



Research Paper

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Structural Model of Family Functioning and Prosocial Behaviors with the Mediating Role of Psychological Maturity

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Article Info.	Abstract
Received: 07.11.2022	Abstract The present research was conducted to clarify the causal relationship between family functioning and prosocial behaviors with the mediating role of psychological maturity. This descriptive research was correlational. Its statistical population consisted of adults aged 18 years and older, of which 436 individuals (i.e., 349 women and 87 men) were selected as the sample using the convenience sampling method. The Prosocial Tendencies Measure revised by Carlo et al. (PTM-R), the Family Assessment Device of Epstein et al. (FAD), and the Psychological Maturity scale of Mohammadkhani et al. were utilized to collect data. Given the results of the Pearson correlation test, significant positive relationships were observed between family functioning and intrinsically motivated prosocial behaviors, between the problem-solving dimensions in family functioning and extrinsically motivated prosocial behaviors, between family functioning and psychological maturity, between the social domain of psychological maturity and prosocial behaviors in emotional and dire situations. In contrast, a negative and significant relationship was revealed between psychological maturity and extrinsically motivated prosocial behaviors. The results of structural equation modeling indicated the significant mediating role of psychological maturity in the relationship between family functioning and prosocial behaviors with intrinsic motivation. Generally, it can be said that optimal family functioning can influence the psychological maturity of its members and their growth, leading individuals to adopt prosocial behaviors with internal motivation and higher levels of moral reasoning.
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Introduction

Prosocial behaviors have significant importance in the quality of interpersonal relationships (Poorshirazi & Nasrolahi, 2021). Although at first glance, they seem to have a simple structure, their multidimensionality in form, motivation, consequences and final cause show considerable complexity (Lewis, 2018). This issue has prompted researchers to investigate several factors involved in them. From among these factors, we can mention the family, which is one of the external factors that determine prosocial behaviors and has a significant impact on the intellectual, social and personality development of people (Javadian & ZeydabadiNezhad, 2016). In the context of the family, an individual learns the demands of the society, and this knowledge leads him to choose certain behaviors (Fathi et al., 2021). The capacity of the family system to meet the needs of members through developmental changes is described as family functioning (Ryan et al., 2005). Families with optimal functioning have a warm emotional climate, clear expectations, and the ability to solve problems in an effective manner (Epstein et al., 1978; Lewandowski et al., 2010). However, unhealthy families have poor communication and high levels of conflict (Lewandowski et al., 2010). Meanwhile, psychological maturity which has its roots in the family (Freidoonfar et al., 2016; RostamAbadi & HaroonRashidi, 2018) is one of the factors which can affect a wide range of behaviors. In addition, family cohesion and its flexibility, which are the most important factors that determine the level of interaction of an individual with society, can play a significant role in psychological maturity (Rostam Abadi & Haroon Rashidi, 2018). In fact, maturity can be identified through an individual's actions while performing an activity (Mazo, 2021). Mature people think about the consequences of their activities and have emotional stability (Caspi et al., 2005). They also have a good understanding of social relations, and know the expectations of the society. In general, it seems that the emergence of prosocial behaviors is influenced by interdependent variables such as family functioning and psychological maturity. Therefore, the present study was conducted with the aim of investigating the mediating role of psychological maturity in the relationship between family functioning and prosocial behaviors.

