Psychiatr. Pol. 2014; 48(4): 789–808
PL ISSN 0033-2674
www.psychiatriapolska.pl

Correlations between the perception of family functioning by patients with eating disorders and their parents and the perception of relations in the parents' families of origin

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Summary

Aim of the study: To assess the correlations between the perception of relations in parents' families of origin and the assessment of the current family by the parents and their daughters suffering from eating disorders.

Studied group: Statistical analyses were applied to the results obtained from 54 patients diagnosed with restrictive anorexia nervosa, from 22 with binge-purge anorexia, from 36 with bulimia and from two control groups: 36 patients diagnosed with depressive disorders and 85 Krakow schoolgirls. The study also covered the parents of the investigated girls.

Method: Family of Origin Scale and Family Assessment Questionnaire (FAM Polish version) were used in the study.

Results: The procreative family assessment made by the mothers was correlated with the assessment of their own generational family and the assessment of own generational family made by their husbands. Procreative family assessment made by the fathers was correlated only with their assessment of their family of origin. Family of origin assessment made by patients with diagnosed eating disorders, particularly bulimia, was correlated only with the family of origin assessment made by their fathers. The last correlation did not occur in the control groups.

Source of support: Scientific grant from the State committee for Scientific Research (Grant number: 6 POSE 09021), scientific grant from the Jagiellonian University, Medical College (Grant number 501/NKL/269/L). consent of the Bioethics Commission the Jagiellonian University No: KBET/26/B/2001.

Conclusions: The research shows a correlation between the experience of the families of origin and the current functioning of the family. They show the impact of the fathers' transgenerational experience on the perception of family relations of daughters with diagnosed anorexia and bulimia nervosa.

Key words: anorexia nervosa, bulimia nervosa, family, transgenerational transmission

Study context

One of the most interesting questions related to the family context posed from the study and clinical perspective concerns the correlations between the experiences from generational family and the functioning of the procreative family. It refers not only to how the experiences of the generational family shape the behaviour of people and determine the perception of the behaviour of others, but also to what extent such experiences co-form the quality of family relations of other family members.

Transgeneration theories assume that transgenerational transmission affects the relation patterns among family members impacting the functioning of them, including the emotional and social development of the children and the functioning of the family as a whole. Such transmission relates to various aspects of the relations such as: intimacy patterns, autonomy, family delegation processes, loyalty and commitment, value system, handling conflicts, dealing with loss [1–9]. These theories are consistent with the constructionist/narrative approach which views the family as an intersubjective dimension where community interpretation takes place [10, 11]. Family members constantly interpret the behaviour of their loved ones and define their relations with them on such basis. The manners in which relations and behaviours of family members are perceived and interpreted are frequently rooted in transgenerational experiences.

An important factor which affects how family members perceive the current functioning of the family seems to be the experience of intimacy and autonomy in the family of origin. The system concepts of Bowen [1], Stierlin [2, 3] and Williamson [5] emphasise the importance of age adequate autonomy and personal responsibility equally with ties and intimacy to others as a factor associated with good functioning of the individual and the family as a whole.

Disorders in the described dimensions are associated with the occurrence of difficulties, psychopathological symptoms, emotional disorders. This is confirmed by empirical studies based on transgenaration models, and particularly on Bowen's concept. And so, better differentiation of self is associated with lower levels of chronic anxiety and better psychological adjustment, fewer somatic complaints [12, 13], lower rates of violence in close relationships [14] and a greater ability to exercise effortful control [15]. Studies also show that the level of differentiation of self is connected with a better adaptation to married life and satisfaction with the relations with the family [16] and the type of relationships in adulthood [17]. Also, the results obtained by Sabatelli & Bartle-Haring [9] regarding adaptation to married life confirm that the experiences from the partners' family of origin have a significant impact on the functioning of marriage, however, it should be emphasised that women's rather than men's experiences have a greater influence on the marital relations. The presented results suggest that

the achievement of autonomy dependent on the experiences from the family of origin is a factor which affects better psychosocial functioning and better functioning in relationships. Conversely, a low level of autonomy is a risk factor for the development of emotional disorders and impaired functioning in relationships [18].

