# The Influence of the Psychological Distance between Family Members on Personality Formation

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## Abstract

The purpose of this study was to examine the relationship between the family relationships recognized by children and mental health after becoming adults, with emphasis on the forms of recognition from the viewpoint of children. It consisted of an anonymous questionnaire survey using a multiple-choice and fill-in-the-answer format among 451 university students as the subjects. The questionnaire included an investigation into the gender, family relationship from the higher grades of elementary school to secondary school, self-esteem, self-efficacy, and the tendency towards depression and anxiety of the subjects. The results of this study suggested that the more balanced the psychological distance between family members, the lower the score showing a tendency towards anxiety, and *vice versa*. The results also suggested that the more balanced the psychological distance between family members, the lower the score showing a tendency towards depression, and *vice versa*. Therefore, it is assumed that the balance of the psychological distance between each member has a stronger impact on the tendency towards anxiety and depression than the length of the psychological distance. In terms of gender, there were no differences in self-esteem, self-efficacy, or the tendency of depression and anxiety. In conclusion, this study partially revealed how the family relationships recognized by children impact personality formation in the process of becoming adults.

## Keywords

Psychological Distance, Self-Esteem, Self-Efficacy, Depression, Anxiety

## 1. Introduction

Issues regarding the mental health of children at school are a matter of social concern. One issue is truancy, which is believed to be due to mental instability such as an increased tendency towards anxiety or depression and a lack of self-esteem and self-efficacy [1]-[4]. As a result, this may lead to emotional instability with uncontrolled emotions as well as heavily poor academic performance or learning disabilities.

It is not difficult to imagine that the family plays a vital role in the physical and mental health of children. In particular, the family significantly impacts the mental health of children during infancy and childhood when children heavily depend on their parents both physically and mentally. The stable state of a family is connected to the emotional stability of children. In addition, children develop a base for their social skills through communication with their family along with their ability to adapt to interpersonal relationships, which may potentially lead to depression and anxiety. Moreover, it has been demonstrated that the self-esteem of children can be enhanced to improve their depressive state by having the parents talk to their children and praise them at an appropriate time [3] [4].

This is the first study focusing on family relationships recognized from the viewpoint of children. Accordingly, the purpose of this study is to examine the relationship between the family relationships recognized by children and mental health after becoming adults, with emphasis on the forms of recognition from the viewpoint of children. Furthermore, university students were used as the subjects of the investigation in order to prevent an unsettled state of body or mind, which is unique to adolescents, from impacting the research study.

## 2. Methods

A questionnaire survey was conducted among 451 university students as the subjects (male 211, female 240). The range in age was 19 to 24, with an average age of 20.3 ± 1.8 years (mean ± standard deviation). Students with a history of treatment or therapy that might have influenced their psychological health, and single parent students, namely those students with only a mother or a father were excluded.

In the survey, questionnaire sheets were distributed right after classes and collected immediately once completed by the students. Incomplete answers within the collected questionnaire sheets were excluded.

The survey in this study was an anonymous questionnaire survey in a multiple-choice and fill-in-the-answer format with the cooperation of the students. The questionnaire included an investigation into the gender, family relationships from the higher grades of elementary school to secondary school, self-esteem, self-efficacy, and the tendency towards depression and anxiety of the subjects.

Regarding the family relationships from the higher grades of elementary school to secondary school, the students were asked to imagine a time when family members were all together and express the psychological distance among family members using

the method of "Figures of Family Relationships." The method of the "Figures of Family Relationships" is a "Schematic Projective Technique (SPT)," and a projective technique of images that expresses real and ideal family relationships (structure and dynamics of a family), by writing circles the size of a one-yen coin representing the components of a family, on a paper with a circle (representing the frame of a family) having a diameter of 12 cm drawn thereon [5] [6]. Based on the categorization of family patterns in the previous study [7], we categorized them into patterns including a pattern with equal and close distances among the three members, a pattern with equal and intermediate distances among the three members, a pattern with a close distance between father and child, a pattern with a close distance between mother and child, and a pattern with a close distance between mother and father. Taking into consideration other family patterns, this study additionally included a pattern with equal and long distances among the three members, a pattern with equal distances between two members (with a long distance between father and child), a pattern with equal distances between two members (with a long distance between mother and child), and a pattern with equal distances between two members (with a long distance between mother and father). In so doing, aspects of the mentality of family members were understood visually and as an image [8]. In addition, the distances among the three members (between father and child/between mother and child/between father and mother) were also measured via a method in combination with previous studies [7] [8] (**Figure 1**). Since the number of applicable subjects was small, the scores of each item regarding mental health in the three patterns with equal distances between two members were aggregated for analysis.

