



The significance of high sensitivity in shaping abnormal eating behaviors in young adult women¹

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Abstract: “High sensitivity” is a relatively new construct, especially in Polish psychology. Although it is sometimes a subject of controversy in the scientific world, it seems to have explanatory significance, helping to understand the mechanism of human functioning in various spheres. The purpose of the research project was to explore the relationships between the intensity of sensitivity and eating behaviors in young adult women. The sample consisted of 213 participants in young adulthood (i.e., from 20 to 35 years old). The selection of respondents was purposeful, and the inclusion criteria were gender and age. The *High Sensitivity Scale* by Elaine Aron, adapted by Agata Borzyszkowska, and the *Questionnaire of Eating-Related Behaviors* by Nina Ogińska-Bulik and Leszek Putyński were used to measure the main variables. As a result of the analysis of the obtained research material, the main assumption about the existence of a relationship between the intensity of sensitivity and eating behaviors in the examined women was confirmed. The higher the level of sensitivity intensity, the higher the tendency for abnormal eating behaviors. A correlation was also found between the difference in real and ideal body mass and eating behaviors, both in their general dimension, emotional eating, and dietary restrictions. Additionally, it was documented that the greater the difference between real and ideal body mass, the greater the tendency of the examined women to exhibit abnormal eating behaviors. A partial relationship between the assessment of the adequacy of support and the burden of stress with eating behaviors was also confirmed.

Keywords: high sensitivity, eating-related behaviors, women, young adulthood

Introduction

The issue of high sensitivity of sensory processing has recently become a popular topic of consideration, not only in the field of science. As a result, there are many colloquial expressions in the public space describing highly sensitive people as, e.g., overly sensitive, too emotional, tearful, oversensitive, or neurotic (Baryła-Matejczuk, 2019). However, these terms do not accurately reflect the specifics of their functioning and can even be hurtful.

The author of the construct “high sensory processing sensitivity” is Elaine Aron, whose monograph, *The High Sensitive Person* (1996), contributed to the popularization of the issue. According to the author, interindividual differences in sensory processing are a genetically and environmentally conditioned

temperament trait with both positive and negative connotations (Aron, Aron, 1997). High sensitivity refers to internal and external stimuli of a physical, emotional, and social nature, and can be placed on a continuum – from low to high, depending on the degree of intensity (Greven et al., 2019). People characterized by a high level of sensory processing sensitivity are identified as highly sensitive (HSP) (Aron, Aron, 1997). Although this trait is often associated with introversion, neuroticism, extraversion, and openness, according to E. Aron and A. Aron (1997), it is a fully separate construct. Surely, however, people with a high intensity of sensory processing sensitivity more often than others experience tension and anxiety on a daily basis, compare themselves more frequently

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with others, worry about what others think about them, how they are evaluated, which lowers their self-esteem (E. Aron, 2017).

Sensory processing sensitivity is largely conditioned by the specific functioning of the nervous system (Baryła-Matejczuk, 2019). Functional studies of this trait using magnetic resonance imaging (fMRI) prove its connection with brain neuronal structure (Acevedo, E. Aron, Pospos, Jessen, 2017; E. Aron, A. Aron, Jagiellowicz, 2012; Chen, He, Chen, He, 2011). It has been shown (Assary, Zavos, Krapohl, Keers, Pluess, 2020) that 47% of the variance of high sensitivity can be explained by genetic factors, and 53% by environmental factors. Among the latter, the family environment is mentioned (E. Aron, 2017; Baryła-Matejczuk, 2019). It has been proven that adults who showed a high level of sensitivity and perceived their childhood as unhappy obtained higher results in the range of negative emotionality and social introversion than respondents who also had a high level of sensitivity but assessed their childhood as happy (E. Aron, A. Aron, 1997). If the environment of a child with a high level of sensitivity is unsupportive, it increases the risk of behavioral problems and psychopathology, both in childhood and adulthood (Greven et al., 2019). On the other hand, when people with high sensory processing sensitivity experience positive life events, and their family environment is supportive, they can develop in an above-average way (Pluess, 2015).

