

Mediating Role of Emotional Intelligence Between Family Communication Patterns and Achievement Motivation Among High School Students

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Received 2016 September 07; Revised 2017 January 15; Accepted 2017 January 18.

Abstract

Background: Achievement motivation is among the structures that have been attracting the attention of many researchers in the field of psychology and education.

Objectives: The present study aimed at investigating the mediating role of emotional intelligence in relationship between family communication patterns and achievement motivation.

Methods: In this correlational study, 291 high school students (all male) were selected from Shiraz city using the random multistage cluster sampling method. To collect data, the scale of family communication patterns, emotional intelligence and achievement motivation questionnaires were used. The research conceptual model was analyzed and assessed using the simultaneous sequential regression method and the steps proposed by Baron and Kenny. All analyses were performed using the SPSS software version 22.

Results: The results showed that family conversation orientation was a positive predictor of achievement motivation ($P < 0.01$) and emotional intelligence ($P < 0.01$). Also, the results revealed that family conformity orientation was a negative predictor of achievement motivation ($P < 0.01$) and emotional intelligence ($P < 0.01$). Emotional intelligence was a positive predictor of achievement motivation ($P < 0.01$) and emotional intelligence played a partial mediator between family conversation orientation and conformity orientation with achievement motivation.

Conclusions: According to the results of this study, increasing of conversation orientation and emotional intelligence and decreasing of conformity orientation are accompanied by increasing high school students' achievement motivation.

Keywords: Achievement Motivation, Family Communication Patterns, Conversation Orientation, Conformity Orientation, Emotional Intelligence

1. Background

The achievement motivation concept was first proposed by Murray in 1970 (1) and then was developed by theorists such as McClelland, and Atkinson. Murray (2) described the need for progress as a need to overcome the obstacles, excellency and meeting the high standard and according to McClelland, the desire for high achievement is caused by trying hard and also the prediction of success from the efforts that are made for success and on the contrary, the need of only little progress is associated with defensive feelings and fear of failure caused by prediction of poor function (3). In this regard, Atkinson justified the individual differences in the desire for progress by the assumption of opposite need, which is the avoidance of defeat (4). Therefore, according to the discussed theories, achievement motivation is an inner mental aspiration, which enables individuals to be encouraged for working on the goals that are valuable to them and achieve

them at the end (5).

Because the subject of success and the wish for it seems to be critical in today's society, the predictors of achievement motivation attract more attention day by day. In this regard, some studies focused on individual (6) and family context (7-10) of achievement motivation predictors. Regarding family factors that are predictive of motivation, family communication patterns, which reflect child-parents relationship, can be investigated (11). Fitzpatrick et al. (12) are convinced that family mostly affects the performance of an individual through communication behaviors. They have identified two aspects of dialectical orientation and conformity orientation as basic beliefs, which determine how much do the family members talk and share their thoughts and feelings. In the dialectical orientation aspect, all family members are encouraged to discuss and exchange views on a wide range of topics (13) and they interact with each other spontaneously and continuously

(14). However, in the conformity orientation aspects, the emphasis is on interdependency and continuity of the family members and they are put under pressure to equalize their attitudes, values and beliefs (15). Studies show that each of these orientations can have its own certain consequences.

The other variable that is expected to be a predictor of students' achievement motivation is emotional intelligence; the emotional intelligence relationship with different forms of motivation (16-18) and especially achievement motivation (19-21) has been investigated in several studies and the results indicate a strong and significant relationship between these two variables. Emotional intelligence, which has a strong root in Gardner's multiple intelligence and Thorndike social intelligence (22), expresses the individual differences in recognizing emotions, motivation and emotional control (23). There are two general approaches associated with these two structures that, while not conflicting with each other (24), they are separated from each other (25). These two approaches are the ability approach and trait approach. The trait approach, which is the basis of the current study, was proposed by theorists such as Bar-on (26, 27). It attempts to blend emotional intelligence with other skills and features such as motivation and ability to communicate with others and emphasizes on self-motivation, self-control and social relationship management (28).

