



The mediating role of loneliness in the relationship between parent-child conflict and academic buoyancy

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*CORRESPONDENCE

Houshang Garavand

hgaravand@gmail.com

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Houshang Garavand*

Assistant Professor, Psychology Department, Faculty of Literature and Humanities, Lorestan University, Khorramabad, Iran

Abstract

The purpose of this study was to investigate the mediating role of loneliness in the relationship between parent-child conflict with academic buoyancy. The research method was correlation of the type structural equation modeling. The population of this study included all undergraduate students of Lorestan University in the academic year 2021-2022. The statistical sample size was determined based on Klein's thumb rule equal to 240 people which was done by accessible sampling method and online questionnaire. The instruments used in this study were UCLA LONELINESS SCALE, Parent Child Relationship Scale (PCRS) and Dehghanizadeh and Husseinchari academic buoyancy questionnaires. Data analysis was performed using structural equation modeling. Statistical analysis was done by the SPSS-22 and AMOS-24 software. The results showed that parent-child conflict had no direct and causal effect on academic buoyancy. The results about the indirect relationships in the model showed that the parent-child conflict is mediated by the feeling of loneliness on academic vitality. Therefore, it is suggested that the necessity of establishing good and friendly relations between parents and young people should be raised in universities, parents should be aware of the consequences of their children's loneliness and provide their children with emotional, material and informational support.

Keywords

parent-child conflict, loneliness, academic buoyancy

Introduction

One of the main concerns in the field of educational psychology is understanding how students and learners cope with academic and school-related difficulties (Megah et al., 2014). One of the abilities that should be considered in academic adaptation of students and learners is academic resilience (Solberg et al., 2012). Martin and Marsh (2008) defined academic resilience as the successful ability of a student to deal with academic obstacles and challenges. Van der Doef, Maes, Phalet, Smulders, and Daamen (2011) acknowledged that success in educational environments requires a sense of energy and happiness. Academic resilience refers to a positive, constructive, and adaptive response to the various challenges and obstacles experienced in the continuous and ongoing educational environment (Pootawin et al., 2011; Camerford et al., 2015). Academic resilience is a simple and useful way to understand and conceptualize students in an educational context (Miller et al., 2013).

Today, studies suggest that there are many factors that are predictive and effective on academic resilience. Many interventions and trainings have been identified to increase the quality of academic and educational resilience (Lester, 2013; Finich et al., 2015). One of the external factors that can have an impact on academic resilience and performance and is rooted in the family is parent-child conflict (Rahland et al., 2007; Hageman, 1995; Terabi, 2010; Dibajifaroushani et al., 2008). Parent-child conflict refers to the communicative and conflictual challenges that arise during the growth and change of family members (Azmit and Beyoglou, 2009). Parent-child conflict is a sign of a gap between parents and their children. In this situation, parents consider their adolescent as incompatible, and the adolescent does not accept their parents' behavior (Javani et al., 2015). The family is one of the most influential and fundamental factors in people's behavior. The influence of parents on children and adolescents is not only genetic and hereditary, but also in their familiarity with social life and culture, families and parents have an important role. The structure and form of families, the way members of each family relate to each other, and the community in which the family lives are mostly dissimilar. Therefore, the behavior and influence of families on individuals are different. Families have the greatest influence on the psychological, social, and cultural personality of individuals and indirectly affect society through their relationships and culture (Shafieabadi and Naseri, 2015).

In fact, changes in the family over time have affected children and will transform society as they enter the social arena. However, one of the issues that affects society, especially higher education,

is the presence of students who, for various reasons, experience family problems and tensions. Therefore, conflicts between parents and children that lead to a disrupted home environment can directly and indirectly have special effects on the general growth and various dimensions of adolescent and youth behavior, especially in the areas of mental and physical health and educational issues. In fact, it can be said that improving students' academic well-being in university to some extent requires a healthy family and appropriate and effective intergroup relationships. Thus, conflicts and problems within the family lead to psychological and behavioral problems in students and ultimately have a negative impact on their academic performance (Azizi Mehr, 2013). One of the variables that is affected by parent-child conflict (Comer & Matanah, 2018; Kokak & colleagues, 2017; Guntzler & colleagues, 2011) and also plays an important role in explaining academic well-being is loneliness (Rotenberg, 1999; Asher & Pacquette, 2003). The results of Comer and Matanah's research (2018) indicate that parents' conflict resolution methods can create negative emotions such as loneliness in children. Orton and Larry (2013) demonstrated a positive and meaningful relationship between reasoning components and mental health and quality of life and a negative and meaningful relationship between verbal and physical aggression and mental health and quality of life. A study showed that conflict resolution methods in the family are related to feelings of loneliness in children (Kokak & colleagues, 2017). Ehrlich and colleagues (2012) believe that parents' reasoning role in conflict resolution is effective in improving the social conditions and performance of children. Additionally, in Guntzler and colleagues' research (2011), verbal violence by parents led to an increase in children's feelings of loneliness and consequently had a negative impact on their quality of life.

