

Aleksandra Korolik

*SWPS University of Social Sciences and Humanities<sup>1</sup>*

Marta Kochan-Wójcik

*University of Wrocław<sup>2</sup>*

## Anorexia readiness syndrome and sensitivity to body boundaries breaches

### Abstract

Our study tests the relationships between the anorexia readiness syndrome (ARS) and the sense of body boundaries as well as sensitivity to breaches of self boundaries. Conducted among 120 young females aged 18–24, the study was based on three questionnaires: the Eating Attitudes Questionnaire, the Sense of Body Boundaries Questionnaire, and the Self Boundaries Sensitivity Scale. Two groups were used for comparative analyses, each consisting of 30 participants with either high or low ARS intensity. The results showed high-ARS intensity individuals to have a weaker body boundary sense, a weaker sense of being separate from the environment, and a stronger sense of their bodies' permeability boundaries, as well as being overly-sensitive to breaches in their social self boundaries. The groups showed no significant differences with respect to sensitivity to breaches in their bodily and spatial-symbolic selves.

### Keywords

anorexia readiness syndrome, sense of body boundaries, bodily self

### Streszczenie

Celem zaprezentowanych badań było sprawdzenie zależności pomiędzy natężeniem syndromu gotowości anorektycznej (SGA) a poczuciem granic ciała oraz wrażliwością na naruszenie granic Ja. W badaniu wzięło udział 120 młodych kobiet w wieku od 18 do 24 lat. Pomiar przeprowadzony został przy użyciu Kwestionariusza do badania indywidualnego stosunku do jedzenia, Skali Wrażliwości na Naruszenie Granic Ja (SnaG), Kwestionariusza Poczucia Granic Ciała (KPGC). Wyodrębnione zostały dwie grupy porównawcze liczące 30 osób: z niskim oraz z wysokim natężeniem syndromu gotowości anorektycznej. Wyniki wykazały, że osoby z wysokim natężeniem syndromu gotowości anorektycznej doświadczają słabszego poczucia granic ciała, niższej odrębności od środowiska, wyższej przepuszczalności granic cielesnych oraz charakteryzuje je nadwrażliwość na naruszenie granic Ja cielesnego. Grupy nie

<sup>1</sup> Aleksandra Korolik, SWPS University of Social Sciences and Humanities, Faculty in Wrocław, ul. Ostrowskiego 30b, 53-238 Wrocław; [aleksandrakorolik@gmail.com](mailto:aleksandrakorolik@gmail.com)

<sup>2</sup> Marta Kochan-Wójcik, Institute of Psychology, Faculty of Pedagogical and Historical Sciences, University of Wrocław, ul. Dawida 1, 50-527 Wrocław; [marta.kochan-wojcik@uwr.edu.pl](mailto:marta.kochan-wojcik@uwr.edu.pl)

różniły się od siebie w zakresie wrażliwości na naruszenie granic ja cielesnego i symboliczno-terytorialnego.

### **Słowa kluczowe**

syndrom gotowości anorektycznej, poczucie granic ciała, Ja cielesne

## **Introduction**

### **Anorexia and the anorexia readiness syndrome**

Under ICD-10 (1998, qtd in Cierpiałkowska, 2009), the symptoms that must be present for the eating disorder anorexia nervosa to be recognized include body weight that is maintained at least 15% below that expected for height and age, and weight loss self-induced by avoiding high-calorie foods and by purging, excessive exercise, or by using appetite suppressants and/or diuretics. Moreover, there is persistent body-image distortion with a dread of fatness. The symptoms are accompanied by endocrine disorders that in women lead to amenorrhoea, and if the onset of anorexia is in adolescence, also to pubertal arrest. Anorexia is estimated to affect between 0.3 and 1% of the population, with the major risk group being adolescents, in particular females (Józefik & Pilecki, 1999; Hoek & van Hoeken, 2003; Keski-Rahkonen et al., 2007).

Several factors are thought to cause anorexia, including biological, socio-economic and socio-cultural ones, such as disorders of attachment and family relations, negative feedback from significant others and the peer group, as well as the prevailing media images promoting slim and attractive-looking female bodies (Józefik & Pilecki, 1999, 2006; Ziółkowska, 2001; Cierpiałkowska, 2009; Kiejna & Małyszczak, 2009).

