



## The role of family communication patterns and birth order in adolescent identity states

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### Abstract

**Introduction:** This study investigated the role of family communication patterns and birth order in the identity state of adolescents.

**Materials and Methods:** The method of this research was descriptive and correlational. The statistical population of the study included 9<sup>th</sup> grade female students in Hamadan-Iran in the academic year of 2017-2018. Ninety students were selected through the convenient sampling method. The research tools were the Ritchie and Fitzpatrick Family Communication Pattern Questionnaire and the Bennion and Adams Identity Status Questionnaire. We analyzed the data using the Pearson correlation coefficient and multiple regression analysis.

**Results:** The findings showed a positive and significant relationship between conversation pattern and achievement identity and a negative relationship with diffusion, foreclosure, and moratorium identities ( $P < 0.05$ ). The conformity pattern has a positive and significant relationship with foreclosure and diffusion identities ( $P < 0.05$ ). The birth order also had a positive and significant relationship with moratorium identity ( $P < 0.05$ ), and the conformity pattern has a positive and significant role in predicting diffusion ( $P < 0.01$ ) and foreclosure identity ( $P < 0.05$ ). The birth order only has a significant role in predicting moratorium identity ( $P < 0.01$ ).

**Conclusion:** It seems that family communication patterns and birth order can predict adolescent identity states.

**Keywords:** Adolescent, Birth order, Communication, Identity

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### Introduction

The most important issue of adolescence and youth is the acquisition or authentication of identity. American Psychology Association defines identity as an individual's sense of defined by a set of social relationships and interpersonal characteristics and a range of affiliations (1). Based on psychoanalytic

theory, Erikson (1968) formed an eight-phase identity theory, used social elements as a basis, and discussed identity development as a life-long process. Marcia expanded Erikson's theory and made it more functional (2). The path of identity formation could be smoother. It does not always follow the same path, and knowing the problems of this path helps to positively

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solve the major evolutionary obstacles of this period (3). As the smallest social unit, the family is one of the most important factors in the growth and formation of children's identity. Parents provide more essential roles for adolescent development among their significant others for adolescents. This is because parents tend to provide emotional and practical support for adolescents when they are going through a transition period (4).

Among the various aspects of the family, the most important factor affecting the children is the relationship between family members, known as family communication patterns. The family communication model is a scientific family structure that is formed based on the communication between family members, what the members say and do to each other, and what they perceive of these relationships (5). The family's communication patterns have two underlying dimensions: conversation and conformity orientation. Conversation orientation is the extent to which the family provides conditions for all family members to freely and comfortably participate in the interaction, discussion, and exchange of opinions on a wide range of issues, and conformity orientation is the extent to which the family emphasizes the sameness of attitudes, values, and behaviors (6).

Another factor that may affect the formation of identity is birth order. Adler believed that birth order affects people's personality. Because the birth order causes children to be exposed to different attitudes of parents and to have different childhood conditions that help in the formation of personality, Adler stated that the order of birth has a positive effect on the way of life (how a person always deals with life tasks including friendship, job, and love) (7).

In terms of the relationship between birth order and identity, we can refer to the studies of Sardana et al. (7), Dugro Cabuker et al. (2), Dunkel et al. (8), and Taghyzade Ghavam et al. (9). Based on the background, most researches have investigated birth order with personality and personality traits, such as Clarke (10), Boccio and Beaver (11), Kaemra and Singh (12) and Nasiri (13).

Regarding the relationship between communication patterns and identity, we can refer to the research of Mehdipour et al. (14) and Soltani et al. (15). As researches show, family and communication within this social system have a high impact on the personality

and identity of people, especially this impact becomes doubly important during adolescence and the period of identity formation. Considering the lack of research regarding the relationship between the mentioned variables, the present study aims to investigate the relationship between birth order and family communication patterns with the identity states of adolescents.

## Materials and Methods

The method of this research was descriptive and correlational. The statistical population included the female students of Hamadan city-Iran in the academic year of 2017-2018, and according to the convenient sampling method, the target sample was selected. The sample size in this research was 88 subjects based on the number of variables through Gpower software, with an average effect size of 0.3, an alpha coefficient of 0.05, and a test power of 0.90. Considering the loss of subjects, 100 people were selected. After collecting the data, incomplete questionnaires were discarded, and finally, the sample was reduced to 90 people. The inclusion criterion included willingness to participate, being female student between the ages of 14 and 16, and the exclusion criteria was unwillingness to continue cooperation.

## Research instruments

*A) Revised Version of Family Communication Pattern Questionnaire (RVFCPQ):* This tool is a 26-item self-assessment questionnaire designed by Ritchie and Fitzpatrick and measures the state of family communication on a 5-point scale (from 0= completely disagree to 4= completely agree). The first 15 items are related to the conversation orientation, and the next 11 are related to conformity orientation. Each subject gets two scores from this tool.