Loneliness is a common experience among humans that almost everyone has experienced to some extent; to the point where statistics show that at least 80% of young people under the age of 18 and 40% of adults over the age of 65 have faced this unpleasant feeling at least at times (Hawkey & Cacioppo, 2010). Dianyong et al. (2010) state that loneliness is a person's mental evaluation of their situation, such that if a person evaluates their number of relationships with friends and colleagues less than their expected level, or does not feel as intimate in their friendly and intimate relationships as they would like, they will experience loneliness.

In this way, loneliness can be perceived as synonymous with social isolation, not necessarily objective social isolation. In other words, a person can live alone and not feel lonely, while another person may feel lonely even in a seemingly rich social environment. This is why loneliness is said

to be a negative mental experience arising from a person's cognitive evaluation of the quantity and quality of their social relationships; the greater the distance between this cognitive evaluation and what the person expects from their social relationships, the greater the feeling of loneliness will be (Hawkley & Cacioppo, 2010). Therefore, the degree of a person's loneliness depends on their expectations of their social relationships. Elahi (2004) also defines loneliness as an unpleasant personal experience, such as the individual's thinking that he or she is distinct from others, which is accompanied by observable behavioral problems such as sadness, anger, and depression, and indicates a mismatch between the person's expectations and desires and their ability to achieve them in social relationships, and is evident in behaviors such as avoiding contact with others so that loneliness is considered one of the threatening factors to mental health.

Based on available research evidence, the importance of the influential variables such as parent-child conflict and loneliness on academic well-being is inferred, but these are preliminary evidence; they do not have the necessary coherence and coordination for conclusions, and this set of factors has not been examined in interaction with each other. Therefore, in the present study, these three categories of factors are considered together, and their direct and indirect relationships with academic well-being are examined. Thus, this study seeks to answer the question of whether loneliness plays a mediating role in the relationship between parent-child conflict and academic well-being.

Material and Methods

The research method used in this study was an applied descriptive-correlational method. The statistical population of the study consisted of all undergraduate students of Lorestan University who were studying in the academic year 2022. According to the statistics provided by the university's budget program, approximately 7500 undergraduate students were enrolled. Based on the thumb rule of Klein (2015), the sample size was determined to be 240 individuals (260 questionnaires were distributed to prevent sample loss). Due to the prevalence of COVID-19, non-probability sampling and online questionnaires were used. The questionnaires were shared through WhatsApp groups formed by students for each course as a complement to the electronic learning management system. After initial data screening and removing samples with missing or distorted data, 240 individuals were analyzed.

The measurement tool used in this study was the Parent-Child Relationship Scale (PCRS), which was adapted from the Conflict Behavior Questionnaire for parents and adolescents by Fine et al. (1983) to measure the variable of conflicts between adolescents and parents. The scale consists of 15 questions that measure three conflict resolution strategies: reasoning, verbal aggression, and physical aggression. The questions have six options (never=0, more than once a month=5) that indicate the frequency of behavior in each question. The first five questions measure reasoning, the second five measure verbal aggression, and the last five measure physical aggression. The score range for the entire scale is 15 to 75, with a score of 15 indicating no conflict and a score of 75 indicating the highest level of conflict. The PCRS has a high internal consistency, with alpha coefficients ranging from 0.89 to 0.94 for the father subscale, 0.61 to 0.94 for the mother subscale, and an overall alpha coefficient of 0.96, according to Fine et al. (1983). In Iran, the PCRS was administered by Zaboli et al. (2005) to 46 individuals, and its reliability was reported as 0.74 for the entire scale and 0.58 for the reasoning subscale, 0.65 for the verbal aggression subscale, and 0.82 for the physical aggression subscale. In addition, in the present study, Cronbach's alpha coefficients for the reasoning, verbal aggression, and physical aggression subscales were 0.78, 0.76, and 0.81, respectively, and the coefficient for the entire questionnaire was 0.94, indicating the appropriate reliability of the questionnaire.

