

# Sense of Coherence and Nutritional Maturity Versus the Feeling of Stress Among Young Adults

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## Abstract

**Objective:** The aim of this study was to establish the interdependencies between the sense of coherence, nutritional maturity and the sense of stress in a group of young adults, considering their diet. Ultimately, research efforts were aimed at testing the predictive power of the study variables against the feeling of stress.

**Method:** The study was conducted in a group of 100 people in the 20–33 age range that were following either a vegetarian and meat diet. The Antonovsky's Sense of Coherence Questionnaire, the Nutritional Maturity Questionnaire (Potocka & Najder, 2016) and the Sense of Stress Questionnaire (Plopa & Makarowski, 2010) were applied.

**Results:** The results indicate a significantly lower intensity of emotional tension, intrapsychic, external and general stress, as well as significantly higher indicators of the sense of coherence and nutritional maturity in the group of vegetarians. Moreover, nutritional maturity was found to be negatively correlated to the sense of stress, while the sense of coherence was noted to be positively correlated to the nutritional maturity. In the end, it was demonstrated that the sense of coherence played an important role in predicting stress as experienced by young adults.

**Conclusion:** The research provided important knowledge on the relationship between attitudes towards nutrition and experiencing stress in a group of young adults.

**Keywords:** sense of coherence, sense of stress, nutritional maturity, young adults

By consuming food, human beings satisfy their biological and psychosocial needs. This is manifested in the so-called 'eating behaviour' (Silva, 2013). When analysing the determinants of human behaviour, including eating behaviour,

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individual (including attitudes, knowledge), socio-environmental (family conditions, influence of peer groups), physical (access to specific food) and macrosystem (standards and importance of food in specific culture, media influence, politics) factors should be considered (Story et al., 2002).

Personality-related factors have been assigned a key role in the genesis of eating behaviour, especially in the context of personality-related mechanisms of eating disorders (anorexia, bulimia, obesity) from the beginning of psychological interest in that area. These individual dimensions include: neuroticism, self-efficacy belief and the locus of control. The previous research conducted in the field of health psychology also indicates a significant and multidirectional relationship between stress and nutrition. The regulatory function of nutrition, apart from the obvious supply of ingredients necessary for the proper functioning of the body, is related to the intensity and quality of experienced emotions. Therefore, food can act as a regulator of the level of stress and unpleasant emotions (Bruch, 1973).

Depending on the psychological characteristics of the individual, as well as the type of stressful situation, an increased desire to reach for food or its inhibition may occur. This is because the level of perceived stress is related to the functioning of the endocrine system, and its proper functioning is related to nutrition. One of the newly developed psychological constructs associating the issue of nutrition with psychological well-being is nutritional maturity. Accordingly, this is the resource of an individual, thanks to which they feel and express their beliefs concerning nutrition and are aware of its influence on their behaviour and relations with the environment.

Being nutritionally mature means holding a balance in satisfying biological and psychosocial needs and having the ability to see if this balance is disturbed. As an attitude, it is one of the personality characteristics responsible for the rational and adaptive behaviour of an individual. It includes two dimensions: control of psychosocial motives (understood in terms of attitudes towards food that go beyond biological motives) and control of biological motives related to the individual's knowledge of the principles of rational nutrition (Potocka & Najder, 2016).

The analysis of the interrelationships between personality factors and stress, including the applied nutritional practices, can provide many interesting discoveries in the service of broadly understood health prophylaxis, among young adults, whose personal potential can be used to improve the strategies of coping with stress in everyday life and its destructive effects.