Eating behaviors are defined as actions and ways of behaving directly related to satisfying nutritional needs (Korwin-Szymanowska, Tuszyńska, 2015). Physiological hunger appears gradually as a consequence of a deficiency of food components, and its result is the mobilization of the body to actions aimed at acquiring and taking food (Juruć, Wierusz-Wysocka, Bogdanski, 2011). However, people reach for food not only under the influence of physiological hunger but also as a result of so-called “emotional hunger” (Czeczor, Brytek-Matera, 2017). The latter appears suddenly, under the influence of affect, provokes to take food despite a feeling of fullness, and often a feeling of guilt arises after eating. Therefore, food intake is a strategy for dealing with negative emotions or bad mood, but at the same time, it serves several other socio-cultural

functions – it is a way of expressing feelings, defining one’s identity, a tool of control, or a source of power (Jaworski, Fabisiak, 2017; Ziolkowska, Wycisk, 2019).

There have been introduced several concepts explaining the psychological mechanism of overeating, especially in emotional situations. According to one of them (Heatherton, Baumeister, 1991; after: Evers, Stok, de Ridder, 2010), overeating is an attempt to escape from negative self-awareness to avoid analyzing information that threatens the *ego*. The masking theory, on the other hand, states that excessive food consumption is a form of diverting attention from the real source of suffering, e.g., loneliness (Herman, Polivy, 1988; after: Evers et al., 2010). It can be assumed that emotions – especially negative ones – affect overeating, and it, in turn, indicates that the source of the primary problem is a lack of adaptive affect regulation strategies. Meanwhile, improper nutrition in young adulthood results in an increased risk of health problems in later life, and above all, it is harmful to women in the reproductive period (Vien, 2015).

1. Purpose and method

In the population of young people, many anti-health behaviors are observed, including in the field of nutrition (Brytek-Matera, Charzyńska, 2009). Food is easily accessible, necessary to maintain vital functions, and also serves as a regulator of emotions and stress by stimulating the reward system (Mendoza, 2019). Meanwhile, proper nutrition of the body, especially in the period when women work intensively and also make a decision about motherhood, is extremely important.

At the same time, it is estimated that even 30% of the population (Greven et al., 2019) experiences high sensory processing sensitivity, which is important for the psychophysical functioning of a human being (Acevedo et al., 2017; Chen et al., 2011). It was assumed, therefore, that people with high intensity of this temperamental trait may use food to a greater extent than the rest of the population for affect regulation, which means that they are more exposed to the development of abnormal eating behaviors (extremely – bulimia or compulsive eating).

In connection with the above, exploratory studies (without a comparison group) were planned in a correlational model, in which the explanatory variable was sensitivity, understood as a temperament trait describing both positive and negative interpersonal differences in environmental sensitivity (E. Aron, A. Aron, 1997). On the other hand, the explained variable was behaviors related to eating, i.e., complex actions and ways of behaving that are associated with satisfying nutritional needs, conditioned by environmental, cultural factors, the functioning of the hormonal system, and the knowledge that an individual has about food (Ogińska-Bulik, Putyński, 2000).

In own research, additional variables were also controlled, such as: body mass index [BMI = weight/height²], the difference between actual and ideal body weight expressed in kilograms, having a partner *vs.* not having a partner, and also the level of satisfaction with the relationship, assessment of the adequacy of support, and the severity of experienced stress determined on a 4-point scale, where 0 means “not at all”, and 3 “very strongly.”

The main research problem was formulated in the form of a question: Is there a relationship between the intensity of sensitivity and eating behaviors in women in the studied sample?

Own research was conducted via the Internet (survey in the *Google* form) from March 2022 to April 2022. Purposeful selection was applied, and the inclusion criteria for the study were female gender and age from 20 to 35 years old. Exclusion was based on the failure to meet the required criteria. 220 women participated in the study, however, the material included in the final analysis was from 213 respondents. The remaining seven did not meet the inclusion criteria and/or the required data was incomplete.

Among the study participants, the oldest woman was 35 and the youngest was 20 years old, with an average age of 25.94 (SD = 5.13). Most women are students (82 people), 76 work, 41 combine work and study, and 14 are not engaged in any of these activities. The majority of the respondents are in a relationship (123 people), of which 118 are satisfied with it. 192 women declared having

support, and 179 of them rated it as adequate for their needs. Most of the respondents currently feel stress (160 people), of which 130 find it hinders their daily functioning. An average BMI value in the study group is 23.70. The largest discrepancy between the current and ideal body weight is 65, and the smallest is 0.