In the literature there are also reports proving the impact of early childhood experiences of mothers and fathers in their relations with their children. Research in this regard relates to particular issues connected to problematic behaviours [19-21] but also to positive impact [22-24].

Transgenerational experiences and issues concerning autonomy and intimacy seem to be important also in eating disorders. This is indicated by clinical models highlighting the difficulties in experiencing autonomy and intimacy in the patients' parents' families of origin [25, 26, 27, 28] as well as in the patients' families of origin [25, 26, 29, 30]. Empirical research partially confirms problems with achieving autonomy [31–42].

The described phenomena are complex due to the circularity of the processes. To simplify the analysis, two levels may be distinguished: the perspective of the adult family members and the perspective of children. The first involves the perception of marital and parental relations, the perception of the relations with own parents and own children, and the assessment of the functioning of the family as a whole. The second – the way in which children perceive their parents and the family as a whole.

The purpose of this study was to find the answer to the question of whether correlations exists between how the patients' parents perceive family relations in the aspect of experiencing intimacy and autonomy in their families of origin and the procreative family and how their daughters perceive the family in which they live.

A number of detailed questions were posed:

1. Is the perception of the experience of autonomy and intimacy in families of origin of the spouses who are parents of the patients with eating disorder diagnosis related to how they perceive the functioning of their own procreative family?
2. Is the perception of the experience of autonomy and intimacy in the parents' families of origin related to how the daughters with eating disorders diagnosis perceive the functioning of the family in which she is being brought up?

Material

The statistical analyses which form the basis of this publication applied the data of 54 patients diagnosed according to DSM-IV [43] with restrictive anorexia (ANR), 22 with binge-purge anorexia (ANBP), 36 with bulimia (BUL). There were two control groups in the study: 36 patients diagnosed with depressive disorders (episodes of severe depression, dysthymia, situational reaction with depressed mood) (DEP) according to DSM-IV [43] and 85 schoolgirls (KSG).

The study also covered the patients' parents. The data of 107 mothers and 76 fathers (ANRmothers, n = 54; ANPBmothers, n = 22; BULmothers, n = 31; ANRfathers, n = 38; ANBPfathers, n = 15; BULfathers, n = 23), 36 mothers and 24 fathers of girls from the depressive group and 80 mothers and 77 fathers of Krakow schoolgirls were used for statistical analyses.

Clinical diagnoses and subtypes of eating disorder diagnoses were based on the criteria and definitions of the Eating Disorder Examination [44, 45]. Consultation in the clinic required a referral from a doctor, a psychologist, the school or else an appointment was made by the parents. Disabled persons, or those raised in institutions were not included in the study. No one refused to participate in the study. Four girls were excluded from the analysis as they had severe depression accompanied by slightly increased symptoms of bulimia. People exhibiting subclinical symptoms according to DSM-IV (significant loss of weight within normal range, vomiting less frequently than twice a week, vomiting after subjective overeating episodes) were included in the relevant main groups [ANR (n = 7, ANBP (n = 6), BUL (n = 2)]. All the subjects required psychiatric treatment.

Method

To investigate the autonomy and intimacy in the patients' family of origin and their parents' family, the Family of Origin Scale (FOS) was applied. This tool developed by Hovestadt, Anderson, Piercy, Cochran and Fine refers to intergenerational models of family relations [46]. The scale is based on two interpenetrating concepts which determine healthy functioning of the family – autonomy and intimacy in relations. Autonomy is understood as the process by which an individual modifies their childhood relations with their parents in favour of independence and determination of own identity, and intimacy expresses the possibility of maintaining ties with the parents based on trust and mutual respect of set boundaries.

The Autonomy Scale (AUTON) consists of five subscales:

- clarity of expression – examines whether feelings and behaviours of an individual are comprehensible to other family members;
- responsibility – examines the extent to which family members take responsibility for their actions;
- respect for others – examines whether the opinion of each family member is taken into account;
- openness to others – examines the extent to which family members behave in an open and direct manner;
- acceptance of separation and loss – examines how a family deals with loss;

The Intimacy Scale (INTIM) is also examined with the use of five subscales which are:

- range of feelings – examines whether family members display a wide range of emotions;
- mood and tone – examines whether the atmosphere in the family is friendly and positive;
- conflict resolution – examines whether the daily problems are handled without undue stress;
- empathy – examines the extent to which family members are sensitive to the others;
- trust – examines the extent to which the family members believe that other people are trustworthy;

The higher the score in the scales, the greater the autonomy and intimacy.

