Perception of transgenerational family relationships: Comparison of eating-disordered patients and their parents

Maciej Wojciech Pilecki
Barbara Józefik

1 Department of Child and Adolescent Psychiatry, Jagiellonian University Medical College, Cracow, Poland
2 Laboratory of Psychology and Systemic Psychotherapy, Department of Child and Adolescent Psychiatry, Jagiellonian University Medical College, Cracow, Poland

Background: Disturbances in various elements of transgenerational family functioning patterns are not uncommon in studies of eating disorders. We examined the relationship between patients’ perception of autonomy and intimacy in their families of origin and that of their parents in their own families of origin.

Material/Methods: The sample consisted of 112 girls who had a diagnosis of an eating disorder and their parents; 54 of the girls were diagnosed with anorexia nervosa restrictive subtype, 22 as anorexia nervosa binge/purge subtype, and 36 were diagnosed with bulimia nervosa. We had 2 control groups: 1 group consisted of 36 girls diagnosed with a depressive episode, dysthymia, or adjustment disorder with depressed mood and the other group was 85 female students from schools in Cracow, Poland and their parents. We used the the Family of Origin Scale to assess perception of family relationships. Statistical analysis was performed with the Statistical Package for the Social Sciences (SPSS 20.0.PL; Chicago, IL, USA).

Results: There was a significant association between daughters’ and fathers’ perceptions of autonomy in their families of origin in all groups. There was no significant association between daughters’ and mothers’ perceptions in all groups. The strongest correlation was between the non-clinical sample of girls and their fathers and for the bulimic group.

Conclusions: We did not detect any link indicating the specificity of transgenerational transmission of autonomy and intimacy in eating disorders. The results point to the importance of the father figure in studies of family systems, including the context of family transmission.

Key words: anorexia nervosa • bulimia nervosa • family • autonomy • intimacy

Full-text PDF: http://www.medscimonit.com/download/index/idArt/889432
Background

Various aspects of transgenerational family functioning patterns such as strong bonding mechanisms, unresolved losses, poor conflict resolution, separation, and distortions of co-individualization and co-evolution processes are repeatedly encountered in patients with eating disorders [1–7]. Previous studies have examined characteristic of parenting styles and patterns of family functioning to elucidate characteristics that may precede and predispose to the onset of eating disorders [1,3,5–9].

Existing literature on the psychological development of girls with eating disorders has focused on the mother-daughter relationship, emphasizing the importance of this relationship during early childhood and adolescence [10–16]. More recently, researchers have begun to study the role of the fathers [17–22]. Palmer et al. compared the perception of fathers of healthy women and anorexic and bulimic women; they found that women with bulimia rated their fathers as less caring and less sensitive than did the healthy controls [22]. Jones et al. studied the perception of fathers of adult women with eating disorders. The results showed an association between perception of rejection and overprotectiveness by fathers and body dissatisfaction and a desire for thinness [23]. A study of adolescent girls with a diagnosis of restrictive anorexia and bulimia showed that these girls perceived their fathers and mothers as less emotionally involved and more controlling compared to healthy controls [19]. Fassino et al. showed that low persistence is common in fathers across all eating disorders. Fathers of restrictive anorexics are highly harm-avoidant. Fathers of both anorexic subtypes and mothers of bulimic women display low self-directedness. Parental personality traits are linearly correlated with daughters’ personality and psychopathology, but the correlation differs among eating disorders [24].

Weber and Stierlin report that the families of origin of the parents of women with eating disorders showed the following characteristic: strong mechanisms of bonding children, overvalue of self-sacrifice, need for emotional control, alienation from previous generations, and reluctance to meet societal expectations [6]. A study of families of anorexic girls showed that these families have a system of rigid and implicit beliefs, which is transmitted from one generation to the next. This system concerns “values, tradition, customs, prescriptions for specific roles, and attitudes concerning relationships and the expression of feeling” [7, p. 256]. Belief systems limit patterns of intra-family relations and choices made by family members, narrowing ways of solving problems, and making adaptation to new situations more difficult. These beliefs relate, amongst other things, to an understanding of loyalty to other family members and to family traditions, including sacrificing one’s own needs for the benefit of the family. This particularly concerns women, who are required to read the feelings and needs of other members of the family (insightfulness) and to meet those needs at the expense of their own desires [7].

Studies of bulimic patients have also examined aspects of family function and perception of parents by these patients [1,3,6]. Roberto [3] emphasized the importance of loss in previous generations of the family, creating a sense of isolation and confusion in society. She considered that the maintenance of strong family loyalties and a strong tendency to self-sacrifice for the needs of other members of the family were the most significant, and at the same time, the most destructive, factors for families with bulimia. Several authors have indicated that mechanisms of bonding are accompanied by perceiving the world as threatening the cohesion of the family [1–3,6,7]. For example, Roberto [3] claimed that patients with bulimia, in trying to stay loyal to their family, remain in a state of tension and internal alienation, feeling obligated to yield their own ego to devote themselves to their families values and ideals. Humphrey analyzed parents’ perspectives of their own families of origin and found that parents of anorexic and bulimic patients had failed to separate from their own parents and thus were not ready to facilitate the separation and individuation in their children; the children’s bid for autonomy was perceived as a threat to family functioning [25].