The cure rate for anorexia nervosa is currently estimated at about 60%. In the remaining cases, its symptoms may lead to death from starvation or self-annihilation (Strober, Freeman, & Morrell, 1997; Ziółkowska, 2001), while also increasing the risk of other medical disorders, including depression, bulimia nervosa, osteoporosis, and procreation-related ailments (Bulik, Reba, Siega-Riz, & Reichborn-Kjennerud, 2005). Effective therapy is increased considerably through recognizing anorexia risk factors and the disorder itself, especially before it reaches its full-blown form.

One direction of preventive action is to analyse behaviour that precedes the development of anorexia. In this context, Ziółkowska (2001) described the so-called anorexia readiness syndrome (ARS), which she defined as “a set of symptoms suggestive of abnormalities in satisfying one’s nutritional needs and the attitude to one’s own body” (Ziółkowska, 2001, p. 17). The syndrome is identified in people who have not yet developed full-blown anorexia, but are nevertheless found to control the amount and quality

of food, focus on their appearance and body weight, believe a slim female body to be a socially desired femininity indicator, dread putting on weight, and delight in weight loss (Chytra-Gędek & Kobierecka, 2008). ARS manifests itself in so-called anorectic behaviour, which is displayed every now and then under stress and in a lowered mood. According to Ziółkowska (2001), examples of such behaviour include:

- taking a keen interest in foods and their calorific value
- showing periodical increase in physical activity
- paying excessive attention to one's looks, focusing on the body and comparing oneself with the ideal of female beauty
- having a tendency toward overestimating the size and weight of the body
- competitiveness
- perfectionism
- need for control
- susceptibility to the influence of mass culture
- emotional lability (mainly conditioned by the attitude to food and the body)
- tendency to control the weight and size of the body, which is accompanied by emotional tension.

Psychologically Ziółkowska reported that, based on her research (2001), ARS is accompanied by an unrealistic and lowered self-esteem, especially with respect to one's attractiveness, which is perceived to be the main source of success in life. This is accompanied by a lowered mood, which may be temporarily boosted by creating strategies for gaining greater control over one's image. Physiologically body size and weight of women with ARS do not usually deviate from the standard, occasionally also exceeding the standard weight and height for their age. People with ARS are also likely to have or have had disturbed family relations with either insufficient or excessive distance between family members. Susceptibility to advertisements is rather selective, although ARS women tend to compare themselves with attractive actresses and models presented in the media.

Three key factors lie at ARS's source: disturbed relations between parents and child (too little or too much distance), a disturbed perception of one's body, and a lack of constructive strategies for coping with difficult situations. Facilitated by adolescent challenges and young people's immersion in popular culture, these factors, when interacting, may trigger anorectic behaviour, thus also leading to full-blown anorexia.

### **Sense of body boundaries**

Corporality and body image are two issues that are being increasingly looked at. Izydorczyk (2011) showed that young anorectic women are characterized by high dysfunction levels affecting various bodily features, contributing as a result to dissatisfaction with the body, low esteem of one's own body, and a limited capacity to recognize emo-

tional states and bodily sensations. Izydorzycyk and Bieńkowska (2009) conducted a study with a view to diagnosing the body self's psychological structure. Their findings demonstrated that young anorectic women were characterized by less complex body schema and unstable attitudes to their boundaries, which were manifested in difficulties those participants had in delineating their body boundaries, as well as in having a sense of their being blurred or absent.

One key body self component, the sense of body boundaries, is related to the way in which people experience their boundaries (Wycisk, 2004; Schier, 2009; Krzewska & Dolińska-Zygmunt, 2012, 2013). The first to investigate this matter were Cleveland and Fisher (1958), who used the notion of "body image boundaries" to demonstrate the differential degree to which people conceive their body boundaries as either being a "barrier" (definite and firm boundaries separating the individual from the external environment) or as being "permeable" (indefinite and weak boundaries exposing the individual to external influences).

Following this lead, Sakson-Obada (2009) define such boundaries as having the skin isolate oneself from other people and objects. A weak boundary sense indicates disturbed body self functioning and is manifested in a limited capacity to interpret one's bodily emotions and physical states, such as hunger, fatigue, and sleepiness.