In the survey regarding the degree of self-esteem, we employed a modified survey method of the previous studies [1] [3] [4]. This survey consisted of eight items based on the free description of university or college students but not from the viewpoint of researchers. The close relationship with mental health was also identified.

In the survey regarding the degree of self-efficacy, we employed a modified survey method of the previous studies [2] [9]. It involved a questionnaire sheet to measure the degree of personal and general recognition of self-efficacy. It consisted of 11 items, with each item making up 4 points.

In the survey on depression, we employed the DSRS-C (Depression Self-Rating Scale for Children) which consists of 18 items and was created by Birleson *et al.* [10] [11] for the purpose of screening the depressive state of children. The state of the most recent one week was evaluated based on three levels. Based on the answers, a score of zero, one, or two points was assigned, with the full score set at 36 and the cut-off score set at 16.

In the survey on the tendency towards anxiety, we employed the SAS (Selfrating Anxiety Scale) invented by Zung [12]. This is a simple questionnaire sheet consisting of only 20 questions and an investigation as a mental self-assessment that evaluates the degree and characteristics of one's own anxiety symptoms. Due to its high reliability and validity, it is useful in the self-evaluation of the current mentality of those suffering from anxiety.
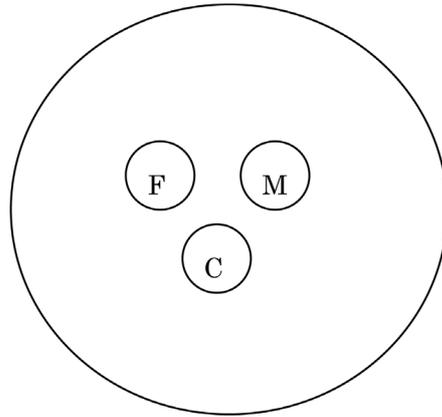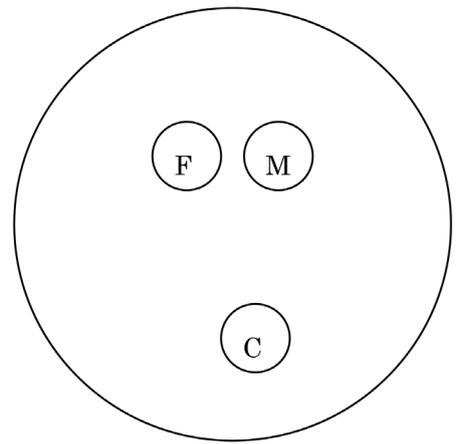
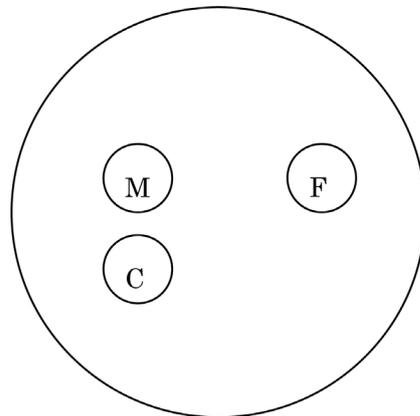Pattern with equal and close distances among the three members
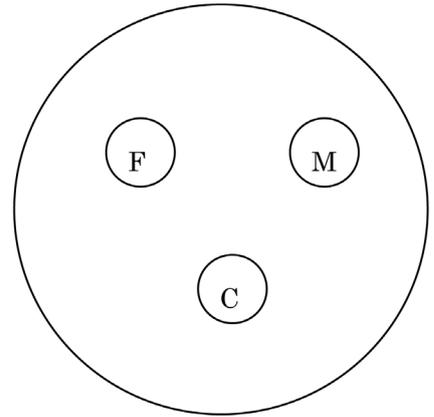
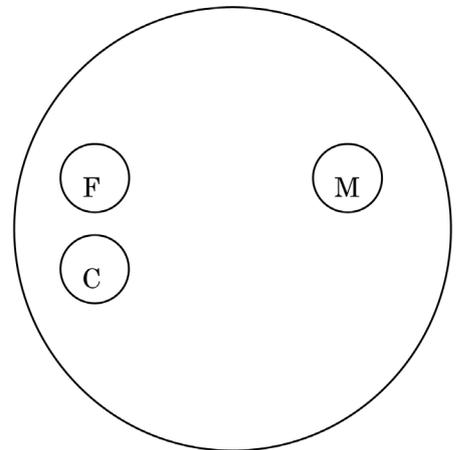Pattern with equal and intermediate distances among the three members
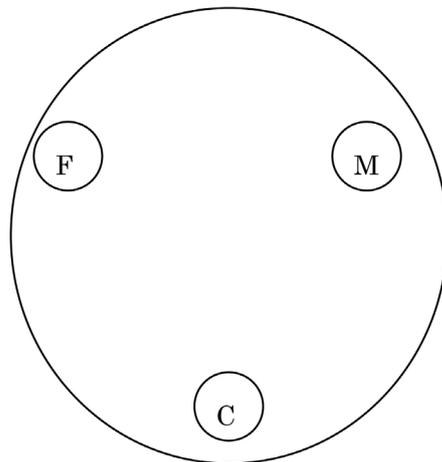
Pattern with equal and long distances among the three members