Methodology

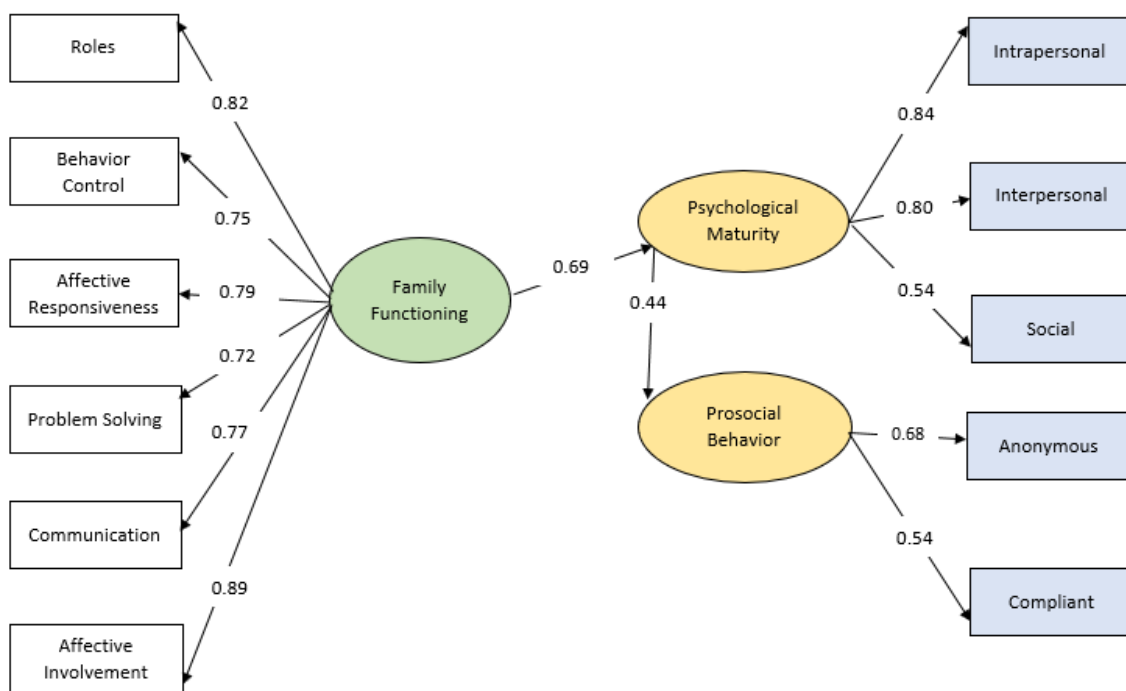
The design of this research study is descriptive and correlational; it is considered as basic research. The population of this study included adults aged more than 18 years old. According to the argument of Schumacher and Lomax, a sample size of 200 to 600 people is required in structural equation modeling (SEM) (Rouhizadeh et al., 2020). Thus, 436 people were selected as samples through the convenience sampling method. The data were collected through Prosocial Tendencies Measure (Carlo et al.), Family Assessment Device (Epstein et al.) and Psychological Maturity Scale (Mohammadkhani et al.). In order to collect data, first, questionnaires related to each variable were compiled electronically. Then, after converting them into a comprehensive questionnaire, the related link was provided to qualified people through virtual networks. Finally, in order to analyze the data, mean, standard deviation, and Pearson correlation test using SPSS software (version 26) and structural equation model (SEM) using LISREL software (version 8.80) were used.

Results

The results of the research showed that 349 participants were women and 87 were men. The minimum age of these participants was 18 years, and the maximum age was 69 years. The mean age of the participants was 37.10 with the standard deviation of 109.11. From among them, 62 participants had a diploma or a lower degree, 44 participants had an associate's degree, 185 participants had a bachelor's degree, 133 participants had a master's degree, and 12 participants had a Ph.D. Moreover, 117 participants were single, 309 were married, and 10 were divorced.

The mean and standard deviation of the total family functioning score were 174.41 and 22.68, respectively. The mean and standard deviation of the total score of psychological maturity were 423.99 and 53.26, and the mean and standard deviation of the total score of prosocial behaviors with internal motivation were 38.82 and 6.52. Regarding the relationships between the variables, the correlation coefficients obtained from the Pearson correlation test between the components of prosocial behaviors with the components of family functioning ranged from -0.17 to 0.29. These coefficients in the relationship between the components of family functioning and its total score with the areas of psychological maturity and their total score were in the range of 0.18 to 0.60. Furthermore, the relationships between the domains of psychological maturity and their total score with the components of prosocial behaviors and their total score were in the range of -0.001 to 0.28. In other words, the results of Pearson's correlation test showed that there were positive significant relationships between family functioning and intrinsically motivated prosocial behavior, between problem-solving in family and extrinsically motivated prosocial behavior, between family functioning and psychological maturity, and between the social domain of psychological maturity and prosocial behaviors in emotional and dire situations. In addition, a negative and significant relationship was observed between psychological maturity and extrinsically motivated prosocial behaviors.

