

### The significance and role of siblings in family therapy

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### **Summary**

The authors discuss the significance of siblings and the relations between them in the family system. Quoting clinical examples, they consider the role and place of siblings in family therapy.

#### siblings / family system

### INTRODUCTION

Family researchers, clinicians, and family therapists agree that relations in a marriage dyad and parent-child relations are of key significance to the functional quality of family life. This has been confirmed in numerous research projects, involving both healthy and dysfunctional families, and most of all, is common theoretical and clinical knowledge. It is only recently that the significance of relations between siblings has been recognised as an important, although so far neglected, area of family system functions. A number of unique features characterise relations between siblings. They are long-term as they last, with varied intensity and in various degrees of intimacy, throughout the entire cycle of family life. Siblings are connected more than other family members are by common genetic and social heritage, family experiences, and common cultural values. To begin with, let us remind ourselves of the model of family functionality that we are going to refer to further in this paper. We are fully aware that by proposing a "functional" or, even worse, "normal" family model we contradict the constructivist approach,

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which denies an objective description of family reality. In this context, the diagram below that presents certain aspects of a functional family system is treated merely as an informal description that makes it easier to consider the tasks of siblings in the family.

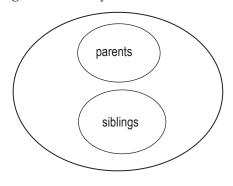


Fig. 1. Model of the functional family system

It is the parental subsystem, a marriage dyad, that should be the strongest in the family, and well separated from the sibling subsystem, at least to the extent that makes easy-flowing communications between the two possible, especially when the children are growing up.

The model taken from Minuchin's structural therapy [1] must be kept in perspective, as there are many circumstances and family situations, which may affect the type of structure more functional for a given family. The constructivist approach [2] places special emphasis on the multidimensional and subjective character







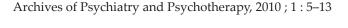
of family descriptions. At the same time, however, family therapy, even with the contemporary family therapy, often refers to certain features of family structure, which happen to be helpful in understanding its problems, provided that we are not too attached to any theoretical model. Goetting [3] attempted to describe the developmental tasks of siblings in different phases of the family life-cycle, with reference to Havighurst's traditional concept [1996]. In the childhood phase, companionship and emotional support are the main developmental tasks of siblings, which seem particularly important when parents are professionally active and the children's time in institutions such as nurseries and kindergartens, or with minders and grandparents, is extended. This also applies in cases of emotional inaccessibility of one or both parents or in various types of family system dysfunctions, such as domestic violence, alcoholism, chronic disease, or the absence of one parent. In these situations, the emotional support between siblings becomes extremely important. The necessity to share parents' love and time is the first training in social relations that makes the later adaptability to peer standards possible. Older siblings, even when the gap between siblings is small, make way for the younger ones in the nursery or especially in the school adaptation process, defend them from other children and provide help in simple, everyday tasks.

In adolescence, when separation and individuation become the main developmental tasks, together with the entire family moving on to the next phase of the life-cycle, the ties between siblings and the existence of a strong sibling subsystem is very important. In families where the boundaries within the system are unclear, or there is a tendency to form coalitions which trespass generational boundaries, a strong sibling subsystem may in a way force a restructuring of the family system, by creating and maintaining the boundaries within generations. Older siblings provide a model of separation for the younger, although any possible failure here can hinder the separation of a younger brother or sister for a long time. It is through shared secrets that in this phase the loyalty ties between siblings become stronger, helping to mark the boundaries of the whole subsystem, and making the separation easier.

In the early and middle phase of adulthood, companionship and emotional support continue to be at the centre. The bonds established in the previous phases are maintained, although with lesser intensity, while they also lose their obligatory character. The important issue of the necessity to take care of ageing or ill parents also appears at this stage. It is quite often that the bond between siblings is reactivated in such critical situations involving the parents.