The tool was standardised to the Polish conditions by Fajkowska-Stanik [47]. The average values obtained for each scale in the Polish studies were similar to the results obtained by the authors of the scales. FOS also displayed high accuracy rates (W = 0.88; α Cronbach coefficient = 0.82) and reliability (Spearman-Brown formula 0.92, Guttman coefficient 0.92.)

The scale was filled in by the patients and their parents.

The study also applied the Family Assessment Questionnaire (FAM Polish version) which was adapted to Polish conditions [48] from a German version of the III FAM Family Assessment Measure questionnaire by Steinhauer, Santa Barbara and Skinner [49]. FAM Polish version is a conceptualisation of The Process Model of Family Functioning [50] which assumes that the primary function of the family system is to create conditions for the development of its members. This development occurs at the biological, psychological and social level and takes into account the responsibilities which are connected with family life cycle as well as with unpredictable life events. The concept emphasises dynamic interactions between different dimensions of family functioning. The model builds on the McMaster Model of Family Functioning by Epstein et al. [50].

The German version of the FAM III, referred to as *Famielienbogen*, was adapted and standardised into English by Cierpka and Frevert [51]. Due to the proximity of the cultural context, it was considered that the German version of FAM III would provide a better basis for adaptation and standardisation into Polish than the English version.

The FAM questionnaire is a tool allowing for multidimensional description of the family system as it captures family relations in three perspectives: dyadic, overall family assessment, assessment of own place in the family.

The FAM questionnaire relating to the above-discussed dimensions of family functioning consists of the following seven scales:

Task Completion (TC); Role Performance (RP); Communication (COM); Emotionality (E); Affective Involvement (AI);Control (CON);Values and norms (VN).

The questionnaire also includes three additional scales: Social Expectations (SE), Defence (DEF) and the General Scale (GEN). The first two examine the willingness to fulfil social expectations, and a tendency to present a better image.

As mentioned before, the FAM questionnaires were standardised for Poland [48]. The results obtained in the form of Cronbach's alpha coefficients were consistent with the English and German versions and above $\alpha = 0.50$ for individual scales. As a result of the standardisation procedures two additional factor scales were introduced in addition to the original scales: the scale of Positive answers (POS) and of Negative answers (NEG) which represent the total negative and positive assessments made by a particular investigated person. The study applied scales for family assessment as a whole. Analyses of positive and negative answers have not been carried out due to the auxiliary and local nature of the scales.

A lower score indicates a more positive assessment in all the scales except SE and DEF, where the correlation is reversed.

Results

The average age of patients from the ANR group was 16.44 (SD 1.57), from ANBP 16.91 (SD 1.31), BUL 17.47 (SD 1.03), DEP 16.78 (SD 1.69), KSG 16.99 (SD 1.55). The Kruskal–Wallis test showed no significant differences between the age of the girls in the study groups (p = 0.056). The family structure of the study subjects has been presented in table 1.

Table 1. **Family structures in the study groups**

Family structure/Diagnosis		NOR	ANR	ANBP	BUL	DEP
Complete family	Sample size	70	45	18	25	26
	Percentage per group	89.7%	83.3%	85.7%	69.4%	72,2%
Divorced or single parent family	Sample size	4	9	2	10	9
	Percentage per group	5.1%	16.7%	9.5%	27.8%	25%
Reconstructed family	Sample size	4	0	1	1	1
	Percentage per group	5.1%	0.0%	4.8%	2.8%	2,8%

In the ANR group two fathers handed in questionnaires assessing the mother, and additionally one of them also handed in a questionnaire assessing the child and the family. In the BUL group two fathers from single-parent families handed in all the three questionnaires. In the other groups, none of the fathers from single-parent families handed in the filled questionnaires.

