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## Psychological aspects of sibling relational conflict vs. mental wellbeing levels in women's perceptions

### Streszczenie

Celem prezentowanych badań była analiza zjawiska konfliktu relacyjnego z rodzeństwem w percepcji dorosłych sióstr oraz przeanalizowanie jego wybranych uwarunkowań. Rozpatrywano także różnicujące znaczenie nasilenia konfliktu relacyjnego z rodzeństwem w zakresie doświadczania dobrostanu psychicznego. W badaniach uczestniczyło 240 kobiet w okresie dorosłości, pochodzących z województwa łódzkiego. Zastosowane narzędzia badawcze: Kwestionariusz Relacji Dorosłego Rodzeństwa (KRDR) C.Stockera i in. (1997) w adaptacji K.Wałęckiej-Matyja (2014) oraz Skalę Mental Health Continuum-Short Form C.L.M. Keyes'a (2008) w adaptacji D.Karaś i in. (2014). Uzyskane rezultaty badań stanowiły podstawę do sformułowania wniosku o ambiwalentnym rodzaju więzi między rodzeństwem w okresie dorosłości, jednoznacznie wskazując na zróżnicowanie występowania konfliktu relacyjnego w zależności o wieku badanych sióstr. W badaniach nie potwierdzono istotności roli konstelacji płci w zakresie doświadczania ogólnego dobrostanu przez badane kobiety. Zweryfikowano natomiast hipotezę o znaczącej roli wieku dla poziomu dobrostanu psychicznego.

### Słowa kluczowe

rodzeństwo, konflikt, dorosłość, dobrostan psychiczny.

### Abstract

My research aim was to analyse sibling relational conflicts perceived by adult sisters and selected conflict determinants. The study also considered the discriminating significance of the sibling relational conflict intensity for experiencing mental wellbeing. The study included 240 adult women, coming from the Łódź district ( $M=41.94$   $SD=15.71$ ). The following research instruments were applied: Adult Sibling Relationship Questionnaire (ASRQ) by C.Stocker et al. (1997) in its – adapted form by K. Wałęcka-Matyja (2014), and Mental Health Continuum-Short Form by C.L.M. Keyes (2008) as adapted by D. Karaś et al. (2014). The research results allowed us to conclude about ambivalent kinds of bonds between siblings in adulthood, clearly indicating variation in the relational conflicts depending on the examined sisters' ages. However, the study did not confirm the significance

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of gender constellation for experiencing general wellbeing by the examined women. It did verify the hypothesis that there is a significant role for age-level psychological well-being.

**Keywords**

siblings, conflict, adulthood, mental wellbeing.

**Introduction**

The significance of close relationships in many human areas has been discussed time and again in numerous studies and in the richly documented psychological and sociological literature (Agyre, 2004; Szlendak, 2012; Janicka, Janicka, 2014). These relationships are an essential element of a person's mental wellbeing, affecting their happiness, contentment and satisfaction with life. In the researchers' reflections, human relationships are interpreted from both the dyadic relationship perspective and the family relationship one. Emphasized are the relationship patterns shaped in the period of early ontogenesis with a significant person who determines the course and the relationship quality with the wider social environment (Mahler, Mc Divitt, 1980; Stierlin, 1983; Bowlby, 1980). Analysing the related literature, it can be noticed that social sibling relationships have aroused less interest among researchers so far than other types of interactions in the family system, for example, mother-child, and parents-children, though, they are considered not less important for a human's adaptation to the surrounding social reality (Feinberg et al., 2012; Myers, 2015). This can be understood as it is exceptionally difficult to carry out research on the relationships occurring in the family system. However, it is necessary to identify them since human life becomes longer and siblings have an opportunity to maintain contact with each other much longer than ever before. Moreover, new technologies, especially in communication (e.g. mobile phones, Internet), and the ease in travelling long distances (cars, planes) have modified the conditions for sibling interaction, and this is connected with a bigger diversity of these relationships than in the past.

These phenomena bring about new challenges for many knowledge fields, including family psychology. Additionally, in adulthood many people face numerous stressful life events, such as divorce, job loss, health loss, and death of a close person. Proper sibling relationships can prevent a significant lowering of life comfort, affecting mental health and life satisfaction.

