



Research Paper: Relationship of Perceived Parenting Styles with Self-Control Capacity and Affective Self-Regulation among Delinquent Adolescents



Sajjad Rezaei^{1*}, Shadi PourHadi², Reza Shabahang³

1. Department of Psychology, Faculty of Literature and Humanities, University of Guilan, Rasht, Iran

2. Department of Psychology, Rasht Branch, Islamic Azad University, Rasht, Iran

3. Department of Psychology, Faculty of Psychology and Educational Sciences, University of Tehran, Tehran, Iran



Citation Rezaei S, PourHadi Sh, Shabahang R. Relationship of Perceived Parenting Styles with Self-Control Capacity and Affective Self-Regulation among Delinquent Adolescents. *Caspian J Neurol Sci*. 2019; 5(2):56-65. <https://doi.org/10.32598/CJNS.5.17.56>

Running Title Parenting Styles with Self-Control Capacity and Affective Self-Regulation

doi <https://doi.org/10.32598/CJNS.5.17.56>



© 2018 The Authors. This is an open access article under the [CC-BY-NC](https://creativecommons.org/licenses/by-nc/4.0/) license.

ABSTRACT

Background: The type of parent's child rearing and the perception of problems by adolescents are one of the important reasons for the formation of inappropriate behavior and delinquency in adolescents.

Objectives: The purpose of the present study was to determine the relationship of perceived parenting styles with self-control capacity and affective self-regulation among delinquent adolescents.

Materials & Methods: The research type was descriptive-correlational. The population of this study included all delinquent adolescents (N=94) from the Guilan Provincial Reconstruction and Upbringing Center and temporary detention centers in 2017-2018. Seventy-three adolescents were selected and completed the Parenting Style Inventory (PSI), Tangney Self-Control Scale (TSCS) and Measure of Affect Regulation Styles (MARS). The data were processed using Pearson correlation coefficient and stepwise multiple regression analyses by SPSS V. 22 software.

Results: Regression analysis indicated that authoritative parenting style positively ($\beta=0.906$, $P<0.001$) and authoritarian parenting style negatively ($\beta=-0.537$, $P<0.001$) 38% of the changes were predicted in the SCS among delinquent adolescents ($F=20.511$, $P<0.001$). Also, the authoritative parenting style negatively ($\beta=-0.641$, $P<0.001$) 41% of the changes were predicted in the MARS among delinquent adolescents ($F=47.543$, $P<0.001$). The permissive parenting style was not statistically significant in any of the regression analyses ($P>0.05$).

Conclusion: Parenting styles have an effective role in the emergence and inhibition of delinquent behavior. It seems that authoritarian and authoritative parenting styles respectively play a role in improving and weakening self-control capacity and affective self-regulation in delinquent behavior among adolescents boys.

Keywords: Self-control; Affect; Juvenile Delinquency; Parenting ; Adolescent

Article info:

Received: 27 Jan 2019

First Revision: 19 Feb 2019

Accepted: 10 Mar 2019

Published: 01 Apr 2019

* Corresponding Author:

Sajjad Rezaei

Address: Department of Psychology, Faculty of Literature and Humanities, University of Guilan, Rasht, Iran

Tel: +98 (911) 3390785, Fax: +98 (13) 33690385

E-mail: rezaei_psy@hotmail.com

Highlights

- Authoritative parenting is directly and authoritarian parenting is inversely correlated with the self-control capacity of juvenile delinquents.
- Authoritative parenting is inversely correlated with affective self-regulatory of juvenile delinquents.
- Permissive parenting does not play an effective role in predicting self-control and affective self-regulatory capacity scores of juvenile delinquents.

Introduction

Juvenile delinquency is a real problem in some societies. By 2015, there were 1,698 boys and 131 girls reportedly arrested for various crimes under the age of seventeen in Iran. This has been increasing since the year before it, and the rate of arrest in boys' populations was about twelve times that of girls. These crimes include murder, involuntary manslaughter, homicide, beatings, threats, duress or coercion, pretending to carry a knife, and intentional poisoning [1]. Regardless of whether the delinquency rate and intensity increase or remain unchanged, it is necessary to find ways to eliminate crime causing situations as much as possible. In other words, today's juvenile delinquency can be the cause of future adult crimes. Currently, delinquent behavior, with its unfavorable consequences in personal and family life, causes many social disruptions [2].