Although there is a paucity of studies on the relationship between the transgenerational experiences of eating-disordered patients and the experiences of their parents (of both sexes) [5], there is an assumption that this relationship exists [1–3,6,7]. This assumption is supported by Bowen’s theory of self differentiation [26], Stierlin’s concept of co-individuation [27], attachment theory, and the concept of mentalization [28]. The last 2 assume that secure attachment promotes the development of healthy autonomy [28]. Both from an individual and a family perspective, autonomy and intimacy are important processes that are linked. Autonomy is defined as maintaining relationships with others, which enable one to be guided by one’s own needs and values. For the family and the individual, autonomy means the ability to define one’s own boundaries and to differentiate between what is internal and what is external [29]. The development of autonomy is linked to relationships that are based on intimacy. Achieving relational individuation allows maintenance of these bonds. Hence, at the individual and family level, close relationships with others may be acknowledged as both a condition and a derivative of autonomy. Desire for and fear of closeness, and the distance experienced by people, are dependent on interaction patterns within the family. Excessive closeness (intimacy) in family relationships is linked to emotional ‘intertwining’ and fusion, which make it difficult to separate, be different, and create one’s own identity.
In turn, a lack of closeness (intimacy) – a relationship based on distance – disrupts the creation of safe bonds and results in feelings of alienation and loneliness, a tendency to emotionally cut oneself off from relationships with others, and disturbances in functioning. According to the literature, both extremes can be associated with the appearance of psychopathological symptoms [25–28].

Disorders of primary attachment, which manifest themselves, amongst other things, in difficulties in autonomous functioning, maintaining close relationships with significant persons and mentalization, are connected with intergenerational transmission of attachment trauma [28].

The issue of the relationship between psychopathology and the discussed dimensions of interaction within the family of origin are seldom the subject of empiric research due to their complex nature. Most studies conducted in this area have been based on attachment theory. They indicate a significant link (but one which is difficult to unambiguously conceptualize) between styles of attachment and diverse psychopathologies or lowering of the risk of emergence of psychopathology [30]. From another perspective, detachment, defined as a dysfunctional autonomy and cutting off rather than separating from the family, is described as significant in the context of emergence and intensification of symptoms of internalization and externalization disorders, depression, or suicidal behaviors [31–33].

A few empirical studies have examined the role of transgenerational family functioning in anorexia nervosa and bulimia nervosa, finding problems in the achievement of autonomy in this population [35–40].

In a previous study, we explored family autonomy and intimacy using the Autonomy and Intimacy Scales of the Family of Origin Scale (FOS) in the context of Polish culture. Teenage female patients with eating disorders, compared with female patients with depression and female pupils from schools in Kraków were asked to assess how they perceive autonomy and intimacy in their families of origin [41]; their parents assessed both dimensions in their families of origin [42]. We found no statistically significant difference in the perception of autonomy and intimacy in their families of origin between restrictive anorexic girls and female student controls. Both groups rated family autonomous functioning and intimacy in family relationships significantly higher than females from other clinical groups. In comparison with female student controls and patients with anorexia nervosa restrictive type, bulimic and depressed females perceive significant difficulties in family autonomic functioning and family relationship intimacy. Females with anorexia nervosa binge/purge subtype had certain, but not major, difficulties in the studied areas [41].

Similarly to their daughters, mothers of bulimic and anorexia nervosa binge/purge subtype patients showed distortion in the processes of autonomy and intimacy. Mothers of patients with restrictive anorexia and female student controls, like their daughters, did not have distorted views [42]. In contrast to depressed daughters, mothers reported no problems in achieving autonomy and intimacy in their own families of origin.

Both autonomy and intimacy distortions were also reported in the families of fathers of patients with restrictive anorexia, whereas in the bulimic group only autonomy distortions were reported by the fathers [42].

The aim of the current study was to explore the association, if any, between the perceptions of autonomy and intimacy in their current families among patients with eating disorders and perceptions of their parents in their own families of origin. We hypothesized that there would be a correlation between the perceptions of the patients and their parents in the way they perceive important dimensions of functioning of their family of origin. Further, we wanted to explore whether this correlation was related to the parents’ gender.

**Material and Methods**

The study sample consisted of girls aged 13 to 20 years who were diagnosed with any eating disorder according to DSM-IV criteria [43] at their initial assessment between 2002 and 2004. This assessment was conducted at the Child and Adolescent Psychiatry Clinic of the University Hospital in Cracow, Poland. The clinic accepts referrals from physicians, psychologist, and school counsellors, as well as self-referral.

Exclusion criteria included an emergency psychiatric consultation, lack of contact with either parent, mental retardation, and diagnostic uncertainties.

Patients and their parents were classified into 3 groups based on their daughter’s eating disorder subtype: anorexia nervosa restrictive subtype (patients: ANRd, mothers: ANRm, fathers: ANRf); anorexia nervosa binge/purge (patients: ANBPd, mothers: ANBPM, fathers: ANBPF); bulimia nervosa (patients: BULD, mothers: BULM, fathers: BULf). Patients with subclinical syndrome symptoms were classified into the appropriate clinical groups [ANR (n=7), ANBP (n=6), BUL (n=2)].

