

**The Mediating Role of Achievement Goals in
Relationship between Perceived Family
Atmosphere and Academic Performance
among Babylon's Students in Iraq**
Article Type: Research Article

**Maryam Hussein Obeid Al-
Soltani PhD Student**
Department of Psychology, Isfahan
(Khorasgan) Branch, Islamic Azad
University, Isfahan, Iran.

Ali Mehdad, PhD*
Department of Psychology, Isfahan
(Khorasgan) Branch, Islamic Azad
University, Isfahan, Iran.
alimahdad.am@gmail.com

**Emad Hussein Oibed Al-
Marshidi, PhD**
Department of Special Education,
University of Babylon, Iraq.

AsgharAghaee, PhD
Department of Psychology, Isfahan
(Khorasgan) Branch, Islamic Azad
University, Isfahan, Iran.

Received: 24/ 10/ 2023 Revised: 10/2/ 2024 Accepted: 15/2/2024
Doi: 10.21859/ijpb.16.1.8

The present study was conducted with the aim of investigating the mediating role of achievement goals in relationship between perception of family atmosphere and academic performance in the students of Babylon University in Iraq. The research method was correlation in the form of structural equation modeling. The statistical population of research included all third and fourth semester bachelor' degree students in psychology studying at Babylon University in Iraq. From the mentioned statistical population, 258 students were selected by the convenience sampling method. The data were collected using the perceived family atmosphere questionnaire (Ryan et al, 1996), the achievement goals questionnaire (Midgley et al, 1998) and the academic mean score. To analyze data, Pearson's correlation coefficient and structural

equation modeling were used. The results showed that there is a positive and significant relationship between the perceived family atmosphere in the two dimensions of father-child relationship and mother-child relationship with achievement goals and academic performance and between achievement goals and academic performance ($p < .01$). Moreover, results of structural equation modeling showed that achievement goals are complete mediating variables in the relationship between the perceived family atmosphere and academic performance ($p < .01$). Based on the results of the study, it can be concluded that the perceived family atmosphere is an important variable for predicting the achievement goals and academic performance in Iraqi students.

Keywords: perceived family atmosphere, academic performance, achievement goals, students, Iraq

In today's world, the acquisition of science and knowledge has become a very necessary obsession for a purposeful and successful life. The signs of this growing need for university education is also well felt in the studies conducted in Iraq (Khammat Al-Issa et al., 2023). This growth of interest in university education, along with the increasing specialization of academic fields in universities and the dual pressure caused by academic competition and the anxiety caused by it (Worley et al., 2023), have drawn more attention than in the past to the role and importance of family in the achievement of students and/or the loss of their motivations for various reasons (Zhao & Zhao, 2022). Although various indicators of the educational and personal development of students in universities need attention from different psychological perspectives, among the various variables, academic performance in universities, despite years of research on it, has remained a construct with major capacities for study and research in higher education systems (Fereidouni & Rouhani, 2023).

In general, performance refers to a person's actions in the tasks assigned to him. In the field of education, academic performance refers to the quality of students' actions in the courses and tasks they are required to complete. (Ferraces Otero et al., 2021). From an appraisal viewpoint, due to quantitative evaluation strategies used in educational systems, including universities in the entire world, the average or academic grade point average of students is often considered and studied as a criterion of academic performance in scientific studies (Turkzad, 2013). Therefore, due to the importance of academic performance in academic and career achievement (Dahlan et al., 2021), thus far several scientific studies have been conducted on the correlates and factors related to this variable. For example, academic performance and academic self-efficacy (Askari et al., 2020), university and school atmosphere (Izaguirre et al., 2023; Zhang et al., 2022), atmosphere and family structure along with achievement goals (Zarejamalabadiet al., 2017a, and Sahu & Suna, 2023), epistemological beliefs (Yousefi and Pariyad, 2020), and a considerable range of personality and other individual variables have been reported in this regard. These studies show the direction of the next research needed, especially in the countries that are still nascent in terms of scientific studies. Therefore, in a country like Iraq, the climate and structure of the family have a special place for the academic performance of students due to the position that the family has in the growth and excellence of children.

