

## The light triad moral dimension and resilience as predictors of health behaviors among COVID-19 convalescents

Moralny wymiar jasnej triady i prężność psychiczna  
jako predyktory zachowań zdrowotnych  
wśród ozdowieńców COVID-19

SZYMON SPAŁEK

Uniwersytet Opolski, Wydział Nauk Społecznych, Polska

sspalek97@wp.pl

<https://orcid.org/0000-0002-4660-1763>

**Abstract:** Research on the frequency of health-related behaviors performed by people after COVID-19 and its relationship with personal resources, personality traits and positive orientation to other people are intended to shed new light on the situation of convalescents after suffering from the disease. The purpose of this thesis was to identify and determine the relationship between moral dimension of the Light Triad, resilience and health behaviors among COVID-19 convalescents. The study involved 204 people aged 18 to 75 years who reported having COVID-19 disease. Each respondent was asked to complete an identical set of survey tools, which consisted of: survey information, metrics and three tools to determine the level of surveyed variables. These were the Brief Resilience Scale (BRS), the Light Triad Scale (LTS) and the Health Behaviors Inventory (IZZ). Studies have shown that there are statistically significant associations between resilience, the Light Triad and health behaviors among COVID-19 convalescents. Resilience and the Light Triad have been found to be predictors of health behaviors in the COVID-19 recovery group, which means that individuals who treat adversity as developmental challenges and are positively oriented towards other people in the face of the SARS-CoV-2 coronavirus disease show a higher level of health behaviors after the disease.

**Keywords:** Light Triad; resilience; health behaviors; convalescents; COVID-19

**Abstrakt:** Badania nad częstotliwością zachowań związanych ze zdrowiem podejmowanych przez osoby po chorobie COVID-19 oraz jej związków z zasobami osobistymi, cechami osobowości, postawą moralną oraz pozytywną orientacją na innych ludzi mają za zadanie rzucić nowe światło na sytuację ozdowieńców po przebyciu choroby. Celem niniejszej pracy było sprawdzenie oraz określenie związków, które zachodzą pomiędzy moralnym wymiarem jasnej triady, prężnością psychiczną a zachowaniami zdrowotnymi wśród ozdowieńców COVID-19. W badaniu udział wzięły 204 osoby w przedziale wiekowym od 18 do 75 roku życia, które zadeklarowały fakt przechodzenia choroby COVID-19. Każda badana osoba poproszona została o wypełnienie identycznego zestawu narzędzi badawczych, na który składały się: informacja o badaniu, metryczka oraz trzy narzędzia, które miały na celu określenie poziomu badanych zmiennych. Były to krótka skala prężności (BRS), skala jasnej triady (LTS) oraz inwentarz zachowań zdrowotnych (IZZ). Badania wykazały, że występują istotne statystycznie związki między prężnością psychiczną, jasną triadą a zachowaniami zdrowotnymi wśród ozdowieńców COVID-19. Prężność psychiczna i jasna triada okazały się predyktorami zachowań zdrowotnych w grupie ozdowieńców COVID-19, co oznacza, że jednostki traktujące przeciwności jako wyzwania sprzyjające rozwojowi oraz zorientowane pozytywnie na innych ludzi, w obliczu choroby wywołanej koronawirusem SARS-CoV-2 wykazują się wyższym poziomem zachowań zdrowotnych po chorobie.

**Słowa kluczowe:** jasna triada; prężność; zachowania zdrowotne; ozdowieńcy; COVID-19

## Introduction

COVID-19 is an infectious disease caused by the recently discovered coronavirus SARS-CoV-2. Despite the fact that most infected people experience mild to moderate symptoms and recover without requiring specialized treatment, the elderly and those affected by health problems such as cancer, diabetes, chronic respiratory diseases or cardiovascular diseases are often at risk of very severe disease (Petersen and Phillips 2020, 1040-1042). The psychological consequences of the global COVID-19 pandemic are, regardless of the severity of the medical symptoms, relatively new phenomena and are being studied by many specialists on a global scale, both in terms of trying to determine their exact nature and in terms of finding factors that may positively influence their management.

Recovery from a serious illness or a stressful situation linked to a serious risk of loss of health, requires certain two-way measures: firstly, direct measures aimed at rapid recovery, and secondly, long-term measures aimed at maintaining good health. According to Weiss and Larsen (1990, 129-130), people who pay more attention to behaviors aimed at improving and maintaining their health, as opposed to people with unhealthy lifestyles, exhibit higher levels of extroversion, optimism and morality, have higher self-esteem, and

attach less importance to chance in health control. This may indicate the important role of personality traits in the overall condition of physical and mental health.

