



# The Relationship Between Emotional Self-efficacy, Sensation Seeking, and the Quality of Child-Parent Relationships With Quality of Life Mediated by High-Risk Sexual Behaviors in Students

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## Abstract

**Background:** Considering the importance of quality of life which is related to various physical, psychological, social, and political dimensions of the individual and the importance of the class which plays a decisive role in forming a successful and healthy society. Also, considering the importance of high-risk behaviors in today's society and the harm that these behaviors create, five variables of quality of life, type of parent-child relationship and sensation seeking, self-efficacy, and high-risk sexual behaviors have been studied together.

**Methods:** The research method was descriptive-correlational with structural equation modeling (SEM). The statistical population included all male and female undergraduate students of Bandar Abbas Branch of Azad University who were studying in the first semester of the 2018-2019 academic year. 260 people were selected through purposive sampling. The inclusion criteria were being an undergraduate student, conscious satisfaction with the implementation method and research process. Data were gathered by the Child-Parent Relationship Quality Questionnaire (PCRS), Zuckerman Sensation Seeking Scale, Quality of Life Questionnaire, High-Risk Sexual Behaviors Questionnaire and Emotional Self-efficacy Scale. Data were analyzed using structural equations with Amos software, version 8.80.

**Results:** The path coefficient between high-risk sexual behaviors and quality of life was -0.84, which indicates the negative and inverse effect of high-risk sexual behaviors and quality of life. The path coefficient between the quality of the parent-child relationship and high-risk sexual behaviors was -0.86, which indicates the negative and inverse effect of the quality of the parent-child relationship and high-risk sexual behaviors.

**Conclusion:** High-risk sexual behaviors mediate the quality of the parent-child relationship and the quality of life of students.

**Keywords:** Emotional self-efficacy, Sensation seeking, Child-parent relationship, Quality of life, Sexual behaviors

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## Introduction

According to the definition of the World Health Organization (WHO), quality of life is the perception that individuals have of their life status, cultural background, and value systems in which they live, their goals, expectations, standards, and priorities. Students' quality of life is generally related to the circumstances in which they live.<sup>1</sup> The family is one of the most central educational environments that affects the maintenance of mental, physical and social health. The psychological conditions of the family and the quality of emotional relationships between parents and children have a great impact on

creating adjustment and mental health, developing social skills and improving the quality of life of children.<sup>2</sup> In this regard, there is a significant relationship between parent-child relationship style and quality of life in adulthood.<sup>3</sup> One of the important factors that improve the quality of life of students is emotional self-efficacy.<sup>4</sup> Emotional self-efficacy is a set of behavioral preparations and desires of the individual in recognizing, processing, and organizing emotional information.<sup>4</sup> It increases self-efficacy, personal health, the ability to do homework in many ways and it makes people see homework as a challenge that they have to master, they are confident that they can

contain potential threats and adapt well to the situation, as a result, they experience a higher quality of life.<sup>5</sup> In this regard, the results of one study showed that self-efficacy significantly predicts quality of life.<sup>6</sup>

One of the factors that can affect the quality of life of students is sensation seeking.<sup>7</sup> Fardis defines sensation seeking as the desire for «diverse emotions and experiences, and a strong tendency to take physical, social, legal and financial risks because of such an experience.<sup>8</sup> Zuckerman identified four elements of sensation seeking using factor analysis: thrill and adventure seeking, disinhibition, experience seeking, and boredom susceptibility.<sup>9</sup> On the one hand, people's sensation seeking increases their risk-taking to gain pleasure, so that they take actions for pleasure and eliminate monotony, which reduces their mental health and quality of life, and on the other hand, they ignore or underestimate the dangers and negative consequences of tending to high-risk behaviors.<sup>7</sup>

Quality of life is a multidimensional structure that cannot be studied in a simple linear structure, so in the present study, high-risk sexual behavior is considered as a mediating variable. High-risk sexual behaviors are divided into two areas: (1) Definitions of sexual behavior that include high-risk, moderate-risk, safe and secure, and in general these behaviors have different degrees of risk, (2) Definitions of the type of sex that includes the primary sexual partner and the secondary sexual partner.<sup>10</sup> Some studies show parental communication and understanding also affect children's sexual behaviors.<sup>11</sup> sensation seeking, on the other hand, increases the likelihood of high-risk behaviors by increasing the child's desire to experience new and varied events and accept physical and social risks.<sup>12</sup> Self-efficacy, on the other hand, helps people use their ideas and thoughts to guide, motivate, and act toward their goals, resulting in less impulsivity and irrational behavior, High-risk behavior is less seen in self-efficient individuals.<sup>6</sup>

Assessing the quality of life of students and recognizing the factors related to it is important in the development of intervention programs and leisure programs of this group, which are the potential forces of the intellectual community. Therefore, we aimed to assess the relationship between emotional self-efficacy, emotion seeking and child-parent relationship quality with the quality of life of students mediated by high-risk sexual behaviors.