On the other hand, some studies have been implicated in the predictive role of family communication patterns of emotional intelligence (29, 30) and also the mediating role of emotional intelligence in the relationship between family communication patterns and other variables (29). The mediating role of emotional intelligence is based on a viewpoint of Ciarrochi et al. (29). They provide a theoretical model that shows many effects of the social fabric and family context appear by the emotional intelligence on the coping style and attitude of the individual. It seems the model can also be used for testing achievement motivation. Based on the above information and given the importance of students' achievement motivation in using capacities and capabilities, which leads to the release of energy stored within them in the course of developing a community, it seems necessary to focus on this subject and its predictive factors. In addition, few studies have considered the role of mediating variables in this regard; so, considering the research gap and also the important role of family in raising and developing the emotional lives of children, the aim of this study was to explore this subject and while the attention has been paid to the predictive role of family communication patterns, the mediating role of emotional intelligence in the relationship between family communication patterns and achievement motivation

was also examined. Hence, the research questions are as the following: Which of the dimensions of family communication patterns predict the achievement motivation and emotional intelligence of the students? Does emotional intelligence have a mediating role in the relationship between the dimensions of family communication patterns and the achievement motivation of the students?

2. Objectives

The present study attempted to investigate the mediating role of emotional intelligence in relationship between family communication patterns and achievement motivation.

3. Methods

This research was a correlational study.

3.1. Population, Sample and Methods of Selection

In this study, 291 high school students (all male) were selected from Shiraz city, Iran, using the Morgan table and random multi-stage cluster sampling method during 2013 - 2014. This means that, after randomly selecting 6 schools, 2 classes were selected in each school and all the students of these classes were enrolled in the study. It was explained to the participants that the information obtained from the questionnaires will remain confidential and will be used only in a research work. It was also noted that participation in the research is voluntary. However, none of the participants withdrew from the study. Means age of the students was 14.77 (SD = 0.61). They completed questionnaires in the classroom during a 45-minutes school lesson. The variables on this study included family communication patterns as predictor variables, (for measuring this variable, we used the RFCP instrument), emotional intelligence as mediating variable (for measuring this variable, we used the EI questionnaire-short form), and achievement motivation as a variable criterion (for measuring this variable, we used the achievement motivation questionnaire).

3.2. Research Instruments

3.2.1. Revised Family Communication Patterns

In this study, for measuring the family communication patterns, we used the revised family communication pattern (RFCP) instrument. This scale is introduced by Fitzpatrick et al. (12) and has 26 items on a Likert scale from four (completely agree) to zero (completely disagree). This scale measures 2 subscales; conformity orientation by 11 items (sample item: my parents feel that is important to be boss) and conversation orientation by 15 items (sample

item: my parents often ask my opinion when the family is talking about something). Fitzpatrick et al. (12) reported the reliability of this scale with the Cronbach's alpha coefficient from 0.92 to 0.82 for conversation dimension and from 0.84 to 0.73 for conformity dimension. Regarding the criterion validity, they have also shown that the dimensions of the RFCP scale with dimensions of the old tool of family communication patterns by McLeod and Chaffee (1972) and the scores of the questionnaire of RFC by Fitzpatrick (1998) are correlated. In Iran, Koroshnia et al. (31) investigated the criterion validity of the RFCP instrument through the Parker Bonding Instrument (PBI), and examined the construct validity using the factor analysis and internal consistency. The criterion validity test showed that there is an acceptable correlation between RFCP and PBI. The internal consistency test showed that the questions related to any of the factors are mostly correlated with the total score of that factor. As a result of factor analysis of the content, two factors of conversation orientation and conformity orientation were extracted. The Cronbach's alpha and retest coefficients were used for testing reliability that were calculated as 0.87 and 0.81 by Cronbach's alpha and 0.84 and 0.78 by retest for conversation orientation and conformity orientation, respectively. Also, Jokar and Rahimi (32) measured the reliability (Cronbach's coefficient) and validity (factor analysis) of this scale and reported it as sufficient. Cronbach's alpha coefficient was used in this paper to measure the reliability of this scale, and 0.82 for conversation dimension and 0.83 for conformity dimension were calculated.

3.2.2. Emotional Intelligence Questionnaire-Short Form

The emotional intelligence (EI) questionnaire-short form was based on the hybrid model of emotional intelligence designed by Petrides and Farenhum (23). The primary form of this questionnaire (TEIQue) had 114 items and 15 facets. The short-form questionnaire has 30 items (two items from each of the 15 facets of the TEIQue) that scored from one (strongly disagree) to seven (strongly agree). Sample item is: "When I am angry with others I can tell them about it". Petrides et al. reported the internal consistency of the questionnaire as 0.86. Also, the relationship of each question with the whole questionnaire showed that the tool has a high validity (23). This questionnaire was frequently used in various researches and a good reliability was reported for that. In Iran, Ahmadi-Azghandi et al. (33) examined the validity of the scale using the Shirink's EI scale (1999), and the high correlations between the scores of the two scales confirmed its convergent validity. The reliabilities of the scale were calculated as 0.76 and 0.71 using the internal consistency and test-retest, respectively. The Cronbach's alpha coefficient was used in this paper to

measure the reliability of the scale and was measured as 0.89. The internal correlation method was used to measure the validity; the correlation coefficients of items and total score were ranged between 0.36 and 0.71, all were significant ($P < 0.01$).