Pattern with a close distance between mother and father

Pattern with a close distance between mother and child

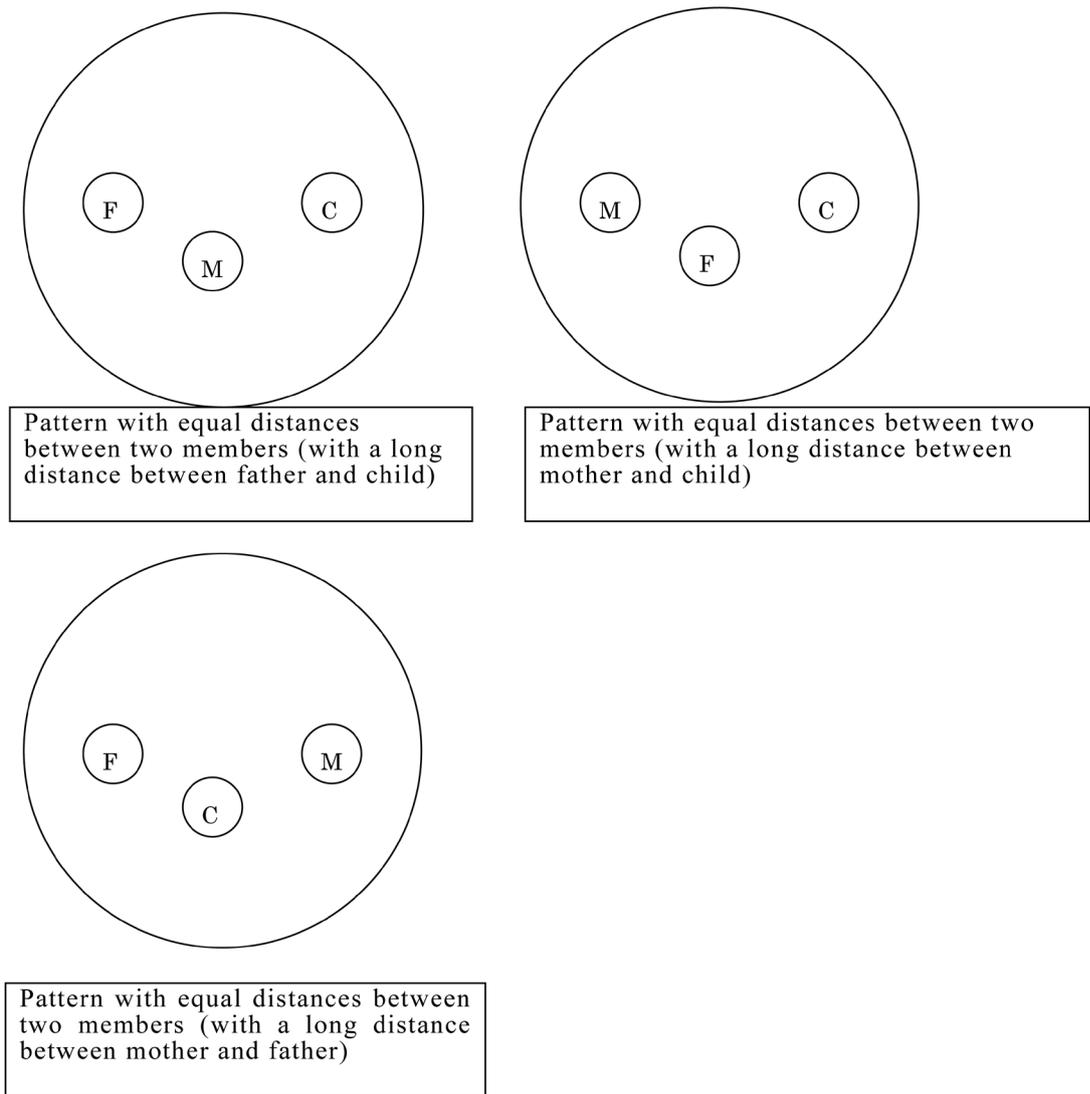Pattern with a close distance between father and child