## Methods

The present research was a correlational study using structural equation modeling (SEM). The statistical population were all male and female undergraduate students of Bandar Abbas Branch of Azad University who were studying in the first semester of the academic year 2018-2019 (n=1365 students). 260 students were selected as the sample by purposive sampling method. The sample size was selected according to Klein's rule. According to this

rule, at least 20 samples are required for each parameter. According to the number of parameters of the present study (13 parameters), a minimum sample of 260 people was required. Data were gathered using the Child-Parent Relationship Quality Questionnaire (PCRS), Zuckerman Sensation Seeking Scale, Quality of Life Questionnaire, High-Risk Sexual Behaviors Questionnaire, and the Emotional self-efficacy scale. Before performing the study, all participants were informed and gave their consent to participate.

### *Child-Parent Relationship Quality Questionnaire*

The PCRS is a 54-item tool for measuring young people's perceptions of their relationship with their parents. It has two forms, one for measuring the child's relationship with the mother and one for measuring the child's relationship with the father. This scale has alpha coefficients of 0.89 to 0.94 for father-related subscales as well as a total alpha of 0.96 and alpha coefficients of 0.61 (replication) to 0.94 for subscales related to the mother and a total alpha of 0.76 indicating a good internal consistency. These alpha coefficients were obtained in a previous study on 541 students.<sup>13</sup>

### *Zuckerman Sensation Seeking Scale (1979)*

This scale was used to measure sensation seeking with four sub-factors of thrill and adventure seeking, disinhibition, experience seeking, and boredom susceptibility. This scale summarizes the fourth form of the Zuckerman Sensation Seeking Scale and consists of 40 two-part items. In each item, one of the two components expresses the amount of sensation seeking of the individual, and the second component is the opposite. The respondent gets a score for each question or item answered correctly, and a higher score indicates higher amounts of sensation seeking. Zuckerman and colleagues reported internal consistency of 0.83-0.86 for the scale subscales.<sup>9</sup> Cronbach's alpha of the Persian version of this scale was 0.84.<sup>14</sup>

### *Quality of Life Questionnaire*

This questionnaire was devised by the WHO in 1989 in collaboration with 15 international field centers. It consists of 26 items assessing four areas of physical health, psychological health, social relations and living environment and is used to measure the quality of life in the last two weeks. In the results reported by the WHO and the 15 international centers, Cronbach's alpha coefficient was reported to be 0.73-0.89 for the four subscales and the whole scale.<sup>15</sup> Cronbach's alpha of this scale in Hakimi Nia and colleagues' study was 0.82.<sup>16</sup>

### *High-Risk Sexual Behaviors Questionnaire*

This questionnaire was designed by Zarie and colleagues.<sup>17</sup> It has 10 items scored on a 5-point Likert scale from 1 (always) to 5 (never). In addition to demographic

characteristics, this questionnaire contains 10 questions about illicit and insecure relationships with the opposite sex. The answers to the questionnaire are arranged in five choices and scoring is done from 1 to 5 points. (in the previous sentence you have mentioned 5 points) A higher score indicates a higher risk of engaging in high-risk sexual behaviors. To determine the content validity of the questionnaire, after preparing the questions based on the available background, 10 faculty members were asked for assistance. The validity coefficient was 0.68 using retesting after two weeks.

**Emotional Self-efficacy Scale**

The Emotional Self-Efficacy Questionnaire is a test with 32 questions developed by Schutte and co-workers (are you sure?) in 2008 and measures (diagnosis, comprehension, regulation and facilitation) on a 5-point Likert scale from a score of 1 to 5. Internal consistency of test questions was reported based on Cronbach’s alpha coefficient of 0.96.<sup>18</sup> The retest validity coefficient in a sample of 27 people at a two-week interval was 0.85. In one study Cronbach’s alpha of this scale in the whole sample was 0.79.<sup>19</sup>

Data were analyzed using descriptive statistics such as mean and standard deviation using SPSS software, version 24. SEM was also done with AMOS software, version 25.

**Results**

The mean ± SD age of the male and female students were 21.23±1.8 and 20.3±1.9, respectively.