Finally, in the last phase, when older, it is the siblings' task to provide mutual close contacts and emotional support, which becomes more intense, often in compensation for other losses. There is also the task of sharing memories, validating past experiences, and solving problems of rivalry between siblings in the earlier periods of life. It is in this phase, when the unresolved rivalry issues become less intense, that more constructive aspects of relations are indeed revealed. It is also in this phase that siblings support one another financially, provide help in sickness, or assist each other in solving any problems that they might have with their adult children. Goetting emphasises the fact that this scheme of tasks, typical for each period of development, may be treated merely as a sketchy guideline, which perhaps refers only to certain groups of population and cannot be entirely generalised. The attempt to define the developmental tasks of siblings in various periods of a family life-cycle is an attempt to look at the issue from a sociological perspective, which is perhaps why the description is short of the emotional component associated with the fulfilment of these roles. Emotions between siblings are usually perceived through two dominant stereotypes: Cain and Abel, and Hansel and Gretel, each focused on the opposite aspect of these relations: jealousy and hatred on the one hand, and love and support on the other. What is important in the first stereotype is the polarization into good and bad brother, typical mostly, although not exclusively, for siblings of the same sex.

So the tasks that siblings perform in each phase of the family life-cycle are accompanied by various strong emotions, which make the fulfilment of these roles either easier or more difficult. Coping with these emotions in itself is a very difficult task, reflecting the ability to con-









trol the emotions towards one's significant others, in various periods of life.

Throughout all phases of the family life-cycle, siblings must also be able to cope with family delegations, often of transgenerational character. Complex transactions take place between siblings within a family system. They make it possible to "nominate" one of the siblings to take on such delegated tasks. For example a very strong delegation, present in the family for many generations, could be an excessive burden for a single child, often even impossible to carry out, which could cause various destructive ways of avoiding it that might hinder or even stop proper development. The presence of siblings leaves a family a certain "freedom" of choice in selecting the object of delegation.

Children are also sometimes included in coalitions with parents. It usually happens when the same-age relations are, for whatever reasons, weaker than parent-child ties. Also tensions in the parent dyad usually result in involving one of the children in a triangle, as discussed by Bowen [5, 6].

Finally, it is useful to discuss the issue of the order of siblings and its significance to the family system and to the siblings. We shall refer in our considerations to Toman's publication Family Constellations [7]. Toman claims that the child's position in the family system at the time of birth significantly determines the way he or she will later function in that system. The expectations towards the eldest or the youngest child in the family will be built into the family structure, and passed from one generation to another. This may be, for example, about the delegation of care for the ageing parents to the oldest child, but only when it is female, or the delegation to educate the eldest son at the expense of the youngest siblings.

# THE SIGNIFICANCE OF RELATIONS BETWEEN SIBLINGS, AND THE PARTICIPATION OF SIBLINGS IN FAMILY THERAPY

The relations between siblings are often omitted not only from the theories of family functionality but also from the process of mutual help. Doctors and psychotherapists working with children and teenagers usually work with their par-

ents. Siblings of patients are rarely involved and the significance of the relations between siblings for the patient's development and their potential participation in the patient's treatment are seldom taken into account.

Looking at the importance of the relations described above, we can only conclude that such an omission reduces an essential area of resources relevant to the therapy process.

Family therapy is a form of psychotherapy that traditionally involves patient's siblings. The systemic approach, in particular, requires the presence of the entire family during therapy sessions. Work with the whole family does not automatically mean that the therapist thinks the relations between siblings relevant, or that he includes them in the process of psychotherapy. Traditionally, even in the systemic approach, it is the relations between parents that are at the centre, and the way the children are included in them is secondary.

The relation between siblings becomes a subject of conversation mainly when family members present it as an issue for discussion, and even then we have to consider whether it is a defence against talking about more complex difficulties. It is often the case that parents talk about conflicts or lack of cooperation between their children to avoid talking about their own relations.

One of the indicators of thinking of siblings as relevant is that sometimes, although unwillingly, we agree to conduct family consultations in their absence, which rules them out from the therapy process. In our experience, this has an impact on the quality and effectiveness of family therapy.

Parents often try to exclude the patient's siblings from therapy. The participation of siblings, especially younger ones, is often controversial and gives grounds for many doubts among parents who not only fail to understand the significance of their presence, but also are often concerned that the children might raise subjects that they themselves are not ready to tackle.

Sometimes, parents are also concerned that taking part in family therapy might be damaging to younger siblings, for example through acquiring knowledge about family matters that the parents think is unnecessary. Our experience shows that less open family communica-

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tions, family taboos and secrets make it more difficult to convince family members to include a patient's siblings in the family therapy.