Pattern with equal distances between two members (with a long distance between father and child)

Pattern with equal distances between two members (with a long distance between mother and child)

Pattern with equal distances between two members (with a long distance between mother and father)

Figure 1. Categorization of family patterns. F: Father, M: Mother, C: Child.

## 3. Results

### 3.1. The Number of Subjects Categorized According to Family Patterns

154 subjects were associated with the pattern with equal and close distances among the three members (34%), 70 subjects were associated with the pattern with equal and intermediate distances among the three members (16%), 10 subjects were associated with the pattern with a close distance between father and child (2%), 89 subjects were associated with the pattern with a close distance between mother and child (20%), 59 subjects were associated with the pattern with a close distance between mother and father (13%), 30 subjects were associated with the pattern with equal and long distances among the three members (7%), 22 subjects were associated with the pattern with equal distances between two members (with a long distance between father and child) (5%), 6 subjects were associated with the pattern with equal distances between two members

(with a long distance between mother and child) (1%), and 11 subjects were associated with the pattern with equal distances between two members (with a long distance between mother and father) (2%).

## 3.2. The Mental Health Categorized According to Family Patterns (Table 1)

The average self-esteem score was 21.7 ± 4.5. Regarding the average score categorized according to family patterns, the pattern with equal and close distances among the three members was 22.4 ± 4.2, the pattern with equal and intermediate distances among the three members was 21.9 ± 3.9, the pattern with a close distance between father and child was 20.9 ± 5.3, the pattern with a close distance between mother and child was 22.0 ± 3.3, the pattern with a close distance between mother and father was 21.9 ± 4.5, the pattern with equal and long distances among the three members was 21.9 ± 3.7, and the pattern with equal distances between two members was 20.0 ± 4.5, respectively. There was no significant difference among the family patterns.

The average self-efficacy score was 26.4 ± 5.5. Regarding the average score categorized according to the family patterns, the pattern with equal and close distances among the three members was 26.7 ± 4.8, the pattern with equal and intermediate distances among the three members was 26.3 ± 4.1, the pattern with a close distance between father and child was 27.0 ± 3.8, the pattern with a close distance between mother and child was 28.0 ± 4.9, the pattern with a close distance between mother and father was