To answer the research question and to investigate the mediating role of psychological maturity in the relationship between family functioning and prosocial behaviors, a structural model based on theoretical and experimental background was drawn. In the proposed model, for the endogenous variable (i.e., prosocial behaviors), only components with intrinsic motivation were considered because according to exogenous and mediating variables (i.e., family functioning and psychological maturity), prosocial behaviors with intrinsic motivation, which include higher levels of moral reasoning, were used as an endogenous variable. Therefore, in this model, the variables of family functioning, psychological maturity and desirable social behavior were considered as hidden variables, and their components were considered as obvious variables. In this way, family function was an exogenous variable, psychological maturity was a mediating variable, and prosocial behaviors was endogenous variable in this model. The fit indices of the final verified model were obtained as follows: ($\chi^2 = 110.05$, $df = 36$, $\chi^2/df = 3.05$, $NNFI = 0.97$, $CFI = 0.98$, $0.96 = GFI$, $RMR = 1.85$, $SRMR = 0.04$, $RMSEA = 0.06$) which indicated good fit. This model is presented in the following figure.



According to the final fitted model, the coefficient of the direct path of family functioning to psychological maturity was equal to 0.69, which was statistically significant ($t = 12.89$). Moreover, the coefficient of the direct path of psychological maturity to prosocial behaviors was equal to 0.44, which was also significant ($t = 5.76$). As a result, the coefficient of the indirect path of family functioning to prosocial behaviors was 0.30, and the significance of the mediating role of psychological maturity in this path was investigated using the Sobel test.

$$z\text{-value} = a*b / \text{SQRT} (b^2*SEa^2 + a^2*SEb^2) = 88/4$$

Considering the fact that the obtained z value (4.88) was higher than 1.96, it could be stated that the indirect effect of family functioning on prosocial behaviors with the mediating role of psychological maturity was significant. Therefore, psychological maturity played a significant mediating role in the relationship between family functioning and intrinsic prosocial behaviors ($P < 0.05$).

Conclusion

The first finding of the research study showed that there was a positive relationship between all dimensions of family functioning with intrinsically motivated prosocial behaviors; these relationships were statistically significant except for the emotional companionship dimension with compliant prosocial behaviors. This finding is in line with the findings of Hezarian et al. (2021) and Jaureguizar et al. (2018). The second finding indicated a positive and significant relationship between all aspects of family functioning and all areas of psychological maturity. This finding was in line with the findings of Stone and Rydberg (2019), Piotrowski et al. (2020) and Yeung (2021). The third finding showed a positive and significant relationship between all areas of psychological maturity and its total score with all kinds of socially motivated behaviors and their total score. This finding was in line with the studies of Camberis et al. (2016) and Nivette et al. (2022). Furthermore, a significant negative relationship was obtained between all areas of psychological maturity and its total score with the altruistic and collective dimensions of prosocial behavior.

There was also a positive and significant relationship between the social sphere of psychological maturity and prosocial behavior in critical and dire situations. These findings showed that the higher the levels of social maturity and social responsibility of people were, the more they helped others in dire situations. The results of examining the structural model in the research study showed that psychological maturity had a significant mediating role in the relationship between family functioning and intrinsic prosocial behaviors. In other words, the family could cause a group of social behaviors which originated from the higher levels of moral reasoning of individuals through affecting the psychological maturity of its members. In general, the decent functioning of the family could influence the psychological maturity of its members and could lead them to adopt prosocial behaviors with intrinsic motivation in order to increase social loyalty. It is suggested that future studies investigate other mediator or moderator variables in the relation between the variables of this research study.

Conflict of interest

There was no conflict of interest in this research study.