The collected data were compared with 2 control groups: 1) patients diagnosed with depressive episodes, dysthymia, and adjustment disorder with depressed mood as determined by DSM-IV [43] and their parents (patients: DEPd, mothers: DEPm, fathers: DEPf), and 2) age-matched female students in schools in Cracow, Poland and their parents (patients: NORd, mothers: NORM, fathers: NORf).
The rationale for using the depressed group as a second control was to ensure that there was no confounding effect due to the presence of nonspecific aspects of being a psychiatric patient or her parent.

All daughters and their parents were provided information on the study and gave consent to participate in the study. They then completed the Family of Origin Scale (FOS).

This instrument [44] uses intergenerational family relationship models. It consists of 2 major scales: the Scale of Autonomy (AUTON) and the Scale of Intimacy (INT). Autonomy is understood as the process by which individuals modify their childhood relationship with parents in favor of independence and defining their own identity, whereas intimacy expresses the possibility of maintaining ties with parents based on trust and mutual respect for borders.

The AUTONOMY scale is divided into 5 subscales: 1) Clarity of Expression: thoughts and feelings are clear in the family; 2) Responsibility: family members take responsibility for their own actions; 3) Respect for Others: family members are respectful of one another; 4) Openness to Others: family members are allowed to speak for themselves; 5) Acceptance of Separation: separation and loss are dealt with openly in the family.

The INTIMACY scale is also divided into 5 subscales: 1) Range of Feelings: family members express a wide range of feelings; 2) Mood and Tone: a warm, positive atmosphere exists in the family; 3) Conflict Resolution: normal conflicts are resolved without undue stress; 4) Empathy: family members are sensitive to one another; 5) Trust: the family sees human nature as basically good.

The FOS was standardized for Polish culture by Fajkowska-Stanik [45]. Polish values for particular scales are similar to those originally obtained by the authors of the scale. High indicators of accuracy (W=0.88; Cronbach’s alpha = 0.82) and reliability (Spearman-Brown prediction formula = 0.92; Guttman’s coefficient = 0.92) were obtained for the Polish version of the FOS.

Data analysis

In this study, we decided to analyse the relationship between collective scales of the studied girls and scales and subscales of parents.

We used 2 types of statistical analysis. The first focused on separately comparing FOS results across all groups (ANR, ANBP, BUL, and NOR) for daughters and their mothers and fathers. One-way analysis of variance was performed, revealing a normal distribution of results in each group and homogeneity of variance. The measurement results were compared using the Kruskal-Wallis test (if at least 1 sample did not come from normally distributed populations) or the Welch test (if the homogeneity assumption was not fulfilled). Post-hoc tests (Tukey or Bonferroni) were performed if one-way analysis of variance or Kruskal-Wallis results were satisfactory. To determine normal distribution of a sample, the Shapiro-Wilk test was performed, and the Levene test was used to verify homogeneity of variance.

The second analysis was a verification of the links between the daughters’ and their mothers’ FOS results and between the daughters’ and their fathers’ FOS results. These calculations were done separately for each group. The Pearson linear correlation coefficient was used if both samples came from normally distributed populations. Otherwise, the Spearman rank correlation coefficient was used.

Statistical analysis was performed with the Statistical Package for the Social Sciences (SPSS 20.0.PL; Chicago, IL, USA). The results were considered statistically significant if the p value was below the criterion level (α=0.05).

Results

We had 112 female patients with eating disorders (ANRD, n=54; ANPBd, n=22; BULD, n=36), 36 patients with depression (DEPD), and 85 female students in Cracow, Poland (NORD). The mean age of patients in the ANR group was 16.44 (SD 1.57), in the ANBP group: 16.91 (SD 1.31), in the BUL group: 17.47 (SD 1.03), DEP: 16.78 (SD 1.69), and NOR: 16.99 (SD 1.55). The Kruskal-Wallis test revealed no significant differences between the age of females in the studied groups (p=0.056).

Data analysis was conducted on responses from 107 mothers and 76 fathers of the girls from the eating disorder groups (ANRM, n=54; ANPBF, n=22; BULM, n=31; ANRF, n=38; ANBPBF, n=15; BULF, n=23), 36 mothers and 24 fathers from the depressed group, and 80 mothers and 77 fathers of the healthy control group. Family characteristics are presented in Table 1. From divorced or single parents or reconstituted families, only 3 fathers agreed to complete the questionnaire (1 from the ANR group and 2 from the BUL group).

Correlations of results of mothers and daughters are presented in Tables 2–6. Analysis of correlations revealed only a few correlations, between the perceptions of daughters and mothers.

Correlations of results of fathers and mothers are presented in Tables 7–11. In the NOR and BUL groups, there is a very strong correlation between fathers’ and daughters’ perceptions of autonomy and intimacy in their families of origin in comparison to the remaining groups.
Table 1. Family structure of each group.

| Family structure/diagnosis     | NOR   | ANR   | ANBP  | BUL   | DEP   |
|--------------------------------|-------|-------|-------|-------|-------|
|                                | 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% |

Table 2. NOR: Correlations between the results of mothers and their daughters.

| Daughters     | Mothers               | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance and separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
|---------------|-----------------------|-----------------------|----------------|-------------------|--------------------|-------------------------------|-------------------|---------------|---------------------|---------|-------|----------|---------|
| Trust         |                       |                       |                |                   |                    |                               |                   |               |                     |         |       |          |         |

* pc.05; ** pc.01.