To measure the main variables, the following were used: 1) *Food-Related Behavior Questionnaire* (FRBQ) by N. Ogińska-Bulik and L. Putyński and 2) Elaine Aron's *High Sensitivity Scale* in the Polish adaptation by Agata Borzyszkowska. The first tool consists of 30 statements to which respondents relate by choosing one of two answers – “yes” or “no”. Due to the nature of overeating, three factors are distinguished: 1) “habitual eating”, 2) “emotional eating”, and 3) “dietary restrictions”. The overall score allows determining the general tendency towards improper nutritional behaviors, and the scores within the subscales allow determining the type of irregularity. Normalization studies showed that the internal consistency of the questionnaire, measured by Cronbach's alpha coefficient, is satisfactory and amounts to 0.89 (Ogińska-Bulik, 2000), and in own research to 0.88.

The second tool – the *High Sensitivity Scale* (HSS) by Elaine Aron in the adaptation of Agata Borzyszkowska (unpublished material obtained from the Author of the adaptation) – allows determining the degree of environmental sensitivity of the respondent. It consists of 27 questions, to which respondents relate by choosing an answer on a 7-point scale, where 1 means “not at all”, and 7 means “extremely.” The higher the score, the greater the sensitivity to both negative and positive stimuli (E. Aron, 2017). Normalization studies showed that the internal consistency of the questionnaire, measured by Cronbach's alpha coefficient, is satisfactory and amounts to 0.94, and in own research to 0.90.

To verify the hypotheses, the Statistica 12 program was used for statistical analysis. To check the reliability of the research tools used, Cronbach's alpha coefficient was used, and to verify the relationships between variables, Pearson's linear coefficient *r* and Spearman's rank correlation coefficient *R_s* was used.

Table 1. Test Shapiro-Wilk – eating behaviors and intensity of sensitivity (N=213)

	M	Mdn	SD	Min	Max	Sk.	Kurt.	W	P
KZZJ	12.97	12	6.70	0	29	0.25	-0.82	0.97	0.001
Habitual eating	4.21	4	2.89	0	10	0.37	-0.90	0.94	< 0.001
Emotional eating	4.89	5	2.48	0	10	0.19	-0.78	0.96	< 0.001
Dietary restrictions	4.29	4	2.95	0	10	0.19	-0.19	0.94	< 0.001
SWW	4.98	5.11	0.89	2.70	6.78	-0.36	-0.37	0.98	0.009

Table 2. Pearson correlation coefficient – relationship between the intensity of sensitivity and eating behaviors (N=213)

	KZZJ		Habitual eating		Emotional eating		Dietary restrictions	
	R	p	R	P	R	P	R	p
SWW	0.28*	0.000	0.19*	0.007	0.33**	0.000	0.23*	0.001

*low correlation, ** moderate correlation ,*** high correlation

2. Results

Statistical analyses began by establishing the distribution of main variables in the study sample (Table 1).

The results obtained prove that behaviors related to eating in general, “habitual eating,” “emotional eating,” and “dietary restrictions,” as well as sensitivity, do not have a normal distribution. However, the skewness and kurtosis parameters are within the limits of -2 to 2, so parametric tests can be used in further analyses (Bedyńska, Cypryńska, 2013). The average score for eating behaviors overall is 12, the highest is 29, and the lowest is 0. On the subscales: “habitual eating” – the average score is 4.2, the highest is 10, and the lowest is 0; “emotional eating” – the average score is 4.89, the highest is 10, and the lowest is 0; “dietary restrictions” – the average score is 4.29, the highest is 10, and the lowest is 0. Meanwhile, the average score on the *High Sensitivity Scale* is 4.98, the highest is 6.78, and the lowest is 2.70.

To answer the main research question, the relationship between sensitivity intensity and eating behaviors in the studied women was examined by conducting a correlation analysis using Pearson’s *r* coefficient (Table 2).