## **I. Resilience and Moral Dimension of the Light Triad – meaning of concepts**

Among the individual characteristics of a person that condition the development of positive changes after experiencing a highly stressful and traumatic situation, one of the factors can be mentioned the concept of resilience (Ogińska-Bulik and Juczyński 2008b, 43). Resilience is associated with flexible and creative coping with adversities. It can be understood as a process of positive adaptation, in which protective factors limit the negative impact of risk factors (*resilience*), and as a trait of the individual's personality or its enduring resource (*resiliency*). An individual with a high level of resilience is easily activated to take remedial action in difficult situations, has a positive attitude towards life, has a higher self-esteem and efficiency, and treats challenges as a prospect for gaining new experiences (Falewicz 2016, 264-265). The importance of resilience can also be noted with regard to the health of the individual, and above all with regard to mental health, and according to Connor (2006, 46-47), it has a clear effect on the reduction of symptoms such as post-traumatic stress.

Good and satisfying relationships with other people are considered the most important of the determinants of well-being. Conversely, the lack or poor quality of close relationships can pose a threat to health and life satisfaction, as well as adversely affect development. Kaufman et al. (2019), starting from the principle of contrast to the Dark Triad and its negative aspects in the moral sense, proposed the introduction of the concept of the Light Triad, which consists of: Faith in Humanity, Humanism, and Kantianism. People who achieve high levels of these three traits experience greater satisfaction in life and in their interpersonal relationships, have a highly integrated morality manifested in relationships with others by promoting honesty and authenticity, and have higher self-esteem. Links between the Light Triad and love, kindness, zeal, teamwork, forgiveness, and gratitude have also been shown (Kaufman et al. 2019).

### **1.1. The relationship between the moral dimension of the Light Triad, resilience and health behaviors among COVID 19 convalescents – the current state of research**

Health behaviors are correlated with self-efficacy, life optimism, internal locus of control, sense of coherence and self-esteem (Ogińska-Bulik and Juczyński 2008a, 25-26). An optimistic approach to the world and people has a positive effect on the mental and physical health of a person. Ogińska-Bulik (2004, 24-26) showed that an optimistic attitude towards life is positively associated with a rational diet and negatively with unfavorable eating behaviors, such as overeating or adopting restrictive diets. The role of positively marked individual beliefs has also been demonstrated in Ziarko's research (2006, 96-98), which showed that the sense of coherence, consisting of a sense of comprehension, resourcefulness and sense, is a factor associated with the intention to undertake health behaviors and with behaviors already performed to recover, maintain or improve health. In this study, the sense of meaningfulness turned out to play a key role, especially for the formation of health behavior intentions.

Understanding the role of morality, positive personality and optimistic attitude towards the world and people, which is expressed by the three dimensions of the Light Triad, for health behaviors, is also possible on the basis of contrast, i.e., by analyzing the results of studies on the relationship between negative personality and health behaviors. An individual's adverse or risky activities, such as the use of psychoactive substances, the consumption of alcohol or the smoking of cigarettes, may be related to many personality traits. Among the personality dimensions that make up the Big Five, neuroticism and extroversion/introversion are most often considered to be associated with the occurrence of risky behavior. Various types of affects are indicated here, i.e., negative affect is associated with neuroticism and introversion, while positive one, which manifests itself in seeking sensations and performing risky behaviors, is associated with extraversion (Ogińska-Bulik and Juczyński 2008a, 22-23). The research of Fredrickson and Tugade (2004, 1169) showed that individuals with a high level of resilience, compared to those with a low level of resilience, more often assessed stressful situations as less threatening. It was also shown that people with high resilience coped better with the negative consequences of stress, which is associated with the use of strategies characterized by positive emotionality, such as focusing on the task, positive reevaluation and giving a positive meaning to everyday events.

Crucial for resilience is its protective nature, which modifies the impact of difficult situations in a person's life. As Waugh and Fredrickson (2006, 101-102) have shown, resilience is associated with the emergence of positive emotions, which have a mediating role in overcoming negative emotions. Research

by Fredrickson and Tugade (2004, 1172-1175) also showed that individuals with a higher level of resilience after experiencing an unpleasant situation were able to return to the initial state of physiological functions, which were increased as a result of negative events, faster than those with a lower level of resilience.

