

Research Article

Investigating the Structural Model of The Relationship Between Family Performance and Social Interest with The Mediating Role of Self-Differentiation

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ABSTRACT

Literature: Numerous studies have examined the relationship between family performance and social interest. However, no study has examined the structural model of the relationship between family performance and social interest with the mediating role of self-differentiation.

Purpose: The present study aimed to examine the relationship between family performance and social interest with the mediating role of self-differentiation in university students.

Method: The present study was a structural equation correlational study using PLS software and survey method. The statistical population of the study included all the students of Islamic Azad University of Khomeini Shahr Branch in the 2019-2020 academic year. The sample size was 300 students who were selected by random cluster sampling based on the number of students in different faculties. The Family Assessment Device (FAD) by Epstein, Baldwin, and Bishop (1983), the Differentiation of Self Inventory by Skowron and Friedlander (1998), and Social Interest Index by Greever et al. (1973) were used to collect research data.

Results: Testing the research model showed that the direct effect of family performance on social interest has been confirmed. On the other hand, considering the significant effect of family performance on self-differentiation as well as self-differentiation on social interest, the mediating role of self-differentiation in the relationship between family performance and social interest is confirmed ($p < 0.05$). Accordingly, family performance both has a direct effect on social interest and affects social interest through self-differentiation.

Conclusion: Among the achievements of this study, the increase in self-differentiation can be mentioned which improves family performance and in this way enhances social interest.

Keywords: family performance, social interest, self-differentiation.

INTRODUCTION

Social interest is an inherent thing and human is a social being naturally and not as a social habit. Social interest is a set of emotions and behaviors and cannot be a single concept (Adler, 1956). The only criterion that can effectively measure the phenomena of psychological life is the existence of a universal social feeling that connects all human beings to each other. Various factors affect the amount of social interest among which family performance and self-differentiation can be mentioned. Family performance includes behaviors that are done by family members to protect the family and meet the needs of its members. In other words, the consequence and result of the family structure are called family

performance. Wirget and Lehi have divided family performance into two categories of instrumental performance and expressive performance. They believe that expressive performance includes emotional communications, roles, verbal and non-verbal communications. Also, this type of performance includes the emotional and psychological aspects of the family. Instrumental performance includes daily life activities such as eating, resting, sleeping, excretion, etc. One of the important factors that affect family performance is the degree of self-differentiation among the family members.

Watts (2010) has conducted a study titled "Investigating family performance and its relationship with social interest in male students of

the Oxford University". The results show that there is a positive relationship between the variables of family performance and social interest, i.e. the more the level of social adjustment in students increases, their level of social interest also increases, and their functions at the social level of the family increase and the level of family performance in these students increases. Studies show that people with better family performance usually have higher differentiation levels.

Self-differentiation or differentiation of self is the most important concept of Bowen's theory (Pirsaqi et al., 2012). According to Bowen, the degree of self-emergence and self-differentiation in every person indicates the person's ability to separate the intellectual process from the emotional process that he/she experiences. So, it can be said that the ability of any person to avoid the automatic adherence of behavior to emotions indicates the degree of self-differentiation in that person (Goldenberg and Goldenberg, 2000: 76). Self-differentiation is the ability to express the "I" position. So, people who have an appropriate level of differentiation are self-leaders meaning that they are aware of their thoughts and feelings and express them and do not feel any compulsion to adjust themselves to the unreasonable expectations of others. Patrick Johnson et al. (2011) in their study examined the relationship between self-differentiation and social interest. Their results showed that different dimensions of self-differentiation have unique effects on social interest. Also, insufficient growth of social interest in children and adolescents leads to psychological difficulties in adulthood.

Finally, the research question is which of the factors in the study has a mediating role in the effect on social interest. It seems that self-differentiation is influenced by family performance and through which this structure affects social interest. The present study seeks to find this relationship and obtain the fit of the mentioned model. The research hypothesis is that there is a relationship between family performance and social interest with the mediating role of self-differentiation. Regarding the necessity of conducting this study, it can be said that the high level of self-differentiation of students can improve their family performance and increase their social adjustment, and in this way, the ground will be provided for increasing their social interest. The present study aimed to investigate the relationship between family performance and social interest mediated by self-differentiation in university students. The results of this study can be used in family training classes to improve the level of family performance in couples.