Of the single families only one father from ANR group and three from the BUL group handed in questionnaires assessing the families. In the remaining groups none of the fathers from single families handed in any questionnaires.

Average disorder duration (in months) was 12.06 (± 8.65) in ANR, 17.91 (± 14.25) in ANBP, 14.64 (± 9.27) in BUL and 11.76 (± 10.9) in DEP. The Kruskal–Wallis test revealed no significant difference between the disorder duration for girls in the study groups (p = 0.090). BMI was 15.44 (± 1.84) kg/m^2 in ANR, 16.14 (± 1.69) kg/m^2 in ANBP, 19.59 (± 1.67) kg/m^2 in BUL, 19.80 (± 2.52) kg/m^2 in DEP. Post-hoc tests revealed no significant differences between ANR and ANBP in the context of BMI (p =.129, T-Student test for independent variables). Objective episodes of overeating in ANBP took place a month prior to the study 32.63 (±39.5) times, in BUL 43.7 (±37.74) times, vomiting in ANBP 48.05 (±49.51) times, in BUL 59.44 (±48.56) times. There were no statistically significant differences between ANBP and BUL in the context of the described bulimic symptoms (episodes of overeating: p = 0.201, vomiting: p = 0.289; the Kruskal-Wallis test). 3 patients from ANR used pharmacological agents to control their body mass. In 6 girls from the ANBP group and 11 from the BUL group compensatory use of pharmacological agents or laxatives was observed. There were no statistically significant differences between the ANBP and BUL groups in this respect (p = 0.391, chi-square test). 12 patients from ANR group did exercise to slim down. 11 patients from ANBP group and 5 from BUL group did exercise as a compensatory behaviour. There were no statistically significant differences

between the ANBP and BUL groups in this respect (p = 0.015, chi-square test). 46 patients from the ANR group fasted in order to slim down. Fasting as a compensatory behaviour was observed in 16 patients from ANBP and 11 from BUL groups. There was a statistically significant difference between fasting as a compensatory behaviour between the ANBP and BUL groups (p = 0.010, chi-square test).

The correlation between the FOS and the FAM Polish version scales in the control group

The study of correlations between the results of FOS and the FAM Polish version scales in the group consisting of schoolgirls, their mothers and fathers (Table 2[1]) revealed two significant correlations. The first value presented in the table is R, and the other is p. It turned out that the way in which the mother assesses the procreative family functioning is correlated with both her experiences from her family of origin and the experiences of her husband's family of origin, while the husband's assessment of the functioning of procreative family is correlated only with the experiences from his family of origin. There were no correlations between how daughters assess the family in which they were raised and intergenerational experiences of the parents.

Table 2. **Correlation between FOS and the FAM Polish version scales in the control group**

	Family in mother's assessment				Family in father's assessment				Family in daughter's assessment			
FOS / FAM Polish version	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIm	AUTONf	INTIMf
TC	-0.341 0.003	-0.331 0.004	-0.435* 0.000	-0.391* 0.001			-0.303 0.010	-0.332 0.005				
RP	-0.358 0.002	-0.357 0.002	-0.373 0.001	-0.387 0.001			-0.437 0.000	-0.484 0.000				
COM	-0.261 0.025	-0.270 0.020	-0.323 0.006	-0.336 0.004			-0.414 0.000	-0.465 0.000				
E	-0.313 0.007	-0.271 0.020	-0.371 0.001	-0.327 0.005			-0.264 0.026	-0.290 0.014				
AI	-0.264 0.023	-0.242 0.038	-0.395 0.001	-0.449 0.000			-0.385 0.001	-0.490 0.000				
CON	-0.273 0.019	-0.271 0.019	-0.336 0.004	-0.385 0.001			-0.354 0.002	-0.384 0.001				

table continued on the next page

1 The tables took into account only statistically significant interactions

VN			-0.234 0.048	-0.250 0.034								
SE	0.254 0.029	0.273 0.019	0.316 0.007	0.301 0.010			0.419* 0.000	0.459* 0.000				
DEF	0.384 0.001	0.428 0.000	0.343* 0.003	0.232* 0.049			0.287* 0.015	0.308 0.009				
GEN	-0.374 0.001	-0.369 0.001	-0.487 0.000	-0.496 0.000			-0.447* 0.000	-0.520* 0.000				