In fact, one may risk the statement that the attitude of family members to the participation of a patient's siblings in a family meeting is indicative of the structure and functioning of a family system. Each parent accepts the presence of the child who supports him or her, and is rather prone to exclude the children that support the other parent. Sometimes parents wish to withdraw from therapy the children who reinforce the rebellious or separation-oriented behaviour in the patient.

If there is any danger that the presence of siblings might affect the status of family secrets, they are often excluded or surrender the idea of taking part in consultations, refuse to join in or remain persistently silent. If, during therapeutic contact, parents decide to talk about the issues that they have not discussed before, or if they agree to include their children in their secrets, they usually bring all the children to the following session, and then siblings begin to talk. The protected content might be anything from violence, sexual abuse, alcoholism or crime, to the fact that parents fight with each other, that they are not married, premarital pregnancies or even that the parents have been divorced for a long time and the children were not informed.

The fact of the presence or absence of the patient's siblings in family therapy is of systemic value. In our experience, it is worth aiming at the involvement of a patient's siblings in the family therapy process. Even if they are not very active or when the relations between the children in the family are not the main issue discussed, the presence of siblings accelerates therapy and increases its effectiveness. In our therapeutic practice, when we are unable to persuade the parents to bring all their children to the consultation, we try to include the absent siblings symbolically by asking about their position on the matters discussed in therapy.

### WHAT IS THE ROLE OF SIBLINGS IN THE FAMILY PSYCHOTHERAPY PROCESS?

In a family system, it is the relation between parents that is the central relation. This is of course determined by the patterns brought by parents to the relationship from their families of origin, and the level of autonomy reached in their own development process. Bowen [5, 6] considered a continuous conflict between the need to be close and at the same time separate to be the essence of the dyadic relation. He also thought that when the related tension intensifies, there is usually a need to include a third party. This process reduces the tension in the parent dyad and allows both parties to continue functioning together, without confronting the conflict in their relationship. Bowen thought that it was very often, although not exclusively, the case that one of the children becomes involved, and that when this happens the child displays certain symptoms or problems. Which child takes on that role depends on many factors, such as the child's personal characteristics, levels of stress in the family at the time of the child's birth or the similarities between the child's position in the family to the parents' positions in their families of origin. According to Bowen in, every family there is one child that reacts to the increased tension between parents in a way that helps to reduce the tension i.e. through focusing on the child's problems or the aggressive behaviour of parents towards that child.

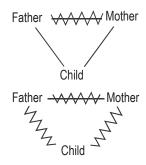


Fig. 2. Bowen's classic triangle II

Sometimes the tension between family members is so intense that the functioning triangles are no longer enough, and more people become involved, creating a network of triangles. Often, when the tension between a couple is continuous, all children are involved in the process of stabilising the family. The roles they play between the parents are informed by the relations between the children.

In this approach, the relations between siblings are a function of their relations with the parents.

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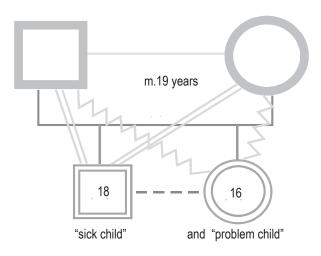






Let us look at some examples, all of which come from our therapeutic practice. We have changed the personal details to avoid any chance of identifying the families described here, and sometimes to simplify the situation in order to present the complexities we wish to discuss more explicitly.

**EXAMPLE 1** 



The family has been referred to a family consultation because of the illness of the older son. During the consultation, it transpired that the parents have problems with both children. The older has been ill since he was born (various allergies, followed by tics, dyslexia, and currently OCD). The boy had always required intensive care from his parents. His mother was responsible for the medical treatment, whereas his father was in charge of taking him to the doctors, to school and to various forms of therapy. The parents were very caring and compassionate towards their son, and they became drawn to various compulsive rituals of his. However, more or less two years ago, the father became a little impatient and expressed his doubts as to whether they should really yield to each of their son's demands. So the parents, who had worked together thus far, were of different opinion for a short while. Finally, the father gave up, as he said himself, after his son's doctor's intervention that convinced him that the boy was sick.