Juvenile delinquents are people who commit illegal acts [3]. In fact, juvenile delinquency is defined as a violent illegal behavior by people under the age of 18 [4]. In other words, juvenile delinquency refers to any illegal act that leads to prosecution [5]. Hence, delinquents are people who are under the age of 18 and their behavior is such that is punishable by law. Some delinquent acts such as robbery, assault, rape, homicide, or drug abuse, if committed by adults, are also considered a crime [6]. Juvenile delinquency has become an emerging phenomenon that increases day by day [7] and can have many negative consequences such as health problems, conflicts, theft, addiction and drug abuse [8]. Given the complexity, multidimensionality, and extent of delinquency, the study of delinquent behaviors is critical.

Delinquency cannot be considered a single phenomenon, rather it is a broad, complex and multidimensional issue generated, developed and maintained through numerous factors such as events during embryonic development, inefficient families, inappropriate schools,

poverty, peer relationships, poor self-control, etc. [4]. One of the most important issues regarding juvenile delinquency and delinquent behavior is the parenting style for this group of adolescents [9].

Research on behavioral disorders often suggests that behavioral disorders are more likely to result from parent-child relationships, rather than genetics and biological factors. Researchers have concluded that there is a correlation between parents' misbehavior and children's behavioral disorders. This relationship is important and indicates that family, and especially parents' behavior during childhood, play an important role in the development of behavioral disorders in childhood and adulthood [10].

Parenting styles as an important part of the family and its functioning can be effective in children's delinquent behaviors. Defining parenting styles, Baumrind [11] states that parenting styles incorporate attitudes, beliefs, and behaviors of parents, and known as a tool for measuring total intimacy and control of children's behaviors. These styles include a wide range of parenting dimensions, such as nutrition, physical activity, sleeping time, playing time, bathing time, and education, divided into three styles of authoritative, authoritarian, and permissive. The authoritative parenting style is characterized by structured guidance that takes children's desires into account. The authoritarian parenting style is known as a strict implementation of the parents' rules by giving little independence to the child. The permissive style is also characterized by low willingness for the children's structural guidance.

The results of various research show a statistically significant relationship between parenting styles and behavioral problems of adolescents [12, 13]. Angrist and Evans [14] argue that parenting styles are effective in reducing the high-risk behaviors of adolescents, and the results of the research by Wilder and Walt [15] suggest that parents who spend more time on raising their chil-

dren have children who are less likely to have high-risk and inappropriate behaviors. Kapetanovic, Skoog, Bohlin, and Gerdner [16] state that having confident parenting and close contact with children has a protective role in adolescents' involvement in high-risk behaviors like delinquencies. The results of Moitra, Mukherjee and Chatterjee's study [17] also revealed that families with delinquent children had a permissive parenting style to raise their juveniles. Katz and Gottman [18] concluded that parents who use hostile styles to solve their conflicts have children who have symptoms of antisocial behavior. In this regard, parenting styles can be a very important factor in juvenile delinquency, which needs to be examined.

Self-control and affective self-regulation are among skills that are defective in juvenile delinquents. Self-control is the ability to adapt and change oneself in accordance with the environment, and the ability to change the internal responses, discontinue inappropriate behavioral intentions and avoid doing them [19]. Self-control is also the ability to detect and regulate desires and emotions characterized by willful acts, self-discipline, and the ability to postpone pleasure or reward [20]. In fact, self-control is a central function of self that refers to the ability to override thoughts and emotions, such as distracting unwanted behavioral tendencies in order to achieve acceptable goals [19, 20], which is in contradiction with impulsivity [21].

Empirical evidence suggests that people with high self-control achieve better results in different areas of life [19]; so that individuals with high self-control, have higher psychological compatibility, fewer psychological problems, fewer pathological signs, and higher self-esteem. They report less impulse control problems and experience a healthier emotional life and eventually commit fewer delinquencies. Self-control leads to positive outcomes such as a healthier lifestyle, better financial status, and better interpersonal relationships, while failure in self-control can mean giving up to these impulses and having harmful behaviors [22]. Investigations on the relationship between self-control and behavioral problems show the role of self-control both in offenses and being a victim of offenses [23], and various studies report a positive relationship between low self-control and various types of antisocial behaviors [24].