* Pearson coefficient (the others are Spearman coefficients), an empty grid means there is no statistically significant correlation

The correlation between the FOS and the FAM Polish version scales in the ANR group

In the group of girls with restrictive anorexia and their parents in the group of mothers, similar correlations were found to those observed in the group of the schoolgirls' mothers, but there were fewer correlations. The way in which the mothers perceived the procreative family functioning was correlated with how the mother and the father assessed their family of origin. It is also worth noting that the correlations concerned mainly the experience of intimacy in the father's family of origin.

As for the father's assessment of the procreative family functioning, similarly to the group of the schoolgirls' fathers it was only correlated with the experiences from his family of origin.

Family functioning assessment by patients with diagnosed anorexia revealed some correlation with the fathers' results in FOS. There was no correlation between how the patients assessed the family in which they were raised and intergenerational experiences of the mothers.

Table 3. **Correlation between FOS and the the FAM Polish version scales in the anorexia diagnosed patients' group**

	Family in mother's assessment				Family in father's assessment				Family in daughter's assessment			
FOS / FAM Polish version	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIm	AUTONf	INTIMf
TC	-0.281* 0.042	-0.319* 0.021	-0.366* 0.024	-0.515 0.001			-0.391* 0.017					
RP		-0.294* 0.036					-0.428 0.008	-0.483 0.002				

table continued on the next page

COM	-0.369* 0.007	-0.378* 0.006									-0.363* 0.025	-0.345 0.034
E	-0.430* 0.010	-0.356 0.010		-0.343 0.035			-0.407* 0.012					
AI	-0.497 0.000	-0.457 0.001		-0.432 0.008								
CON				-0.341 0.036				-0.391 0.017			-0.411 0.012	
VN				-0.428 0.009								
SE	0.504* 0.000	0.599* 0.000		0.350 0.034			0.360* 0.029					
DEF	0.302* 0.035	0.415* 0.003		0.361 0.033	0.366* 0.026	0.334* 0.046	0.331* 0.049	0.333 0.047				0.324 0.016
GEN	-0.409* 0.004	-0.408* 0.004	-0.335* 0.049	-0.501 0.002			-0.442* 0.007	-0.416 0.012				

* Pearson coefficient (the others are Spearman coefficients), an empty grid means there is no statistically significant correlation.

The correlation between the FOS and the FAM Polish version scales in the ANBP group

In the group of girls with diagnosed binge purge anorexia and their parents there were fewer correlations than in the restrictive anorexia group. Their character in the patients' assessment with the exception of emotionality proved to be similar to the previously observed dependence. In the case of Emotionality it was correlated to the perception of emotional experience in the mother's assessment.

Table 4. **The correlation between FOS and the FAM Polish version scales in the binge purge anorexia diagnosed patients' group**

	Family in mother's assessment				Family in father's assessment				Family in daughter's assessment			
FOS / FAM Polish version	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIMm	AUTONf	INTIMf
TC												-0.533* 0.041
RP								-0.603 0.022				

table continued on the next page

COM	-0.449* 0.047	-0.450* 0.046										
E	-0.511* 0.021						-0.665* 0.013	-0.656* 0.015	-0.465 0.029			
AI		-0.469* 0.037			-0.617 0.019		-0.688 0.007	-0.740 0.002				
CON	-0.458* 0.042											
GEN	-0.479* 0.044											

* Pearson coefficient (the others are Spearman coefficients), an empty grid means there is no statistically significant correlation.

The correlation between the FOS and the FAM Polish version scales in the BUL group

In the group of patients with bulimia nervosa and their parents the assessment of procreative family functioning made by the mother was correlated with the experiences of her husband's family of origin to a much greater extent (10 correlations) than with her experiences from her family of origin (4 correlations).

As for the father's assessment of the procreative family functioning, similarly to the previous groups it was only correlated with the experiences from his family of origin.

Family functioning assessment by patients with diagnosed bulimia revealed some correlation with the fathers' experience of autonomy (7 correlations). As in the previous groups, there was no correlation between how the patients assessed the family in which they were raised and intergenerational experiences of mothers.