## **Research Problem and Purposes**

The aim of this study is to establish the interdependencies between nutritional maturity, the sense of coherence and the feeling of stress among young adults. In addition, the intensity of the above variables and the power of their mutual relationships will be tested in two groups of people following different types of diet: vegetarian and meat eaters (i.e. allowing the consumption animal products). The final aim of the study is to check the power of the predictive effects of the sense of coherence,

nutritional maturity and the used diet on the level of perceived stress. In the light of the reported references, it can be concluded that the type of food consumed is of great importance in the effective fight against stress and the creation of mental resilience. It has been shown that a vegetarian diet reduces the level of arachidonic acid, which is associated with the reduction of oxidative stress, while a meat diet may increase its level, and disturb well-being (Key et al., 1999; Szeto et al., 2004). Moreover, vegetarianism is the result of moral experiences and a philosophy of life promoting the protection of the natural environment, including animals, and a healthy lifestyle. It is often a conscious choice of a person, giving meaning and value to his life, so it should be related to the maturity, including nutritional maturity, and coherence of the individual (Müssig et al., 2022; Pyrzyńska, 2013; Salehi et al., 2023).

Expanding the scope of research within the above-mentioned trend is necessary to reduce additional sources of everyday stress and to promote healthy eating habits.

The following research questions and hypotheses were proposed:

1. What intensity of stress, sense of coherence, and nutritional maturity is presented by the respondents?
2. What are relationships between the study variables?
3. Are the sense of coherence and nutritional maturity predictors of stress experienced by young adults?

The analysis of the references in the theoretical part of this study allows for the detailed hypotheses:

- 1a. People following a vegetarian diet show a lower feeling of stress compared to people following a meat diet.
- 1b. People following a vegetarian diet show a stronger sense of coherence in relation to a meat-eating group.
- 1c. People following a vegetarian diet are more nutritionally mature than people following a meat diet.
- 2a. Nutritional maturity is negatively correlated to the sense of stress.
- 2b. Nutritional maturity is positively correlated to the sense of coherence.
- 2c. The sense of coherence is negatively correlated to the sense of stress.
3. The sense of coherence and nutritional maturity are predictors of stress experienced by young adults.

## Method

### Study Sample

The voluntary study included a group of one hundred young adults aged 20–33 from Poland. The respondents had higher education ( $M = 28.12$ ;  $SD = 5.89$ ), and the selection to the group was purposive. It was based on the declaration

of two nutrition models – a vegetarian diet and a meat diet, i.e. a diet allowing the consumption of meat products. The main (criterion) group consisted of subjects ( $n = 50$ , including 25 women and 25 men) following the vegetarian model of nutrition who had followed the vegetarian diet for the period of 3 to 10 years. The comparative (control) group consisted of subjects ( $n = 50$ ) following a meat diet.

## Research Tools

### ***The Nutritional Maturity Questionnaire (KDŻ)***

KDŻ was developed by Adrianna Potocka and Anna Najder (Potocka & Najder, 2016). The questionnaire was used to measure and assess psychosocial maturity, as well as rational nutrition. The respondent refers to 21 statements contained in the questionnaire by selecting the appropriate answer from among the four available on a four-point scale, arranged in the following order: 1 – *I strongly agree*, 2 – *I rather agree*, 3 – *I rather disagree* and 4 – *I strongly disagree*. The Cronbach's alpha coefficient of 0.88 indicates that the Nutritional Maturity Questionnaire is a tool that meets the methodological requirements. The score obtained as the overall result determines nutritional maturity. The score in each of the scales determines the maturity of beliefs in terms of diet, as well as the use of food products as a method of satisfying physiological hunger.

### ***The Sense of Stress Questionnaire (Plopa & Makarowski, 2010)***

Was applied to assess the level of perceived stress. The questionnaire contains 27 statements that are referred to on a five-point scale (1 – *true*, 2 – *rather true*, 3 – *hard to say*, 4 – *rather not true*, 5 – *not true*).

The tool examines three dimensions of stress: emotional tension, intrapsychic stress, and external stress. The internal consistency coefficients for each of the dimensions of stress oscillated within Cronbach's alpha of 0.70–0.81 (Bedyńska & Książek, 2012). The emotional tension scale reflects the feeling of anxiety, as well as excessive and inadequately occurring nervousness in everyday life, lack of energy, aversion and fatigue. The intrapsychic stress scale outcome is highly related to negative internal experiences, the inability to resolve internal conflicts and deal with stressful situations, the feeling of loneliness and anxiety, the tendency to pessimism and to hold negative perceptions of oneself and the world. The scale of external stress reflects frustration and helplessness as a result of negative evaluations from others and demands that exceed the possibilities of being performed.