Table 3. Pearson correlation coefficient – correlation between the BMI value and eating behaviors (N=213)

	BMI	
	R	P
KZZJ	0,09	0,164
Habitual eating	0,02	0,771
Emotional eating	0,13	0,066
Dietary restrictions	0,10	0,164

In the study sample, there is a weak positive relationship between the intensity of sensitivity and the overall result in the field of eating behaviors. Additionally, sensitivity intensity is positively related to all FRBQ factors – weakly with “habitual eating” and “dietary restrictions”, and moderately with “emotional eating.” This means that the higher the level of sensitivity, the higher the level of habitual eating – regardless of the feeling of fullness, under the influence of affect, and the greater use of restrictions in the diet.” This in turn

Table 4. Pearson correlation coefficient – correlation between the difference between the current and expected body weight and eating behaviors (N=213)

	KZZJ		Habitual eating		Emotional eating		Dietary restrictions	
	R	p	R	P	R	P	R	p
The difference between the current and expected body weight	0.17*	0.009	0.12	0.073	0.18*	0.009	0.14*	0.036

*low correlation, ** moderate correlation, *** high correlation

Table 5. Spearman’s rank correlation coefficient –relationship between the adequacy of support and the burden of stress and eating behaviors (N=213)

	KZZJ		Habitual eating		Emotional eating		Dietary restrictions	
	R	p	R	P	R	P	R	p
The adequacy of support	0.09	0.192	0.01	0.848	-0.14*	0.049	- 0.14	0.055
The burden of stress	0.31**	0.000	0.20*	0.010	0.29*	0.000	0.31**	0.000

*low correlation. ** moderate correlation. *** high correlation

provided an answer to the main research question by demonstrating a significant relationship between the level of sensitivity and the eating behaviors of the studied women.

As mentioned, the own research also controlled for several secondary variables. This allowed for the verification of their relationships with the main variables. First, the correlation between the BMI value and eating behaviors and their dimensions in the studied women was checked (Table 3).

No association between the BMI value and eating behaviors and their dimensions in the study sample was found ($r = 0.09$; $p = 0.164$), but it was proven (Table 4) that the difference between the current and expected body weight is significantly related to eating behaviors.

It was found that in the group of studied women there is a positive, weak relationship in terms of the discrepancy between real and ideal body weight and overall eating behaviors as well as “emotional eating” and “dietary restrictions”. This means that the greater the disparity between the real and ideal body weight, the greater the tendency of the studied women to

exhibit abnormal eating behaviors, especially in terms of eating under the influence of affect and following a dietary regime.

Next, the relationship between the adequacy of support and the burden of stress and eating behaviors and their dimensions was checked (Table 5).

Analysis of the research material showed that the adequacy of support in the studied sample is weakly associated with “emotional eating”, with a greater sense of inadequacy of support leading to a greater tendency of the studied women to eat under the influence of emotions. At the same time, positive

Table 6. Spearman’s rank correlation coefficient–relationship between the sensitivity intensity and the adequacy of support and the burden of stress (N=213)

	SWW	
	Rs	p
The adequacy of support	-0.14*	0.054
The burden of stress	0.30**	0.000

*low correlation. ** moderate correlation. *** high correlation

relationships (from weak to moderate) were noted between the assessment of stress burden and overall eating behaviors and all their dimensions, indicating that the higher the assessment of stress burden, the greater the intensity of abnormal eating behaviors.

Correlations between the adequacy of support and stress burden with sensitivity intensity were also examined in the studied group of women (Table 6).

It turned out that in the studied sample there is a weak negative relationship between sensitivity intensity and the assessment of support adequacy, meaning the higher the sensitivity intensity, the lower the adequacy of support is rated among the studied women. Moreover, a moderate positive relationship between sensitivity intensity and stress burden assessment was proven. Thus, the greater the sensitivity intensity in the studied sample, the more stress is felt by the studied women as burdensome.

3. Discussion

As indicated by the analysis of literature sources conducted by the authors – no studies have been described to date in which correlations between eating behaviors and the intensity of sensory processing sensitivity were verified in the framework designed by the authors. However, this does not mean that the issue of sensitivity was overlooked in these studies. For example, the relationship between atypical sensory processing and high sensitivity (Saure, Lepistö-Paisley, Raevuori, Laasonen, 2022) and high sensitivity and disturbed body perception (Sagardoy et al., 2015) in individuals with *anorexia nervosa* was verified and confirmed. However, in the studies of Tasuku Kitajima and his team (2022), which compared the functioning of children and adolescents diagnosed with *anorexia nervosa* (AN) and healthy ones, it was proven that avoiding sensory stimuli in the clinical group may be a kind of “scar” (consequence/defect) due to chronic hunger, not the cause of *anorexia nervosa*.