Table 5. **The correlation between the FOS and the FAM Polish version scales in the bulimia diagnosed patients' group**

	Family in mother's assessment				Family in father's assessment				Family in daughter's assessment			
FOS FAM Polish version	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIMm	AUTONf	INTIMf
TC			-0.510* 0.037				-0.456* 0.029	-0.508* 0.013			-0.449* 0.041	
RP	-0.587* 0.001	-0.524* 0.004	-0.699* 0.002	-0.654* 0.004			-0.437* 0.042	-0.505* 0.016			-0.594* 0.005	
COM			-0.605* 0.010	-0.549* 0.022			-0.640* 0.006	-0.620* 0.002				

table continued on the next page

E								-0.441* 0.035			-0.482 0.027	
AI			-0.514 0.035								-0.514* 0.017	
CON	-0.472* 0.011	-0.526* 0.004						-0.496* 0.026			-0.514* 0.020	
VN							-0.489* 0.025	-0.604* 0.004				
SE			0.573* 0.020	0.499* 0.049				0.429* 0.041			0.526 0.014	
DEF												
GEN			-0.685* 0.003	-0.580* 0.019			-0.546* 0.013	-0.621* 0.003			-0.471* 0.042	

* Pearson coefficient (the others are Spearman coefficients), an empty grid means there is no statistically significant correlation.

The correlation between the FOS and the FAM Polish version scales in the DEP group

In the group of patients with depression and their parents the assessment of procreative family functioning made by the mother was correlated with the experiences of her husband from his family of origin in one scale and the experiences of mothers in two FAMAQ scales.

Table 6. **The correlation between the FOS and the FAM Polish version scales in the depression diagnosed patients' group**

	Family in mother's assessment				Family in father's assessment				Family in daughter's assessment			
FOS FAM Polish version	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIMm	AUTONf	INTIMf	AUTONm	INTIMm	AUTONf	INTIMf
RP	-0.525* 0.001	-0.616 0.000						-0.426 0.043				
DEF	0.341 0.045											

* Pearson coefficient (the others are Spearman coefficients), an empty grid means there is no statistically significant correlation.

Discussion

The aim of the study was to assess the correlation between the perception of intimacy and autonomy in the family of origin of parents of patients diagnosed with eating disorders and their and their daughters assessment of the current situation in the family. The study applied two control groups: Krakow schoolgirls and girls treated for depressive disorders.

When comparing the results, attention should be paid to a recurrent pattern (with one exception of the Defence scale in the ANR fathers' assessment), in which the fathers' assessment of the procreative family functioning is related to their of transgenerational experiences whereas in the case of the mothers – to both their own experiences and their partners' experiences. The Defence scale is a control scale directly correlated to a defensive attitude to the study [48], and hence it is difficult to interpret the nature of this only correlation found in the fathers' group.

These results show that the women's perception of the study area is co-formed by their partners' experiences and is open to perspectives other than their own. This would indicate that women are "relationship specialists" in the formation of the conjugal relationship [52]. The results obtained by the fathers in contrast to results of their wives may primarily indicate their difficulty in distancing themselves from their own family history, and modified experiencing based on the partners' experiences. The obtained results are similar to results of a study by Soudabeh Ghoroghi et al. [53] using the same FOS tool in which autonomy and intimacy in the family of origin were the best predictors for adaptation to the marital life of Iranian students. Additionally, in the cited study the male perception of adaptation to conjugal life was more influenced by the experience of the families of origin than in the case of women (37.7 % variance in the case of men compared with 17.9 % for women). In Bartle's study [54] to assess the factors which affect trust in couples, in the case of men trust for their partners was best explained by emotional reactivity in the relationship with their parents, while in the case of the results for women the opposite was true. Also, in the study by Donato et al. [55] on coping in dyadic relationships which involved 153 premarital couples and their parents, it was found that daughters are more similar to their partners than to their parents in the way they deal with dyadic relationships, whereas the sons are equally similar to their partners and their parents.