## 2. Material and method

The subject of this research work is the relationship between the moral dimension of the Light Triad, resilience and health behaviors among convalescents of COVID-19, caused by the SARS-CoV-2 virus. The level of resilience among the subjects was shown on the basis of its overall dimension, while the individual dimensions that make up the Light Triad of personality are: Humanism, Kantianism and Faith in Humanity. The level of health behaviors is indicated by the general indicator and their four dimensions: eating habits, preventive behaviors, positive mental attitudes and health practices.

To measure resilience, the Brief Resilience Scale developed by Smith and colleagues was used. The scale was adapted and validated to the Polish version by Konaszewski, Niesobędzka and Surzykiewicz (2020). The Polish adaptation of the Light Triad Scale by Gerymski and Krok (2019, 354) was used to measure three positive personality traits: Humanism, Kantianism and Faith in Humanity, which make up the Light Triad. In order to measure health behaviors and their individual dimensions, the Inventory of Health Behaviors, created by Juczyński (2001, 121), was used.

The own research procedure covered two hundred and four male and female subjects of various ages. The age range of the subjects ranged from 18 to 75 years, and the mean was  $M = 41.8$  years ( $SD = 17.86$ ). The respondents had varied education. 73 people (35%) had secondary education, 63 people (30%) had higher education, 40 people (19%) had vocational education, and 28 people (13%) had primary education. The requirement to participate in the study was to undergo the COVID-19 disease caused by the SARS-CoV-2 virus. In the questionnaire, the subjects were asked to indicate the period of time (in months) since the onset of the disease and to indicate on a ten-point scale the degree of severity of the symptoms of the disease they experienced. In addition, they were asked whether during their illness and as a result of its somatic symptoms they were forced to undergo hospitalization treatment. Finally, out of two hundred and four people who took part in the study, seventy-eight (38%) were hospitalized due to COVID-19, and one hundred and twenty-six (62%) people managed to get over the disease without hospitalization.

Each surveyed person was asked to fill in an identical set of research tools, which consisted of: information about the study, a metric and three tools that were aimed at determining the level of the examined variables. These were the Brief Resilience Scale (BRS), the Light Triad Scale (LTS) and the Health Behavior Inventory (IZZ). The record included questions about age, sex, education, time since the disease and hospitalization in connection with the disease.

### 3. Research results

The first step in the calculations was to perform a structure analysis based on descriptive statistics. In order to do this, the arithmetic mean, standard deviation, skewness and kurtosis were calculated. The exact results of the calculations are presented in Table 1. The Shapiro-Wilk test showed that all the tested distributions differed from the normal one. However, due to the fact that the values of skewness and kurtosis indicated a small asymmetry of the studied distributions and due to the large group of people surveyed, parametric analyzes were used for further calculations.

Table 1. Descriptive statistics for symptom severity and resilience, the Light Triad, and health behaviors ( $N=204$ )

Variable	M	SD	SKE	K	W	p
Intensification of symptoms	6,08	2,39	-0,51	-0,56	0,90	0,001
Resilience	3,49	1,01	-0,52	-0,95	0,92	0,001
Faith in humanity	3,76	0,74	-0,57	0,06	0,96	0,001
Humanism	4,02	0,63	-0,71	0,14	0,90	0,001
Kantianism	3,98	0,69	-1,33	2,71	0,92	0,001
Correct eating habits	3,57	0,96	-0,54	-0,77	0,93	0,001
Preventive behaviors	3,76	0,76	-0,91	0,64	0,93	0,001
Positive mental attitude	3,76	0,70	-0,83	0,44	0,94	0,001
Health practices	3,58	0,62	-0,44	0,21	0,94	0,001
Health behaviors – overall result	3,66	0,63	-0,82	0,43	0,94	0,001

*SKE* – skewness; *K* – kurtosis

In the next step of the analysis, an attempt was made to determine the occurrence of gender differences in the severity of COVID-19 symptoms, resil-

ience, Light Triad and health behaviors. The Student's *t*-test for independent samples was used to statistically assess the differences. Detailed results of inter-sex comparisons are presented in Table 2.

Table 2. Results of the Student's *t*-test between women and men in terms of severity of COVID19 symptoms, resilience, the Light Triad and health behaviors (*N*=204).