Table 3. ANR: Correlations between the results of mothers and their daughters.

| Daughters     | Mothers               | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance and separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
|---------------|-----------------------|-----------------------|----------------|-------------------|--------------------|-------------------------------|-------------------|---------------|---------------------|---------|-------|----------|---------|
| Clarity of expression |                       |                       |                |                   |                    |                               |                   |               |                     |         |       |          |         |
| .33*          |                       |                       |                |                   |                    |                               |                   |               |                     |         |       |          |         |
| Acceptance of separation and loss |                       |                       |                |                   |                    |                               |                   |               |                     |         |       |          |         |
| .34*          |                       |                       |                |                   |                    |                               |                   |               |                     |         |       |          |         |

* pc.05; ** pc.01.

Table 4. ANBP: Correlations between the results of mothers and their daughters.

| Daughters     | Mothers               | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance and separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
|---------------|-----------------------|-----------------------|----------------|-------------------|--------------------|-------------------------------|-------------------|---------------|---------------------|---------|-------|----------|---------|
| Acceptance of separation and loss |                       |                       |                |                   |                    |                               |                   |               |                     |         |       |          |         |
| .50*          |                       |                       |                |                   |                    |                               |                   |               |                     |         |       |          |         |
| Range of feelings |                       |                       |                |                   |                    |                               |                   |               |                     |         |       |          |         |
| .45*          |                       |                       |                |                   |                    |                               |                   |               |                     |         |       |          |         |

* pc.05; ** pc.01.
Discussion

Our results indicate that mothers’ and daughters’ perceptions of studied dimensions were generally not correlated to each other except in the depressive group. Relationships occurred between daughters and fathers in all groups, regardless of whether girls and fathers reported difficulties in the studied areas [41,42]. Further, the largest number of correlations between positive perceptions of daughters and fathers occurred amongst the female students control group.

The analysis of results for daughters and fathers indicates a significant and strongly positive link between particular dimensions of intimacy and autonomy in the trans-generational dimension. The greatest number of positive correlations occurred between the results of fathers on the subscales of Clarity of Expression, Conflict Resolution, and Responsibility, and the results of daughters on the Autonomy and Intimacy scales. This shows that experiences of fathers in their own families of origin significantly influence perception of autonomy and intimacy by daughters from the non-clinical sample in their family of origin. This is more evident in communicating feelings and thoughts, taking responsibility for behavior and decisions, and skillful conflict resolution.

In the case of non-clinical controls, the subscale Acceptance of Separation and Loss was correlated with results of fathers on the general scales of Autonomy and Intimacy and all subscales. This indicates a strong link between daughters’ perceptions of separation and coping with losses in the family and the fathers’ experiences of autonomy and intimacy in their family of origin. This result may be explained as a function of the normal adolescent developmental task of searching for identity and separation from significant figures of childhood [46]. Thus, the father’s transgenerational experience can be the framework for the child’s own experience in that field.

In the bulimic group, the most significant factors for assessment of autonomy and intimacy by daughters were transgenerational experiences of fathers concerning taking responsibility, openness in family relations, emotional atmosphere

| Table 5. BUL: Correlations between the results of mothers and their daughters. |
| Daughters | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance of separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
|-------------------|----------------------|----------------|-------------------|-------------------|-----------------------------|----------------|--------------|------------------|---------|-------|----------|----------|
| Mothers | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance of separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
| Clarity of expression | | | | | | | | | | | | |
| Responsibility | | | | | | | | | | | | |
| Acceptance of separation and loss | | | | | | | | | | | | |
| Range of feelings | | | | | | | | | | | | |
| Mood and tone | | | | | | | | | | | | |
| Conflict resolution | | | | | | | | | | | | |
| Autonomy | | | | | | | | | | | | |
| Intimacy | | | | | | | | | | | | |

* p <.05; ** p <.01.

| Table 6. DEP: Correlations between the results of mothers and their daughters. |
| Daughters | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance of separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
|-------------------|----------------------|----------------|-------------------|-------------------|-----------------------------|----------------|--------------|------------------|---------|-------|----------|----------|
| Mothers | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance of separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
| Clarity of expression | | | | | | | | | | | | |
| Responsibility | | | | | | | | | | | | |
| Acceptance of separation and loss | | | | | | | | | | | | |
| Range of feelings | | | | | | | | | | | | |
| Mood and tone | | | | | | | | | | | | |
| Conflict resolution | | | | | | | | | | | | |
| Autonomy | | | | | | | | | | | | |
| Intimacy | | | | | | | | | | | | |

* p <.05; ** p <.01.
and mood, and range of revealed feelings. It is worth remembering that in this group, all members negatively assessed the studied dimensions of autonomy and intimacy [41,42]. In the bulimic group, the only negative correlation (found in the study) was observed between the mothers’ Conflict Resolution subscale and the daughters’ Trust subscale. This means that the more mothers observe their family of origin as being capable of resolving conflicts, the less trust daughters have in their families. The following question arises: in what way has the transgenerational experience of mothers influenced their behavior in the family? A negative correlation would be logically justified if the experience of resolving