The most interesting difference which emerged between the two control groups and the clinical group regarded the daughters' perception. This correlation was most clearly observed in the group of patients with diagnosed bulimia nervosa where six scales and the general scale proved to correlate with the experiences of the fathers' autonomy in the family of origin although it was observed in the whole eating disorder group and not in control where six scales and the cumulative scale correlated with the experience of the fathers' autonomy in the family of origin, although it was observed in the whole group of eating disorders and did not appear in the control groups. Most of the authors of classical psychoanalytic and psychodynamic concepts see the source of anorexia and bulimia nervosa in a disturbed dyad of mother-child relationship. If the father occurs in the context, it is as the forbidden fruit of oedipal

desires or as the perpetrator of physical and mental abuse [56]. Also in the system conceptualization in the etiology of eating disorders a lot of though is usually devoted to the relationship with the mother, assuming that the way in which the mother perceives important dimensions of the functioning of her family of origin will be crucial for the daughters in the process of transgenerational pattern transmission. These in turn are to influence the development of eating psychopathology. In the literature on the subject, there are also reports highlighting the importance of fathers in the process. The fathers of patients diagnosed with eating disorders are described as on the one hand as less tender, but also more controlling. In this respect there are no major differences between different diagnoses, although not only the current one, but also the course of illness may be of significance [57–62]. An analysis of the results obtained by us suggests that in eating disorders, particularly bulimia, the assessment of family relations between daughters and fathers is dependent on the fathers' transgenerational experience and is not modified by the experience of the mother. It is as if the fathers' narrative about their own past was the dominant narrative in the father – child dyad. It is worth noting that both fathers and mothers of daughters with bulimia negatively assessed the experience of autonomy and intimacy in the relations in their families of origin [41, 63]. Similarly negative was the assessment of family relations of their daughters [63, 64]. Referring to the classical concept of families with the problem of bulimia it could mean not so much a lack of emotional harmony as specific emotional harmony where in the family life cycle the daughters experience the same deficit as their fathers did [65].

The correlation observed in the present study, although most pronounced in bulimia nervosa, also appeared in the girls with a diagnosis of restrictive anorexia, and (in one correlation) in binge – purge anorexia. In a study using a different research methodology but conducted on the same clinical population a similar correlation was observed also in healthy schoolgirls (66). A similar correlation between the fathers and daughters, although it appears also in anorexia nervosa (62), is reported by other authors in the context of other psychopathologies or among healthy individuals [67]. So the question remains open to what extent this correlation is a rule in the development of the daughters in general, and to what extent it is related specifically to the occurrence of eating disorders. The issues of three-generation family transgeneration transmission as a risk factor for eating disorders are not often the subject of scientific analysis. They confirm the importance of transmission to a broader extent than that observed in the present study. In a study by Canetti et al (62) the attitude of both anorectic patients' paternal grandfathers as well as paternal and maternal grandmothers measured using Parental Bonding Instrument were found to be associated with self-assessed enhancement of eating disorders symptoms in the granddaughters. In a study by Moong et al (68) the education of maternal grandmothers correlated with a higher risk of psychiatric hospitalization in the course of anorexia.

It should also be noted here that there are significant differences in the structure of families which we investigated. All the researched clinical group, especially the bulimia group, contained a high percentage of single-parent families. Between the groups there were also significant differences in the number of total questionnaires which had

been handed in. However, the questionnaires were handed in - as is clear from cross analyses in the description of the research group – mainly by fathers from complete families. This causes a disparity in the analyses. In this paper the data of all mothers and daughters and fathers, as well as fathers mainly from complete families were analysed. The correlation between the fathers' transgeneration experiences and the current perception of family relations by their daughter, however, occurred in families with restrictive anorexia nervosa and with bulimia nervosa which significantly differ in the percentage of complete families.

The obtained results may indicate the significance of the analysis of relations with parents or of the parents with their parents in the process of family, married couples and individual therapy. Current relations or family functioning are saturated with meanings rooted in the experiences of generational families. The obtained results provide an empirical clue indicating the correctness of theories which indicate a transgenerational nature of family relations [1–11].