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References

- Camberis, A. L., McMahon, C. A., Gibson, F. L., & Boivin, J. (2016). Maternal age, psychological maturity, parenting cognitions, and mother–infant interaction. *Infancy*, 21(4), 396-422. <https://doi.org/10.1111/inf.12116>
- Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality development: Stability and change. *Annual Review of Psychology*, 56, 453-484. <https://doi.org/10.1146/annurev.psych.55.090902.141913>
- Epstein, N. B., Bishop, D. S., & Levin, S. (1978). The McMaster model of family functioning. *Journal of Marital and Family Therapy*, 4(4), 19-31. <https://doi.org/10.1111/j.1752-0606.1978.tb00537.x>
- Fathi, A., Malekirad, A., Abasi, M. (2021). predicting high-risk behaviors of adolescents based on the family function and religious orientation emphasizing on the police role. *Quarterly Journal of Hamedan Police Science*, 8(1), 13-23. <https://doi.org/10.22034/hpsj.2021.95981>. [In Persian]
- Freidoonfar, H., Farhadi, S., Karami Zare, M. & Mortazavi, M. (2016). The role of family communication patterns in predicting psychological maturity. *The first International Comprehensive Psychology Congress of Iran*. <https://civilica.com/doc/475229/>. [In Persian]
- Hezarian, S., Bakhtiarpour, S., Pasha, R., Asgari, P., & Hafezi, F. (2021). The Relationship between family function and drug attitude by mediating role of social adjustment among students. *Scientific Quarterly of Research on Addiction*, 15(59), 139-156. <https://doi.org/10.52547/etiadpajohi.15.59.139>. [In Persian]
- Jaureguizar, J., Bernaras, E., Bully, P., & Garaigordobil, M. (2018). Perceived parenting and adolescents' adjustment. *Psicologia: Reflexão e Crítica*, 1(31), 1-11. <https://doi.org/10.1186/s41155-018-0088-x>
- Javadian, S. R., & Zeydabadi Nezhad, F. (2016). The relationship between family social capital and prosocial behaviors (case study: Yazd university students). *A Research Journal of Social Work*, 3(9), 44-75. <https://doi.org/10.22054/rjsw.2016.9256>. [In Persian]
- Lewandowski, A. S., Palermo, T. M., Stinson, J., Handley, S., & Chambers, C. T. (2010). Systematic review of family functioning in families of children and adolescents with chronic pain. *The Journal of Pain*, 11(11), 1027-1038. <https://doi.org/10.1016/j.jpain.2010.04.005>
- Lewis, M. (2018). Prosocial Behavior. In: Shackelford, T. K., & Weekes-Shackelford, V. (Eds.), *Encyclopedia Of Evolutionary Psychological Science*. Springer, Cham. https://doi.org/10.1007/978-3-319-16999-6_158-1
- Mazo, S. (2021). Maturity and personality: What does it mean to be mature? *Denison Student Scholarship*. 81, 56-89. <https://digitalcommons.denison.edu/studentscholarship/81>
- Nivette, A., Echelmeyer, L., Weerman, F., Eisner, M., & Ribeaud, D. (2022). Understanding changes in violent extremist attitudes during the transition to early adulthood. *Journal of Quantitative Criminology*, 38, 949-978. <https://doi.org/10.1007/s10940-021-09522-9>
- Piotrowski, K., Brzezińska, A. I., & Luyckx, K. (2020). Adult roles as predictors of adult identity and identity commitment in Polish emerging adults: Psychosocial maturity as an intervening variable. *Current psychology*, 39(6), 2149-2158. <https://doi.org/10.1007/s12144-018-9903-x>
- Poorshirazi K, & Nasrolahi B. (2021). The comparison of emotional intelligence, cognitive distortions and social behavior between substance-dependent and non-dependent individuals. *Scientific Quarterly of Research on Addiction*, 15(59), 227-250. <https://doi.org/10.52547/etiadpajohi.15.59.227>. [In Persian]
- RostamAbadi, M., & HaroonRashidi, H. (2018). Investigating the relationship between students' family cohesion and flexibility, with the level of psychological maturity with the mediation of assertiveness. *The 5th*

International Conference on Psychology, Education and Lifestyle, Qazvin.
<https://www.sid.ir/paper/898121/fa>. [in Persian]

- Rouhizadeh, M., Alam, S., Hozhabrnya, Z. (2020). Identifying the factors affecting the development of health and providing a Structural equation modeling. *Razi Journal of Medical Sciences*, 27(5), 1-11. <http://rjms.iums.ac.ir/article-1-6220-fa.html>. [in Persian]
- Ryan, C., Epstein, N.B., Keitner, G.I., Miller, I.W., & Bishop, D.S. (2005). *Evaluating and Treating Families: The McMaster Approach* (1st ed.). Routledge. <https://doi.org/10.4324/9780203843840>
- Stone, R., & Rydberg, J. (2019). Parenthood, maturation, and desistance: Examining parenthood transition effects on maturation domains and subsequent reoffending. *Journal of Developmental and Life-Course Criminology*, 5, 387-414. <https://doi.org/10.1007/s40865-019-00123-6>
- Yeung, J. W. (2021). Family processes, parenting practices, and psychosocial maturity of Chinese youths: a latent variable interaction and mediation analysis. *International Journal of Environmental Research and Public Health*, 18(8), 4357. <https://doi.org/10.3390/ijerph18084357>

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