### ***The Life Orientation Questionnaire (SOC-29)***

SOC-29 by A. Antonovsky (Antonovsky, 1995 in the adapted by Pasikowski & Sęk, 2001) was used to measure the individual level of the sense of coherence.

It consists of three scales, corresponding to the three elements of the sense of coherence. These are: meaningfulness, comprehensibility and resourcefulness. The questionnaire contains 29 statements to which the respondent self-assesses on a seven-point scale. The internal consistency for the overall score is a Cronbach's alpha of 0.92, which is a satisfactory psychometric index and allows the method to be used in scientific research (Koniarek et al., 1993).

## **Research Procedure**

The survey was conducted in a group of respondents who were expected to provide written answers to the questions/statements contained in questionnaires. Each participant agreed to participate in the research and was informed about the possibility of resignation at any time. They were also assured that the research is anonymous. Ultimately, no one quit, so all subjects voluntarily graduated from the study. After completing the written responses to the questionnaires (after an hour), material was personally collected from each participant.

## **Data Analysis Methods**

Data were analyzed with SPSS Statistics software, version 26. At the beginning comparative analyzes of the strength of the examined variables were carried out in the group of vegetarians and people following a meat diet. Next, in order to assess the relationship between nutritional maturity and the level of the feeling of stress and the sense of coherence, a correlation analysis was conducted. The last stage of the analyses was an attempt to identify predictors of the sense of stress. For this purpose, multivariate linear regression analysis was performed.

## **Result**

### **Comparative Analysis of the Power of the Studied Variables in the Group of Vegetarians and Meat Eaters**

To answer the question of whether people who consumed vegetarian products differed from the reference group in terms of the feeling of stress, sense of coherence and nutritional maturity, a series of intergroup comparisons were performed using the Mann-Whitney U rank test (Table 1). The choice of the test was due to the fact that there were significant discrepancies in the results in the subgroups in relation to the normal distribution.

The performed tests showed that in comparison to the control group, vegetarians were characterised by statistically significantly lower intensity of emotional tension, external stress, intrapsychic stress and the general level of the feeling of

stress. This confirmed H1 hypothesis, that hearing people following a vegetarian diet show a lower level of stress than meat eaters.

**Table 1**

*Consumption of vegetarian and non-vegetarian products and the intensity of the feeling of stress, sense of coherence and nutritional maturity*

	Meat diet (n = 50)		Vegetarian diet (n = 50)		U	p	rg
	Mdn	Mrang	Mdn	Mrang			
Emotional tension	24.50	62.51	17.50	38.49	649.50	< .001	0.48
External stress	21.00	61.90	15.00	39.10	680.00	< .001	0.46
Intrapsychic stress	21.00	62.66	15.00	38.34	642.00	< .001	0.49
Lie scale	17.00	46.85	18.00	54.15	1067.50	.207	.15
General sense of stress	68.00	63.35	49.00	37.65	607.50	< .001	0.51
Comprehensibility	43.00	42.41	49.00	58.59	845.50	.005	0.32
Resourcefulness	42.50	39.14	51.00	61.86	682.00	< .001	0.45
Meaningfulness	38.00	38.65	46.00	62.35	657.50	< .001	0.47
General sense of coherence	123.00	39.49	141.50	61.51	699.50	< .001	0.44
Rational nutrition	36.00	45.06	37.00	55.04	978.00	.083	.20
Psychosocial maturity	24.00	41.27	27.00	57.73	797.00	.004	0.34
General nutritional maturity	61.00	41.99	65.00	56.16	832.50	.013	0.29

It also turned out that compared to the group of meat eaters, the group of people eating exclusively vegetarian meals obtained statistically significantly higher indices of the sense of coherence considered as the sense of comprehensibility, the sense of resourcefulness, the sense of meaningfulness, and as a general result. This fully confirms research hypothesis H2 that people following a vegetarian diet show a stronger sense of coherence.