The University of California, Los Angeles Loneliness Scale (UCLA): The UCLA loneliness scale was developed by Russell, Peplau, and Ferguson (1978) to measure levels of loneliness. This scale consists of 20 items that describe individuals' experiences of loneliness. The scale is scored on a four-point Likert scale (1=never to 4=often), with a maximum score of 80 and a minimum score of 20. Higher scores indicate greater intensity of loneliness. The scale includes 11 positive statements and nine negative statements. Items 1, 5, 6, 9, 10, 15, 16, 19, and 20 are reverse scored (Noroozi, et al., 2016). The UCLA loneliness scale has consistently demonstrated high internal consistency reliability with alpha coefficients ranging from 0.89 to 0.94 worldwide. For example, Hanyun (2007; cited in Rohani & Alizadeh-Fard, 2012) reported Cronbach's alpha coefficients of 0.88 and 0.89 for the scale. In the present study, the Cronbach's alpha coefficient for the entire scale was 0.97, indicating the appropriate reliability of the questionnaire.

Academic Buoyancy Questionnaire by Dehghanizadeh and Hosseinchari (2012): This scale was developed by Dehghanizadeh and Hosseinchari (2012) by adapting the Academic buoyancy Scale by Martin and Marsh (2006), which consists of four items. The researchers added five more items

to the scale and evaluated its validity. The nine-item academic buoyancy scale is rated on a five-point Likert scale (never=1 to always=5). In the study by Dehghanizadeh and Hosseinchari (2012), the alpha coefficient for the scale was 0.77, and the validity was established by calculating the correlation between each item and the total score, which was between 0.54 and 0.64. In the study by Fakharian et al. (2019), confirmatory factor analysis was used to confirm the construct validity of the questionnaire, and the factor loading indices indicated a good fit between the hypothesized factor structure and the collected data.

Data analysis method: Descriptive statistics (mean, standard deviation, skewness, and kurtosis), Pearson correlation coefficient, and structural equation modeling were used to analyze the data. Bootstrapping was used to test the mediation paths. The data were analyzed using SPSS version 22 and AMOS version 24.

Results

Variables present in this study included academic buoyancy as an endogenous variable, loneliness as a mediating variable, and parent-child conflict as an exogenous variable. Results show the frequency distribution of participants by gender. Accordingly, 25.56% of the students were female and 75.43% were male. In Table 1, the mean, standard deviation, skewness, kurtosis, and correlation coefficients between the research variables are presented. As shown in Table 2, the relationship between all variables was significant ($p < 0.05$).

Table 1. Mean, standard deviation, skewness, kurtosis, and correlation coefficients between the research variables

Variable	1	2	3
1. parent-child conflict	1		
2. loneliness	.42**	-	
3. academic buoyancy	-.23**	-.54**	-
Mean	1.70	2.64	3.16
SD	.66	.85	.99
Skewness	.60	.07	-.15
Kurtosis	.14	-.51	-.44

For testing the hypothetical model, several assumptions of structural equations, including missing data, normality, and multiple linearity, were examined. The results showed that all research variables had an absolute value of kurtosis coefficient less than 2 and an absolute value of skewness coefficient less than 10, and the data followed a normal distribution. None of the exogenous

variables had a correlation greater than 0.80, and the tolerance index for all predictor variables was less than 0.59, and the variance inflation factor was less than 2.06; therefore, the assumptions of the structural equations were confirmed. Therefore, the structural equation modeling could be used to test the research model. The fit indices of the proposed model are presented in Table 2. As shown in Table 3, the fit indices of the proposed model were acceptable

Table 2. The fit indices of the proposed model

Index	χ^2	df	P	χ^2/df	RMSEA	GFI	AGFI	CFI	NFI	IFI	TLI
Obtained	12.02	4	.017	3	.09	.98	.93	.97	.96	.97	.93
Accepted	-	-	> .05	< 3	< .10	> .90	> .85	> .90	> .90	> .90	> .90

The results of the table 2 indicate that all fit indices are reported within an acceptable range, and the proposed model fits well with the data. Therefore, based on the fit indices, it can be concluded that the main hypothesis of the study, which was about the fit of the conceptual model with the considered modifications, is accepted. According to the results, loneliness ($p = 0.001$, $\beta = 0.57$) had a significant effect on academic buoyancy, but parent-child conflict did not have a significant effect on academic buoyancy. Additionally, parent-child conflict ($p = 0.001$, $\beta = 0.45$) had a significant effect on loneliness.

Table 3 shows the results of the bootstrap method for the indirect relationships. The indirect effect of parent-child conflict on academic buoyancy through the mediating role of loneliness was significant ($p = 0.002$, $\beta = 0.26$). The results of the bootstrap test showed that the confidence interval of the indirect effect did not include zero (CI: 0.17-0.35, 95% CI), indicating a significant indirect effect.