Variable	M Women ( <i>N</i> =103)	M Men ( <i>N</i> =101)	<i>t</i>	<i>df</i>	<i>p</i>
Severity of the symptoms	5,71	6,46	-2,25	202	0,025
Resilience	3,12	3,87	-5,68	202	0,000
Faith in humanity	3,70	3,81	-1,01	202	0,312
Humanism	4,04	4,00	0,55	202	0,583
Kantianism	4,07	3,88	2,01	202	0,046
Correct eating habits	3,69	3,45	1,81	202	0,071
Preventive behaviors	3,71	3,81	-0,89	202	0,373
Positive mental attitude	3,67	3,84	-1,74	202	0,084
Health practices	3,57	3,58	-0,02	202	0,986
Health behaviors – overall result	3,66	3,67	-0,07	202	0,945

The analyzes showed that there are statistically significant differences between women and men in terms of the declared feeling of the severity of COVID-19 disease symptoms and in the level of resilience and one dimension of the Light Triad – Kantianism. Men in the study declared a significantly higher degree of experiencing negative symptoms of COVID-19 disease compared to the group of women. Also, men were characterized by a significantly higher level of resilience compared to the surveyed women. Women, on the other hand, showed a significantly higher level of Kantianism than the group of surveyed men.

In order to verify the significance of the relationships between the variables studied, a correlation analysis using the Pearson's *r* correlation coefficient was used. The first analysis undertaken was an attempt to verify whether the time elapsed since the COVID-19 disease of the subjects and the declared severity of symptoms are related to psychological variables: resilience, the Light Triad and health behaviors. Detailed results are given in Table 3 below.

Table 3. Results of Pearson's  $r$  correlation between time since illness, severity of the symptoms and resilience, the Light Triad and health behaviors ( $N=204$ ).

Variable	Time between illness	Severity of the symptoms
Resilience	0,31***	0,32***
Faith in humanity	0,03	0,15*
Humanism	0,36***	0,30***
Kantianism	-0,06	-0,06
Correct eating habits	0,17*	0,10
Preventive behaviors	0,30***	0,31***
Positive mental attitude	0,27***	0,14*
Health practices	0,15*	0,18*
Health behaviors – overall result	0,27***	0,22**

\*\*\* $p < 0,001$ ; \*\* $p < 0,01$ ; \* $p < 0,05$

The results of the analysis indicate that Pearson's  $r$  coefficient was statistically significant for most of the variables. No statistically significant correlations were found between the time since passing COVID-19 and Faith in Humanity and Kantianism, as well as between the severity of symptoms and Kantianism and proper eating habits. The remaining variables turned out to correlate with each other to a weak or moderate degree and in a positive way. Resilience was moderately and positively related to the time since illness and the severity of symptoms. Of the three variables that make up the Light Triad, Humanism was moderately and positively associated with both the time since COVID-19 and the severity of symptoms. There was also a weak and positive relationship between belief in humanity and the severity of symptoms. For health behaviours, both the individual dimensions and the overall outcome showed a mild to moderate and positive relationship with time since COVID-19 sickness and severity of symptoms. In the next step, an analysis of the relationship using the Pearson's  $r$  coefficient was performed between the examined psychological variables, i.e. between resilience and the Light Triad, and health behaviors. Detailed results are presented in Table 4.



Table 4. Results of Pearson's  $r$  correlation between resilience, the Light Triad and health behaviors ( $N=204$ )

Variable	Resilience	Faith in humanity	Humanism	Kantianism
Correct eating habits	0,17*	0,38***	0,36***	0,15*
Preventive behaviors	0,35***	0,35***	0,45***	0,15*
Positive mental attitude	0,55***	0,60***	0,58***	0,21**
Health practices	0,33***	0,33***	0,54***	0,12
Health behaviors – overall result	0,41***	0,50***	0,57***	0,19**

\*\*\* $p < 0,001$ ; \*\* $p < 0,01$ ; \* $p < 0,05$

The results presented in Table 4 showed weak to moderate and strong and positive associations with almost all variables subjected to the correlation analysis with the only exception, as no statistically significant association was found between Kantianism and health practices. Resilience positively correlates with each dimension and the overall result of health behaviors. Belief in humanity and humanism turned out to be positively correlated with all dimensions of health behaviors and their overall score. Kantianism is positively correlated with the three dimensions of health behaviors and their overall score.