In addition, compared to the group following the meat diet, the group of people consuming exclusively vegetarian meals achieved higher indices of nutritional maturity in the area of psychosocial and general maturity. The exception is the scale: rational nutrition, in which slightly higher results were obtained by people following a vegetarian diet – however, the difference is not statistically significant. The above almost fully confirms H3 hypothesis, that hearing people who follow a vegetarian diet are more nutritionally mature.

## Analysis of the Correlation Between the Study Variables

In order to assess the relationship between nutritional maturity and the level of the feeling of stress and the sense of coherence, a correlation analysis was performed in Table 2. The non-parametric Spearman's rank correlation test was applied, the properties of which allow for a good estimation of the correlation coefficients in the case of distributions significantly deviating from the normal distribution (Brzeziński, 2001; Field, 2009).

**Table 2**

*Nutritional maturity and the intensity of the feeling of stress and the level of coherence (N = 100)*

	<b>Rational nutrition</b>	<b>Psychosocial maturity</b>	<b>General nutritional maturity</b>	
<b>Stress</b>	Emotional tension	-.311**	-.475**	-.436**
	External stress	-.230*	-.302**	-.274**
	Intrapsychic stress	-.278**	-.452**	-.374**
	Lie scale	-.140	-.080	-.129
	General sense of stress	-.300**	-.461**	-.401**
<b>Coherence</b>	Comprehensibility	.241*	.441**	.352**
	Resourcefulness	.235*	.345**	.315**
	Meaningfulness	.343**	.409**	.400**
	General sense of coherence	.283**	.416**	.367**

\* $p < .05$ ; \*\* $p < .01$

Based on the table above, it can be perceived that the obtained correlation coefficients indicate that among the respondents, the increase in rational nutrition, psychosocial maturity and general nutritional maturity was associated with a moderate decrease in emotional tension and general feeling of stress, and a weak or moderate decrease in intrapsychic and external stress. Moreover, the increase in all three indices of nutritional maturity was associated with an increase in the sense of coherence – apart from a weak correlation between rational nutrition and the sense of resourcefulness, comprehensibility and the general sense of coherence, the remaining correlations were moderate.

An analogous correlation matrix was calculated for the group of people who do not eat meat and follow a meat diet. The results are presented in Table 3.

**Table 3**

*Nutritional maturity and the intensity of the feeling of stress and the level of coherence according to the division into the groups of people using meat and vegetarian diets*

	<b>Meat diet (n = 50)</b>	<b>Rational nutrition</b>	<b>Psychosocial maturity</b>	<b>General nutritional maturity</b>
<b>Stress</b>	Emotional tension	-.242	-.387**	-.321*
	External stress	-.166	-.242	-.173
	Intrapsychic stress	-.277	-.426**	-.344*
	Lie scale	-.152	-.088	-.112
	General sense of stress	-.247	-.418**	-.311*
<b>Coherence</b>	Comprehensibility	.127	.267	.202
	Resourcefulness	.125	.102	.143
	Meaningfulness	.221	.177	.206
	General sense of coherence	.177	.217	.208
	<b>Vegetarian diet (n = 50)</b>	<b>Rational nutrition</b>	<b>Psychosocial maturity</b>	<b>General nutritional maturity</b>
<b>Stress</b>	Emotional tension	-.302*	-.417**	-.440**
	External stress	-.198	-.129	-.183
	Intrapsychic stress	-.175	-.285*	-.230
	Lie scale	-.173	-.148	-.212
	General sense of stress	-.257	-.327*	-.337*
<b>Coherence</b>	Comprehensibility	.288*	.493**	.409**
	Resourcefulness	.241	.375**	.339*
	Meaningfulness	.302*	.425**	.379**
	General sense of coherence	.323*	.459**	.415**