**Table 1.** The mental health categorized according to family patterns.

|  | Self-esteem | Self-efficacy | Depression | Anxiety |
| --- | --- | --- | --- | --- |
| Total average score | 21.7 ± 4.5 | 26.4 ± 5.5 | 11.9 ± 5.8 | 31.9 ± 8.8 |
| Pattern with equal and close distances among the three members | 22.4 ± 4.2 | 26.7 ± 4.8 | 11.3 ± 5.5 | 31.0 ± 6.7 |
| Pattern with equal and intermediate distances among the three members | 21.9 ± 3.9 | 26.3 ± 4.1 | 12.6 ± 5.8 | 33.2 ± 7.2 |
| Pattern with equal and long distances among the three members | 21.9 ± 3.7 | 26.0 ± 5.0 | 12.1 ± 4.6 | 33.3 ± 8.8 |
| Pattern with a close distance between mother and father | 21.9 ± 4.5 | 26.4 ± 5.0 | 11.6 ± 5.5 | 33.8 ± 9.1 |
| Pattern with a close distance between mother and child | 22.0 ± 3.3 | 28.0 ± 4.9 | 12.2 ± 5.6 | 32.7 ± 7.2 |
| Pattern with a close distance between father and child | 20.9 ± 5.3 | 27.0 ± 3.8 | 15.4 ± 8.3 | 32.9 ± 6.9 |
| Pattern with equal distances between two members | 20.0 ± 4.5 | 25.6 ± 4.0 | 15.0 ± 5.3 | 35.5 ± 9.1 |
| Significant difference | N.S. | N.S. | p < 0.01 | p < 0.01 |

26.4 ± 5.0, the pattern with equal and long distances among the three members was 26.0 ± 5.0, and the pattern with equal distances between two members was 25.6 ± 4.0, respectively. There was no significant difference among the family patterns.

The average score of the tendency towards depression was 11.9 ± 5.8. There were 132 subjects with a score of more than 16 and a tendency towards depression. Regarding the average score categorized according to the family patterns, the pattern with equal and close distances among the three members was 11.3 ± 5.5, the pattern with equal and intermediate distances among the three members was 12.6 ± 5.8, the pattern with a close distance between father and child was 15.4 ± 8.3, the pattern with a close distance between mother and child was 12.2 ± 5.6, the pattern with a close distance between mother and father was 11.6 ± 5.5, the pattern with equal and long distances among the three members was 12.1 ± 4.6, and the pattern with equal distances between two members was 15.0 ± 5.3, respectively. There was a significant difference among the family patterns ($p < 0.01$).

The average score of the tendency towards anxiety was 31.9 ± 8.8. There were 34 subjects with a score of more than 45 and a tendency towards anxiety. Regarding the average score categorized according to the family patterns, the pattern with equal and close distances among the three members was 31.0 ± 6.7, the pattern with equal and intermediate distances among the three members was 33.2 ± 7.2, the pattern with a close distance between father and child was 32.9 ± 6.9, the pattern with a close distance between mother and child was 32.7 ± 7.2, the pattern with a close distance between mother and father was 33.8 ± 9.1, the pattern with equal and long distances among the three members was 33.3 ± 8.8, and the pattern with equal distances between two members was 35.5 ± 9.1, respectively. There was a significant difference among the family patterns ($p < 0.01$).

### 3.3. The Relationship between the Family Patterns and Gender Differences

Regarding the number of male subjects categorized according to the family patterns in decreasing order, the pattern with equal and close distances among the three members was 81 subjects (38%), the pattern with equal and intermediate distances among the three members was 37 (18%), the pattern with a close distance between mother and father was 31 (15%), the pattern with a close distance between mother and child was 28 (13%), the pattern with equal distances between two members was 17 (8%), the pattern with equal and long distances among the three members was 13 (6%), and the pattern with a close distance between father and child was 4 (2%). Regarding the number of female subjects, the pattern with equal and close distances among the three members was 79 subjects (32%), the pattern with a close distance between mother and child was 62 (26%), the pattern with equal and intermediate distances among the three members was 36 (15%), the pattern with a close distance between mother and father was 27 (11%), the pattern with equal distances between two members was 16 (7%), the pattern with equal and long distances among the three members was 16 (7%), and the pattern

with a close distance between father and child was 4 (2%).

As a common characteristic between genders, the largest was the number of subjects categorized into the pattern with equal and close distances among the three members, while the smallest was the number of subjects categorized into the pattern with a close distance between father and child; in contrast, as a difference between genders, the ratio of female subjects categorized into the pattern with a close distance between mother and child was approximately twice that of male subjects. There were no significant differences between genders in the average scores of each item and no difference in the results categorized according to the family patterns between the overall results and the results categorized by gender (data not shown).