Regarded as a relatively stable mental experience (Krzewska & Dolińska-Zygmunt, 2012), the sense of body boundaries is significantly related to human mental health. An impairment to body boundary development may result from adverse early-childhood experiences, such as parental emotional unavailability, and a lack of appropriate touch and adequate stimulation (Anzieu, 1989, qtd. in Sakson-Obada, 2009). Individuals without a fully-developed body self in their adult life tend to delineate their boundaries by engaging in self-destructive behaviour, which may lead to self-mutilation, self-inflicted pain, addictions, and eating disorders (Krueger, 2002, qtd. in Krzewska & Dolińska-Zygmunt, 2012).

The subject of body boundaries has also been taken up by Burriss & Rempel (2004), who put forward the conception of amoebic self, one that draws certain analogies between unicellular organism (amoebas) qualities and the human beings' cognitive and motivational features. Amoebas are driven by the two basic needs for food and protection from danger, which is a tendency that is common for all living organisms: striving for what is positive and favorable, and eliminating the negative. Furthermore, both amoebas and human beings need to be able to differentiate between what is internal and what is external, with an extra requirement added for humans, the social creatures who also need to distinguish friend from foe. The underlining assumption behind the conception of amoebic self is the need common to all organisms to perceive oneself as separate from the environment (Jaśkiewicz & Drat-Ruszczak, 2011).

Under their theory, Burris and Rempel (2004) distinguished three levels that define the boundary between the self and the world around: bodily, social, and spatial-symbolic. At the first level, the boundary between the internal and the external is delineated by the skin, a literal equivalent to the amoeba membrane that, when intact, comprises the most effective protection against infection. The ability to differentiate the inside of one's body and the external world is no less important for human beings than it is for the amoeba (Jaśkiewicz & Drat-Ruszczak, 2011), since being aware of one's body boundaries allows an individual to distinguish between what they might be able to interact with using the strength of their muscles, and what lies beyond that influence. Conversely, it may well have deadly consequences to identify one's own body as a potentially harmful element of the external environment. At the heart of the second level lies the need to be able to distinguish between friends – those who might support one's development, and foes – those who pose a threat. Being able to do so is indispensable for human beings, who coexist with other representatives of their kind (Jaśkiewicz & Drat-Ruszczak, 2011). To navigate through these complex social networks, people have to perceive their privacy and the ability to regulate interpersonal boundaries in order to reveal their selves to people they trust and hide them from those who may be unworthy of their trust. As Burris and Rempel (2004) point out, emotions play a significant role in how human beings function at the social level, making it distinctly different from the bodily level, which is grounded solely on corporality. Spatial-symbolic is the third level in the amoebic self theory. By using abstract thinking, human beings are able to endow other people, objects, beliefs, and even the surrounding space with symbolic meaning that may be unrelated to the functions assigned to them (Jaśkiewicz & Drat-Ruszczak, 2011). In so doing, humans may incorporate them as part of their self representations, ensuring consistency and stability. Termed “identity markers”, they serve to symbolize who individuals are, where they come from, where or who they belong to, and why they are where they are (Burris & Rempel, 2004). At this level, individuals distinguish between people and objects that constitute their “identity markers” and those that do not.

Each level allows for a manifestation of different key survival motives in avoiding danger by defending one's boundaries: at the bodily level, the self is defended against physical injury, at the social level – against the violation of privacy by the wrong people, and at the spatial-symbolic level the self is guarded against having the “identity markers” altered or lost (Jaśkiewicz & Drat-Ruszczak, 2011).

## **Current study**

Being strongly associated with identity and personality formation, the sense of body boundaries is ranked among the bodily perception's key aspects (Krzewska & Dolińska-Zygmunt,

2013). People suffering from anorexia are characterised by a dysfunctional corporal self and a weakened body boundary sense, which impair their capacity to interpret the signals coming from their bodies. Eating disorders may be treated as attempts to delineate those boundaries by individuals with incompletely developed corporal selves, and thus also with incomplete body boundaries (Krueger, 2002, qtd. in Krzewska & Dolińska-Zygmunt, 2012). In light of these theoretical assumptions, we found it justified to investigate whether ARS women would be significantly characterized by a weaker sense of body boundaries.