Research results on adult sibling relationships emphasize their complex and ambivalent nature due to the interweaving relationships of warmth, fondness, conflict, jealousy and rivalry, which can be determined genetically or as deliberate choices (Myers, Goodboy, 2010; Mikkelsen, 2014). The paradoxical nature of the sibling relationship has

been confirmed in numerous typologies attempting to put sibling subsystem relationships into uniform theoretical frames (Gold, 1990; Murphy, 1992; Kristine, Morgan, 1998; Szymańska, 2016). The sibling relationship in adulthood for some people can be a valuable resource, an excellent source of friendship and support (Connidis, Davies, 1990). For others it can mean a source of conflict and rivalry (Allan, 1977; Connidis, 2007). However, it must be stressed that the research results obtained in this field are characterized by significant discrepancies.

Analysing the concept of *conflict* between siblings in adulthood, the adopted interpretation is the interactive one. In my present study, *conflict* is understood as a dispute where at least two parties are engaged. These parties think that their goals are inconsistent, the resources limited, and perceive each other as obstacles in achieving their objectives (Wilmont, Hocker, 2011). A *conflictual relationship* between siblings in adulthood has been defined as a negative relationship, characterized by failure to reach an agreement between the parties, a desire to dominate, perceived mutual contrasts, demonstrative competitive behaviours and, in some cases, even destructive ones including aggression.

Sibling conflict is mainly to be found within family relationships. It should be considered as a social conflict whose essence is its participants' conscious emotional commitment (Sztumski, 1987). Analysing the meaning of disharmony in the relationships between siblings, focus is placed on the broader social context, namely, the other family members' behaviour, and the social surrounding. That is required by the adopted assumptions of the systemic theory, which is best explains how the family functions social (McHale et al., 2006). Therefore, the present discussion on specific sibling relationships will be based on the above mentioned paradigm.

In the systemic interpretation, *family* is a system forming a certain complex reality and a set of elements in dynamic interaction where each element is determined by the others. Thus, the whole family as a community of people is affected by all its members. It is stressed that basic to the family system is the *emergency* phenomenon, meaning that the family system is more than a sum of its constituent elements. All family members together create a reciprocal relationship network. In the family system, each person has their own individuality and at the same time, so to say, carries traces of the whole system (Ryś, 2009). It was adopted in this study that interpersonal conflict is a particular interaction in which there are negative influences between its participants. This relationship may encompass all the family subsystems, but due to the subject under discussion, focus was placed on the sibling subsystem.

There may be different social conflicts between siblings, namely, age conflict (contemptuous use of the words “elder/younger brother/sister”), generation conflict (when the age difference between siblings is significant – 10 years and more), and gender con-

flict (between sisters and brothers). A reason of these conflicts or misunderstandings can also be the phenomenon of overt or hidden competition for the parents' favour. Such a conflictual relationship between siblings to a great extent keeps changing with age and depends on the family's life stage. A lot of family researchers present findings that confirm the view about a gradual reduction of the sibling conflict level. In childhood and adulthood, it is usually very high, but in adulthood it demonstrates a downward trend (Furman, Buhrmeister, 1985; Lanthier et al., 1997; Noller, 2005). This situation can be explained by changes in a child's and adolescent's needs, the possibilities of satisfying them by the parents as well as those resulting from all family member needs. And besides, adult siblings do not usually live together, are independent persons, and can decide about the frequency of their meetings.

Another factor significantly affecting sibling subsystem conflict is gender. The gender constellation in siblings has often been taken up by family researchers (Buhrmeister, 1992; Voorpostel, Blieszner, 2008), but their research findings do not give a clear picture. More consistency has been found in respect to positive sibling relationships, indicating that the relationships between same gender siblings, especially the sister-sister dyad, tend to be characterized by the highest closeness levels (Cicircelli, 1991; Lanthier et al., 1997; Voorpostel, Van der Lippe, 2007; Harwas-Napierała, 2014). Research results describing hostility between siblings are less consistent. In some researchers' opinion, the most conflict-inducing relationships are those between brothers (Cole, Kerns, 2001) whereas other findings indicate the sister-sister dyad as the most conflictual one (Voorpostel, Blieszner, 2008). Some researchers say that having a sister increases the level of life satisfaction although it is emphasized that in same gender siblings there might be tension, strong competition, and deliberate activities aimed at shaping one's own identity in contrast to the sister (McGhee, 1985).