3.2.3. Achievement Motivation Questionnaire

The Denver youth achievement motivation scale is a 13-item scale developed by Institute of Behavioral Sciences in 1990 (19) to measure achievement motivation. It uses a Likert scale from one (not true at all) to five (true nearly all the time), with a total score range from 13 to 65. Sample item is: "I like to work on things that are interesting even if they are hard to do". Different researches have gained acceptable validity and reliability for this questionnaire. In Iran, Sobhi-Gharamaleki measured the reliability (test-retest reliability; $r = 0.78$) and validity (internal consistency; 0.79 - 0.84) of this scale and reported it as sufficient (19). In the present study, the Cronbach's alpha coefficient was found to be 0.76.

3.3. Statistical Analysis

In this research, Pearson correlation coefficient was used to assess the correlation between the variables, and multiple regression analysis by using the proposed stages by Baron and Kenny (34) was used simultaneously to investigate the main purpose (investigating the mediating role of emotional intelligence) of the research. All descriptive statistics and path analyses were performed with SPSS 22.

4. Results

In this study, 291 male students were selected from different high schools of Shiraz City. All descriptive statistics and path analyses were performed by the SPSS 22. Mean age of the students was 14.77 ($SD = 0.61$).

The findings of the study were presented in two parts of descriptive and path analysis and included the impact of family communication patterns on achievement motivation, the impact of family communication patterns on emotional intelligence and the impact of family communication patterns and emotional intelligence on achievement motivation. The descriptive findings including mean and standard deviation and correlation matrix of family communication patterns, emotional intelligence and achievement motivation variables have shown in Table 1, and 2.

As shown in Table 2, a positive significant relationship was found between the conversation orientation and emotional intelligence ($r = 0.31$, $P < 0.01$) and achievement motivation ($r = 0.48$, $P < 0.05$). Also, a positive significant relationship was found between the emotional intelligence

Table 1. Mean and Standard Deviation of Variables

Variables	Average	Standard Deviation
Conversation orientation	40.61	9.67
Conformity orientation	37	8.81
Emotional intelligence	78.75	15.2
Achievement motivation	44.28	4.52

and achievement motivation ($r = 0.30$, $P < 0.01$). A negative significant relationship was found between the conformity orientation and emotional intelligence ($r = -0.18$, $P < 0.01$). In addition, a negative significant relationship was observed between the conformity orientation and achievement motivation ($r = -0.21$, $P < 0.01$).

Multiple regression analysis was used simultaneously to investigate the questions of the research. The main purpose of this study was to investigate the mediating role of emotional intelligence using the proposed stages by Baron and Kenny (34). Thus, in the first stage, achievement motivation regression was performed on family communication patterns (Table 3). In the second stage, emotional intelligence regression was performed in relation to family communication patterns (Table 4) and in the third stage, achievement motivation regression was applied to the emotional intelligence by controlling family communication patterns (Table 5).

According to the Table 3, conversation orientation was a positive significant predictor of achievement motivation ($P < 0.01$, $\beta = 0.47$), but conversation orientation ($P < 0.01$, $\beta = -0.16$) was a negative significant predictors of achievement motivation; it should be considered that all the predictor variables presented 25% of variance of achievement motivation.

According to the Table 4, conversation orientation was a positive significant predictor of emotional intelligence ($P < 0.01$, $\beta = 0.30$), but conformity orientation ($P < 0.01$, $\beta = -0.15$) was a negative significant predictor of emotional intelligence; it should be considered that all the predictor variables presented 12% of variance of emotional intelligence.

According to the Table 5, emotional intelligence was a positive significant predictor of achievement motivation ($P < 0.01$, $\beta = 0.14$) and conversation orientation ($P < 0.01$, $\beta = 0.43$) was also a positive significant predictor of achievement motivation. However, conformity orientation ($P < 0.01$, $\beta = -0.13$) was a negative significant predictor of achievement motivation. It should be considered that emotional intelligence, conversation orientation, and conformity orientation variables presented 27% of variance of achievement motivation.

According to Figure 1, to investigate the mediating role of emotional intelligence in the relationship among family communication patterns and achievement motivation, the coefficient paths of family communication patterns were analyzed in three stages.