According to the most accepted theories in the field of family psychology, the family atmosphere is defined as the existence of cohesion among the family members, responsiveness according to needs, and the capacity to resolve conflicts between the family members (Eichhorn et al., 2023). Coherence, as the first

dimension raised in the family arena, is the existence of emotional bonds between family members along with the necessary support in times of stress and pressure. Accountability, as the second aspect of this structure, is to provide and guarantee needs in all areas, and the third dimension is the existence of capacities for conflict resolution, which also reflects problem-solving skills in family relationships (Das, 2022). The existence of a coherent, responsive family with the ability to resolve conflicts brings many consequences at the individual level, including the optimal growth and development of children, satisfaction with life and family, purposeful efforts, and higher family and social and educational performance for the family (Fakharian et al., 2019; Kordzanganeh et al., 2022). This is only a small part of the positive and constructive effects that the family atmosphere has. In terms of how such functions occur and from the theoretical and practical aspects, these effects of the family atmosphere mostly come into effect through strengthening personal self-efficacy, strengthening self-worth, and perceived social support for children and other members (Rezaei-Dehaghani et al., 2018). The same capacity and effects for children in the field of academic performance can be proposed and discussed.

According to a review of research literature, cohesive families strengthen problem-solving abilities, goal-setting focused on success and achievements, academic self-efficacy, and passion for education and success in their children, and in this way create an atmosphere for strengthening performance and better academic achievement in their children. Research evidence supporting this issue in the studies of Sabzian et al. (2018), Mohabi NuruddinVand et al. (2011), Jafari et al. (2016), Hosseini Abrishmi & Nikdel (2020), Arjmand & Kazmian Moghadam

(2019), and Jahan et al. (2022) is well presented. In addition to the relationship between family atmosphere and academic performance in a realistic situation, it is expected that the influential variables in this relationship should be taken into consideration in the form of mediating variables. This can expand the theoretical and practical knowledge aimed at the family atmosphere and facilitate the implementation of educational and family programs. In this regard, from a theoretical and practical perspective, the variable of achievement goals is one of the variables that can be a mediating variable in the relationship between family atmosphere and academic performance in Iraqi students.

Achievement goals' constructs mean that people are motivated and move forward by the type of orientation they choose towards their goals. Based on this theoretical basis, humans, either through goals aimed at gaining mastery and skill (which is also called mastery-oriented goal setting) or through goals aimed at optimal and optimal performance (which is called performance-oriented goal setting), are motivated and perform their purposeful activities (Weissman & Elliott, 2023; Wu, 2023). Goal-setting methods and their affiliate motivations in humans are learned under the affection of the environment in which they grow and develop, and in practice, it will be the provider of the chosen paths to achieve the goals and the satisfaction or dissatisfaction after that (Jaafari et al., 2016; Greisel et al., 2023). The next important point regarding the nature of learning goal-setting theory is that through what processes and structures the achievement goals are formed and strengthened.

According to accessible research's data, the performance, structure, and atmosphere of a family are some of the most essential factors in the formation of children's achievement goals

(Zare Jamalabadi et al., 2017 a). The mechanism of link between family atmosphere and achievement goals in children (in the current study in students) comes back to the fact that a family with emotional cohesion has the ability to respond to the mental, physical, social, and spiritual needs of its members, as well as the ability to solve conflicts skillfully and tolerantly, and it increases and strengthens the level of self-worth, ability, and motivation of children's achievement. In this way, it provides goal setting aimed at achievement, success, and excellence (Jahan et al., 2022). In this regard, the study of Jahan et al. (2022) has shown that the level of involvement and attachment of parents in the family is an influential factor in the positive or negative family atmosphere, with motivation and goals aimed at achievement. Moreover, research conducted by Zare Jamalabadi et al. (2018) has also shown that there is a positive relationship between family atmosphere and achievement goals and study of Shokrkon et al. (2005) showed negative relationship between achievement goals and self-handicapping. After increasing the level of achievement goals through the family atmosphere, in the next step, based on the theoretical approach of motivational spillover and self-worth and self-efficacy's positive spillover, the level of academic performance will increase through achievement goals. The motivational and self-worth spillover refers to the simple fact that with the gradual formation of a supported, valuable, efficient, and motivated self in family structures with a coherent and responsive atmosphere, children transfer these capacities to the educational environment and in the direction of educational goals, and in this way, show a higher level of performance. In this setting, Zare Jamalabadi et al.'s study (2018 b) identified achievement goals as a mediating variable in the relationship between family