### Table 7. NOR: Correlations between the results of fathers and their daughters.

| Daughters | Fathers |
|-----------|---------|
| Clarity of expression | .32** | .25* | .32** | .36** | .27* | .24* | .29* | .27* | .33** | .37** | .34** |
| Responsibility | .35** | .34** | .30** | .41** | .32** | .27* | .25* | .40** | .29* |
| Respect for others | .25* | .30* | .28* | .27* | .36** | .31** | .25* |
| Openness to others | .26* | .31** | .30** |
| Acceptance of separation and loss | .30* |
| Range of feelings | .24* | .33** | .45** | .27* | .32** | .34** | .28* |
| Mood and tone | .25* | .30* |
| Conflict resolution | .35** | .49** | .30** | .37** | .51** | .36** | .30** | .38** | .39** | .51** | .42** |
| Empathy | .35** | .32** | .28** | .42** | .28** | .23* | .28** | .37** | .28* |
| Trust | .27* | .29* | .25* | .25* | .36** | .28* | .25* |
| Autonomy | .27* | .32** | .28** | .42** | .28** | .23* | .28** | .37** | .28* |
| Intimacy | .27* | .35** | .24* | .42** | .24* | .24* | .27* | .34** | .37** | .31** |

* p < .05; ** p < .01.

### Table 8. BUL: Correlations between the results of fathers and their daughters.

| Daughters | Fathers |
|-----------|---------|
| Clarity of expression | .69** | .49* |
| Responsibility | .51* | .52* | .66** | .56** | .56** | .52* | .48* |
| Respect for others | .51* | .52* | .66** | .56** | .56** | .52* | .48* |
| Openness to others | .51* | .54* | .67** | .54** | .48* | .53* | .58** | .43* |
| Range of feelings | .54* | .61** | .47* | .51* | .50* | .52* | .44* |
| Mood and tone | .55** | .50* | .63** | .51* | .59** | .55* | .55* | .57** | .54* |
| Empathy | .59* | .54* | .49* | .50* | .48* | .52* |
| Autonomy | .46* | .63** | .57** | .43* | .46* | .51* |
conflicts was perceived by daughters as invasive and ineffective. These results may correspond with those conceptions that indicate difficulties and conflicts in the family relations of patients with bulimia [1,6].

In the anorexia binge/purge subtype group, the correlation between, on the one hand, how daughters perceive mutual respect and respecting boundaries among family members and, on the other, the experiences of the father linked with intimacy,

| Daughters | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance of separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
|-----------|-----------------------|----------------|-------------------|--------------------|-------------------------------|------------------|--------------|-------------------|-------|------|---------|---------|
| Responsibility | .46**                | .40*           | .37*              | .31                | .38*                          | .41*             | .42*         | .42*              |       |      |         |         |
| Respect for others | .33*                  |               |                   |                    |                               |                  |              |                   |       |      |         |         |

* p<.05; ** p<.01.

| Daughters | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance of separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
|-----------|-----------------------|----------------|-------------------|--------------------|-------------------------------|------------------|--------------|-------------------|-------|------|---------|---------|
| Responsibility | .56*                 | .59*           | .54*              | .57*                |                               |                  |              |                   |       |      |         |         |
| Respect for others | .56*                |               |                   |                    |                               |                  |              |                   |       |      |         |         |
| Openness to others | .56*                |               |                   |                    |                               |                  |              |                   |       |      |         |         |
| Mood and tone | .64**            |               |                   |                    |                               |                  |              |                   |       |      |         |         |
| Conflict resolution | .58*               |               |                   |                    |                               |                  |              |                   |       |      |         |         |

* p<.05; ** p<.01.

| Daughters | Clarity of expression | Responsibility | Respect for others | Openness to others | Acceptance of separation and loss | Range of feelings | Mood and tone | Conflict resolution | Empathy | Trust | Autonomy | Intimacy |
|-----------|-----------------------|----------------|-------------------|--------------------|-------------------------------|------------------|--------------|-------------------|-------|------|---------|---------|
| Clarity of expression | .43*                | .49*           | .30               | .48*                | .56**                         | .46*             | .53*         |                   |       |      |         |         |
| Openness to others | .43*                |               |                   |                    |                               |                  |              |                   |       |      |         |         |
| Range of feelings | .43*               |               |                   |                    |                               |                  |              |                   |       |      |         |         |
| Mood and tone | .46*               | .48*          |                   |                    |                               |                  |              |                   |       |      |         |         |
| Conflict resolution | .63**            | .54**         | .44*              | .51*                | .51*                          | .56**            | .49*         |                   |       |      |         |         |
| Intimacy | .41*                |               |                   |                    |                               |                  |              |                   |       |      |         |         |

* p<.05; ** p<.01.
openness to others and trust, responsibility, and the emotional climate in the family, is noteworthy. Comparison of the results of the 3 eating disorders groups indicate the indirect nature of the anorexia nervosa binge/purge subtype group, not only in terms of the clinical picture, but also other accompanying broader dimensions.

In the context of the analysed results, it is worth looking at the research tool itself for a moment. It should be noted that the subscales making up the main scales of Autonomy and Intimacy are based on a just few items; thus one may wonder whether they study the dimensions to which they relate precisely enough.

Factor analyses conducted recently on the U.S. population indicate that one (primary component) FOS scale exists describing the general family climate and the quality of communication. Other dimensions studied by the scale are methods of resolving conflicts (Conflict Resolution), and also support for openness to various points of view outside the family [47]. The obtained results, especially in the NOR group, may indicate the importance of these dimensions.