In contrast, Naish and Harris (2012) verified the relationship between high sensitivity and a tendency towards obesity. It turned out that food intake was much higher for people with high sensitivity compared

to those with low intensity of this trait. Moreover, individual results in terms of sensory sensitivity were positively correlated with self-description of emotional eating, suggesting that people more sensitive to the sensory properties of food have a more intense perception of tastiness, leading to greater food consumption. Farrow and Coulthard (2012; 2018) in their research – similar to Bell and Wildbur (2017) – proved that picky eating and food neophobia are linked to anxiety and sensory sensitivity.

Thus, it can be recognized that the results of our own research regarding the documentation of the relationship between eating behaviors (primarily emotional eating) and high sensory processing sensitivity are consistent with the findings of other researchers. However, it should be noted that the referenced project was carried out in the general population, while the cited studies were conducted among individuals with disturbed relationships to food and their own bodies.

In our study, it was also shown that it is not so much the BMI value, but the difference between actual and ideal body weight that is related to eating behaviors and all their dimensions – habitual eating, emotional eating, and dietary restrictions. This observation is consistent with numerous reports. Muennig, Jia, Lee, Lubetkin (2008) proved that the difference between actual and desired body weight is a stronger predictor of mental health than body mass index (BMI). According to Steineberg and his team (2023), a significant difference in terms of actual and expected weight poses a greater risk of relapse in people with *anorexia nervosa* than a low BMI. Meanwhile, Zarychta and colleagues (2022) showed that young people who had a smaller discrepancy between actual and ideal body weight were more satisfied with their physicality, thus being less prone to adopting unhealthy eating practices.

In our own studies, we also proved that a lack of perceived support and a subjectively estimated higher level of stress positively correlate with abnormal eating behaviors. This result is consistent with the findings of other authors. For example, Łuczak (2016) empirically documented that the global stress level of the subjects significantly correlates with emotional eating and habitual eating. The latter is

related to stress factors such as lack of support and a feeling of psychological burden. In other studies (Potocka, Mościcka, 2011), it was noted that the more the women studied focused on emotions, the more they manifested abnormal eating habits. Those who felt high levels of stress thought about food more often, snacked in secret, and viewed food as an important part of their lives compared to those who experienced average stress levels.

Based on the collected empirical material, we also confirmed the relationship between the intensity of sensitivity and the evaluation of the adequacy of support and the severity of stress in the study sample. Studies indicate (Greven et al., 2019) that high sensory processing sensitivity increases – on one hand – the risk of stress-related problems in response to a negative environment, but if the environment is favorable, it can also be beneficial. Haberlin (2015) argues that particularly talented people may suffer from subjectively higher stress levels due to their characteristics, such as perfectionist tendencies and increased sensitivity. Therefore, we can conclude that the findings from our research are consistent with the existing reports of researchers.

Summary

In summary, based on the collected research material, the main assumption about the occurrence of the relationship between the intensity of sensitivity and eating behaviors in the studied women was confirmed. The higher the level of intensity of

sensitivity, the greater the propensity for abnormal eating behaviors. However, no co-variation of BMI and overall eating behaviors and their dimensions was found. Nevertheless, a correlation was demonstrated between the difference in actual and ideal body weight and eating behaviors, both in their general dimension and in terms of emotional eating and dietary restrictions. Additionally, the analysis results documented that the greater the difference between actual and ideal body weight, the greater the propensity of the studied women to exhibit abnormal eating behaviors. Furthermore, a partial relationship between the assessment of the adequacy of support and the severity of stress and eating behaviors was confirmed. It turned out that: 1) the stronger the feeling of inadequacy of support among the studied women, the greater their tendency to eat under the influence of emotions and 2) the higher the level of stress they perceived as burdensome, the greater the tendency to various types of abnormal eating behaviors they revealed.

Although the referenced studies have some limitations (e.g., they were conducted *online*, a correlational research model was used, and no control group was selected), their results seem to have explanatory significance, enriching knowledge about the mechanisms of functioning of highly sensitive people. Additionally, they fit into the stream of research that perceives high sensitivity as a risk factor for forming an abnormal relationship to eating in a non-clinical population and thus may form the basis for designing various forms of prevention, especially in the population of young women.