It is interesting cognitively to refer the conflictual relationship to mental wellbeing. In operationalizing *mental wellbeing*, it has been assumed that it is an emotional attitude towards one's own life, which has resulted from getting to know it and reflecting on it. The cognitive component, constituting the emotional one, is demonstrated in self-appraisal and the appraisal of one's life as compared with accepting life's standards. A positive result stemming from these comparisons indicates that there is contentment and satisfaction with life. The *mental wellbeing* interpretation adopted in this study is both general and detailed in nature, determined by three dimensions: emotional, mental and social. Emotional wellbeing<sup>2</sup> is derived from the concept of N. M. Bradburn (1969) and

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<sup>2</sup> Emotional wellbeing is understood as experiencing life satisfaction and being in a positive mental state (Karaś et al., 2014).

H. Cantril (1965). Mental wellbeing<sup>3</sup> is understood according to C.D. Ryff's concept (1989), and social wellbeing<sup>4</sup> to the theory by C.L.M. Keyes (1998) and D. Karaś et al. (2014). Research conducted from different theoretical perspectives provides evidence that close relationships with other people may not only be a correlate of human wellbeing but also its causative force. People who have close relationships with friends and/or relatives are generally happier (Myers, Diener, 1995). However, it should be stressed that close relationships are indispensable for a person to experience mental wellbeing only if they contain positive interactions. Since there is a strong correlation between the quality of interpersonal relationships and wellbeing, it is important to better understand the correlation between adult sibling relationships and their wellbeing.

The present knowledge about the research subject being considered indicates that numerous discrepancies exist in researchers' opinions on the relational quality in the adult sister dyad as well as scarce research carried out in Poland. This finding was an inspiration for seeking answers to the following research questions:

1. What is the perceived mutual relationship image of adult sisters?
2. Do age and gender constellations differentiate the relational conflict occurrences in sisters?
3. Do age and relational conflict intensity levels in the sister dyad differentiate general mental wellbeing levels?

Based on the related literature, the following research hypotheses have been elaborated:

H1: A dimension that most often describes the relationships in the adult sister dyad is warmth, yet there are also present less frequently occurring factors of conflict and rivalry.

H2: With age conflictual relationship occurrences in the examined sister dyads decrease.

H3: In the sister-sister dyads the relational conflict occurs less often than in the sister-brother dyads.

H4: Older age and high relational conflict intensity levels in the examined women decrease general mental wellbeing levels.

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<sup>3</sup> Mental wellbeing refers to satisfaction with the functioning of a human person in individual terms (e.g. in respect to integration vs. autonomy, intimacy, acceptance) (Karaś et al., 2014).

<sup>4</sup> Social wellbeing concerns satisfaction with functioning in terms of the super-individual, or public dimension (Karaś et al., 2014).

## Method

### Participants

The study included 240 adult women, coming from the Łódź district. Due to some imprecise answers, the answers of only 199 women were taken into account. The women's ages ranged from 19 to 76 years (average of 41.94; SD = 15.71). Young adults (from 21 to 35 years of age) included 63 women (31.7%), middle-aged people (36–50 years of age) included 88 women (44.2%), and late adults (from 51 to 76 years of age) 48 women (24.1%). The women mostly lived in urban areas (n=132; 36.4%). Residence in a rural area was declared by 67 respondents (33.7%). Considering professional activity, it was found out that over half the women were active in the labour market (n=115; 57.8%), almost half them were still studying (n=49; 24.6%), and the smallest percentage included pensioners (n=35; 17.6%). All the women were raised together with siblings, towards whom they were supposed to take an attitude in the Adult Sibling Relationship Questionnaire. When the research was conducted, 81.9% of the women (n=163) did not live together with their siblings. Analysing birth order, more than half the women were born as the first child in the family (n=107; 53.8%). Considering gender constellation in the women's siblings, it was noticed that 60.8% of them (n=121) were raised in the sister-sister dyad whereas 39.2% (n=78) grew up with a brother (sister-brother).

### Procedure

The study was conducted in Poland, in the Łódź district in 2014–2015. The participants were recruited via the snow-ball method. The majority of the participants fit into the chosen criteria, and belonged to the agreed age groups. The persons were informed about the aim of the study and the intention to use the results only for scientific purposes. Participation was anonymous and voluntary. Completing the test sets took the respondents about 30 minutes and was done free of charge.