Our results urge rethinking of the meaning and role of intergenerational transmission between daughters and mothers and require further research, perhaps conducted with different statistical analysis or different methodology (e.g. grounded theory methodology). This also points to the significance of the relationship with the father and not with the mother observed in studies of transgenerational transmission, including transgenerational transmission linked with body image and eating psychopathology [48]. Research by Dacynger et al. [49] points to a link between perceptions of daughters and fathers. They studied the extent to which the perception by patients with eating disorders concerning the functioning of the family was consistent with their parents’ perception. It turned out that significant differences were not noted between the perception of family relations by fathers and daughters, whilst differences did occur between mothers’ and daughters’ perceptions. Mothers assessed family relations as significantly healthier and less chaotic than daughters. Mothers also assessed the functioning of the family in a more positive way than fathers and daughters, who saw the family as more dysfunctional. The authors concluded that differences in viewpoint between mothers, father, and daughters “may contribute to the continuation of dysfunctional family pattern and maintenance of the eating disorders and/or impact negatively on the course of treatment” [49, p. 135]. Jones et al. [23], in their studies measuring parental rearing behaviors, core beliefs, and psychopathology, also found a significant relationship between fathers and daughters. Their results indicated that “in eating-disordered women, paternal rejection and overprotection predicted aspects of eating psychopathology via the mediating role of abandonment, defectiveness/shame, and vulnerability to harmful core beliefs” [23, p. 319].

The results of studies cited above, showing – similarly to our results – significant links between female student controls and their fathers as well as patients with different psychopathologies and their fathers, are consistent with contemporary developmental concepts, which underline the role of the father in the development of the child by creating a bond with it and maintaining a stable and supportive bond with its mother [50,51]. In this sense, the results obtained in the NOR group suggest the importance of fathers experiencing autonomy and intimacy in their family of origin for developing a sense of autonomy and intimacy by their daughters, or a link between the narratives of fathers and daughters on the subjects of autonomy and intimacy.

The high number of correlations in the NOR group in comparison with clinical groups suggests that the transmission of the experience of autonomy and intimacy in the father-daughter relationship may protect against the development of psychopathology, including eating disorders, and at the same time, weakness of this transmission may constitute a risk factor for the development of disorders. It should also be remembered that a correlation is a two-way relationship. The obtained results can thus also be interpreted in a different way. The results obtained by the fathers may attest to their difficulty in distancing themselves from their own family history and in building current family relations.

However, many limitations should be borne in mind when drawing this conclusion. The results obtained by girls from the restrictive anorexia group have limited credibility. Patients from the ANR group generally did not indicate any difficulties (in contrast to their fathers who indicated disorders of autonomy and intimacy in their families of origin). They also generally obtained correct results on the Eating Disorder Inventory [52], which in the context of their low body mass index, may be interpreted as an expression of denial, idealization, or difficulties in recognizing their mental states.

The presence of depressive symptoms in the group of patients with eating disorders – especially intense among bulimic patients – may have an influence on the obtained results [53]. The depressive symptoms of daughters could have distorted their assessment of family relations, thus disrupting the correlations with the parents’ assessments. However, this does not explain the differences between the correlations with the assessments by fathers and mothers.

As already mentioned, the reason why we decided to select a depressive group as a second control group was to compare results obtained by girls with eating disorders with another
diagnostic group. It was assumed that in this way it would be possible to define the degree to which the studied correlations are specific for eating disorders. However, it seems that in the present analysis concerning transgenerational transmission, the choice of the depressive group did not allow such a solution. In the case of depressive disorders, similar transgenerational factors may have a comparable meaning to that in eating disorders [32,54,55].

An important complement to the correlations for the results of parents and daughters would be to present them in the form of a daughter-mother-father triad and view the mutual interactions. This was shown by Bosco, Renk, Dinger, and Epstein [56], where in bivariate correlational analyses and regression analyses, sons and daughters exhibited higher levels of internalizing disorders when higher levels of interparental difficulties and triangulation were observed. In the cited study, only daughters exhibited greater internalizing behaviors when there was a greater negative perception of both fathers and mothers, higher levels of parental psychopathology, lower levels of parental acceptance, and higher levels of parental control and paternal emotional unavailability.

It is also worth focusing on the significant differences in the structures of the families we studied. All clinical groups, especially the bulimia and depressed group, were characterized by a large percentage of single-parent families. One question is: what were patients assessing when they evaluated the functioning of the family – the family before the divorce, an averaged evaluation of the family, or the one-parent family?

The complexity of the processes occurring in families, especially when we consider a 3-generational system, makes measuring the studied variables more difficult. The concept of autonomy itself, which is a complex construct despite its universality, is not often a research subject. Few tools exist that operationalize it. The most frequently applied tools – self-reports – have significant limitations by their very nature. The answers depend on the perception and understanding of one’s family relations, the ability to name them, the action of defensive mechanisms, the moment at which research is carried out, the attitude to the research itself, and the relationship with the researcher.

The relatively small size of the total group is also a limitation of our study. In addition, the girls that completed the survey still lived at home. Thus, adolescence may have influenced the results of all 5 studied groups.