The next step of the statistical analysis was an attempt to determine which of the following dimensions: time since going through COVID-19, severity of symptoms, resilience and the Light Triad, are the best predictors of health behaviors and their dimensions among COVID-19 recoveries. For this purpose, the stepwise regression method was used. The first stepwise regression analysis was carried out for the dimension of correct eating habits, and its results can be seen in Table 5.

Table 5. Stepwise regression results for Correct eating habits by dimensions: time since COVID-19, severity of the symptoms, resilience, and the Light Triad

Correct eating habits: $R = 0,42$ ; $R^2 = 0,17$ ; $F(2,201) = 21,72$ ; $p < 0,001$	$\beta$	$t$	$p$
Faith in humanity	0,26	3,37	0,001
Humanism	0,22	2,87	0,004

The obtained results allow us to conclude that two of the three dimensions of the Light Triad, namely belief in humanity and humanism, are important

predictors of proper eating habits. The value of the standardized  $\beta$  coefficients indicates that these compounds are positive. With a higher level of faith in humanity and humanism among COVID-19 healers, their level of correct eating habits increases. This model explains 17% of the variance.

The stepwise regression results for the dimension of preventive behavior in terms of the time since going through COVID-19, the severity of symptoms, as well as resilience and the Light Triad are presented in Table 6.

Table 6. Stepwise regression results for Preventive behaviors by dimensions: time since COVID-19, severity of the symptoms, resilience, and the Light Triad

Preventive behaviors: R = 0,51; R <sup>2</sup> = 0,26; F(2,201) = 17,56; p < 0,001	$\beta$	<i>t</i>	<i>p</i>
Humanism	0,27	3,43	0,001
Severity of the symptoms	0,17	2,67	0,008

Stepwise regression analysis for these dimensions showed that preventive behaviors are explained in 26% of the variability of the results by the model to which humanism and severity of symptoms have entered. The  $\beta$  coefficient turned out to be positive, so COVID-19 convalescents who have experienced the disease in a more severe and severe way and show a higher level of Humanism will show a higher level of preventive behavior.

Then, a stepwise regression was performed for the positive mental attitude dimension in relation to the same dimensions as the one above. Its detailed results are presented in Table 7.

Table 7. Stepwise regression results for Positive mental attitude by dimensions: time since COVID-19, severity of the symptoms, resilience, and the Light Triad

Positive mental attitude: R = 0,71; R <sup>2</sup> = 0,51; F(3,200) = 521,72; p < 0,001	$\beta$	<i>t</i>	<i>p</i>
Faith in humanity	0,34	5,71	0,000
Resilience	0,32	5,32	0,000
Humanism	0,25	3,93	0,000

The dimension of positive mental attitude is explained in 51% of the variability of results by the model, which included the following predictors: faith in humanity, resilience and Humanism. A positive result of the standardized

regression coefficient means that the level of the explained variable increases with the increase in the predictors included in the above model. In other words, the higher the level of faith in humanity, resilience and Humanism shown by the surveyed COVID-19 survivors, the higher they achieved in the dimension of health behaviors, which is a positive mental attitude.

The next step was to analyze the relationship between the explanatory variables and the explained variable, which was the last dimension of health behaviors – health practices. Stepwise regression results for these variables are provided in Table 8 below.

Table 8. Stepwise regression results for Health Practices by dimensions: time since COVID-19, severity of the symptoms, resilience, and the Light Triad

Health practices: R = 0,54; R <sup>2</sup> = 0,29; F(1,202) = 83,63; p < 0,001	$\beta$	<i>t</i>	<i>p</i>
Humanism	0,54	9,15	0,000

The results obtained in this regression mean that the only predictor that entered the model, i.e. humanism, explains 29% of the variance in the results of health practices. This relationship is positive, which means that convalescents with a higher level of humanism show a higher level of health practices.

The last stepwise regression was performed for the overall score of health behaviors against time since going through COVID-19, severity of symptoms, resilience and the Light Triad. Its detailed results are presented below in Table 9.

Table 9. Stepwise Regression scores for overall Health Behavior score by dimensions: time since COVID-19, severity of the symptoms, resilience, and the Light Triad

Health behaviors – overall result: R = 0,61; R <sup>2</sup> = 0,37; F(2,201) = 60,35; p < 0,001	$\beta$	<i>t</i>	<i>p</i>
Faith in humanity	0,27	3,99	0,000
Humanism	0,42	6,34	0,000

The stepwise regression model for the overall result of health behaviors included two of the three dimensions of the Light Triad – Faith in Humanity and Humanism. The overall health behavior score is 37% explained by these predictors. In the case of both variables, these relationships were positive. Taking into account the positive sign of the relationship, it can be concluded that con-

valescents with a high level of Humanism and Faith in Humanity will show high results in health behaviors after recovering from COVID-19.