To this end, we set out to measure the differences in the general body boundary sense and two of its aspects (“barrierability” and “permeability”) with respect to ARS intensity. We hypothesized that individuals with high ARS intensity will be characterised by a weaker body boundary sense, in particular a weaker sense of being separate from the environment and a stronger sense of permeability, compared with people having low ARS intensity.

We also wanted to verify body boundaries in the amoebic self concept. ARS individuals are excessively concentrated on their bodies, paying particular attention to their looks and controlling their body size and weight (Ziółkowska, 2001). People suffering from anorexia and those with ARS alike may perhaps treat food as a sort of threat, both for their physical appearance as well as the sense of control they have over their bodies. It could therefore be predicted that young ARS females, who are prone to excessive concentration on their body, will also demonstrate higher sensitivity to their bodily self boundary breaches.

Furthermore, according to Jaśkiewicz and Drat-Ruszczak (2011), sensitivity to social self boundary breaches may be perceived in terms of a strategy that minimises the risk of negative social evaluation. People with high ARS intensity perceive their attractiveness in rather critical terms, which – reinforced by the influence of mass culture – makes them control their appearance excessively. Mira Dana (1987, qtd. in Garrett, 1998) explains the symbolic meaning of boundaries in people suffering from anorexia, an explanation that can be associated with the social level of self-representation: the afflicted female does not accept the version of herself that she thinks others would wish her to become. Body boundaries are then a metaphor for social relations, determining the degree to which people allow others to get close and to which they trust them. It is justified to argue that the case with young ARS females is similar; they may be more sensitive to breaches of their social self boundaries than are people with low ARS intensity. Moreover, sensitivity to social self boundary breaches may trigger response strategies that also typify anorexia: a self-directed attack, which is related to a high awareness of one’s negative features and actions, both of which often lead to embarrassing situations, and withdrawal (Jaśkiewicz & Drat-Ruszczak, 2011). At the same time, given that a breach of spatial-symbolic boundaries triggers a coping strategy based on attacking others rather than oneself (op. cit.), we predicted that using such a strategy would not be

characteristic of ARS individuals. Moreover, spatial-symbolic self-representation is related to social awareness demands that usually develop in relationships with strict parents; such adolescents perceive that others' opinions are a key reference point for the norms and principles they follow. Families with an anorectic member are characterised by overprotecting parenting and blurring of roles and subsystem boundaries, making it difficult for such individuals to clearly formulate identity markers. In this light, we predicted that individuals with high and low ARS intensity will not be different on the spatial-symbolic level of self-representation.

## **Materials and Methods**

The study included 120 young women aged 18–24 ( $M = 21.0$ ;  $SD = 1.82$ ), who were asked to complete a battery of questionnaires.

### **Eating Attitudes Questionnaire (EAQ)**

A self-reported questionnaire used to assess ARS intensity, the EAQ was developed by Ziółkowska (2001). It comprises 20 statements that define four types of variables expressing the respondents' attitude to eating and their own body: ways to lose weight, attitude to eating, style of upbringing, and one's attractiveness perception. The questionnaire is complemented by a lie scale, on which the respondent answers *Yes* or *No* to a series of questions. The results are shown on a scale from 0 to 16 points, with a high score indicating the presence of ARS and a low score showing no abnormalities in attitude to eating and the body.

### **Sense of Body Boundaries Questionnaire (SBBQ)**

Developed by Krzewska and Dolińska-Zygmunt (2013), the SBBQ is a self-reported questionnaire used to assess how respondents experience their body boundaries. It comprises 17 statements that describe the sense of physical separation from the environment and the respondents' sensitivity to body boundary breaches, which they rate on a 5-point scale. The SBBQ results test are reported on three scales: a global scale, which indicates the sense of body boundaries (SBB), a barrierability scale (BAR), and a permeability scale (PERM). The higher the score on the global scale, the stronger the respondent's sense of body boundaries. Likewise, high scores on the BAR and PERM scales indicate a strong sense of separation from the environment and a low permeability sense, respectively. The questionnaire has satisfactory reliability coefficients, with Cronbach's alphas ranging between 0.75 and 0.87.

### **Self Boundaries Sensitivity Scale (SBSS)**

The SBSS was used to assess participants' sensitivity to breaches of self boundaries. The questionnaire is a Polish adaptation of Burris and Rempel's Amoebic Self Scale (2004), and was developed by Jaśkiewicz & Drat-Ruszczak (2011). It comprises 22 statements

divided into three subscales that measure sensitivity to bodily self boundary breaches, the social self (associated with the need for privacy, shame, and social anxiety), and the spatial-symbolic self (associated with identity markers).