In the method of structural equations and multivariate norms, normality is one of the important assumptions that must be considered. One of the common properties in examining the assumption of normality is the calculation of skewness and tensile statistics. The absolute value of the skewness coefficient is less than 3 and the kurtosis coefficient less than 10 for normality, and our data were within these ranges. The Durbin-Watson test was also used to check the independence of errors. The results showed that the assumption of independence was established and the observed values were between the allowed limit of 1.5 to 2.5, which indicates that the errors are independent. A summary of the SEM results is presented in Table 1. According to the obtained indicators in the proposed model ( $\chi^2/df=2.785$  GFI=0.918; IFI=0.937; TLI=0.943; CFI=0.921 and =0.059 RMSEA), the model has a good fit. Direct and indirect paths of the model are shown in

**Table 2.**

As shown in Table 2, the path coefficient between high-risk sexual behaviors and quality of life was -0.84, which indicates the negative and inverse effect of high-risk sexual behaviors on quality of life. The path coefficient between the quality of the parent-child relationship and high-risk sexual behaviors was -0.86, which indicates the negative and inverse effect of the quality of the parent-child relationship and high-risk sexual behaviors. Moreover, high-risk sexual behaviors mediate the quality of the parent-child relationship and the quality of life of students. Therefore, the path coefficient between emotional self-efficacy and high-risk sexual behaviors was -0.79, which indicates the negative and inverse effect of emotional self-efficacy and such behaviors. High-risk sexual behaviors mediate the relationship between emotional self-efficacy and students’ quality of life. The path coefficient between arousal and high-risk sexual behaviors was -0.53, which indicates the negative and inverse effect of arousal and high-risk sexual behaviors. Therefore, high-risk sexual behaviors mediate the relationship between students’ sensation seeking and quality of life.

Considering the direct and indirect coefficients between the research variables, the final research model is presented in Figure 1, which indicates the mediating role of high-risk sexual behaviors in the relationship between emotional self-efficacy, sensation seeking and quality of child-parent relationships with quality of life in girl and boy students.

Table 2 presents the model fit indices in SEM. As can be seen, the research model has a good fit and the level of acceptance of the indicators has been met.

**Discussion**

The results of the present study showed that there was a significant relationship between the quality of the parent-child relationship and quality of life with the mediating role of high-risk sexual behaviors.

This finding is consistent with the findings of several other studies.<sup>1,3,20</sup> It can be said that it is the family and parents who transfer values, improve morals, and correct behavior. In fact, parents, as influential people in adolescents’ lives, can help them get on the right track by using an authoritative parenting style and communicating effectively with them. They can improve their children’s health-related behaviors by facilitating their emotional

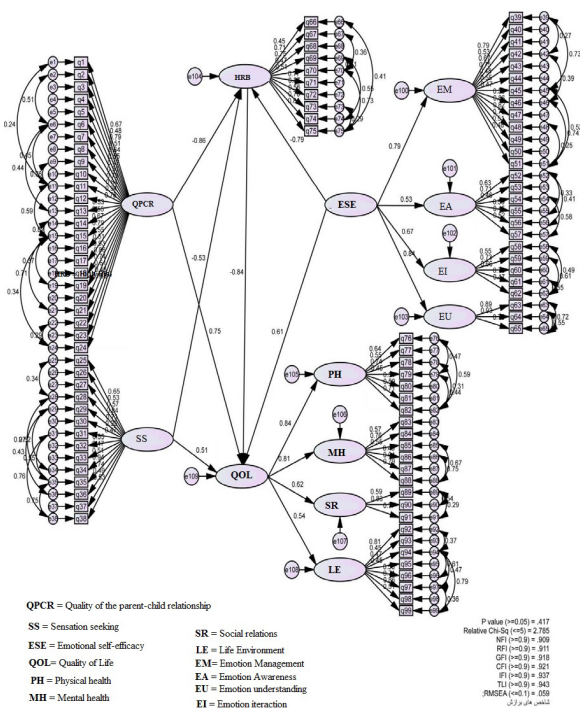
**Table 1.** Goodness of Fit Indices of the Proposed Model

	P value	$\chi^2/df$	GFI	IFI	TLI	CFI	RMSEA
Hypotheses	0.417	2.785	0.918	0.937	0.943	0.921	0.059
Appropriate level	>0.005	<5	>0.90	>0.90	>0.90	>0.90	<0.1
Result	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable

Abbreviations: GFI, goodness of fit index; IFI, incremental fit index; TLI, Tucker-Lewis index; CFI, comparative fit index; RMSEA, Root Mean Square Error of Approximation