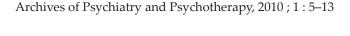
The younger daughter was entirely different from her brother. She was healthy, coped well among her peers and at school, she did not require such intense involvement of her parents, although she was always a "bit naughty" and, as her parents said, she "needed discipline". She became problematic when she was approximate-

ly twelve years old, and the problems intensified about 2 years prior to the consultation. The girl neglected her studies, failed to return home at night, provoked conflicts with parents, probably experimented with drugs and alcohol. She fiercely attacked her mother, who asked the support of her husband and got it. The parents tried to "discipline" her together.

The siblings had no close relations; they practically never spoke with each other. This was also something the parents were worried about, as they had hoped that their daughter would help her brother to make contact with his peers. The parents described themselves as a "good marriage" although it had been ages since they had any chance to do something together as a couple. Even their conversations are focused only on the children. They regretted this state of affairs but saw no way to change it.

We suggest that this couple coped with the tension in their marriage by focusing on the care of their first-born. This is how they could function as parents, while avoiding the closeness that could be dangerous to them. When the tension in this arrangement began to grow, they could diffuse it by getting angry with the younger daughter. In relations with each of their children, they could express the worrying aspects of their own relationship: the need for love and care in case of their son, and anger in their relation with their daughter. This is how their own relationship remained conflict free, whereas the relations between the siblings were expressive of their need to increase the distance between one another and their need for autonomy in the relationship, and was maintained by the parents through the different treatment of their children, and also through "inviting" the daughter to participate in the care of her brother.

This family came to a therapist with a problem of repeated, open conflicts and the rebellious behaviour of the younger daughter. The parents freely discussed the fact of their children varying diametrically from the very beginning, and that they were different in every respect. The son was excellent at school and achieved in sports; he was handsome and fulfilled all of his parents' ambitions; he even got involved in the problems with his sister and controlled her more effectively than the parents (for example he always knew when she played truant). The daughter had al-

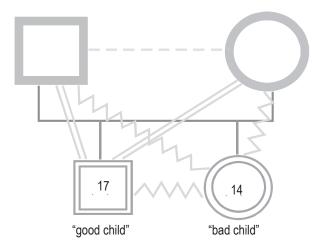






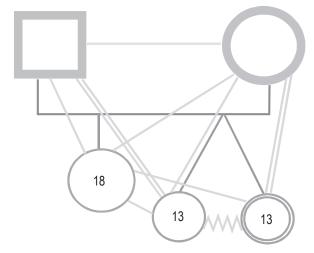
ways been troublesome: first in the nursery and then at school. She was described as not as intelligent as her brother, with her school marks being bad. She was not involved in any sports, which was probably the main reason why she was obese; she did not take care of her personal hygiene and she had a spotty, rather ugly face, etc. What's more, she did not appreciate it that her brother was trying to help her, and she was rude to him and stole his things. The siblings fought with each other, sometimes even physically. On one occasion, the sister threw a knife at her brother.

### **EXAMPLE 2**



The parents never argued but they spent little time together. They were both working hard and spent their holiday separately as they had different interests. They had slept in separate rooms for years. During the session, the daughter said that if it were not for their children they would have been divorced by then but they denied it. The parents coped with the tension in their marriage by keeping their distance. They could do this without risking the breakdown of their relationship because they were connected through their two children, expressing different aspects of their relation through the children: admiration and approval through their son and aversion and criticism through their daughter. The fights between the brother and sister were the reflection of the conflict between the parents, who could not face confrontation, as it would put the very existence of the family in danger.

### **EXAMPLE 3**



"Ideal family" - a conflict between siblings

The third family that we are going to discuss here described itself as "almost ideal". The parents said a lot about their strong bond with their three daughters, and also about their own marriage being very agreeable. They talked about the activities the family did together, about their shared method of bringing the children up and about the standards and principles they adhered to. The skill of solving problems without arguments, and rational discussion of difficulties in relationships, was one of the skills valued highly by the parents. The only dissonance in the family was the dramatic conflict between the twin sisters. The girls argued and fought so terribly that the parents were too scared to leave them alone at home, as they were a danger to each other. The parents and the older sister had to separate the two; sometimes they even had to use force. During arguments, the father more often took the side of one of the twins and the mother of the other, but it did not result in any friction between the parents. What the conflict between the sisters showed was the anger and the need to separate, the expression of which the parents denied to themselves and to their daughters in all other relations, and mostly in their own marriage so that the conflict-free functioning of the other persons was possible at all. When the therapy revealed the tension in the relationship between the parents, the twins were happy to separate and they stopped fighting, yet the parents interrupted the therapy.