The instrument consists of three tasks: in Task 1, the respondents rate on a 7-point scale how unpleasant it is for them to think about a number of specific events; in Task 2, they identify people they would feel uncomfortable with in a number of embarrassing situations; and in Task 3 the respondents rate on a 7-point scale how much discomfort they would experience in a range of situations posing a potential threat to their identity. High scores on the individual scales indicate the participant's high sensitivity to self boundary breaches. Like the remaining two instruments, this questionnaire also has satisfactory reliability, with alphas ranging between 0.70 and 0.77.

## Results

Based on their scores in the EAQ, which determined ARS intensity ( $M = 7.52$ ,  $SD = 4.09$ ), study participants were divided into three groups:

- low-ARS individuals, who scored 0–4 points ( $N = 30$ );
- moderate-ARS individuals, who scored 5–10 points ( $N = 60$ ); and
- high-ARS individuals, who scored 11–16 points ( $N = 30$ ).

We chose to run further analyses on a sample comprising the participants who made up the two outermost groups, that is, women with low and those with high ARS scores.

We hypothesized that high-ARS individuals would have a weaker sense of body boundaries compared with their low-ARS counterparts. The measurements were based on participants' global SBBQ scores. Furthermore, we hypothesized that, in contrast to their low-ARS counterparts, high-ARS participants would be characterized by a weaker sense of separation from the environment (as measured on the BAR scale) and a higher sense of permeability and susceptibility to external influences (as measured on the PERM scale). The statistical analyses we conducted confirmed all of our assumptions. The results are given in Table 1.

Table 1. *ARS and sense of body boundaries*

	Low ARS intensity (N=30)		High ARS intensity (N=30)		U	Z
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks		
Global Score	37.66	1054.5	21.0	656.5	191.5*	-3.95
Barrierability	36.28	1088.5	24.72	741.5	276.5*	-2.59
Permeability	38.13	1067.5	21.45	643.5	178.5*	-3.76
	Low ARS intensity (N=30)		High ARS intensity (N=30)			

\* $p < 0.05$



We additionally hypothesized that individuals with high ARS scores would be more sensitive to breaches of the bodily and social selves boundaries than those with low ARS scores. The sensitivity indicator was determined based on participants' SBSS scores. Analyses revealed no statistically significant differences between the high- and low-ARS groups with respect to the sensitivity to boundary breaches of the bodily and spatial-symbolic selves ( $p > 0.05$ ), although they showed significant differences with respect to such a breach of the social self boundaries. The women who scored high on the ARS intensity scale also demonstrated higher sensitivity levels in having their social self boundaries breached than did their low-ARS counterparts (see Table 2).

Table 2. ARS and sensitivity to breaches of the social self boundaries

	Low ARS intensity (N=30)		High ARS intensity (N=30)		T	df
	M	SD	M	SD		
Social Self	21.1	7.14	25.33	5.54	-2.57*	58

\* $p < 0.05$

## Discussion

According to Izydorczyk and Bieńkowska (2009), body boundary sense is the mental ability to perceive oneself as an embodied entity – that is, one with a physical body who is able to perceive its (finite) boundaries – and to mentally separate one's body from the world around. The sense of body boundaries is weaker in people who suffer from anorexia than is expected for healthy individuals of their height and age. Izydorczyk and Bieńkowska (2009) demonstrated that anorectic females experience the greatest difficulty in defining their body boundaries, which was manifested in the difficulty they had in delineating body boundaries, as well as having a sense of their being blurred or absent altogether. These observations allowed us to put forward several hypotheses about the abnormalities in perceiving body boundaries, barrierability, and permeability in individuals with high ARS scores. Specifically, we hypothesized that such participants would have a weaker sense of body boundaries, as well as seeing their bodies as characterized by lower barrierability, that is, feeling distinctly separate from the environment, and higher permeability. The current study corroborated all of these hypotheses. We conducted further analyses to investigate the high-ARS females' sensitivity to breaches of the self, defined in line with the amoebic self theory by Burris and Rempel. One could expect that given the exceptional preoccupation of high-ARS individuals with their appearance and body weight, it would be their bodily selves that would be most sensitive to boundary breaches. Rempel and Burris (2006) observed that a lower body mass index is related to perceiving a threat related to skin breaching boundaries. Our findings failed