**Table 2.** Results of Structural Equation Modeling

Relation	The result of Examining the Relationship Between Variables	Composite Reliability (CR)	P Value	Total Effect	Beta coefficient of Indirect effect	Beta Coefficient of Direct Effect	Relationships of Research Variables
Negative and inverse and meaningful	Verification	5.11	<0.001	-0.86	-	-0.86	The quality of the parent-child relationship and high-risk sexual behaviors.
Positive and meaningful	Verification	5.89	<0.001	0.75	-	0.75	Quality of parent-child relationship and quality of life
Negative and inverse and meaningful	Verification	5.62	<0.001	-0.79	-	-0.79	Emotional self-efficacy and high-risk sexual behaviors
Positive	Verification	6.75	<0.001	0.61	-	0.61	Emotional self-efficacy and quality of life
Negative and inverse and meaningful	Verification	6.94	<0.001	-0.53	-	-0.53	Sensation seeking and high-risk sexual behaviors
Positive	Verification	6.37	<0.001	0.51	-	0.51	Sensation seeking and quality of life
Negative and inverse and meaningful	Verification	6.780	<0.001	-0.84	-	-0.84	High-risk sexual behaviors and quality of life of students
Positive	Verification	5.32	<0.001	0.722	0.722-0.84*-0.86	-	Quality of parent-child relationship - High-risk sexual behaviors - Quality of life
Positive	Verification	5.13	<0.001	0.663	0.663-0.84*-0.79	-	Emotional self-efficacy - High-risk sexual behaviors - Quality of life
Positive	Verification	5.79	<0.001	0.445	0.445-0.84*-0.53	-	Sensation seeking - High-risk sexual behaviors - Quality of life



**Figure 1.** The Final Research Model.

needs. Children with warm parents express their conflicts with them and ask for their guidance and help. Establishing a good relationship with parents leads to a sense of belonging in the child and adolescents internalize many patterns of social, cultural, and behavioral norms through assimilation to accepted patterns. By understanding the needs of the adolescent and responding appropriately, parents can become an acceptable model for children and by internalizing the rules and norms accepted by the society, prevent them from tending to risky behaviors.<sup>3</sup>

The results also showed that the path coefficient between emotional self-efficacy and quality of life was mediated by high-risk sexual behaviors. This finding is consistent with the findings of Foran et al,<sup>2</sup> Beri et al<sup>4</sup>, and Izadi & Barzegar<sup>21</sup> and their colleagues. To explain this, it can be said that self-efficacy increases the feeling of adequacy in adolescents and enables them to deal with their problems more effectively.<sup>2</sup> Many high-risk behaviors of adolescents are related to their low self-esteem. In fact, self-efficacy prevents adolescents from feeling empty by increasing their self-esteem, which prevents many of their negative behaviors and leads to a better quality of life. Self-efficacy is the judgment of individuals about their ability to do a task or adapt to a particular situation.<sup>22</sup> Sometimes the



lack of a sense of efficiency and inability to adapt to the environment in reality, leads adolescents to imaginatively satisfy these needs by committing high-risk behaviors such as substance abuse and alcohol and leads to reduced quality of life.<sup>4</sup>

We found that there was a significant relationship between sensation seeking and quality of life with the mediating role of high-risk sexual behaviors. This finding is in line with the findings of other researchers.<sup>7,10,12,23</sup> People's sensation seeking on the one hand increases their risk-taking to gain pleasure, so that in order to gain pleasure and eliminate monotony, they take actions to improve their mental health and quality of life, but they ignore or underestimate the dangers and negative consequences of tending to risky behaviors.<sup>10</sup>

Also, the path coefficient between high-risk sexual behaviors and quality of life indicates the negative and inverse effect of high-risk sexual behaviors on quality of life. This finding is consistent with the findings of some other studies.<sup>24,25</sup> In this regard, quality of life is an important factor that enables a person to positively balance life and avoid undesirable responses. People with better quality of life can face challenges of social life, cope with them and perform better in the society and be less prone to undesirable or anti-social behaviors.<sup>26</sup>

Therefore, considering the role of high-risk sexual habits in the relationship between emotional self-efficacy, sensation seeking and the quality of child-parent relationships with quality of life, it is necessary that universities and counseling centers develop a special and suitable environment for the actual improvement of students' quality of life, to provide the ground for their further growth and prosperity.

Among the limitations of the present study are the limited sample of male and female undergraduate students of Bandar Abbas Branch of Azad University and the lack of control over some unwanted research variables. In this regard, the results of the present study should be generalized with caution.

#### Conflict of Interest

The authors declare that they have no conflict of interests.

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#### Authors' Contribution

FSE : gathered the information and wrote the original draft. KH: supervised the research, SAS: reviewed the manuscript and edited the manuscript and designed the figure.

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#### Ethical Statement

All ethical principles were considered in this study. The participants were informed about the purpose of the study and its implementation stages and signed the informed consent form. They were also assured about the confidentiality of their information, and were allowed to leave the study whenever they wished, and if desired, the findings of the study would be available to them.

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