#### **4. Discussion of the results and interpretation**

The analysis and interpretation of the results obtained in the study began with intergroup comparisons in order to check whether the sex of the subjects significantly differentiates the results achieved. Statistically significant gender differences were found for the following dimensions: the level of severity of COVID-19 symptoms, resilience and Kantianism. It turned out that men who had to face the disease caused by the SARS-CoV-2 virus described the severity of its symptoms as more severe and serious than the group of women surveyed. In addition, the results of the study showed that men achieved a significantly higher score of resilience compared to the group of women. This means that male COVID-19 convalescents were characterized by a higher level of treating their lives as something they can influence and much in their lives depends on their own activities, and they treat difficult situations as challenges conducive to development. Women turned out to achieve significantly higher results in Kantianism. This means that women, more often than men, adopt a highly moral attitude of treating other people as persons and an end in themselves, and not as means to an end.

The conducted correlation analysis showed that there is a statistically significant relationship between each of the components of the Light Triad and the overall result of health behaviors among the group of convalescents. Moreover, dependencies were also shown for each component of the Light Triad in relation to individual dimensions of health behaviors, with the only exception being the relation between Kantianism and health practices, where the correlation turned out to be statistically insignificant. Among COVID-19 recoveries, higher levels of each component of the Light Triad are associated with higher overall health behavior scores. The manifestation of high morality, respect for the individuality and identity of each individual among COVID-19 survivors is positively associated with the occurrence of health behaviors in them. This is confirmed by studies that have shown that an optimistic and moral approach to the world and other people has a positive relationship with mental and physical health (Ogińska-Bulik and Juczyński 2008a, 19)

The correlation analysis also showed that among COVID-19 survivors, resilience is statistically significantly associated with the overall result of health behaviors and with each of their dimensions. Along with the increase in resilience, an increase in the overall score of health behaviors, as well as each of

their dimensions, was observed. This is confirmed by the results of research by Ogińska-Bulik (2011, 7-9), who, examining women struggling with breast cancer, showed that resilience was associated with a higher level of acceptance of the disease and with the majority of constructive strategies for coping with the situation of cancer, and individuals with a low level of mental resilience achieved higher results in destructive coping strategies.

## Conclusion

The situation of the global pandemic, which occurred as a result of the rapid spread of the SARS-CoV-2 coronavirus, was associated with a large number of stressors, the nature of which took many forms and affected people on many levels. In this perspective, factors that have a protective function and support positive adaptation, such as resilience, allowing to cope with the consequences and a quick return to the state before the disease, play a huge role.

Treating other people as an end in themselves, appreciating the value and dignity of each individual, and believing that people are inherently good express the moral and optimistic attitude of the individual towards society and himself. The experience of positive emotions as a result of everyday interactions with other people undoubtedly translates into the mental and physical health of the individual. Demonstrating these relationships in the study fills in some gaps in the current state of research and is a good basis for continuing further research in this area, which ultimately may contribute to a better understanding of this specific group and the creation of better and adequate post-disease support programs for it.

Based on the conducted own research and the obtained results and analyzes, the following conclusions can be drawn:

1. In the group of COVID-19 convalescents, there are differences between women and men in terms of the perceived intensity of symptoms of the disease, resilience and Kantianism. Men are characterized by a significantly higher level of feeling the negative effects of the disease caused by SARS-CoV-2 compared to women. Men also show a higher level of resilience. Women, on the other hand, show a higher level of Kantianism compared to men.
2. There are statistically significant relationships between resilience, the Light Triad and health behaviors among COVID-19 recoveries. Resilience and the Light Triad are predictors of health behaviors in the group of COVID-19 convalescents, which means that individuals who treat ad-

versity as challenges conducive to development and positively oriented towards other people in the face of the disease caused by the SARS-CoV-2 coronavirus show a higher level of health behaviors after illness.