A higher score on each scale means that the subject perceives more conversation or conformity orientation in family. The internal consistency showed that the questions related to each factor have the most correlation with the total score of that factor. Also, there was a significant correlation between the scores of each factor and the total score. The criterion validity of this tool was obtained in the conversation orientation (0.74), and the dimension of conformity orientation (0.49), and reliability was obtained by Cronbach's alpha method for conversation orientation was 0.87 and conformity orientation was 0.88 (16).

*B) Extended Objective Measure of Ego-Identity Status (EOM-EIS):* The identity states questionnaire was designed by Bennion and Adams in 1986 by modifying the first version of the identity states questionnaire and according to the theory of Erikson and Marcia. This questionnaire comprises 64 items and includes four subscales: diffusion, foreclosure, moratorium, and achievement, each containing 16 questions. The scoring method on the Likert system (1= completely disagree to 6= agree). To measure the reliability of identity components, Carlson found an internal consistency of 0.69 for the diffusion, 0.81 for the foreclosure identity, 0.66 for the moratorium identity, and 0.76 for the achievement identity subscales.

Nikosefat and Qarabaghi have also studied the reliability coefficient of this questionnaire with the retest method in Iranian students, which ranges from 0.54 to 0.76 (17). After implementing the questionnaires and collecting information, the data were analyzed using Pearson correlation and simultaneous regression statistical methods.

## Results

The sample of the present study included 90 ninth-grade female students. The mean and standard deviation of the age of the participants were 14.53 and 0.52, respectively. Table 1 presents the demographic variables.

**Table 1.** Sociodemographic information of the sample

Variable	N	Percentage (%)
Girl age (in years)		
14 years old	43	47.8
15 years old	46	51.1
16 years old	1	1.1
Birth order		
First	52	57.8
The middle	22	24.4
The last	16	17.8
Parent information		
Marital status		
Married	85	94.4
Divorced	5	5.6
Education status		
Lower than diploma	12	13.3
Diploma	35	38.9
Bachelor's degree	38	42.2
Master's degree	5	5.6
Income (level)		
Low-income	25	27.8
Middle-income	52	57.8
High-income	13	14.4
Occupational status		
Unemployed	16	17.8
Freelance	36	40.00
Employed	27	30.00
Part-time employed	11	12.2
	Mean	SD
Age (in years)	38.47	3.21

Leven's test was used to check the homogeneity of variance, which confirmed the results of this test of equality of variances. Pearson's correlation coefficient test was then used to check the linear relationship between the predictor variables (age, communication patterns, and birth order) and the criterion variable (identity states). The results showed a

significant correlation between birth order and moratorium identity only. There was a significant correlation between the conversation pattern and all identity states and a significant correlation between the conformity pattern with diffusion and foreclosure identity. However, age had no significant relationship with identity states (Table 2).

**Table 2.** Mean, standard deviation, and correlation matrix of research variables

Variable	Mean	S. D	1	2	3	4	5	6	7	8
1 Achievement	65.23	8.11	-							
2 Foreclosure	45.28	4.27	-0.22*	-						
3 Diffusion	38.33	6.09	-0.31*	-0.23*	-					
4 Moratorium	54.24	7.22	-0.11	-0.34*	0.33*	-				
5 Conversation pattern	45.75	3.77	0.66**	-0.38**	-0.41**	-0.39**	-			
6 Conformity pattern	27.63	6.34	-0.18	0.37**	0.21*	0.16	-0.26*	-		
7 Birth order	1.6	0.77	0.09	0.06	0.13	0.34**	0.13	0.22*	-	
8 Age	14.53	0.52	0.03	0.08	-0.11	-0.18	0.03	0.13	-0.06	-

\* $P < 0.05$ , \*\* $P < 0.01$

Multiple regression test was used to predict identity states based on predictor variables. Before running the regression, the assumptions of the regression analysis, including multiple normality, the existence of a linear relationship between the variables, and multiple non-collinearity, were checked, and the results of these assumptions were confirmed. Because

age had no significant relationship with identity orientation, the regression analysis did not include it. Communication patterns and birth order can significantly predict moratorium identity. To investigate this finding, multiple regression was used, the results of which are presented in Table 3.