METHOD

Population, sample, and sampling method

The present study is a structural equation correlational study using the survey method. The statistical population of the study includes all the students of Islamic Azad University of Khomeini Shahr Branch in the 2019-2020 academic year. The sampling method is random cluster sampling based on the number of students in different faculties of the university. The sample size is considered as 300 based on the number of subscales and components of the model factors multiplied by 15. The research tools are the Differentiation of Self Inventory by Skowron and Friedlander (1998), the Family Assessment Device (FAD) by Epstein, Baldwin, and Bishop (1983), and Social Interest Index by Greever et al. (1973) which were completed by the students.

The Differentiation of Self Inventory

This questionnaire has been developed by Skowron and Friedlander (1998) with 43 items in four subscales of Emotional Reactivity (ER), "I" Position (IP), Emotional Cutoff (EC), and Fusion with Others (FO). The revised form has 46 questions. This questionnaire is graded based on a 6-point Likert scale from 1 (not at all true about me or not true) to 6 (absolutely true about me or true), and each question is given a score between 1 and 6 such that option 1 is given a score of 1 and option 6 is given a score of 6. Therefore, the maximum score of this questionnaire is 276. Lower scores in this questionnaire indicate lower levels of differentiation. All the questions except questions number 4, 7, 11, 15, 19, 23, 27, 31, 37, 41, and 43 are scored in reverse. The analysis based on the questionnaire scores is such that the obtained scores must be added and it should be considered that the amount of scores is as follows: the lower limit is the score of 46, the average limit is the score of 184, and the upper limit is the score of 276. If, for example, you have 10 questionnaires, you must multiply the following scores by 10.

The number of questions in the questionnaire * 1 = low score limit/ If the scores of the questionnaire are between 46 and 92, the degree of self-differentiation is poor. If the scores of the questionnaire are between 92 and 184, the degree of self-differentiation is moderate. If the scores are above 184, the degree of differentiation is very good.

In 2006, Younesi has standardized the above questionnaire and has reported its content validity through the internal consistency method as equal to 0.83 and its validity through the retest method as equal to 0.81. An alpha coefficient of 0.7 for

the reliability of the questionnaire indicates that it has acceptable reliability. Based on these results, it can be concluded that the questions are appropriate and the questionnaire maintains its

structure without changing or deleting some questions. The final Cronbach's alpha is 0.83 (Skowron, 2000, quoted by Eskian, 2005).

Table 1: The components of the Differentiation of Self Inventory

Variable	Scales	Number of questions	The questions that measure differentiation characteristics
Differentiation	Emotional reactivity	11	1, 6, 10, 14, 18, 21, 26, 30, 34, 38, 40
	"I" position	11	4, 7, 11, 15, 19, 23, 27, 31, 37, 41, 43
	Emotional cutoff	12	2, 3, 8, 12, 16, 20, 24, 28, 32, 36, 39, 42
	Fusion with others	12	5, 9, 13, 17, 22, 25, 29, 33, 35, 44, 45, 46

Social Interest Index

It has been developed by Greever et al. (1973). This questionnaire includes 32 questions about the dimensions of friendship, self-importance, love, and work. Questions 1 to 8 are related to the friendship scale; questions 9 to 16 are related to the self-importance scale; questions 17 to 24 are related to the love scale; questions 25 to 32 are related to the work scale. One characteristic has been stated for each question (for example, question (1): I have many friends.) for which the subject determines his/her answer on a 5-point Likert scale from (1) (not at all like me) to (5) (very much like me). Lower scores indicate a lower level of social interest and higher scores indicate a higher level of social interest. It should be noted that questions 6 and 13 are scored in reverse. In the present study, to assess the convergence validity of the Social Interest Index, the two SII and SIS questionnaires (Crandall, 1976) were completed by 50 people (25 couples). The correlation coefficient between SII and SIS questionnaires ($\text{sig} = 0.0001$) was obtained as 0.74. The researchers have reported the internal consistency and reliability of 0.81 for the social interest scale.