Bibliography

- Acevedo, B., Aron, E., Pospos, S., Jessen, D. (2017). The functional highly sensitive brain: a review of the brain circuits underlying sensory processing sensitivity and seemingly related disorders. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 374–381. <https://doi.org/10.1098/rstb.2017.0161>
- Aron, E. (2017). *The Highly Sensitive Person. How to Thrive When the World Overwhelms You*. Londyn: Harper Collins Publishers.
- Aron, E.N., Aron, A. (1997). Sensory-processing sensitivity and its relation to introversion and emotionality. *Journal of Personality and Social Psychology*, 73, 345–368. <https://doi.org/10.1037/0022-3514.73.2.345>
- Aron, E.N., Aron, A., Jagiellowicz, J. (2012). Sensory processing sensitivity: A review in the light of the evolution of biological responsiveness. *Personality and Social Psychology Review*, 16(3), 262–282. <https://doi.org/10.1177/1088868311434213>
- Aron, E.N. (1996). *The Highly Sensitive Person*. Broadway Books.
- Assary E., Zavos H.M.S., Krapohl E., Keers R., Pluess M. (2020). Genetic architecture of Environmental Sensitivity reflects multiple heritable components: a twin study with adolescents. *Molecular Psychiatry*, 26, 4896–4904. <https://doi.org/10.1038/s41380-020-0783-8>
- Baryła-Matejczuk M. (2019). A model of support for highly sensitive children of preschool and early school age. *Avances en Psicología Clínica*, 272–280.