It can be observed that in the third stage, after the introduction of emotional intelligence, the regression coefficient of conversation orientation has been reduced (from 0.47 to 0.43). Also, in the other dimension, conformity orientation can be observed too (from -0.16 to -0.13). Hence, it can be concluded that emotional intelligence plays a partial mediating role in the relationship between family communication pattern dimensions and achievement motivation.

5. Discussion

The present study was conducted to investigate the prediction of achievement motivation and emotional intelligence of students based on dimensions of family communication patterns. However, the most important objective of this study was to investigate the mediating role of emotional intelligence in the relationship between achievement motivation and family communication patterns. The results showed that dimensions of family communication patterns could predict students' achievement motivation. Also, the results indicated that emotional intelligence was a predictor of student achievement motivation and emotional intelligence could also be predicted through family communication patterns. Also, emotional intelligence plays a partial mediating role in the relationship between family communication patterns and achievement motivation. The following possible explanations can be claimed:

1. Based on the obtained results, conversation orientation among dimensions of family communication is a positive significant predictor of achievement motivation while conformity orientation is a significant negative predictor of achievement motivation. These findings indicated that the possibility of boosting children's achievement motivation among families that encourage dialectical and constructive interaction is more than those who do not encourage positive interaction. One explanation could be probably in such environments children have the opportunity to comment and express their feelings and opinions, so as a result we could expect that children grow up with higher self-esteem. Self-esteem helps the person to overcome the opposing forces of achievement motivation, which is fear of failure and also helps them to step forward to achieve his goals and be proud of them. Whereas, in conformity orientation, children have less opportunity to ponder on their wishes and as a result lack of awareness of the

Table 2. Correlation Matrix Between Variables

Variables	1	2	3	4
Conversation orientation	1			
Conformity orientation	-0.12	1		
Emotional intelligence	0.31 ^a	-0.18 ^a	1	
Achievement motivation	0.48 ^a	-0.21 ^a	0.30 ^a	1

^aAll coefficients are significant.

Table 3. Predicting the Achievement Motivation Based on Family Communication Patterns (The First Stage)

Predictor Variables	Criterion Variable	F	P <	R ²	SE	β	T	P
Conversation orientation	achievement motivation	49.78	0.001	0.25	0.25	0.47	9.19	0.001
Conversation orientation					0.28	-0.16	3.13	0.002

Abbreviations: β , Coefficient of Regression; F, F-test; P, Significant Level; R², Coefficient of Determination; SE, Standard Error of Coefficients; T, t-test.

Table 4. Emotional Intelligence Regression on Family Communication Pattern Dimensions (The Second Stage)

Predictor Variables	Criterion Variable	F	P <	R ²	SE	β	T	P
Conversation orientation	emotional intelligence	19.67	0.001	0.12	0.085	0.30	5.34	0.001
Conformity orientation					0.094	-0.15	2.25	0.005

Abbreviations: β , Coefficient of Regression; F, F-test; P, Significant Level; R², Coefficient of Determination; SE, Standard Error of Coefficients; T, t-test.

Table 5. Regression of Achievement Motivation Based on Emotional Intelligence by Controlling the Family Communication Pattern Dimensions (The Third Stage)

Predictor Variables	Criterion Variable	F	P <	R ²	SE	β	T	P
Conversation orientation	achievement motivation	36.13	0.001	0.27	0.026	0.43	8.07	0.001
Conformity orientation					0.028	-0.13	2.68	0.008
Emotional intelligence					0.017	0.14	2.61	0.009

Abbreviations: β , Coefficient of Regression; F, F-test; P, Significant Level; R², Coefficient of Determination; SE, Standard Error of Coefficients; T, t-test.

desires leads to the reduction of motivation and desire to try to achieve them.

2. Based on the results of the similar studies, emotional intelligence is a positive significant predictor of students' achievement motivation. In explaining these findings, it can be concluded that individuals with a high emotional intelligence hold features such as self-awareness, capabilities, competencies, and capabilities in the field of intrapersonal traits on one hand and on the other hand, they develop skills such as conflict management, accepting, and understanding others, which makes a greater ability to

understand their own and others' demands. Also, people with a high emotional intelligence are able to manage themselves when they are suffering from stress and therefore they turn stressful situations into a challenge and a chance to learn, not a threat to their safety (35, 36). Obviously, along with the reduction of failure avoidance the person's desire to succeed increases. At the end, it can be said that holding this feature along with intrapersonal and interpersonal skills puts the person in better condition of achievement motivation.