In another study to examine the internal consistency, the data of 120 people (60 couples) were examined in a pilot study, and the Cronbach's alpha coefficient was calculated for the whole sample and also by gender as 0.93. Finally, Greever et al. (1973) have reported reliability of 0.85 for the Social Interest Index. The results showed that this tool has high stability (Greever et al., 1973, quoted by Diarian, 2012).

Family Assessment Device (FAD)

It has been developed by Epstein, Baldwin, and Bishop (1983) aiming to assess family performance. FAD is a 60-item questionnaire designed to assess family performance according to the McMaster model. It has 6 dimensions of family functions: problem-solving, communications, roles, affective responsiveness,

affective involvement, and behavior control. Similarly, the FAD is consisted of 6 subscales to measure each of these dimensions, plus a seventh subscale regarding the overall functioning. FAD standardization has been done based on the responses of 503 people, 294 of whom belonged to a group of 112 families. The majority of these families (93) had a member admitted to a psychiatric hospital. The remaining 209 were students of a basic psychology course. No other demographic data are available. Although the current version of the scale has 60 items, the main studies were based on a 53-item scale. Seven items were added to the scale, which according to reports have increased the reliability of the subscales. Each item is scored from 1 to 4 using the key below.

A=2, SA=1, D=3, SD=4

The items related to unhealthy functioning are scored inversely in which the lower scores indicate healthier performance. The average of the scored responses is calculated to obtain the scores of the seven scales, which ranges from 1 (healthy) to 4 (unhealthy). Having an alpha coefficient of 0.72 to 0.92 for the subscales, FAD has shown relatively good internal consistency. The reliability values for the whole scale are 0.82 and the retest data are also 0.73. FAD has a degree of simultaneous and predictive validity. In a separate study on 178 couples in their 60s, FAD had a moderate correlation with the Locke-Wallace Marital Satisfaction Test and had a relative ability to predict the Philadelphia Aging Mood Scale scores. Besides, FAD has good known group validity. The Persian version of this scale has been translated by Baqer Sanaei. For scoring the Persian version test, each question is scored from 1 to 4 based on the following: strongly agree: 1, agree: 2, disagree: 3, strongly disagree 4 (Korkoran, 2013, quoted by Jazayeri, 2012).

After receiving the license from the Islamic Azad University of Khomeini Shahr Branch, we referred to different faculties and distributed the questionnaires among the students (This was

done in several stages. In each stage, the questionnaires were distributed in one faculty). Out of 300 questionnaires, 200 were completed in person by the students by referring to the university (during the practical classes of the

summer semester of 2020) and 100 questionnaires were completed online. To analyze the data obtained from the measurement tool, the statistical method of structural equation correlation using PLS software was used.

RESULTS

Table 2: Description of the main variables

Variables	Mean	SD
Problem-solving	17.69	2.56
Communication	19.74	2.56
Roles	24.38	2.70
Affective companionship	19.56	2.64
Affective fusion	23.66	3.77
Behavior control	24.91	3.64
Overall performance	36.61	5.17
Family performance	166.26	20.03
Emotional reactivity	35.49	8.30
"I" position	33.84	6.98
Emotional cutoff	41.26	7.43
Fusion with others	39.10	7.81
Self-differentiation	149.70	22.94
Friendship	26.92	4.79
Self-importance	25.96	4.35
Love	30.29	4.85
Work	29.07	4.39
Social interest	112.24	13.93

Examination of the means shows that the average family performance in the research sample is equal to 166.26; the average self-differentiation in the research sample is equal to 149.70, and the average social interest is equal to 112.24. The results of the Kolmogorov-Smirnov test show that all the research variables have a normal distribution. The significance level of the Kolmogorov-Smirnov test for all the research

variables was greater than 0.05 ($p < 0.05$) which indicates the normality of the variables. Examination of skewness and kurtosis values shows that considering that these values for all the variables are in the range of +2 to -2, it can be concluded that all the variables have a normal or close to normal distribution. So, parametric tests (such as Pearson correlation) can be used.