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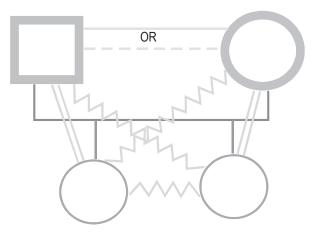






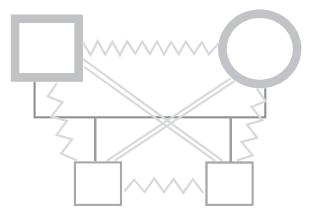
The examples described here, in which the relations between siblings reflect one of the aspects of the relations between parents, and of the tensions growing between them, are obviously not the only way that the dependencies discussed here present themselves. We often encounter a situation in which siblings fight among themselves, and with one of the parents, on behalf of the other parent that they are close to. In this way, the parents can remain in a relatively good or distanced relationship.

### **EXAMPLE 4**



And finally, it is worth mentioning the most obvious situation, in which the conflict between the parents is in the open, and each of the children is in coalition with one of the fighting parties and obviously, as the representatives of the opposing armies, they have to fight among themselves.

### **EXAMPLE 5**



When the family has many children, they also create various supporting or fighting coalitions, depending on who they feel closer to. There are also "omitted" children - those who are not involved in the parents' triangles. They are the

ones who have the best chances of becoming independent, and having relations with their siblings independent of the tension between their parents. However, they often feel less important in the family and compete with their siblings or they support the trouble-making child, which is their way of expressing their complaint towards their parents.

The question is: can siblings have relations independent of their relations with their parents, and the relation between the parents?

We believe that the answer is in a sense negative, because if we understand the way the family functions in a systemic paradigm, then there are no relations in it that are independent of the others. They are all interrelated. In this understanding, the relations between parents are also dependent on their relations with the children. If, however, the boundaries separating the children's and parents' subsystems are clear, and there are no intergenerational coalitions, children may support one another or fight independently of their parents' relationship. S. Minuchin considered this possible when the ties within one generation are stronger than between generations, whereas according to Bowen's concept it is possible if the parents know how to cope with the tensions within their relationship, without including the children. This can happen in the case of autonomous partners, properly separated from their families of origin. It seems, however, that such families are rarely or perhaps never in therapy.

Sometimes the boundaries between the generations are too stiff and rigid, and the bonds are not strong enough for the parents to fulfil their parenting function. This is when the parents are inaccessible to children, and the role of sibling ties is much stronger. At least one of the children must take on the supporting and caring role, and this is when the relations between that child and the other children resemble the complementary parent relations with all their consequences, including the rebellion against that particular child. A child who is taken out of the children's subsystem to play the parenting role with one of the real children is in a similar situation. Instead of symmetrical relations with its siblings, he or she will enter into a complementary relation, be it hostile or caring. This arrangement is often transposed to adult life, depriv-

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ing one of the children the experiences of sibling relations.

## PARTICIPATION OF PATIENT'S SIBLINGS IN FAMILY THERAPY

Participation of all siblings in the family meetings seems very important. It is particularly important when one of the children is a co-called "identified patient", and the family consultation takes place because of him or her. The presence of siblings takes the weight off the patient's responsibility for the role of the only child disclosing family problems; the responsibility is in this way shared between brothers and sisters. In the situations described above, when siblings play a stabilising role in their parents' relations, the presence of only one child consolidates its role as "the patient" i.e. the child that bears the excessive load.

### CONCLUSIONS

Different variants of this situation can occur, such as:

It is very often the case that in a situation when parents are the only family members who arrive at the session (in spite of the others also being invited), the patient says that he or she prefers to postpone the conversation until the siblings are actually present.

The siblings are supportive of the patient who is no longer the only representative of the children. It is particularly important when the patient is in conflict with the parents and decides to open the conflict up. Consolation and calming influences are especially needed then. Sometimes the siblings share the patient's charges, thus sharing the role of a rebellious child and dispersing the possible anger the parents might feel or any looming punishment. The parents can simply no longer say: "He/she is ill and doesn't know what he/she is saying".