\* $p < .05$ ; \*\* $p < .01$

In the case of people following a meat diet, the increase in psychosocial maturity and general nutritional maturity was associated with a moderate decrease in intrapsychic stress, emotional tension and general feeling of stress. There were, however, no other statistically significant relationships in this respect. In turn, among people following a vegetarian diet, it was observed that the increase in psychosocial maturity and general nutritional maturity was associated with a moderate decrease in emotional tension and general feeling of stress, and with a moderate increase in all indices of the sense of coherence. It also turned out that in people not consuming meat, the higher the level of rational nutrition index, the lower was the level of emotional tension in a moderate way, and



the higher was the level of the sense of meaningfulness, as well as the general sense of coherence in a moderate way.

To summarise the above analyses, it can be concluded that nutritional maturity is negatively correlated to the feeling of stress, although it seems that these relationships are weaker in people following a vegetarian diet. Thus, hypothesis H2a was confirmed, so nutritional maturity is negatively correlated to the feeling of stress. H2b hypothesis can also be confirmed, therefore the sense of coherence has a positive correlation with nutritional maturity, although a significant positive relationship between nutritional maturity and the sense of coherence was observed only in the group of people following a vegetarian diet.

### Intensity of the Feeling of Stress and the Level of Coherence

In this part of the study, the relationship between the dimensions of the feeling of stress and the general result, as well as the dimensions of the sense of coherence were verified. In doing so, the non-parametric Spearman's rank correlation test was applied (Brzeziński, 2001; Field, 2009).

The results presented in Table 4 (below) are consistent – all relationships between the various dimensions of the feeling of stress and sense of coherence, except for any relationships with the lie scale, turned out to be strong and statistically significant, with a negative sign. With the increase in the sense of comprehensibility, resourcefulness and meaningfulness, as well as with the increase in the general sense of coherence, the declared level of stress decreased in the respondents, both in the form of the general dimension and its sub-dimensions – emotional tension, external and intrapsychic stress.

**Table 4**

*Intensity of the feeling of stress and the level of coherence (N = 100)*

<i>Stres</i>	<b>Comprehensibility</b>	<b>Resourcefulness</b>	<b>Meaningfulness</b>	<b>General coherence</b>
Emotional tension	-.578**	-.666**	-.645**	-.697**
External stress	-.575**	-.634**	-.660**	-.700**
Intrapsychic stress	-.537**	-.654**	-.634**	-.672**
Lie scale	.196	.109	.042	.103
General sense of stress	-.616**	-.706**	-.714**	-.755**

\* $p < .05$ ; \*\* $p < .01$

As in the previous case, analysis with division into two groups was conducted. Table 5 exhibits, that significant and negative relationships were observed again between all dimensions, except for the lie scale.

**Table 5**

*Intensity of the feeling of stress and the level of coherence according to the division into the groups of people using meat and vegetarian diets*

	<b>Meat diet (n = 50)</b>	<b>Comprehen- sibility</b>	<b>Resourceful- ness</b>	<b>Meaningful- ness</b>	<b>General coherence</b>
<b>Stress</b>	Emotional tension	-.442**	-.485**	-.391**	-.521**
	External stress	-.568**	-.359*	-.556**	-.611**
	Intrapsychic stress	-.375**	-.385**	-.481**	-.509**
	Lie scale	.258	.091	.005	.077
	General sense of stress	-.532**	-.431**	-.538**	-.611**
	<b>Vegetarian diet (n = 50)</b>	<b>Comprehen- sibility</b>	<b>Resourceful- ness</b>	<b>Meaningful- ness</b>	<b>General coherence</b>
<b>Stress</b>	Emotional tension	-.542**	-.607**	-.620**	-.648**
	External stress	-.505**	-.657**	-.612**	-.635**
	Intrapsychic stress	-.537**	-.661**	-.613**	-.643**
	Lie scale	.113	.095	.025	.065
	General sense of stress	-.591**	-.698**	-.685**	-.712**

\* $p < .05$ ; \*\* $p < .01$

The analysis of the results indicates the existence of a strong and negative relationship between the sense of coherence and the experienced stress. Therefore, H2c hypothesis hearing the sense of coherence is negatively correlated to the feeling of stress, was fully confirmed.