to confirm their hypothesis, as individuals with high and low ARS intensity scores did not differ significantly with respect to their sensitivity to such breaches. This is consistent with Bagińska's findings (2006). However, instead of being related to having one's body interfered with directly and invasively, a weak sense of body boundaries in both anorectic and ARS individuals may in fact stem from their perception of the psychological boundaries between the self and the external world. Furthermore, Jasiński and Drat-Ruszczak demonstrated high scores on the SBSS to be related to subjective perception of depression, while "signals coming from the body are observed with care, although they are an unlikely symbolic expression of emotional problems" (Jasiński & Drat-Ruszczak, 2011, p. 260).

In turn, our study has confirmed the hypothesis that individuals with high ARS intensity may be significantly more sensitive to breaches of the social self boundaries, as compared with their low-ARS intensity counterparts. This finding is congruent with the results obtained by Bagińska (2006) and Sokołowska (2006) in their studies among young females diagnosed with anorexia. Sensitivity to breaches of the social self might be perceived as a strategy to prevent negative evaluation by others. Ziółkowska (2001) underlines eating in the context of individuals' taking care of their physical appearance in order not to become less attractive and, therefore, lose social acceptance. According to Jaśkiewicz and Drat-Ruszczak (2011), the social self-representation level is associated with low self-esteem, low tolerance level for one's imperfections, and the control individuals wish to exercise over how they are perceived by others. These, in turn, relate to fear in being negatively evaluated by other people and to experiencing shame that leads to self-directed attack and withdrawal.

Our study encourages further body boundary exploration in ARS individuals, with future research ideally involving larger samples and comparing ARS females with those suffering from anorexia. It would furthermore be interesting to investigate more deeply the factors that contribute to developing a strong sense of body boundaries. Such knowledge could greatly widen the scope of screening for individuals at high risk for developing anorexia, while strengthening the body boundary sense could constitute the practitioners' aim in providing them with a tool for preventing the disorder.

## References

- Bagińska, S. (2006). *Badanie „ja” symbolicznego u kobiet z diagnozą anoreksji: aplikacja teorii Amebowego „ja” Burrisa i Rempela*. [The study of an symbolic self in women with anorexia: application of Burris & Rempel theory of amoebic self]. Unpublished MA dissertation, Warszawa: SWPS.

- Bulik, C.M., Reba, L., Siega-Riz, A.M., & Reichborn-Kjennerud, T. (2005). Anorexia nervosa: Definition, epidemiology and cycle of risk. *International Journal of Eating Disorders*, 37: 2–9.
- Burris, C. T., & Rempel, J. K. (2004). ‘It’s the end of the world as we know it’: Threat and the spatial-symbolic self. *Journal of Personality and Social Psychology*, 86, 19–42.
- Chytra-Gędek, W., & Kobińska, A. (2008). Gotowość anorektyczna u dziewcząt i młodych kobiet [Anorexic readiness in girls and young women]. *Psychiatria*, 5, 7–12.
- Cierpiałkowska, L. (2009). *Psychopatologia*. [Psychopathology]. Warszawa: Wydawnictwo Naukowe Scholar.
- Cleveland, S.E., & Fisher, S. (1958). *Body Image and Personality*. Princeton, N. Y.: Van Nostrand.
- Garrett, C. (1998). *Beyond Anorexia: Narrative, Spirituality and Recovery*. Cambridge: Cambridge University Press.
- Hoek, H., & van Hoeken, D. (2003). Review of the prevalence and incidence of eating disorders. *International Journal of Eating Disorders*, 34, 383–396.
- Izydorczyk, B. (2011). Psychologiczny profil cech ja cielesnego u młodych kobiet polskich – analiza porównawcza struktury ja cielesnego u kobiet chorych na zaburzenia odżywiania się i zaburzenia psychotyczne [Psychological profile of bodily self features of young Polish women – comparative analysis of bodily self structure of woman with eating disorders and psychosis]. *Psychiatria Polska*, 5 (45), 653–670.
- Izydorczyk, B., & Bieńkowska, N. (2009). Zastosowanie techniki rysunku w psychologicznej diagnozie struktury Ja cielesnego u kobiet chorych na anoreksję i bulimię psychiczną [Applying the technique of a thematic drawing in the psychological diagnosis of the structure of body self in women suffering from eating disorders]. *Problemy Medycyny Rodzinnej*, 3 (28), 5–19.
- Jaśkiewicz, M., & Drat-Ruszczak, K. (2011). Skala Wrażliwości na Naruszenie Granic Ja (SnaG): polska adaptacja Skali Amebowego Ja (Amoebic Self Scale) C. Burrisa i J. Rempela [Self boundaries sensitivity scale: Polish adaptation of Burris and Rempel’s Amoebic Self Scale]. *Psychologia Społeczna*, 63(18), 252–266.
- Józefik, B., Iniewicz, G., & Ulańska, R. (2010). Wzory przywiązania, samoocena i płeć psychologiczna w anoreksji i bulimii psychicznej [Attachment patterns, self-esteem, gender schema in anorexia and bulimia nervosa]. *Psychiatria Polska*, 44, 665–676.