### Research instruments

To collect empirical data, the test procedure was applied as the basic diagnostic method. In the study, two research instruments and a questionnaire for collecting demographic data and the ones referring to the issues related with having siblings were applied.

Adult Sibling Relationship Questionnaire (ASRQ) by C. Stocker et al. (1997) in the adaptation by K. Wałęcka-Matyja (2014) was used to measure relationships between siblings in adulthood. It is a self-reporting instrument, with which the examined person evaluates their behaviours and feelings towards their adult siblings as well as their siblings' perceptions – of the behaviours and feelings toward the respondents. ASRQ in-

cludes 81 items, which make up three main composite factors of sibling relationships: *Warmth*, *Conflict* and *Rivalry*.

*Conflict* describes relationships characterized by lack of understanding between siblings, willingness to dominate, noticing differences and competitive behaviours. The scales making up the Conflict factor are: Opposition, Domination, Quarrel, and Competition (Cronbach's  $\alpha$  .92). The dimension of *Warmth* covers a relationship characterized by acceptance, closeness between siblings, who acknowledge their similarities, admire each other, have knowledge about each other, and support each other, both emotionally and instrumentally (Cronbach's  $\alpha$  .97). *Rivalry* refers to the degree in which siblings feel treated fairly or unfairly by their parents (Cronbach's  $\alpha$  .87).

All the ASRQ items (except rivalry) are assessed on the Likert's scale, from "Hardly Anything" (1 point) to "Extremely Much" (5 points). Items measuring the rivalry level in siblings were assessed on a scale from zero to two points. The psychometric properties of ASRQ are good and make carrying out research possible (Cronbach's  $\alpha$  .87-.97) (Stocker et al., 1997; Walęcka-Matyja, 2014).

The Mental Health Continuum-Short Form MHC-SF scale by C.L.M. Keyes (2008) adapted by D. Karaś, J., Ciecuch, and C.L.M. Keyes (2014) was used to determine general mental wellbeing. The MHC questionnaire comprises 14 items considered as the most characteristic for defining an individual's mental wellbeing. Three items represent emotional wellbeing and are derived from N.M. Bradburn's (1969) and H. Cantril's (1965) concept. Six items represent mental wellbeing as interpreted by C.D. Ryff (1989), and five items social wellbeing referring to C.L.M. Keyes' theory (1998). Respondents declare how often they experience particular mental health symptoms (how often in the last month: *never, once or twice, more or less once a week, 2-3 times a week, almost every day, every day*). The general score in the MHC-SF scale is the sum of the individual item scores. It is also possible to calculate the three wellbeing indicators. Cronbach's alpha coefficient of reliability for the whole scale is .91 and for the three MHC-SF subscales from .82 to .87. Normal control research was conducted on 2115 adult people (Karaś et al., 2014).

## Results

In the statistical analysis, the repeated measures ANOVA and regression analysis were applied and conducted using SPSS 22 software.

### Descriptive statistics

Table 1 presents descriptive statistics for the interval variables.

**Table 1.** *Descriptive statistics distribution.*

Examined group	Sisters having adult siblings N=199			
	M	SD	Min.	Max.
Sibling relationship dimensions				
Warmth	143.32	38.22	52.0	228.0
Rivalry	4.64	6.13	.0	24.0
Conflict	41.55	13.52	23.0	81.0
Conflict dimensions				
Quarrel	11.46	3.82	5	22
Opposition	10.53	4.34	6	27
Competition	10.18	4.27	6	23
Domination	9.37	4.00	6	25

Source: own work.

### The quality of adult sibling relationships according to the examined women

To find an answer to the first research question, due to the large scores span on the relationship quality scales, these scores were recalculated as the mean score values obtained for appropriate questionnaire items. The items included in the rivalry dimension were recoded – instead of the scoring recommended in the key 0–1–2, a scoring 1–3–5 was applied.

Table 2 presents the mean values of the recalculated scores on the relationship quality scales.

**Table 2.** *Recalculated result values on relationship quality scales.*

Relationship quality	M	SD
Warmth	3.12	0.83
Rivalry	1.74	1.01
Conflict	1.81	0.59

Source: own work.