**Table 3.** Predictors of moratorium identity

Variables	Moratorium identity		
	B	$\beta$	P
Constant	8.54	-	0.037*
Conversation pattern	-0.37	-0.49	< 0.001**
Conformity pattern	0.50	0.16	0.071
Birth order	0.11	0.22	0.049*
	$R^2 = 0.42$	$F = 31.65**$	

Note: B= unstandardized coefficients;  $\beta$ = standardized coefficients; \* $P < 0.05$ , \*\* $P < 0.01$

According to Table 3 ( $F = 31.65$ ,  $P < 0.001$ ), it can be said that the communication patterns and birth order can predict the amount of moratorium identity variance up to 42%. The results also showed that the conversation pattern with a beta coefficient of -0.49 had a significant role in predicting the variance of moratorium identity ( $P < 0.01$ ), while the

conformity pattern had no significant role in predicting moratorium identity. Birth order with a beta coefficient of 0.22 had significantly predicted moratorium identity ( $P < 0.05$ ). Communication patterns and birth order can significantly predict achievement identity. Multiple regression was used to investigate this finding. Table 4 displays these results.

**Table 4.** Predictors of achievement identity

Variables	Achievement identity		
	B	$\beta$	P
Constant	31.23	-	0.001**
Conversation pattern	0.34	0.49	< 0.001**
Conformity pattern	-2.50	-0.14	0.079
Birth order	2.41	0.16	0.083
	$R^2 = 0.24$	$F = 13.91**$	

\* $P < 0.05$ , \*\* $P < 0.01$

According to Table 4 ( $F = 13.91$ ,  $P < 0.01$ ), it can be said that communication patterns and birth order can predict the amount of

achievement identity variance up to 24%. The results also showed that a conversation pattern with a beta coefficient of 0.45

significantly predicts the variance of achievement identity ( $P < 0.01$ ). In contrast, conformity patterns and birth order did not significantly predict achievement identity ( $P < 0.05$ ).

Communication patterns and birth order can significantly predict diffusion identity. To investigate this finding, multiple regression was used, the results of which are presented in Table 5.

**Table 5.** Predictors of diffusion identity

Variables	Diffusion identity		
	B	$\beta$	P
Constant	5.51	-	0.421
Conversation pattern	-0.53	-0.47	$< 0.001^{**}$
Conformity pattern	0.38	0.32	$< 0.001^{**}$
Birth order	1.20	0.06	0.436
	$R^2 = 0.33$	$F = 21.90^{**}$	

\* $P < 0.05$ , \*\* $P < 0.01$

According to Table 5 ( $F = 21.90$ ,  $P < 0.001$ ), it can be said that the communication patterns and birth order can predict the amount of diffusion identity variance up to 33%. The results also showed that the conversation pattern with a beta coefficient of -0.47 and conformity pattern with a beta coefficient of 0.32 significantly predict

the variance of diffusion identity ( $P < 0.01$ ). In contrast, birth order had no significant role in predicting diffusion identity. Communication patterns and birth order can significantly predict foreclosure identity. Multiple regression was used to investigate this finding. Table 6 presents these results.

**Table 6.** Predictors of foreclosure identity

Variables	Foreclosure identity		
	B	$\beta$	P
Constant	32.35	-	0.011*
Conversation pattern	-0.15	-0.25	$< 0.008^{**}$
Conformity pattern	0.43	0.34	$< 0.001^{**}$
Birth order	1.08	0.09	0.527
	$R^2 = 0.10$	$F = 3.45^*$	

\* $P < 0.05$ , \*\* $P < 0.01$

According to the results of Table 6 ( $F = 3.45$ ,  $P < 0.05$ ), it can be said that communication patterns and birth order can predict the amount of foreclosure identity variance up to 10%. The results also showed that conversation patterns with a beta coefficient of -0.25 and conformity patterns with a beta coefficient of 0.34 significantly predict the variance of foreclosure identity ( $P < 0.01$ ). In contrast, birth order had no significant role in predicting foreclosure identity.

**Discussion**

The present study investigated the relationship between family communication patterns and birth order in adolescent identity states. Results showed a significant relationship between the communication patterns and identity of

adolescents, which is in line with the research results of Mehdipour et al. (14), Muttaqin et al. (4), and Soltani et al. (15).

Mahdipour et al. in a study with a statistical sample including 100 high school students of Kashan city investigated the correlation of family communication patterns and identity styles. The research tool included the scale of family communication patterns and Berzonsky's identity styles. The statistical analysis of the Pearson correlation showed that only the conversation orientation had a positive and significant relationship with the three identity styles of informational, normative, and commitment (14). In another study, Soltani et al. assessed the role of family communication patterns in young males' identity processing styles. Three hundred forty-five male students

were selected from different colleges of Shiraz University. The research tools include a Revised Family Communication Pattern (RFCP) instrument and Identity Style Inventory (ISI). They revealed that the conversation orientation of communication patterns in the family predicts normative and informational styles positively. Also, conformity orientation of communication patterns in family predicts diffuse-avoidant style positively (15). Muttaqin et al. in Indonesia investigated the role of parents and friends in adolescents' identity formation. Their research involved 489 adolescents ranging from 12 to 21 years old. The Indonesian version of the identity commitments scale, a shortened version of the child's report on parent behavior inventory, and a friendship quality scale were used to measure the variables. The regression analysis was used to determine the role of parenting and friendship quality dimensions in predicting identity formation. The results showed that parenting and friendship quality predict commitment. Findings indicated that forming adolescents' identities includes a collective culture and it is inseparable from authority figures and peer groups. Based on the results of this study, the quality and form of relationships with parents and friends change adolescent identity formation (4).