atmosphere and academic performance among Iranian students, and Sabzian et al.'s study (2018) also identified academic self-efficacy, which is closely related to achievement goals, as a mediating variable in the relationship between emotional atmosphere and family flexibility and academic cheating among Iranian students.

Consequently, based on a reviewed theoretical and research background, the perception of family atmosphere and especially the nature of the relationship between parents and children is one of the essential factors related to achievement goals as well as academic performance in students. Especially based on the theoretical approach of motivational spillover and positive spillover based on self-worth and self-efficacy, the quality of the relationship between parents and children is a serious determinant for achievement goals, and achievement goals are a determinant for improving academic performance in students. In spite of such capacities, based on broad searches in valid academic sources, a study that investigated the roles and functions of perception of family atmosphere (in the form of relationships between parents and children) in Iraqi's students for the purposes of academic achievement and performance could not be found. Although significant efforts have been made by researchers to help students in different countries, it is necessary to understand the real and potential capacities of the family atmosphere for the purposes of academic achievement and performance in students in a country like Iraq. It should be put to the test in advance through scientific research of the type of present study. This can provide a basis for the expansion of scientific knowledge for a wide range of students and ways to improve their academic performance in Iraq. For the reason that based on searches in reliable scientific sources, no such research has been conducted in Iraq. So far, the findings of

the current research and its comparison with the findings of other countries will provide a new horizon in field of cross-cultural psychology. Accordingly, current study has been carried out to answer the question of whether there is a relationship between the perception of family atmosphere and academic performance regarding the mediating role of achievement goals among students at Babylon University in Iraq. According to this, the conceptual model of the research was developed as described in Figure 1

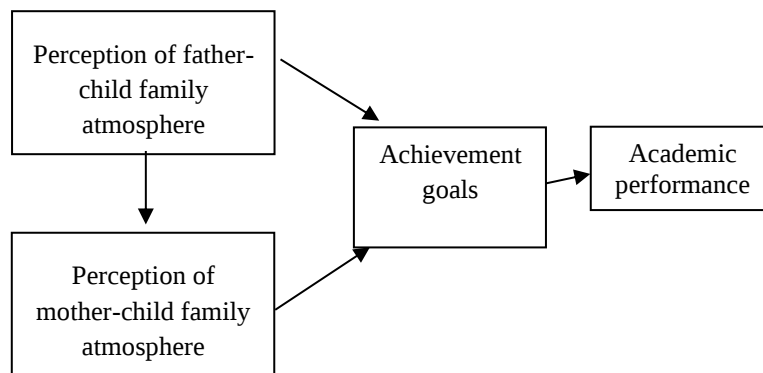


Figure 1. Conceptual research model

Method

This research is a correlational type of structural equation modeling. The statistical population of research was formed by the students of psychology and educational sciences at Babylon University in Iraq in the winter of 2023, a total of 600 students. From the mentioned statistical population, through convenience sampling based on Kerjesi and Morgan's (1970) table, 260 people were selected. The inclusion criteria included willingness to participate and being engaged in studies in the fields of psychology and education. After collecting the 260

questionnaires, 2 questionnaires were left out of the research due to being distorted (equivalent to 0.7%), and therefore the sample was reduced to 258 people. Data were analyzed using Pearson's correlation coefficient along with the mean and standard deviation, and finally, after examining the statistical assumptions of normality through the Shapiro-Wilk test and the linearity of the relationship between the variables through the scatter diagram, structural equation modeling using SPSS version 26 and AMOS version 16 software were analyzed.