Based on the repeated ANOVA measures, it has been found that between the mean values of the points on the relationship quality scales there were statistically significant

differences  $F(1.67; 331.42)=150.72$ ,  $p<0.001$ ,  $\eta^2=0.43$ . Pairwise comparisons with the Bonferroni correction allow for the statement that the results in the Warmth dimension were significantly statistically higher than in the Rivalry ( $p<0.001$ ) and Conflict dimensions ( $p<0.001$ ). No statistically significant difference was found between the Rivalry and Conflict dimension scores. The obtained results confirm hypothesis 1.

### Age and gender constellation vs. conflict occurrences in sisters' relationships with their adult siblings

In order to provide an answer to the second research question, a regression analysis was carried out, in which the person's ages, their sibling gender constellation (sister-sister or sister-brother) and the interaction between them were analysed as predictors. The level of conflict and conflict dimensions namely, quarrel, opposition, competition and domination, were analysed in separate models.

Table 3 presents the obtained regression coefficients together with their statistical significance.

**Table 3.** Results of regression analysis.

Dependent variables	Age		Gender constellation		Age x gender constellation	
	Beta	p	Beta	p	Beta	p
Conflict	-0.24**	0.001	0.04	0.525	-2.25*	0.026
Opposition	-0.27***	0.001	0.08	0.224	-0.18*	0.012
Quarrel	-0.26***	0.001	0.05	0.488	-0.16*	0.025
Domination	-0.18*	0.012	0.02	0.818	-0.15*	0.045
Competition	-0.08	0.260	-0.04	0.965	-0.05	0.517

Source: own work.

Statistically significant correlations were discovered between the examined persons' ages and the of opposition, quarrel and domination conflict intensity levels. The higher the age the lower the conflict level. The obtained results are consistent with hypothesis H2. The persons' ages explained 3.9% of the conflict level variance, 4.9% of the opposition intensity variance, 4.8% of the quarrel intensity variance and 2.1% of the domination intensity variance. But no statistically significant correlation was found between age and competition intensity.

No statistically significant main effects of gender constellation in siblings were discovered; therefore, we obtained no results to confirm hypothesis H3.

On the other hand, statistically significant interaction effects were noticed between the persons' ages and their sibling gender constellations in respect to conflict, opposition intensity, quarrel intensity and domination intensity. The interaction effects explained

2.4% of the conflict level variance, 3.0% opposition intensity variance, 2.3% quarrel intensity variance, and 2.0% domination intensity variance.

Table 4 presents the regression analysis results conducted in the group having a sister and in the group having a brother, in which the correlations between age and conflict and the intensity levels of opposition, quarrel and domination were analysed.

**Table 4.** Results of regression analysis conducted in the group of people who had a sister and in the group of people who had a brother.

Dependent variables	sister-sister		sister-brother	
	Beta	p	Beta	p
Conflict	-0.08	0.361	-0.36**	0.001
Opposition	-0.10	0.278	-0.37**	0.001
Quarrel	-0.10	0.268	-0.42***	0.001
Domination	-0.04	0.661	-0.29*	0.010

Source: own work.

It has been found that statistically significant negative correlations between age and conflict level, opposition, quarrel and domination intensities occurred exclusively in the group of people who had a brother. Age in this group explained 13.3% of the conflict level variance, 13.8% opposition intensity variance, 18.0% quarrel intensity variance, and 8.4% domination intensity variance.

### Age and sibling relational conflict intensity vs. general wellbeing experience

The age and the level of sibling relational conflict were also examined as general mental wellbeing predictors. The regression coefficients are presented in Table 5.

**Table 5.** Analysis of correlations between mental wellbeing and age and sibling relational conflict level for respondents.

Predictors	General wellbeing	
	Beta	p
Age	-0.08	0.272
Conflict	-0.09	0.211

Source: own work.

No statistically significant correlations were discovered; therefore, there are no results to confirm hypothesis H4.

## Discussion

The aim in my article was to answer the question about sibling relationship quality as perceived by adult sisters and to analyse one of the components in this relationship, the Conflict factor. It was assumed that the sibling relationships in early, middle and late adulthood would be characterized in the greatest degree by ambivalence, with Warmth prevailing and with Conflict and Rivalry as a smaller presence (Myers, Goodboy, 2010; Mikkelsen, 2014). My research has confirmed these expectations. The result depicts the multidimensionality of adult sibling relationships, clearly indicating that apart from the most frequently occurring Warmth dimension, these relationships also contain conflict and rivalry.