## 4. Discussion

Based on the overall average scores of the degree of self-esteem, it is believed that the pattern with equal and close distances among the three members and the pattern with a close distance between mother and child are categorized into a group with a relatively high degree of self-esteem, the pattern with a close distance between mother and father, the pattern with equal and long distances among the three members, and the pattern with equal and intermediate distances among the three members are categorized into a group with an average degree of self-esteem, and the pattern with a close distance between father and child and the pattern with equal distances between two members are categorized into a group with a relative low degree of self-esteem. Although there were no significant differences in this study, the results showed that those who are satisfied with the relationship with their parents have a lower degree of self-esteem, while those who are dissatisfied with the relationship with their parents have a higher degree of self-esteem. Moreover, based on the overall average scores of the degree of self-efficacy, it is believed that the pattern with a close distance between mother and child and the pattern with a close distance between father and child are categorized into a group with a relative high degree of self-efficacy, the pattern with equal and close distances among the three members, the pattern with a close distance between mother and father, the pattern with equal and intermediate distances among the three members, and the pattern with equal and long distances among the three members are categorized into a group with an average degree of self-efficacy, and the pattern with equal distances between two members is categorized into a group with a relatively low degree of self-efficacy. It is believed that one of reasons for these results is that those with a higher degree of self-esteem/self-efficacy demand a higher level of family relationships, resulting in dissatisfaction with the present condition, while those with a lower degree of self-esteem/self-efficacy may make up for the compromise in or lack of confidence in family relationships through relationships with others. Since this study only focused on the psychological distance among family members, it can be assumed that different results might have been obtained if a survey on satisfaction was added.

The average score of all items according to the SAS was 31.9 ± 8.748. Regarding the difference in each score of the six types, the tendency towards anxiety was lower in

children who recognize their family as the pattern with equal and close distances among the three members in comparison with those who recognize their family as the pattern with equal distances between two members. According to the previous study [7], the results showed that the scores regarding the degree of anxiety is higher in the group with unequal distances among the three members (hereinafter, "unbalanced group"), including the pattern with a close distance between father and child/the pattern with a close distance between mother and child/the pattern with a close distance between mother and father/the pattern with equal distances between two members, than the group with equal distances among the three members (hereinafter, "balanced group"), including the pattern with equal and close distances among the three members/the pattern with equal and long distances among the three members/the pattern with equal and intermediate distances among the three members; consequently, it is assumed that the balance in the psychological distance from their parents recognized by children may impact mental health. In this study, the results also showed that the scores regarding the degree of anxiety are higher in the unbalanced group, the pattern with equal distances between two members, than the balanced group, the pattern with equal and close distances among the three members; thus, it can be assumed that balanced psychological distance among family members is better.

Regarding the difference in scores with respect to depression according to the DSRS-C test, the tendency towards depression was lower in children who recognize their family as the pattern with equal and close distances among the three members than those who recognize their family as the pattern with equal distances between two members; in other words, as shown in the results regarding the tendency towards anxiety, the scores regarding depression were higher in the unbalanced group than the balanced group. As expected, it can also be assumed that the recognition of children that their parents treat them just as the mother and father treat each other or that the relationship between parents and children and that between mother and father are equally good lead to a decrease in the depressive state of children.

There was no significant difference between genders regarding the average score of each item. However, this study showed a tendency for higher scores regarding depression in female subjects. Regarding gender differences, the scores of female subjects were similarly higher in adolescents in the study employing DSRS-C [13]. Against this background, the impact of complicated developmental aspects can be considered, including that secondary sex characteristics are exhibited earlier in females, which accelerates the acquisition of sexual role and self-awareness.

In this study, we examined the relationship between the family relationships recognized by children and mental health, with emphasis on the forms of recognition from the viewpoint of children. However, the specific relationship between family relationships and mental health was not revealed. The first reason for this was thought to be an insufficient explanation in the questionnaire sheets. The purpose of this study was to ask the subjects to express the psychological distances among family members; however, due to a lack of emphasis, some answers were expressed in terms of physical dis-

tance. As the second reason, it can be assumed that there was no significant difference in the analysis results, since the survey was conducted at only one university and focused on university students at the post-secondary education level in a relatively good environment. From this perspective, more realistic results might be obtained if the survey was conducted in a public elementary/secondary school among students with more diverse family backgrounds.

## 5. Conclusion

In this study, although no specific relationship between family relationship and personality formation was revealed, we found some trends to be clues supporting the fact that building family relationships impacts personality formation.

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