- Bedyńska, S., Cypryńska, M. (2013). *Statystyczny drogowskaz*. Warszawa: Szkoła Wyższa Psychologii Społecznej.
- Bell, K., Wildbur, D. (2017). Self-Disgust within Eating Disordered Groups: Associations with Anxiety. *Disgust Sensitivity and Sensory Processing*, 25(5), 373-380. <https://doi.org/10.1002/erv.2529>
- Brytek-Matera, A., Charzyńska, E. (2009). Poznawcze i behawioralne determinanty zaburzeń odżywiania u kobiet z otyłością. *Endokrynologia, Otyłość i Zaburzenia Przemiany Materii*, 5(2), 45-50.
- Chen, C., He, Q., Chen, C., He., L. (2011). Contributions of Dopamine-Related Genes and Environmental Factors to Highly Sensitive Personality: A Multi-Step Neuronal System-Level Approach. *Plos One*, 6(7), e21636. <https://doi.org/10.1371/journal.pone.0021636>
- Coulthard, H., Williamson, I., Palfreyman, Z., & Lyttle, S. (2018). Evaluation of a pilot sensory play intervention to increase fruit acceptance in preschool children. *Appetite*, 120, 609-615. <https://doi.org/10.1016/j.appet.2017.10.011>
- Czepczor, K., Brytek-Matera, A. (2017). *Jedzenie pod wpływem emocji*. Warszawa: Difin.
- Eşkisü, M., Ağırkan, M., Çelik, O., Yalçın, R., Haspolat, N. (2022). Do the Highly Sensitive People Tend to have Psychological Problems Because of Low Emotion Regulation and Dysfunctional Attitudes? *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 40, 683-706. <https://doi.org/10.1177/0146167210371383>
- Evers, C., Stok, F.M., de Ridder, D.T. (2010). Feeding Your Feelings: Emotion Regulation Strategies and Emotional Eating. *Personality and Social Psychology Bulletin*, 36(6), 792-804. <https://doi.org/10.1177/0146167210371383>
- Farrow, C.V., Coulthard, H. (2012). Relationships between sensory sensitivity, anxiety and selective eating in children. *Appetite*, 58(3), 842-6. <https://doi.org/10.1016/j.appet.2012.01.017>
- Greven, C.U., Lionetti, F., Booth, C., Aron, E.N., Fox, E., Schendan, H.E., Pluess, M., Bruining, H., Acevedo, B., Blijt-ebier, P., Homberg, J. (2019). Sensory Processing Sensitivity in the context of Environmental Sensitivity: A critical review and development of research agenda. *Neuroscience & Biobehavioral Reviews*, 98, 287-305. <https://doi.org/10.1016/j.neubiorev.2019.01.009>
- Haberlin, S. (2015). Don't stress: What do we really know about teaching gifted children to cope with stress and anxiety? *Gifted and Talented International*, 30(2), 146-151. <https://doi.org/10.1080/15332276.2015.1137465>
- Jaworski, M., Fabisiak, A. (2017). Psychospołeczne determinanty wyboru żywności. *Zeszyty Naukowe Uczelni Vistula*, 54(3), 17-29.
- Juruć, A., Wierusz-Wysocka, B., Bogdański, P. (2011). Psychologiczne aspekty jedzenia i nadmiernej masy ciała. *Farmacja Współczesna*, 4, 119-126.
- Kitajima, T., Otani, R., Inoue, T., Matsushima, N., Matsubara, N., Sakuta, R. (2022). Sensory processing in children and adolescents shortly after the onset of anorexia nervosa: a pilot study. *BioPsychoSocial Medicine*, 16-27. <https://doi.org/10.1186/s13030-022-00256-z>
- Korwin-Szymanowska, A., Tuszyńska, L. (2015). Zachowania żywieniowe jako nieodłączny element edukacji zdrowotnej – raport z badań. (W:) A. Wolska-Adamczyk (red.), *Znaczenie racjonalnego żywienia w edukacji zdrowotnej*, 23-38. Warszawa: WSiLiZ.
- Łuczak, A. (2016). Czynniki stresogenne i sytuacje trudne oraz ich związek z emocjonalnym i nawykowym przejadaniem się i jego konsekwencjami w grupie kierowców samochodów ciężarowych. *Annales Universitatis Marie Curie-Skłodowska*, 24(4), 193-206. <https://doi.org/10.17951/j.2016.29.4.193>
- Mendoza, J. (2019). Eating Rewards the Gears of the Clock. *Trends in Endocrinology and Metabolism*, 30(5), 299-311. <https://doi.org/10.1016/j.tem.2019.03.001>
- Muenning, P., Jia, H., Lee, R., Lubetkin, E. (2008). I Think Therefore I Am: Perceived Ideal Weight as a Determinant of Health. *American Journal of Public Health*, 98(3), 501-506. <https://doi.org/10.2105/AJPH.2007.114769>
- Naish, K.R., Harris, G. (2012). Food intake is influenced by sensory sensitivity. *PLoS One*, 7(8):e43622. <https://doi.org/10.1371/journal.pone.0043622>
- Ogińska-Bulik, N., Putyński, L. (2000). Kwestionariusz Zachowania Jedzeniowe Związane z Jedzeniem: konstrukcja i własności psychometryczne. *Folia Psychologica*, 4, 25-33.
- Pluess, M. (2015). Individual Differences in Environmental Sensitivity. *Child Development Perspectives*, 9(3), 138-143. <https://doi.org/10.1111/cdep.12120>
- Potocka, A., Mościcka, A. (2011). Stres oraz sposoby radzenia sobie z nim a nawyki żywieniowe wśród osób pracujących. *Medycyna Pracy*, 62(4), 377-388.
- Sagardoy, R., Morales, G., Garcia, S., Julián, R., Fernández, A., Ostolaza, G., Martínez, G. (2015). Heightened sensitivity to somatosensory stimuli in anorexia nervosa: an exploratory study with the SASTCA scale. *Nutricion Hospitalaria*, 31(3), 1413-1422. <https://doi.org/10.3305/nh.2015.31.3.8320>
- Saure, E., Lepistö-Paisley, T., Raevuori, A., Laasonen, M. (2022). Atypical Sensory Processing Is Associated With Lower Body Mass Index and Increased Eating Disturbance in Individuals With Anorexia Nervosa. *Front. Psychiatry*, 13, <https://doi.org/10.3389/fpsy.2022.850594>
- Steinberg, D., Perry, T., Freestone, D., Hellner, M., Baker, J., Bohon, C. (2023). Evaluating differences in setting expected body weight for children and adolescents in eating disorder treatment. *International Journal of Eating Disorders*, 56(3), 595-603. <https://doi.org/10.1002/eat.23868>
- Vien, C. (2015). Millennial women: How to woo a new generation of employees. *Journal of Accountancy*, 220, 26-30.
- Zarychta, E., Mullan, B., Łuszczzyńska, A. (2022). It doesn't matter what they say, it matters how they behave: Parental influences and changes in body mass among overweight and obese adolescents. *Appetite*, 96, 47-55. <https://doi.org/10.1016/j.appet.2015.08.040>
- Ziółkowska, B., Wycisk, J. (2019). *Autodestruktywność dzieci i młodzieży*. Warszawa: Difin.