A question also arises concerning the mediating factors between history of relationship in the parents' family of origin and the assessment of the child's current relationships. Each of the major developmental conceptualizations assumes the impact of past events on current relationships. The experience of relationships with parents shape the child's inner world becoming the foundation for their intrapsychic structures, for instance ego and superego in the structural concept, self-object and object in the psychology of the self, or internal working model in the attachment theory. Impacting the external world, it in turn exerts influence on important relationships in the child's life [56]. It does not only mean that past relationships shape the present. It signifies that the narrative of the past is related to the narrative of the present, without resolving the objectivity of these memories. The nature of the applied statistical analysis does not allow to draw firm conclusions about the trend of the observed relationships. Their assessment would be possible only in a prospective study.

At this point it is also worth considering what is actually being investigated by asking questions about the experiences of families of origin: is it an objective picture, or rather the state of emotion corresponding to the current stage of life. The practice of psychotherapy would suggest a dynamic and variable nature of such observations where each stage of life confronts us with the necessity to redefine not only the current relationship but also the former ones. In particular, the period of adolescence which the investigated girls were in is the time when not only the relevant aspects of the inner world but also the relationships with parents undergo reassessment and change [69, 70]. Illness of the child may also have a similar modifying effect in the case of parents [71].

The conducted study leads to a number of questions. This analysis focused only the correlations. A question concerning more complex correlations arises, where the interaction of several variables, such as the perception of the relationship with their parents, their own assessments of the current family relationships and partner's assessments would be investigated. The perception of their marital and parental relationships may be dependent both on their own experiences with their parents, position in the family of origin and the partner's experience [72, 73]. The subject of analyses

may include not only the assessment of the family as a whole, but also mutual dyadic relationships.

An important limitation of this study is also the fact that the couple has not been treated as the subject of analysis. It may be difficult to assess to what extent the experiences of the family of origin influence a sense of satisfaction in relationships without taking into account what this correlation is for the other partner [9].

Further research is required into the correlation of the results obtained with the family structure. Patients with eating disorders report a variety of difficulties in relationships with parents and difficulties of the parents themselves. In the case of bulimic patients, poor assessment of family relationships is often accompanied by the memory of a real trauma in the relationship with their father [74].

Apart from fasting used as compensating behaviour between binge-purge anorexia and bulimia there were no significant differences in the duration of the illness, its nature or severity of symptoms. The assessment of family relations in different groups, however, may be influenced by these factors, and also by treatment efficacy [75, 62]. The results of the tests may also be affected by depressive symptoms [76]. The credibility of the results of patients with a diagnosis of eating disorders, especially restrictive anorexia, may raise reasonable doubts [77]. These aspects were not included in the discussed analyses.

In this paper it was decided to divide the study subject in such a manner as to allow patients with subclinical symptom severity to be included in the main groups. Although this decision is consistent with the direction of changes in the DSM [78], an open question remains about the differences in the studied interactions between patients with varying severity of symptoms. These issues were not the subject of this analysis but they can significantly affect the observed correlations.

Conclusions

1. The assessment of procreative family relationships in the case of men is correlated with how they assess the autonomy and closeness in their family of origin.
2. The assessment of procreative family relationships in the case of women is correlated with how they assess the autonomy and closeness in their family of origin and how autonomy and closeness in the family of origin is assessed by their husbands.
3. The dependence of the above, taking into account the number of observed significant statistical correlations, is most fully expressed in non-clinical group of schoolgirl families but it is present in families of patients with diagnosed eating disorders and depression.
4. Among girls diagnosed with eating disorders especially when it comes to the number of the observed correlations, the bulimic group exhibited a correlation between some of the aspects of family assessment by the patient and transgenerational experience of their fathers. This correlation was not observed in the control groups.

5. The obtained results are important in the context of the theory and empirical studies indicating that the level of autonomous functioning and experience of closeness in family relationships is associated with the occurrence of psychopathological symptoms. The results showing the importance of the fathers' transgenerational experience on the perception of family relations of their daughters diagnosed with anorexia and bulimia make us question the concepts which focus on the mother-daughter relationship and ignore the father-daughter relationship. The results are relevant to clinical practice indicating the importance of considering these issues both in the context of individual psychotherapy as well as family therapy.

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