Instruments

Family atmosphere perception

To measure perception of family atmosphere, the 42-item parental perception questionnaire of the adult version (Grolnick et al., 1997), which includes two items: father-child relationship (21 items) and mother-child relationship (21 items), was used. Before implementation, this questionnaire was first translated into Arabic by a psychology expert fluent in Arabic, and then translated into Farsi by an Arabic language expert, after matching them, the few differences were resolved and then it was implemented. The response scale of the questionnaire is based on a seven-point range from completely disagree (1) to completely agree (7), with a range of scores at the overall level from 42 to 294 (and for each of the two dimensions of the relationship between father and child and mother and child between 21 and 147). An increase in scores indicates a positive perception of the relationship between parents and children. The validity of the factorial structure of this questionnaire has been investigated and confirmed by means of exploratory factor analysis. Zare Jamalabadi et al. (2017), quoting from a variety of studies, found the validity of this questionnaire to be approving and the

reliability according to Cronbach's alpha coefficient for the two areas of father-child relationships and mother-child relationships equal to 0.84 and 0.87, respectively. Also, as evidence of convergent validity, a positive relationship has been reported between the scores obtained from the family atmosphere perception questionnaire and creative thinking in children. In current research, the Cronbach's alpha coefficient was obtained for the two areas of father-child relationship and mother-child relationship, which were equal to .89 and .87, respectively.

Achievement goals

To measure achievement goals, the 18-item questionnaire of Midgley et al. (1998) was used, which covers three areas of mastery goals, approach performance goals, and avoidance performance goals. Before implementation, this questionnaire was first translated into Arabic by a psychology expert fluent in Arabic, and then translated into Farsi by an Arabic language expert, after matching them, the few differences were resolved and then it was implemented. The response scale of this questionnaire is based on a 5-point Likert scale from completely disagree (1) to completely agree (5), and the range of scores is from 18 to 90. The increase in scores indicates a higher level of achievement goals. Midgley et al. (1998) used confirmatory factor analysis to study the factorial structure (construct validity) of the questionnaire, and the data showed that this questionnaire has an approving structure. As well, confirmatory factor analysis and Cronbach's alpha coefficient were reported as 0.61 to 0.63 (Midgley et al., 1998). This questionnaire has also been used in various studies so far. Among them, Zare Jamalabadi et al. (2017, a) in their study, as evidence of the convergent validity of this

questionnaire, obtained a positive and significant relationship between achievement goals and creative thinking and reported the Cronbach's alpha coefficient as 0.88. In the present study, Cronbach's alpha coefficient was obtained equal to 0.90.

Academic performance

In the present study, academic performance was considered in terms of grade point average of academic semesters up to the time of the study, which was collected in the form of self-reporting.

Results

The composition of the participants in terms of being in the first, second, third, and fourth years of educational level was 9.5%, 15.5%, 15%, and 60%, respectively, and the age of participants up to 20, 20 to 25, 26 to 30, and 31 and above was 12%, 59%, 13%, and 16%, respectively. Before analysis administration, the path analysis defaults, including the normality of data distribution, error independence, and multicollinearity, were examined. Skewness and kurtosis of the distribution of the scores were used to investigate the normality default of the research variables, which indicated that the scores distribution of all variables was normal (distribution range between +1 and -1). The Variance Inflation Factor (VIF) and tolerance were used to examine the multicollinearity, which indicated no collineation among the variables (VIF range was obtained less than 10, and tolerance was obtained higher than .1). The results of the mean, standard deviation, and internal correlation of the research variables are presented in Table 1.

Table 1
Mean, Standard Deviation and Relationship between Research Variables

Row	variables	Mean	SD	1	2	3	4
1	Father-child relationship	70.31	10.97	.89 [@]			
2	Mother-child relationship	73.32	10.02	.61**	.87		
3	Achievement goals	70.11	9.05	.28**	.39**	.85	
4	academic performance	14.25	2.41	.242**	.392**	.357**	-

@ The numbers inserted on the diameter of the matrix are the Cronbach's alpha of the variables

As can be seen in Table 1, the relationship between all research variables is significant ($p \leq 0/01$). In Table 2, the result of structural equation modeling of relationship between the perception of family atmosphere and academic performance with regard to the mediating role of achievement goals is presented.