Another aim of my study was to verify the age and gender constellation variables in siblings for the experience of relational conflict intensity. The expectations proved by some earlier empirical findings have been confirmed only to a certain extent. It appeared that the variable *age* played an important part in shaping the examined sisters' relationships with siblings, whereas the variable *sibling gender constellation* did not. In-depth reflections constituted grounds for formulating a conclusion that with age, conflicts between the examined women and their siblings were scarcer with more kindness and support being shown. It can be presumed that the most conspicuous relational conflict concerned sibling relationships fostered by women in early adulthood in comparison with those in middle and late adulthood. The results are congruent with other researchers' findings (Furman, Buhrmeister, 1985; Lanthier et al., 1997; Noller, 2005). Interpreting the above – mentioned fact, it shall be remembered that although the examined sisters lived separately, the sibling relationships perceived by them were conflictual. In the related literature there is a view that negative adult sibling relationships often result from unresolved disputes originating from earlier developmental periods, which could contribute to the research results. Moreover, this period is characterized by relationships with a high intensity degree (Cicirelli, 1991; Buhrmester, 1992). However, there was no proof that conflictual relationships were more frequent in the sister-sister dyads than in the sister-brother dyads. The results obtained in this respect have not confirmed hypothesis three. It was found that statistically significant negative correlations between age and multidimensional conflict levels occurred exclusively in the group of sisters who had brothers.

The last research question attempted to demonstrate that the *age* and *high relational conflict intensity* variables with siblings differentiated the sister groups in terms of experiencing general wellbeing. The empirical findings in the study show that there were no statistically significant correlations that would confirm hypothesis four. Interpreting the obtained results, we must refer to the sisters' general characteristics in their relationships with siblings, which describes them mainly in the warmth categories and therefore understood as positive in nature. Thus, a conclusion can be drawn about the

relatively low intensity of conflict, which is not significant for experiencing lower general wellbeing levels, as well as the examined sisters' sufficient social competencies in respect to solving conflicts. It is worth emphasizing that the general wellbeing level is also determined by many other factors – genetic, subjective and situational, – whose verification goes outside the scope of this study (Karaś et al., 2014).

Summing up, research on sibling subsystems and developing knowledge in this field are part of the research conducted on a person's functions throughout the whole course of life. Undoubtedly, psychological knowledge in this field needs permanent updating and clarifying. Due to the fact that a human life lasts longer and longer, it is worth exploring its spheres that have been overlooked so far and looking for factors that may improve its quality.

## References

- Argyle, M. (2004). *The Psychology of Happiness*. Wrocław: Astrum.
- Allan, G. (1977). Sibling solidarity. *Journal of Marriage and the Family*, 39, 177– 184.
- Bowlby, J. (1980). *Attachment and Loss*, t.3. Sadness and Depression. London: Hogarth Press.
- Buhrmester, D. (1992). *The developmental course of sibling and peer relationships*. In: F. Boer, J. Dunn (Eds.). *Children's sibling relationships: Developmental and clinical issues*, Hillsdale, NJ: Lawrence Erlbaum Associates, Inc, 19–40.
- Cicirelli, V.G. (1991). Sibling relationships in adulthood. *Marriage and Family Review*, 16, 291–310, doi: 10.1300/J002v16n03\_05.
- Connidis, I.A. (2007). Negotiating inequality among adult siblings: Two case Studies. *Journal of Marriage and Family*, 69, 482–499.
- Connidis, I.A. Davies, L. (1990). Confidants and companions in later life: The place of family and friends. *Journals of Gerontology*, 45, 141–149.
- Cole, A., Kerns, K.A. (2001). Perceptions of Sibling Qualities and Activities of Early Adolescents. *The Journal of Early Adolescence*, 21, 204–227.
- Feinberg, M.E., Solmeyer, A.R., McHale, S.M. (2012). The Third Rail of Family Systems: Sibling Relationships, Mental and Behavioural Health and Preventive Intervention in Childhood and Adolescence. *Clinical Child and Family Psychology Review*, 15(1), 43–57, PMID: PMC3517254.