### **Sense of Coherence and Nutritional Maturity as Predictors of the Feeling of Stress**

The last stage of the analyses was an attempt to identify predictors of the sense of stress. For this purpose, multivariate regression analysis was performed. The results are presented in Table 6.

The group of explanatory variables included the type of diet, as well as the general index of the sense of coherence and the general index of nutritional maturity. Due to the high collinearity of detailed indices of coherence and nutritional maturity (intercorrelations at the level of 0.56–0.78), it was impossible to create a model based on detailed indices (Field, 2009). The calculated model was, however, revealed to be a good fit for the data [ $F(3, 96) = 47.49$ ;  $p < .001$ ] and explained 59.2% of the variance in the feeling of stress. The only statistically

significant predictor was the sense of coherence ( $\beta = -0.65$ ;  $p < .001$ ). The results of the study indicate that along with its increase, a strong decrease in the sense of stress can be predicted.

**Table 6**

*Predictors of the sense of stress (N = 100)*

Predictor	<i>B (SE)</i>	$\beta$
Constant	133.55 (8.32)	...**
Diet	-4.78 (2.46)	-.14
General sense of coherence	-0.41 (.05)	-.65**
General nutritional maturity	-.23 (.14)	-.12
<i>F</i>	47.49**	
<i>R</i> <sup>2</sup>	.592	

\* $p < .05$ ; \*\* $p < .01$

To summarise the above analysis, H3 hypothesis was partially confirmed, that the sense of coherence is a predictors of stress experienced by young adults.

## Discussion

The aim of this study was to establish the interdependencies between nutritional maturity, the sense of coherence and the feeling of stress. The conducted research confirmed that vegetarians are a group with a lower intensity of emotional tension, external stress, intrapsychic stress and a general sense of stress. People who consume plant products provide the body with food with a high nutrient density and low caloric value. According to research conducted by Michael Macht (2008), the intensification of negative emotions causes an increase in appetite in 30% of all respondents, while 48% of all respondents lose interest in food. Diet was the decisive factor in the study result. People on restrictive diets for weight loss felt an increased need to reach for food products. Olson and Mello (2012) demonstrated that nutritional values are not only a necessary element for the proper development of the brain, but also condition the functioning of cognitive, memory and emotional processes. This is also confirmed by studies conducted on rats, in which dietary supplementation contributed to the production of increased levels of oxytocin, which resulted in the improvement of social skills, but also an increase in the number of contacts (Avraham et al., 2019).

According to Pliska and Jeżewska-Zychowicz, biochemistry related to nutrition is inextricably associated with the quality and course of thought processes

(Pliska & Jeżewska-Zychowicz, 2008). In line with the assumption of hypothesis 1a, it turned out that vegetarians present a statistically significantly lower sense of stress. As there is not enough research to clearly demonstrate whether a vegetarian diet is the cause of well-being or its result, these measurements should be considered in subsequent studies (Key et al., 1999; Szeto et al., 2004).

The study also revealed that people following a vegetarian diet obtained statistically significantly higher results in the area of the indices of the sense of coherence, which allows for the confirmation of hypothesis 1b. The work conducted by Lindmark, Stegmayr and Nillson (Lindmark et al., 2005) uncovered a relationship between a low sense of coherence and diseases associated with unhealthy diet (understood as the consumption too high-calorie foods, with a high content of simple sugars and unhealthy fats). According to researchers, a healthy diet has an impact on mental and physical health, and as a result, on social functioning – and the sense of coherence is a component of these interacting factors (Packard et al., 2012). The confirmation of the above hypothesis suggests that a vegetarian diet is related to general life orientation (Müssig et al., 2022; Pyrzyńska, 2013).