Table 2
Paths of the Relationship Model Between the Perception of Family Atmosphere and Academic Performance According to the Mediating Role of Achievement Goals

Row	Paths of model	B	SE	β	p	R^2
1	Perception of Mother-child family atmosphere → achievement goals	.18**	.02	.33**	.001	.145
2	Perception of father-child family atmosphere → achievement goals	.16*	.018	.17**	.01	
3	achievement goals → academic performance	.12*	.03	.16*	.02	.11

* $p < .05$ ** $p < .01$

As can be seen in Table 2, the perception of mother-child family atmosphere ($p < .01$, $\beta = .33$) and the perception of father-child family atmosphere ($p < .01$, $\beta = .17$) have a significant relationship with achievement goals and have been able to explain 14.5% of the variance of this variable. Further, achievement goals ($p < .01$, $\beta = .16$) had a significant relationship with academic performance and were able to explain 11% of the variance of this variable. Figure 2 shows the structural model of the research.

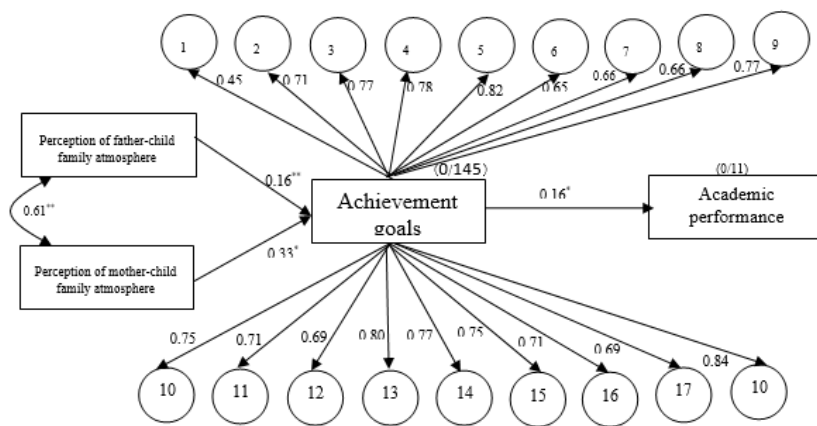


Figure 2. The final and revised structural model of the research

As can be seen in Figure 2, the Perception of Mother-child family atmosphere and the Perception of father-child family atmosphere have an indirect relationship with academic performance through achievement goals. In Table 4, the indirect mentioned effects in the final model (Figure 2) are presented.

Table 3
Indirect Effects of the Final Research Model in Standard and Non-Standard Mode for Academic Performance

row	Indirect effects	academic performance	
		non-standard	standard
1	Indirect effects of Perception of mother-child family atmosphere on academic performance through achievement goals	.022*	.053*
2	Indirect effects of Perception of father-child family atmosphere on academic performance through achievement goals	.019*	.026*

* $p \leq .05$

As can be seen in Table 3, the indirect effects presented for the perception of mother-child family atmosphere and father-child family atmosphere through achievement goals are significant ($p < .05$). The fit indices of the final model are presented in Table 4.

Table 4
Fitness Indices of the Final Research Model

Fit indices	Acceptable value	amounts in present study	results
1. (χ^2)	Being non significant	2.31 55.41 $p =$ and	favorable
2. (χ^2/df)	Less than 3	.29	favorable
3. (GFI)	.9 and above	.97	favorable
4. (CFI)	.9 and above	.96	favorable
5. (IFI)	.9 and above	.97	favorable
6. (RMR)	.05 and less	.032	favorable
7. (RMSEA)	.08 and less	.07	favorable

As can be seen in Table 4, all the fit indices of the final model of the research, in comparison with the level of acceptable values (Wang and Wang, 2012), had a favorable situation. This means that the final research model has a favorable condition. Therefore, according to the results presented in Tables 2 to 6, the hypothesis of the research that achievement goals mediates the relationship between the perception of family atmosphere (mother-child and father-child) and academic performance is confirmed.