Our study showed significant links between daughters’ and fathers’ perceptions of their families of origin, both among female students and girls with eating disorders and depressive disorders, in contrast to the general absence of such links between daughters’ and mothers’ perceptions in all studied groups. Correlations were observed despite crucial differences in the perception of autonomy and intimacy in the groups.

We detected no link indicating the specificity of transgenerational transmission in eating disorders. This is convergent with results of studies that challenge the specific dimensions of family issues in eating disorders in comparison to other psychiatric disorders [8].

Conclusions

Several conclusions with practical applications can be drawn from the studies. The results undoubtedly point to the importance of the father figure in studies on family systems, including the context of family transmission. The question of the mechanism of transgenerational transmission in families with detectable psychopathology remains open. It seems advisable that aspects of the father-daughter relationship should be tackled in the course of family therapy, both in work with the whole family and in work on the father-daughter subsystem.

Statement

The study was approved by the Bioethics Commission UJ CM No: KBET/26/B/2001.

References:

1. Gröne M: Wie lasse ich meine Bulimie verhungern? Ein systemischer Ansatz zur Beschreibung und Behandlung der Bulimie. Vierte, korrigierte Auflage. Heidelberg: Carl-Auer-Systeme, 2003 [in German]
2. Reich G, Cierpka M: Psychoterapie der Eßstörungen. Krankheitsmodelle und Therapiepraxis – störungspezifisch und schulenübergreifend. Stuttgart–New York: Georg Thieme Verlag, 1997 [in German]
3. Roberto LG: Bulimia: The transgenerational view. J Mar Fam Ther, 1986; 12: 255–73
4. Selvini Palazzoli M, Cirillo S et al: Family games: General models of psychosomatic processes in the family. London: Karnac Books, 1989
5. Ward A, Ramsay R, Turnbull S et al: Attachment in anorexia nervosa: A transgenerational perspective. Brit J Med Psychol, 2001; 74: 497–505
6. Weber G, Stierlin H: In Liebe entzweit. Ein systemischer Ansatz zum Verständnis und zur Behandlung der Magersuchtfamilie. Rienbek bei Hamburg: Rowohlt Verlag, 1993 [in German]
7. White M: Anorexia nervosa: A transgenerational system perspective. Fam Proc, 1983; 22: 255–73
8. le Grange D, Lock J, Loeb K, Nicholls D: Academy for Eating Disorders position paper: the role of the family in eating disorders. Int J Eat Disord, 2010; 43: 1–5
9. Pike KM, Hilbert A, Wilfley DE et al: Toward an understanding of risk factors for anorexia: A case-control study. Psychol Med, 2008; 38: 1443–53
10. Bruch H: Golden cage: The enigma of anorexia nervosa. Cambridge, MA: Harvard University Press, 1978
11. Chenin K: The hungry self: women, eating and identity. London: Virago Press London, 1986
12. Humphrey LL: Observed family interactions among subtypes of eating disorders using structural analysis and social behavior. J Consult Clin Psychology, 1989; 57: 206–14
13. Masterson J: Primary anorexia nervosa in the borderline adolescent. In: Hartocollis P [ed.], Borderline personality disorders. New York: International University Press, 1977; 475–94
14. Miller-Day MA: Communication among grandmothers, mothers, and adult daughters: a qualitative study of maternal relationships (LEA's Series on Personal Relationships). Mahwah: Lawrence Erlbaum Associates, 2004
15. Selvini Palazzoli M: Self-starvation: from individual to family therapy in the moderating role of parental support among Italian adolescents. J Fam Klin, 2009; 9: 233–41 [in Polish]
16. Sugarman A: Bulimia: A displacement from psychological self to body self. In: Johnson CL, ed. Psychodynamic treatment of anorexia nervosa and bulimia. New York, London: The Guilford Press, 1991; 3–34
17. Cassano M, Adrian M, Veits G: The inclusion of fathers in the empirical investigation of child psychopathology: An update. J Clin Child Adolesc Psychology, 2006, 35: 583–89
18. Józefik B: Attachment theory and eating disorders – theoretical and empirical issues. Psychiat Pol, 2008, 2: 157–66 [in Polish]
19. Józefik B, Iniewicz G, Ulatowska R: Attachment patterns, self-esteem, gender schema in anorexia and bulimia nervosa. Psychiatr Pol, 2010; 5: 665–76 [in Polish]
20. Meyer C, Gillikins K: Parental bonding and bulimic psychopathology: The mediating role of mistrust/abuse beliefs. Int J Eat Disorders, 2004, 35: 229–33
21. Palmer RL, Oppenheimer R, Marshall P: Eating disorders patients remember their parent: A study using Parental Bonding Instrument. Int J Eat Disorders, 1988; 7: 101–6
22. Jones CJ, Leung N, Harris G: Father-daughter relationship and eating psychopathology. The mediating role of core beliefs. Brit J Clin Psychology, 2006; 45: 319–10
23. Fassino S, Amianto F, Abbate-Daga G: The dynamic relationship of parental personality traits with the personality and psychopathology traits of anorectic and bulimic daughters. Compr Psychiatr, 2009; 18: 206–16