3. The other finding of the study was the predictive

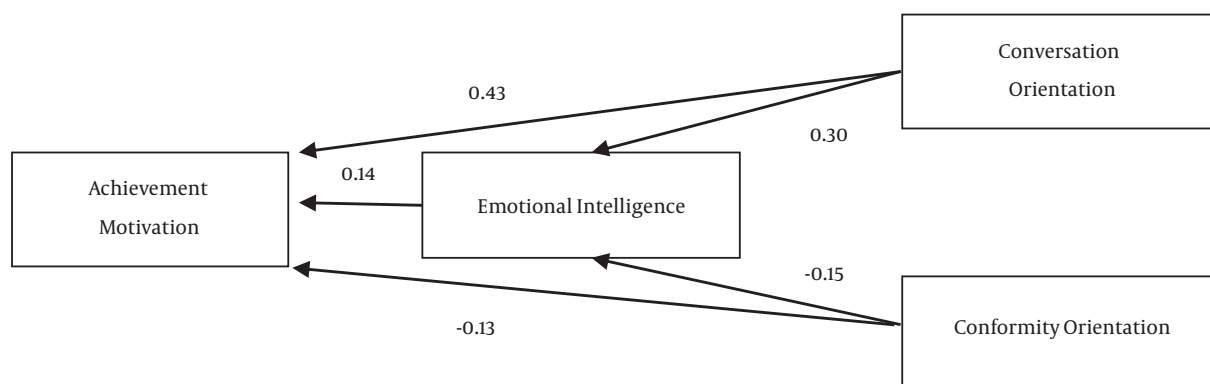


Figure 1. The Coefficient Paths of Family Communication Patterns

ability of the dimensions of family communication pattern on student's emotional intelligence. In this regard, Fitzpatrick et al. (12) claim that two aspects of dialectical orientation and conformity orientation specify the extent to which family members talk about and share their thoughts and feelings. In the conversation orientation, all family members are encouraged to discuss and exchange views on a wide range of topics (13) and spontaneously and continuously interact with each other (14). As a result of this interaction, it can be expected that children have a better understanding of their own emotions and the emotions of others. Also, in the families that expressing ideas, feelings and desires are allowed, people have a higher level of tolerance; therefore, in the face of opposition and conflict they can easily control their emotions. In contrast, in the families that follow conformity orientation, family members have little interaction with each other and talk less about their thoughts and emotions (16). They are also under pressure to liken their attitudes, values and beliefs of their parents (17). Based on what was said, this environment can lead to a reduction in emotional intelligence.

4. The most significant result of this study, which examines the mediating role of emotional intelligence in the relationship between family communication patterns and achievement motivation was that conformity orientation reduces achievement motivation both directly and indirectly through emotional intelligence. Also, conversation orientation increases achievement motivation both directly and indirectly through emotional intelligence. However, it must be added that the indirectly impacts through emotional intelligence were minimal and insignificant. Somewhat, this finding is consistent with the theoretical model presented based on views of Ciarrochi et al. (quoted from 32) and the findings of Tajalli et al. (29), Sabri et al. (30) that emphasize the mediating role

of emotional intelligence in studying the effects of social fabric and family context on the coping style and the attitude of individual. However, in fact, these findings suggest that families with conformity orientation raise their children with low emotional intelligence and low achievement motivation and maybe somewhat low emotional intelligence indirectly suppresses the achievement motivation in them, but this role is minimal. Also, on the contrary, families with conversation orientation raise their children with high emotional intelligence and achievement motivation and maybe somewhat high emotional intelligence turn increases the achievement motivation in them.

Finally, family communication patterns are important aspects of family environment, which affect different features of children's life (37). In fact, what is happening in a family as a communication pattern, each affects the process of child development in a way and considered as a key factor in the development and motivating a child. Thus, according to the research findings, it is suggested that more efforts be made to promote and strengthen the culture of talking and interaction in families. Therefore, by this attempt we may be able to grow children that while having a high level of emotional intelligence, have higher achievement motivation. It is clear that to achieve such a goal, it is not enough to rely on the present findings because there have been always limitations of the present study in selected sample (gender and educational level at this study), etc. It is recommended in the future these issues are taken into account to conducts more research in this area.

Acknowledgments

This article was not supported by any specific organization or university.

Footnotes

Authors' Contribution: All authors have participated equally in the study.

Financial Disclosure: The study is self-funded.

Funding/Support: The study is self-funded.

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