Discussion

This research was conducted with the aim of determining the relationship between perceptions of family atmosphere and academic performance while considering the mediating role of achievement goals in students at Babylon University, Iraq. The results indicated that there is a significant positive relationship between the perception of a mother-and-child family atmosphere and achievement goals. This result is consistent with the results of Jahan et al. (2022) and Zare Jamalabadi et al. (2018b). In explaining the relationship between the family atmosphere and the goals of progress, the most central point to consider and state is that the function of empowering and improving self-worth, along with increasing the level of self-efficacy based on support and positive feedback regarding capacities and abilities, is located. Cohesive, supportive families with a positive communication and emotional atmosphere, in the process of their interactions with their children, provide their children with positive feedback of value and ability in a permanent way. These positive feedbacks put the children on the path of self-worth and motivation for progress, and at the same time, on the path of identifying the goal-oriented and positive behaviors of parents.

The motivation and ambition to set goals based on achievement and success are strengthened in the children.

The next finding of the results showed a significant positive relationship between the emotional atmosphere of family and academic performance. This result is consistent with the results of Sabzian et al. (2018), Hosseini Abrishmi and Nikdel (2020), Arjmand and Kazemian Moghadam (2019), and Jahan et al. (2022). In explaining the relationship between the perception of family atmosphere and academic performance, it can be assumed that in family systems with an emotional, psychological, and socially positive atmosphere, striving for optimal performance in all fields, including education, is considered valuable, and this value is promoted and supported by behavior and dialogue among family members. For this reason, in terms of behavioral and cognitive patterns and even interactions within the family, children will perceive learning as a valuable thing and will strive for optimal performance in education through continuous efforts. This causes a positive connection between the positive feelings of the family atmosphere and the academic performance of students. In the last part of the results, it was also shown that achievement goals are a complete mediating variable in the relationship between the perception of family atmosphere (at the level of relationship between parents and children) and academic performance. This result is consistent with the results of Zare Jamalabadi et al. (2018), b, and Sabzian et al. (2018). The explanation of the mediating role of achievement goals in the relationship between perception of family atmosphere (in two dimensions of mother-father-child family atmosphere) and academic performance can be explained based on the theoretical approach of motivational spillover and the self-worth intersystem

(from the family system to the educational and training systems). In this way, with positive and constructive support and interaction, along with supportive and empowering feedback from family to children, the level of motivation of children to set goals based on achievement and success is improved. Then, after increasing the level of achievement goals through family atmosphere, in the next step, based on the theoretical approach of motivational and positive spillover, the level of academic performance increases through achievement goals.

In fact, the mentioned motivational spillover and self-worth become factors for the gradual formation of children's own perceptions of support, worth, competence, and motivation from their family. Therefore, these capacities are transferred from family environment to the educational environment in support of goals, resulting in an increase in academic performance at the end of this chain.

The current research, like other researches, has some limitations that need to be taken into account. This study was conducted on psychology's students at Babylon University in Iraq. The research method was a correlation type and convenience sampling method was the last limitation of the research due to the fact that the names of all the students were not provided to the researcher by the university officials. Based on these limitations, it is suggested to other researchers to conduct the current study by using random sampling and semi-experimental method among other students of Babylon University and other universities in Iraq in order to ensure the generalizability of the findings. It is also suggested to other researchers that in future research, the relationship between family structure, atmosphere, and function and variables such as satisfaction with education, academic achievement, resiliency, engagement, self-efficacy, and success

in education be examined and studied. In the end, considering that in the present study, the perception of the family atmosphere, especially the nature and quality of the relationship between parents and children, were identified as having a decisive and meaningful role for achievement goals and, finally, for the academic performance of students, it is suggested to improve the positive and emotional atmosphere of families through short-term to long-term training plans under the supervision of experienced psychologists. The family should be the main goal of the organizations involved in improving the quality of family life in Iraq. On the other hand, it is necessary to seriously pursue the improvement of the level of development targeted through universities in Iraq, especially the University of Babylon.

Acknowledgments

The authors would like to express their thanks and appreciation to all students who made it possible to carry out the research with their participation and cooperation in this study.