24. Blos P: Son and father. In: Breen D (ed.), The gender conundrum. London: Routledge, 1993; 70–84
25. Huemar J, Haidvogl M, Mattejat F et al: Perception of autonomy and connectedness prior to the onset of anorexia nervosa and bulimia nervosa. Zeit Kind Jugend Psychiatr Psychother, 2012; 40: 61–68
26. Karwiautz A, Haidvogl M, Wagner G et al: Subjective family image in anorexia and bulimia nervosa in adolescence: a controlled study. Zeit Kind Jugend Psychiatr Psychother, 2002; 30: 251–59
27. Stierlin H: Coevolution and coindividuation. In: Stierlin H, Simon F, Schmidt W, editors. Familiar realities. New York: The Guilford Press, 1991; 27: 908–23
28. Smolak L, Levine MP: Separation-individuation difficulties and the distinction between bulimia nervosa and anorexia nervosa in college women. Int J Eat Disorders, 1993; 14: 33–41
29. Simon FB, Stierlin H: Dictionary of families therapy. Gdańsk: Gdańskie Wydawnictwo Uniwersytetu Jagiellońskiego, 2006 [in Polish]
30. Mikulincer M, Shaver PR: An attachement perspective on psychopathology: The mediating role of mistrust/abuse beliefs. Int J Eat Disorders, 2004, 35: 229–33
31. Lynch HH, Ryan RM: Emotional autonomy versus detachment: Revisiting the vicissitudes of adolescence and young adulthood. Child Develop,1989; 60 (2): 340–56
32. Pace U, Zappulla C: Relations between suicidal ideation, depression, and emotional autonomy from parents in adolescence. J Child Fam Stud, 2010; 19(6): 747–56
33. Pace U, Zappulla C: Detachment from parents, problem behaviors, and the moderating role of parental support among Italian adolescents. J Fam Issues, 2013; 34(6): 768–83
34. Tacón AM: Attachment and anxiety: a conceptual integration. Integ Cancer Ther, 2002; 1(4) 371–81
35. Huemar J, Haidvogl M, Mattejat F et al: Perception of autonomy and connectedness prior to the onset of anorexia nervosa and bulimia nervosa. Zeit Kind Jugend Psychiatr Psychother, 2012; 40: 61–68
36. Heim C, Nemeroff CB: The potential role of childhood adversities in the pathogenesis of mood and anxiety disorders. J Child Psychiatry, 2007; 48: 183–96
37. Leong G, Licas A, Colligan R et al: Sexual, body image and personality attitudes in anorexia and bulimia nervosa in adolescence: a controlled study. Zeit Kind Jugend Psychiatr Psychother, 2002; 30: 251–59
38. Fajkowska-Stanik M: Polska adaptacja Skali Rodziny Pochodzenia Hovestadta, 2009 [in Polish]
39. Karwiautz A, Haidvogl M, Wagner G et al: Subjective family image in anorexia and bulimia nervosa in adolescence: a controlled study. Zeit Kind Jugend Psychiatr Psychother, 2002; 30: 251–59
40. Weixelblatt T, Gurick G, Simon R: Autonomy and relatedness in the development of healthy eating. J App Develop Psychol, 2003; 24: 179–200
41. Józefik B, Pilecki MW: Perception of autonomy and intimacy in families of origin of patients with eating disorders with depressed patients and healthy controls. A transgenerational perspective – Part I. Arch Psychiatr Psychother, 2010; 4: 69–77
42. Fajkowska-Stanik M: Polska adaptacja Skali Rodziny Pochodzenia Hovestadta, 2009 [in Polish]
43. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders DSM-IV. Washington: American Psychiatric Press, 1994
44. Hovestadt AJ, Anderson WT, Piercy FP et al: A family of origin scale. J Mar Fam Ther, 1985; 11: 287–97
45. Fajkowska-Stanik M: Polska adaptacja Skali Rodziny Pochodzenia Hovestadta, 2009 [in Polish]
46. Köpke S, Denissen JJA: Dynamics of identity development and separation-individuation in parent–child relationships during adolescence and emerging adulthood – A conceptual integration. Develop Rev, 2012; 32(1): 67–88
47. Hemming ME, Blackmer V, Russell Searight H: The Family-of-Origin Scale: A psychometric review and factor analytic study. Int J Psychol Stud, 2012; 4(3): 34–42
48. Pilecki MW, Józefik B, Salapa K: Disordered eating among mothers of Polish patients with eating disorders. Med Sci Monit, 2012; 18(12): CR758–64
49. Danciger J, Fornari V, Sciortino I et al: Daughters with eating disorders agree with their parents' perception of family functioning? Compr Psychiatry, 2005; 46: 135–39
50. Blos P: Son and father. In: Breen D (ed.), The gender conundrum. London: Routledge, 1993; 70–84
51. Brazelton TB, Gerner SR: The earliest relationship. Parents, infants, and the drama of early attachment. New York: Da Capo Press/Pervus Book Group, 1990
52. Józefik B: Relacje rodzinne w anoreksji i bulimii psychicznej. Cracow: Wydawnictwo Uniwersytetu Jagiellońskiego, 2006 [in Polish]
53. Pilecki MW, Józefik B: The relationship between self-image and depressive-ness amongst girls with various types of eating disorders. Psychiatr Psychother Klin, 2009; 6: 233–41 [in Polish]
54. Köpke S, Denissen JJA: Dynamics of identity development and separation-individuation in parent–child relationships during adolescence and emerging adulthood – A conceptual integration. Develop Rev, 2012; 32(1): 67–88