Table 3: Pearson correlation matrix between the main variables and the divergent validity

Variable	Family performance	Self-differentiation	Social interest
1. Family performance	<u>0.75</u>		
2. Self-differentiation	0.23***	<u>0.72</u>	
3. Social interest	0.42***	0.17**	<u>0.67</u>

Note: * = $p \leq 0.05$; ** = $p \leq 0.01$; *** = $p \leq 0.001$

The results show that the final dependent variable, i.e. social interest has a significant relationship with all the research variables ($p < 0.05$). The direction of the relationship between social interest and the two variables of family performance and self-differentiation is positive. Social interest has the strongest relationship with family performance with a correlation coefficient of 0.42. The intensity of the correlation between social interest and self-differentiation is equal to 0.17. The mediating

variable of self-differentiation has a positive relationship with the independent variable of family performance ($p < 0.05$). The intensity of the correlation between self-differentiation and family performance is 0.23. The Pearson correlation test showed that family performance has a positive correlation with all the components of social interest ($p < 0.05$). Family performance has the strongest correlation with love with a coefficient of 0.35. The Pearson correlation test showed that family performance has a positive correlation with all the components of self-differentiation except

the "I" position ($p < 0.05$). Family performance has the strongest correlation with emotional cutoff with a coefficient of 0.37.

Table 4: Model fit indicators

Variables	Coefficient of determination index R^2	Redundancy index Q^2	Overall fit index GOF
Self-differentiation	0.19	0.10	0.35
Social interest	0.21	0.11	

According to the results, the coefficient of determination for the final dependent variable of social interest is equal to 0.21 and for the mediating variable of self-differentiation is equal to 0.19. Therefore, the independent model variables could explain 19% of the variance of the self-differentiation variable and 21% of the variance of the social interest variable. The value of the Q^2 index (CV-Redundancy) for social interest is 0.11 and for self-differentiation is 0.10 which are moderate values and show that the

redundancy index indicates a moderate fit of the model. The value of the GOF index, which measures the overall fit of the model, is 0.35 for the research model, which is a relatively good value, and it can be said that the GOF index is an acceptable value because it is close to 0.36. In general, examination of the fit indices shows that the fit of the model is acceptable and approved, and with a little negligence, we can approve the model in general (Davari and Rezazadeh, 2013)

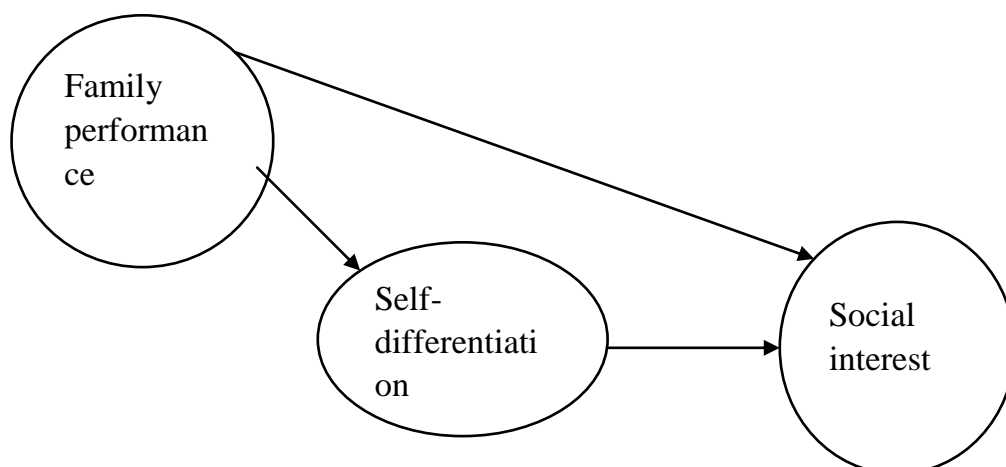


Fig.1: Testing the research model

Table 5: Testing the mediating role of self-differentiation in the relationship between family performance and social interest