References

- Arjmand, N., Kazemian Moghadam, Ph.D. K. (2020). Examining the relationship between Family Emotional Atmosphere, Adolescents' Perceptions of Classroom Activities, and Academic Engagement among Female High School Students in Ahwaz. *Quarterly Journal of Family and Research*, 16(4), 143-159. URL: <http://qjfr.ir/article-1-1332-fa.html> (In Persian).
- Askari, M. R., Makvandi, B., & Neisi, A. (2020). The prediction of Academic performance based on Academic Engagement, Academic Self- efficacy, the Achievement Goals and Perception of School Atmosphere in Gifted

- Students. *Psychology of Exceptional Individuals*, 9(36), 127-149. doi: 10.22054/jpe.2020.44149.2016 (In Persian).
- Dahlan, D. A., Omar, R., & Kamarudin, S., & Nasar, A. (2021). A systematic review of succession planning in higher education. *International Journal of Advanced and Applied Sciences*, 8(12), 80-92.
- Das, P. (2022). Effects of family atmosphere and socioeconomic status on academic achievement of tribal students at secondary level in Kalahandi district. *International Journal of Multidisciplinary Educational Research*, 11(3/5), 88-97.
- Eichhorn, T., Schüller, S., Steinberg, H., & Zerle-Elsässer, C. (2023). Family atmosphere in pandemic times: Adolescents and mothers. *Social Inclusion*, 11(1), 282-294.
- Fakharian, J., Yaghobi, A., Zargham, M., & Mohagheghi, H. (2019). The designing of academic buoyancy model based on family emotional atmosphere, social constructive learning environment, and academic engagement mediated by academic self-efficacy in high school girl students. *Research in Teaching*, 7(3), 28-1. doi: 10.34785/J012.2019.954 (In Persian).
- Fereidouni, S., & Rouhani, S. (2023). Higher education expansion policy in Iran and its impact on educational justice. *Quarterly Journal of Research and Planning in Higher Education*, 25(2), 1-21 (In Persian).
- Ferraces Otero, M. J., Lorenzo Moledo, M., Otero, A. G., & Santos Rego, M. A. (2021). Students' mediator variables in the relationship between family involvement and academic performance: Effects of the styles of involvement. *Psicología Educativa*, 27(1), 85-92.
- Greisel, M., Melzner, N., Kollar, I., & Dresel, M. (2023). How are achievement goals associated with self-, co-, and socially

- shared regulation in collaborative learning? *Educational Psychology*, 43, 1-19.
- Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. In JE. Grusec., & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of Contemporary Theory* (pp.135-161), New York: Wiley.
- HosseiniAbrishmi, M., & Nikdel, Z. (2020). The relationship between perception of the family's emotional atmosphere and academic engagement. *The 7th National Research Conference in Social Sciences and Psychology of Iran* (In Persian).
- Izaguirre, L. A., Rodríguez-Fernández, A., & Fernández-Zabala, A. (2023). Perceived academic performance explained by school atmosphere, positive psychological variables and life satisfaction. *The British Journal of Educational Psychology*, 93(1), 318–332.
- Jafari, S., Khatami, M., Nejati, V., AkhwanTafti, M., & Sarami, G. (2016). The role of the intermediate goals of progress in the relationship between the structure of the educational system and the academic achievement of students. *Journal of Research in Educational Systems*, 10(32), 23-51 (In Persian).
- Jahan, F., Taheri, F., Yaghoobi, A., & Jahan, A. (2022). The mediating role of parental non-involvement to goals of progress with academic dishonesty in students. *Journal of Practice in Clinical Psychology*, 10(4), 309-318. (In Persian).
- Khammat Al-iessa, A. H., Amiryousefi, M., & Afrouz, M. (2023). Relationship between Iraqi EFL Students' Perceptions of