Table 3. Results of the bootstrap method for the indirect relationships

Predictor	Path		β	CI 95 %		p
	Mediator	Criterion		HL	LL	
Parent-child conflict	Loneliness	Academic buoyancy	-.26	-.17	-.35	.002

Therefore, the results of the study suggest that parent-child conflict can affect academic buoyancy indirectly through the mediating role of loneliness.

Discussion

The aim of the present study was to determine the mediating role of loneliness in the relationship between parent-child conflict and academic buoyancy in students. The results showed that loneliness can lead to a reduction in academic buoyancy. Regarding the overall model fit and the general relationship between variables based on the opinion of Spear (2005), the educational environment is one of the environments that requires adaptation and compatibility. In fact, the challenges and pressures of the educational environment are one of the situations that students must adapt to. Moreover, the rapid cognitive and emotional changes during adolescence and youth, combined with these environmental challenges and pressures, make it necessary for adolescents to have the ability to adapt. The results of the studies indicate that among students who experience academic buoyancy, the minimum level of dropout occurs (Cameron et al., 2015). Academic buoyancy is one of the normal concepts and structures of positive psychology that is related to academic progress improvement, as buoyancy is a recognized factor in education that students use as a coping strategy for academic problems and challenges. Overall, academic buoyancy can act as a supportive factor to protect students from academic problems (Martin & Marsh, 2008). Therefore, researchers in the field of education have identified the effective factors on students' academic buoyancy and the process of their impact on three levels: 1- psychological, 2- educational environment and engagement, 3- family and peers (Martin & Marsh, 2008). Thus, the structural relationships of the current research model are consistent with the research foundations. Contrary to expectations, parent-child conflict did not have a direct and significant effect on academic buoyancy. This finding was inconsistent with the results of studies by Rahiland et al. (2007), Hageman (1995), Torabi (2011), and Dibaji faroushani et al. (2008). One possible reason for this could be the way parent-child conflict was measured. Since the basis of parent-child conflict in this study was students' responses to conflict scale items rather than family living situations, there is a possibility that social desirability bias affected the results. Therefore, another explanation for this finding is that the relationship between these two variables can be influenced by other variables such as personality traits, loneliness, academic stress, the prevalence of coronavirus, etc.

The indirect results of the model showed that parent-child conflict, with the mediation of feelings of loneliness, has an indirect effect on academic buoyancy. This finding is consistent with the results of studies by Koerner and Mahtani (2018), Cokacar and colleagues (2017), Guntzler and

colleagues (2011), and Rahal and colleagues (2007). Parental conflict and parent-child conflict can strain the parent-child relationship, causing the child to prefer spending less time in the presence of their parents and more time in their own room because they do not feel the intimacy and trust towards their parents. If parental beliefs about their conflicted relationship with their child lead them to try to control and evaluate their children's behaviors and feedback according to their own standards, their relationships can become disrupted. This type of control and resulting fear does not allow children to freely express their emotions, and the emotions they receive from their parents are also limited and suppressed. This can prevent the creation of positive and adaptive relationships between parents and children (Asher et al., 1984), which can lead to feelings of loneliness in students.

High levels of loneliness are associated with poorer academic progress and less academic buoyancy (Rotenberg, 1999; Asher and Paquette, 2003). Since loneliness is a specific indicator of students' perception of disruption and dissatisfaction within their peer group, it is possible that these feelings may directly or indirectly interfere with their ability to succeed in educational programs. As a result, they may be so preoccupied with these feelings of loneliness that they are unable to focus on their academic tasks. Another important factor in this regard is the satisfaction with relationships with peers. Students who feel lonely are not satisfied with their social relationships with peers. This feeling of loneliness and social dissatisfaction may initially interfere with students' academic progress and gradually lead to withdrawal and dropping out of school, which can ultimately lead to a reduction in academic buoyancy among students.

One of the main limitations of this study was that it was conducted only on undergraduate students. Additionally, the fieldwork was carried out during the COVID-19 pandemic and was conducted online, limiting participation to those with internet access. Another limitation was the use of direct questions about parent-child conflict, which may have led to social desirability bias and insincere responses. These limitations may have been beyond the control of the researcher.

Given that family and parent-child relationships have a significant impact on academic wellbeing and happiness, it is recommended that universities hold sessions to encourage positive and friendly relationships between parents and their children. Parents should also be made aware of authoritative parenting styles. Additionally, due to school closures and the stay-at-home orders during the pandemic, it is suggested that parents and caregivers consider measures to alleviate the loneliness of adolescents and young people during their leisure time.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material; further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by ethics committee of Lorestan University, Khorramabad, Iran.

Author contributions

HG contributed to the study conception and design, material preparation, data collection and analysis. HG contributed to the article and approved the submitted version.

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