- Furman, W. Buhrmester, D. (1985). Children's perceptions of the qualities of sibling relationships. *Child Development*, 56, 448–461.
- Gold, D. (1990). Late-Life Sibling Relationships: Does Race Affect Typological Distribution? *The Gerontologist*, 30 (6), 741–748.
- Harwas-Napierała, B. (2014). *Specificity of interpersonal communication in the family understood as a system*. In: I. Janicka, H. Liberska (Eds.). *Psychology of family*. Warszawa: PWN, 47–72.
- Janicka, I. Janicka, K. (2014). Young women's sense of security and commitment in interpersonal relationships. *Polish Psychological Forum*, 19 (2), 209–228. doi: 10.14656/PFP20140203
- Karaś, D., Ciecuch, J., Keyes, C.L.M. (2014). The polish adaptation of the Mental Health Continuum Short Form (MHC-SF). *Personality and Individual Differences*, 69, 104–109.
- Kristine, M.V., Morgan, C.B. (1998). Sibling relationships in early adult: A typology. *Journal of Personal Relationship*, 5, 59–74.
- McGhee, J.L. (1985). The effects of siblings on the life satisfaction of the rural elderly. *Journal of Marriage and the Family*, 49, 85–95.
- Mahler, M.S., Mc Divitt, J. (1980). *The separation – individuation process and identity formation*. In: S.I. Greenspan, G.K. Pollock (Eds.). *The course of life: Psychoanalytic contributions toward understanding personality development*. Bethesda: NIMH, 395–406.
- McHale, S., Kim J., Whiteman, S. (2006). *Sibling relationships in childhood and adolescence*. In: P. Noller, J. Feeney (Eds.). *Close relationships. Functions, forms, and processes*. New York: Psychology Press, 127–150.
- Mikkelson, A. (2014). *Adult sibling relationships*. In: K. Floyd, M. Morman (Eds.). *Widening the family circle: New research on family communication*. Thousand Oaks, CA: SAGE Publications, Inc, 19–35. doi: <http://dx.doi.org/10.4135/9781483387956n2>
- Murphy, S. O. (1992). *Using multiple forms of family data: Identifying pattern and meaning in sibling infant relationships*. In: J. Gilgun, K. Daly, & Gerald Handel (Eds.). *Qualitative methods in family research*. Newbury Park, CA: Sage, 146–171.
- Myers, S. A. (2015). Using Gold's Typology of Adult Sibling Relationships to Explore Sibling Affectionate Communication. *North American Journal of Psychology*, 17 (2), 301–310.

- Myers, S.A., Goodboy, A.K. (2010). Relational maintenance behaviours and communication channel use among adult siblings. *North American Journal of Psychology*, 12, 103–116.
- Noller, P. (2005). Sibling relationship in adolescence: Learning and growing together. *Personal Relationship*, 12, 1–22.
- Myers, D.G., Diener, E. (1995). Who is happy? *Psychological Science*, 6 (1), 9–17. doi: 10.1111/j.1467-9280.1995.tb00298.x
- Ryś, M. (2009). *Family systems. Methods of research on the structure of the family of origin and own family*. Warszawa: Methodical Centre for Psychological and Educational Assistance.
- Stierlin, H. (1983). Family dynamic in psychotic and serve psychosomatic disorders: A comparison. *Family System Medicine*, 1 (14), 43–50.
- Stocker, C., Lanthier, R., Furman, W. (1997). Sibling relationships in early adulthood. *Journal of Family Psychology*, 11, 210–221.
- Szlendak, T. (2012). *Sociology of family*. Warszawa: Publ. PWN.
- Sztumski, J. (1987). *Social conflict*. Katowice: Publ. University of Silesia.
- Szymańska, P. (2016). An analysis of sibling relationship in adulthood: STQNow, Polish version. *Archives of Psychiatry and Psychotherapy*, 1, 55–64. doi: 10.12740/AP-P/61610
- Voorpostel, M., Blieszner, R. (2008). Intergenerational solidarity and support between siblings. *Journal of Marriage and the Family*, 70, 157–167.
- Voorpostel, M., Van der Lippe, T. (2007). Support between siblings and between friends: Two worlds apart? *Journal of Marriage and Family*, 69, 1271–1282, doi: 10.1111/j.1741-3737.2007.00446.
- Wałęcka-Matyja, K. (2014b). Psychometric properties of the polish adaptation of the Adult Sibling Relationship Questionnaire (ASRQ). *Archives of Psychiatry and Psychotherapy*, 16 (4), 77–88. doi.10.12740/APP/32460.
- Wilmont, W., Hocker, J. (2011). *Conflicts between people*. Warszawa: Scientific Publishers PWN.