- Community of Inquiry and their Attention and Engagement in Online Classes. *Teaching English Language*, 17(1), 1-28.
- Kordzanganeh, Z., Bakhtiarpour, S., Hafezi, F., & DashtBozorgi, Z. (2022). Mediating role of self-efficacy beliefs in the relationship between family emotional atmosphere and time management with academic stress in university students. *Journal of Research & Health*, 12(3), 185-192 (In Persian).
- Midgley, C., Kaplan, A., Middleton, M., & Maehr, M. L. (1998). The development and validation of scales assessing students' achievement goal orientations. *Contemporary Educational Psychology*, 23, 113-131.
- Mohebi Nuruddin Vand, M. H., Mushtaghi, S., & Shahbazi, M. (2011). Relationship between Family Emotional Atmosphere and Development of Social Skills and Achievement of Students Primary. *Research in Curriculum Planning*, 8(30), 84-93 (In Persian).
- Rezaei-Dehaghani, A., Keshvari, M., & Paki, S. (2018). The relationship between family functioning and academic achievement in female high school students of Isfahan, Iran, in 2013-2014. *Iranian Journal of Nursing and Midwifery Research*, 23(3), 183–187 (In Persian).
- Sabzian, S., Ghadampour, E., & Mirderikvand, F. (2018). Providing a Causal Model for Perceptions of Emotional Atmosphere and Flexibility of Family with Academic Dishonesty: The Mediating Role of Academic Self-Efficacy. *Quarterly Journal of Social Work*, 7(3), 32-43 (In Persian). URL: <http://socialworkmag.ir/article-1-292-fa.html>.
- Sahu, J., & Suna, G. (2023). A study of family atmosphere and academic achievement of secondary school students of Odisha. *Indian Journal of Psychology and Education*, 13(2), 70-74.

- Shokrkon, H., Najarian, B., & Hashemi Sheikh Shabani, S. (2005). Examining the relationship between some important and related antecedents of academic self-handicapping and its relationship with selected outcomes in first-year male students of Ahvaz high schools. *Journal of Educational Sciences and Psychology*, 12(3), 77-100 (In Persian).
- Turkzad, M. (2013). The relationship between family emotional atmosphere, academic performance and academic achievement of high school girls in Morvdasht city. *Master's Thesis, Faculty of Psychology and Educational Sciences, Islamic Azad University, Marvdasht Branch*.
- Wang, J., & Wang, X. (2012). *Structural equation modeling: Applications using M plus*. John Wiley & Sons.
- Weissman, D. L., & Elliot, A. J. (2023). Achievement goal perception: An interpersonal approach to achievement goals. *Journal of Personality and Social Psychology*, 125(3), 607–628.
- Worley, J. T., Meter, D. J., Ramirez Hall, A., Nishina, A., & Medina, M. A. (2023). Prospective associations between peer support, academic competence, and anxiety in college students. *Social Psychology of Education*, 1-23.
- Wu, C. C. (2023). Effects of achievement goals on learning interests and mathematics performances for kindergarteners. *Frontiers in Psychology*, 14, 1156098.
- Yousefi, N., & Pariyad, M. (2020). The relationship between family emotional atmosphere and epistemological beliefs with academic performance among fourth year high school students in Bukan. *Journal of School Psychology*, 9(3), 307-324. doi: 10.22098/jsp.2020.1078 (In Persian).

- Zarejamalabadi, M., Mehdad, A., Manshaee, G., & Afshani, S. A. (2018 b). Relationship between Perceptions of Family Atmosphere and Academic Performance through the Mediation of Achievement Goals (Structural Model). *Tolooe Behdasht*, 16(5), 49-64 (In Persian). URL: <http://tbj.ssu.ac.ir/article-1-2456-fa.html>
- Zarejamalabadi, M., Mehdad, A., Manshaee, G., & Afshani, S. (2017 a). Predicting academic performance (1 and 2 through perceptions of the family atmosphere with the mediation of creative thinking. *Medical Education And Development* (Jmed); (12)51-64 (In Persian). URL: <http://jmed.ssu.ac.ir/article-1-785-fa.html>
- Zhang, Y., Guan, X., Ahmed, M. Z., Jobe, M. C., & Ahmed, O. (2022). The association between university students' achievement goal orientation and academic engagement: Examining the mediating role of perceived school atmosphere and academic self-efficacy. *Sustainability*, 14(10), 6304.
- Zhao, L., & Zhao, W. (2022). Impacts of family environment on adolescents' academic achievement: The role of peer interaction quality and educational expectation gap. *Frontiers in Psychology*, 13, 911959.