Effects	Mediating variable	Direct effect	Indirect effect	Total effect	Result
Family performance → Social interest	Self-differentiation	0.376*	0.017*	0.393	Direct effect + mediating effect

Note: $p = \leq 0.05$

Testing the research model showed that the direct effect of family performance on social interest has been confirmed and on the other hand, considering the significant effect of family

performance on self-differentiation and also self-differentiation on social interest, the mediating role of self-differentiation in the relationship between family performance and social interest is confirmed ($p < 0.05$). The intensity of the indirect

effect is equal to 0.017. Accordingly, family performance both has a direct effect on social interest and affects social interest through self-differentiation. The measurement models of the dimensions of self-differentiation, family performance, and social interest in the

standardized coefficients or factor loading states show that all the factor loads have a suitable and approved value and their amount is more than 0.40. All the t-values related to factor loads are greater than 1.96 and significant ($p < 0.05$).

Table 6: The structural model coefficients test: standardized coefficients, t value, and significance level

Effects	Impact size index	Standardized coefficient	T value	P-value	Result
The effect of family performance on self-differentiation	0.01	0.12	2.04	<0.001	Confirmed
The effect of family performance on social interest	0.14	0.38	5.13	<0.001	Confirmed
The effect of self-differentiation on social interest	0.02	0.14	2.21	<0.001	Confirmed

Testing the research model showed that the effect of family performance on self-differentiation is confirmed ($p < 0.05$). The direction of the effect is positive and the intensity of the relationship is equal to 0.12. Testing the research model also showed that the effect of family performance on social interest is confirmed ($p < 0.05$). The direction of the effect is positive and the intensity of the relationship is equal to 0.38. The effect of self-differentiation on social interest is confirmed ($p < 0.05$). The direction of the effect is positive and the intensity of the relationship is equal to 0.14.

DISCUSSION

The present study aimed to investigate the relationship between family performance and social interest mediated by self-differentiation in university students. According to the results, the direct effect of family performance on social interest is confirmed; and on the other hand, considering the significant effect of family performance on self-differentiation and also self-differentiation on social interest, the mediating role of self-differentiation in the relationship between family performance and social interest is confirmed ($p > 0.05$). The intensity of the indirect effect is equal to 0.017 and accordingly, family performance both has a direct effect on social interest and affects social interest through self-differentiation. The results of this study are consistent with the results of the studies by Johnson and Smith (2003), Johnson (2011), Young New (2018), and Patrick Johnson (2020). Explaining this hypothesis, it can be said that according to Bowen, differentiation is the product of a way of thinking that turns into a way of being. Self-differentiation is largely determined by the degree of emotional separation that the

individual receives from his/her main family. He says that people with higher self-differentiation can think objectively and are more successful in their works. Therefore, it can be argued that increasing the level of self-differentiation leads to better cohesion and family performance in students because when self-differentiation increases, mainly the level of conflict and tension in family relationships is reduced. Studies show that the relationships between parents and children affect the promotion of social interest. People who have sufficient support in the family are more adaptable and more inclined to collective and social activities. It may be concluded that increasing the level of self-differentiation leads to improvement of performance in family members and thus, better family performance increases job and academic satisfaction in students, and all of this affect their social development and possibly on their level of social interest to some extent. One of the limitations of this study is the statistical population of it which is consisted of all students of the Islamic Azad University of Khomeini Shahr branch in 2019-2020, and the generalization of these results to other populations should be done with caution. Another limitation is the length of the questionnaires, which causes fatigue in the subjects and this affects the quality of responding. In this study, it is suggested that organizations pay attention to the family conditions of their staff to increase the level of social interest and improve family performance in individuals; and hold training courses to increase the level of awareness of individuals about increasing and decreasing self-differentiation within the family, and in this way improve the quality of life and increase the scores of social interest in their staff. It is also suggested that future studies will do extensive

analyses based on the variables of family performance, social interest, and self-differentiation in students so that researchers can use the theoretical foundations of this study as the basis and propose and test several hypotheses based on it.

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