Sometimes the support takes the form of fooling around, especially when younger children are involved, which reduces the tension in the session, especially when it increases to unbearable levels. In this way, by interrupting the conversation or otherwise (e.g. repeatedly leaving

for the toilet), children protect the family from discussing issues which are too difficult.

If the patient is a child involved in a parentschild triangle, the siblings are outside of the triangle, which provides a different perspective on the patients' relations in the family. Sometimes a brother or sister who find themselves in this position are jokingly called "co-therapists" as without them it would be difficult to escape the roles of the "caring parents" and "poor sick child".

The presence of siblings introduces to the session the subject of relations between the children, which it is then possible to observe and discuss. This makes it easier to understand the way the entire family functions, as the relations between siblings often reflect the problems of their parents. By displaying the conflicts that exist between them, children often introduce the subject of differences, disputes, and problems without breaking loyalties or family taboos, and avoiding parental disapproval.

In therapy, siblings are rarely indifferent to the attempts of separation undertaken by patients. Sometimes they support such attempts strongly and effectively, distinguishing between the constructive and auto-destructive attempts with precision. Sometimes siblings join in the separationoriented behaviour, and gather courage under the cover of therapy to become independent themselves. Having done so, they either keep supporting the patient or refuse to continue with the conversations, which is a way of emphasising their newly found independence. Sometimes siblings also hinder their brother's or sister's attempt at gaining independence, protecting their own independent position in the family, and expressing their fears that the parents' attention may now focus on them. We assume that the children's position towards the separation of one of them depends on the roles that they play in the family triangles. If there are children in the family who have successfully realised their developmental separation, it may become a resource for those who are still growing up. If however, the older sibling has failed, and his/her separation attempts were accompanied by auto-destruction, which means that the emotional cost to the family was high, the parents' fear and the fear of the growing-up siblings is increased.

Now and again, it is the relations between siblings that are introduced during the session as

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the problem, and become the main subject of the therapeutic work. The presence of brothers and sisters involved in these relations makes it possible to place the discussed relations in the family context, and work on separating the relations among siblings from the relations with the parents. The most moving moments in our therapeutic work are often those when the fighting children realise that, in fact, it is neither their war they fight, and nor are the charges they have against one another theirs or addressed to the right party. This may provide foundations for ceasing the dispute and building a supporting relation, often for the rest of their lives. Once the sister/brother relations are freed from the expectations and pressures of their parents, even if these carry the message of helping and loving one another, there is always a chance of greater authenticity and more developmental value.

The participation of all children in therapy allows the therapist to work, if possible, on consolidating the siblings' subsystem in order to change the family structure and weaken the intergenerational coalitions, the significance of which has been discussed above. This element of work originates in structural therapy.

It is very often that family therapists try to support the patient's separation by working on the parents' relationship, and forgetting that apart from being a burden, the role of a go-between gives the child the feeling of being important and strong. By using the resources inherent in the siblings' support, it is possible to reduce the sadness of losing this position and special care. In addition, it is easier for parents to control their fear for the child when they see that it has the companionship and help of its siblings.

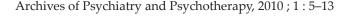
Finally, it is useful to remind ourselves that the family relations which we work on in therapy regard all family members to the same degree. If the patient's siblings are left out of the family therapy this can easily lead to a situation in which the siblings subsequently take over the role left behind by our patient. The participation of all children in the family sessions, working on their mutual relations, and discussing family roles, may reduce such risk.

### **REFERENCES**

- 1. Minuchin S. Families and family therapy. Cambridge, Massachusetts: Harvard University Press; 1974.
- 2. Gergen KJ. Realities and relationships. Sounding in social construction. Cambridge, Massachusetts: Harvard University Press; 1974.
- 3. Goetting A. The developmental tasks of siblings over the life cycle. J. Mar. Fam. 1986; 48: 703–714.
- Havighurst RJ. Developmental tasks and education. New York: David McKay; 1996.
- 5. Bowen M. The use of family theory in clinical practice. Compr. Psychiatry, 1966; 7: 345–374.
- Bowen M. Family therapy in clinical practice. New York: Aronson; 1978.
- 7. Toman W. Family Constellation: Theory and Practice of a Psychological Game. New York: Springer Publishing; 1961.









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