In explaining the correlation between the family communication pattern and the acquisition of identity, the family is the first status and even the most important environment for forming an adolescent's identity. Meeus et al. believe that children's communication with the family makes them think and discuss different issues. Through the conversation in the family, children enter into identity issues and are challenged by family problems, which leads to the acquisition of an achievement identity. Conformity orientation refers to harmony between family members and avoiding conflicts and arguments; in other words, parents deprive their children of the ability to think and comment on life's problems, and this educational style leads to forming a diffusion identity in adolescents. They have lost the ability to establish biological, psychological, and spiritual balance in destructive conditions (18).

People with diffusion identity do not have occupational or ideological commitments in adolescence and may not have experienced an identity crisis. Their chosen lifestyle rejects a

sense of commitment and, in extreme cases, leads to aimless wandering. These adolescents have cold relations with their parents and perceive them as indifferent and rejecting (17). According to Adams and Jones's point of view, young people who are in high stages of identity, their parents encourage their independence. Adolescents with diffusion identities believe that their parents used inconsistent parenting styles. Adolescents with moratorium identities showed that their parents exerted much control over them and encouraged less independence (19). If adolescents are loved and accepted by their parents, an achievement identity will be created in them. Adolescents have a greater desire to receive and evaluate information; they use this information to shape their identity, and as a result, they have a more successful and advanced identity. However, parental control without love and acceptance does not create an achievement identity (20).

Regarding birth order, the results of this research are consistent with the findings of the study of Dogru Cabuker et al. (2) and inconsistent with the results of the study of Sardana et al. (7). Also, Dogru Cabuker et al. concluded a positive relationship between positive identity perception and first child and youngest child. There was a negative and significantly low relationship between the middle and only child (2).

Sardana et al. attempted to understand the influence of birth order on the identity formation of middle adolescents. The exploratory study undertakes a purposive sampling of 158 respondents. The ego identity process questionnaire and global adjustment inventory were the tools used for data collection. Correlation analysis indicated a significant relationship between identity and various dimensions of adjustment. However, findings suggested no significant differences between the first and third-born individuals in their identity formation process (7).

The results of the present study showed that birth order only played a significant role in predicting moratorium identity. In this context, based on Kaemra and Singh, the characteristics related to this component, i.e., being the first, middle, or last child, can predict identity to some extent. The environment of birth and upbringing of children in a family is the same in appearance, but it is completely different for each child (12). The birth order only affected the amount of moratorium identity may have

since the characteristics related to the position of the adolescent in the family and the fact that he/she is the second child affect his/her diffusion. For example, the second or third child of the family, in addition to their parents, is also influenced by their older children. In contrast, the first children are considered the only main source of parental role modeling.

It is also observed in the research that the psychological order of birth plays an important role in predicting the identification process of a person. These results also showed that a person's understanding of his/her position in the family and his/her family communication pattern plays an important role in developing positive identity perception. One of the limitations of this research was that the sample was limited to female adolescents. The second limitation is that each of the effects of birth order has yet to be addressed separately, which indicates the need for investigation in future research. Both boys and girls should be investigated in future research, and other variables such as identity and parenting styles should also be investigated.

### Conclusion

The results showed that the conversation pattern plays a significant role in predicting the identity of progress, so it is suggested that parents emphasize cooperative and supportive behaviors such as listening, avoiding too much control, providing information feedback, reducing psychological and behavioral

pressures, not forcing children to accept their wishes, encourage independent thinking, confirm their children's competence, allow them to participate in decisions, and provide the context for experiencing desirable outcomes in the formation of their successful identity. Therefore, attention should be paid to parents' education in communication patterns with children.

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### Conflict of Interests

The authors declare no conflicts of interest.

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### Ethical Considerations

This article is taken from the authors' research work and approved by Bu-Ali Sina University. The subjects participated in the research voluntarily, and the principle of confidentiality and other ethical considerations were observed.

### Authors' Contributions

First Author (Abolghasem Yaghoobi) was responsible for leading the overall research process. Second Author (Azadeh Mahdavi) was responsible for research plan design and data collection. Third Author (Safdar Nabizadeh) was responsible for writing the first version of the manuscript and data analysis. All authors discussed the results, reviewed and approved the final version of the manuscript.

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