- Józefik, B. Pilecki, M. (1999). Obraz kliniczny zaburzeń odżywiania się. In: B. Józefik (Ed.) *Anoreksja i bulimia psychiczna: rozumienie i leczenie zaburzeń odżywiania się*. [Anorexia and bulimia nervosa: understanding and treatment of eating disorders]. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Józefik, B. (2006). *Relacje rodzinne w anoreksji i bulimii psychicznej* [Family relationships in anorexia and bulimia nervosa]. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Keski-Rahkonen, A., Hoek, H. W., Susser, E. S., Linna, M.S., Sihvola, E., Raevuori, A., Bulik, C. M., Kaprio, J., & Rissanen, A. (2007). Epidemiology and course of anorexia nervosa in the community. *American Journal of Psychiatry*, 164, 1259–1265.
- Kiejna, A., & Małyszczak, K. (Eds.) (2009). *Psychiatria – podręcznik akademicki* [Psychiatry – academic manual]. Wrocław: Wydawnictwo AM.
- Krzewska, I., & Dolińska-Zygmunt, G. (2012). Poczucie granic ciała i jego implikacje dla kondycji zdrowotnej człowieka [Sense of body boundaries and its consequences for human health condition]. *Czasopismo Psychologiczne*, 18 (2), 325–333.
- Krzewska, I., & Dolińska-Zygmunt, G. (2013). Sense of Body Boundaries Survey – construction and psychometric values. *Polish Journal of Applied Psychology*, 11 (3), 93–110.
- Rempel, J. K., & Burris, C. T. (2006). Push-you-pull-you: The boundaried self in close relationship. *Personality and Social Psychology Bulletin*, 32, 256–269.
- Sakson-Obada, O. (2009). *Pamięć ciała. Ja cielesne w relacji przywiązania i w traumie* [Memory of a body. Body ego in trauma and attachment relationship]. Warszawa: Difin.
- Schier, K. (2009). *Piękne brzydactwo. Psychologiczna problematyka obrazu ciała i jego zaburzeń* [A beautiful ugly thing: a scope of psychological problems concerning body image and its disorders]. Warszawa: Wydawnictwo Naukowe Scholar.
- Sokołowska, A. N. (2006). *Specyfika więzi rodzinnych i wrażliwość na naruszenie granic Ja w anoreksji* [The specificity of family bounding and sensitivity to self border violation in anorexia]. Unpublished MA dissertation, Warszawa: SWPS.
- Strober, M., Freeman, R., & Morrell, W. (1997). The long-term course of severe anorexia nervosa in adolescents: Survival analysis of recovery, relapse, and outcome predictors over 10-15 years in a prospective study. *International Journal of Eating Disorders*, 22, 339–360.

- Wycisk, J. (2004). *Okaleczanie ciała. Wybrane uwarunkowania psychologiczne* [Body mutilation. Selected psychological conditions]. Poznań: Bogucki Wydawnictwo Naukowe.
- Ziółkowska, B. (2001). *Ekspresja syndromu gotowości anorektycznej u dziewcząt w stadium adolescencji* [Expression of anorexia readiness syndrome among adolescent girls]. Poznań: Wydawnictwo Fundacji Humaniora.