The conducted analyses also confirm hypothesis 1c – that people following a vegetarian diet are more nutritionally mature, while statistically significant results covered only the area of psychosocial maturity. This area relates to the general belief that food can be used for purposes other than physiological hunger. The scientific literature includes studies on the nutritional motives of vegetarians. An online study on this topic was conducted by Fox and Ward (2008). The research concerned English-speaking people living in the USA, Canada, and the United Kingdom. The results indicated that the main reason for choosing a vegetarian diet was the concern for one's own health. One of the main reasons was also the care and empathy shown towards animals, and some respondents declared the will to care for the environment. Therefore, the assumptions proposed in this study concerning the dependencies between the diet and nutritional maturity have been confirmed by research, while more analyses should be carried out in order to broaden the scope of knowledge in the mentioned issue, as the cultural adaptation of the research may be an important aspect (Salehi et al., 2023).

The results obtained in the analysis of the relationship between nutritional maturity and stress demonstrated their correlation (hypothesis 2a). Our work indicates that the growing tendency of psychosocial maturity and general nutritional maturity is associated with a moderate decrease in the sense of stress and emotional tension. Based on the results, we also showed that vegetarians were characterised by moderately lower emotional tension, which was the lower the higher the rational nutrition index was. Among people following a non-vegetarian diet, the upward trend in psychosocial maturity and general nutritional maturity can be said to be associated with a moderate decrease in intrapsychic stress, emotional tension, and a general sense of stress.

According to researchers Potocka and Mościcka (2011), short-term exposure to stress causes appetite suppression, while prolonged exposure to stress factors results in a number of physiological hormonal responses. Torres and Nowson

conducted research on glucocorticoids that are released into the blood characterised by long half-life period, and the situation is worsened by the fact that they cause excessive appetite in case of constantly experienced stress, so the more often stress occurs, the more unhealthy eating habits are strengthened. There is evidence that self-regulatory factors of a nutritionally mature personality can help to neutralise the sense of stress (Stenhammar et al., 2020; Tores & Nowson, 2007; Wing et al., 1990).

The study revealed a moderate increase in general nutritional maturity in relation to all components of the sense of coherence. This ratio was demonstrated only in the group of vegetarians. Despite the fact that hypothesis 2b has been confirmed, it requires verification via a larger sample. Studies conducted in other countries showed a greater intensity of variables and differentiation of results depending on the sex of the respondents participating in research on eating behaviour (Horiguchi et al., 2016; Swan, 2016).

The results of the tests concerning the relationship between the intensity of the sense of stress and the level of the sense of coherence were similar to the research previously conducted in this field (Walsh, 1994). The increase in the level of the sense of coherence, induced a decrease in the declared stress in both study groups. This sense of coherence is related to the sense of stress (hypothesis 2c).

Finally, the study has demonstrated that the sense of coherence is the only statistically significant predictor of the feeling of stress in the study sample. Therefore, hypothesis 3 was partially confirmed. These results are consistent with the scientific literature. The reason for such a result may be the fact that the sense of coherence is a personality resource that, as a variable included in numerous studies, served as a factor reducing the feeling of stress. On the other hand, nutritional maturity is treated as an attitude towards food. The literature suggests that predictions of stress have a relationship with emotional nutrition, unfortunately, the research concerning the opposite relationship did not provide any effect.

## **Conclusion**

The research provided important knowledge on the relationship between attitudes towards nutrition, diet and experiencing stress in a group of young adults. People who follow a vegetarian diet are characterized by lower levels of stress, higher levels of nutritional maturity and coherence. In addition, in the vegetarian group, nutritional maturity is in a positive relationship with coherence. Finally, coherence plays a significant predictive role in the face of stress, the strength of which decreases with its increase. The research has therefore provided interesting results indicating the regulatory function of attitudes – life orientation and nutritional maturity in the face of stress. In order to broaden knowledge about the relationship between nutrition, individual resources and stress, it is worth continuing the above direction of research on a larger sample. Finally, it should be added that the Covid-19 pandemic, falling during the research and

the stress directly related to it, could affect both the well-being and eating habits of the respondents, so the research should be repeated in less radical external circumstances.

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