3. Resilience is positively correlated with the overall score of health behaviors and each of their dimensions among COVID-19 recoveries. This means that people who are more resistant to the harmful effects of stressors and who treat adversity as challenges that contribute to development, after experiencing a life or health-threatening situation, more often perform activities aimed at improving or regaining the previous level of health.
4. Each of the dimensions of the Light Triad positively correlates with the overall result of health behaviors. This means that a positive personality and an attitude full of respect and dignity towards other people, treating them as ends in themselves and believing that they are inherently good, is positively associated with undertaking health behaviors after experiencing COVID-19 disease and related to it a whole range of harmful factors.
5. Apart from the relationship between Kantianism and health practices, there are positive relationships between the dimensions of the Light Triad and the rest of individual dimensions of health behaviors.

This study, despite providing new, interesting results and conclusions, is not free from limitations. Further studies on the same thematic scope of variables should take into account the latest scientific achievements related to the COVID-19 pandemic and the situation of convalescents, because over time this group is becoming better and better diagnosed. It would also be worth conducting such research on a larger group of people and on populations other than Poland. It would also be interesting to include comorbidities in the studied relationships. Also interesting results could be obtained by the use of longitudinal studies to verify changes in the level of health behaviors among convalescents over a period of time.

## BIBLIOGRAPHY

- Connor, Kathryn M. 2006. "Assessment of Resilience in the Aftermath of Trauma." *Journal of Clinical Psychiatry*, 67, 46-49.
- Falewicz, Adam. 2016. "Prężność osobowości i jej rola w procesach radzenia sobie ze stresem." *Studia Koszalińsko-Kołobrzeskie*, 23, 263-275.
- Gerymski, Rafał and Dariusz Krok. 2019. "Psychometric properties and validation of the Polish adaptation of the Light Triad Scale." *Current Issues in Personality Psychology*, 7(4), 341-354.
- Juczyński, Zygfryd. 2001. *Narzędzia pomiaru w promocji i psychologii zdrowia*. Warszawa: Pracownia Testów Psychologicznych Polskiego Towarzystwa Psychologicznego.

- Kaufman, Scott et al. 2019. "The Light vs. Dark Triad of personality: Contrasting two very different profiles of human nature." *Frontiers in Psychology*, 10, 467. Access: 16.01.2023. <https://doi.org/10.3389/fpsyg.2019.00467>.
- Konaszewski, Karol, Małgorzata Niesiołbódzka, and Janusz Surzykiewicz. 2020. "Validation of the Polish version of the Brief Resilience Scale." *PLoS ONE*, 15(8), e0237038. Access: 16.01.2023. <https://doi.org/10.1371/journal.pone.0244895>.
- Ogińska-Bulik, Nina. 2004. *Psychologia nadmiernego jedzenia*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Ogińska-Bulik, Nina. 2011. "The role of resiliency in adjustment to cancer in women." *Psychoonkologia*, 15(1), 1-10.
- Ogińska-Bulik, Nina and Zygryd Juczyński. 2008a. *Osobowość: stres a zdrowie*. Warszawa: Difin.
- Ogińska-Bulik, Nina and Zygryd Juczyński. 2008b. "Skala Pomiaru Prężności – SPP-25." *Nowiny Psychologiczne*, 3, 39-56.
- Petersen, Irene and Andrew Phillips. 2020. "Three Quarters of People with SARS-CoV-2 Infection are Asymptomatic: Analysis of English Household Survey Data." *Clinical Epidemiology*, 12, 1039-1043.
- Tugade, Michele, Fredrickson, Barbara and Lisa Feldman Barrett. 2004. "Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health." *Journal of Personality*, 72(6), 1161-1190.
- Waugh, Christian and Barbara Fredrickson. 2006. "Nice to know you: Positive emotions, self-other overlap, and complex understanding in the formation of a new relationship." *The Journal of Positive Psychology*, 1(2), 93-106.
- Weiss, Gregory and Daniel Larsen. 1990. "Health value, health locus of control, and the prediction of health protective behaviors." *Social Behavior and Personality: an international journal*, 18(1), 121-135.
- Ziarko, Michał. 2006. *Zachowania zdrowotne młodych dorosłych – uwarunkowania psychologiczne*. Poznań: Wydawnictwo Naukowe Bogucki.

**SZYMON SPAŁEK** – mgr, Uniwersytet Opolski. Zainteresowania badawcze: moralność; etyka; związki pomiędzy duchowością a dobrostaniem jednostki; psychologia rozwojowa; psychologia dzieci i młodzieży.