In relation to the affective self-regulation of juvenile delinquents, it should be acknowledged that affective self-regulation and its failure can be a prominent influential factor in delinquent behaviors [25]. The affective state is mainly represented as a factor directly affecting

the psychosocial function. That is, negative affections have negative effects, and positive affections result in positive outcomes. Adaptive and efficient performance requires differentiating affections so that people can achieve positive results by regulating their affections. Research shows that perceived ability to self-regulation is an important factor in various behaviors caused by affections [26]. Accordingly, the affective self-regulation capacity and its failure can be considered one of the leading factors in juvenile delinquency.

Regarding the importance of self-control and affective self-regulation abilities in juvenile delinquency, as well as considering the relationship of parenting styles with self-control and affective self-regulation abilities, a question arises whether self-control and affective self-regulation abilities of juvenile delinquents are affected by their parenting styles. That is, whether parenting styles can predict the self-control and affective self-regulation levels of delinquents. The lack of sufficient, and of course new studies in this regard, especially in Iran, adds to the importance of examining the relationship between parenting styles, self-control ability and affective self-regulation ability of the delinquents. The purpose of the present study was therefore to determine the relationship of perceived parenting styles with self-control and affective self-regulation capacities of juvenile delinquents.

Materials and Methods

This was a descriptive-correlational study. The statistical population included 94 juvenile delinquent boys at the Guilan Provincial Reconstruction and Upbringing Center and some of the temporary detention centers of Guilan Province Police in 2017-2018. Among them, a sample of 73 subjects was recruited according to Krejcie and Morgan table through convenience sampling. After checking the tests, 3 of forms were excluded because they were not filled out completely, and the data from 70 questionnaires were analyzed.

Inclusion criterion: Being 12-18 years old, male, no history of serious psychiatric disorders leading to hospitalization, no history of taking psychiatric medication, the ability to read and mark the questionnaire or having at least elementary school education. Exclusion criteria: unwillingness to cooperate with the interviewer and incomplete questionnaires.

Study tools

Parenting Style Inventory (PSI) was developed in 1973 based on Baumrind's theory of authoritative, authoritar-

ian and permissive parenting styles in order to investigate patterns of influence and parenting styles. PSI has 30 items and is answered based on a five-point Likert scale. Using the test-retest method, Buri [27] reported its reliability in mothers and fathers as 0.81 and 0.77 for the permissive style, 0.86 and 0.85, for the authoritarian style, 0.87 and 0.88 for the authoritative style, respectively.

The results also showed discriminant validity and criterion validity of the questionnaire. Marlowe-Crowne Social Desirability Scale confirmed that PSI has acceptable validity regarding bias to desirable social responses. In Iran, Esfandiari [25] reported the reliability of PSI using test-retest method as 0.69 for the permissive style, 0.77 for the authoritarian style, and 0.73 for the authoritative style. Content validity of PSI was also confirmed by ten psychologists and psychiatrists.

Tangney Self-Control Scale (TSCS) was developed in 2004 by Tangney, Baumeister and Boone [19] and has 36 items. TSCS was inspired by previous tools and was developed to address the shortcomings of self-control measuring questionnaires. The 36 items are answered based on a 5-point Likert spectrum from 'not similar at all'=1 to 'extremely similar'=5. The total score of the subjects ranged from 36 to 180 [19].

The developers of TSCS reported its total reliability in the first study and the second study as 0.89. Results of re-test reliability (three weeks later) for the whole scale was 0.89. TSCS has adequate correlation with tools that measure components such as self-esteem, interpersonal skills, health-related behaviors and adaptive behaviors [19]. In Iran, two studies assessed the reliability and validity of the scale in undergraduate students. The mean, standard deviation and alpha coefficient results were 111.48, 18.81 and 0.89 for the first study, and 102.66, 18.19 and 0.89 for the second study, respectively. Internal consistency estimates of reliability were high. The alpha coefficient for total TSCS was 0.89. Therefore, this scale is reliable [28].

Measure of Affect Regulation Styles (MARS) study used Iranian version of this scale [29]. The 44 items of MARS are mainly taken from the Handbook of self-regulation by Larsen and Prizmic (2004) that measure 6 dimensions of cognitive, behavioral, focus on position, focus on affection change, decrease negative affections, and increase positive affections [30]. To determine the construct validity, the results of factor analysis showed that the scores of this measure are loaded on six factors listed in Table 1. The reliability of these subscales was

also reported from 0.42 to 0.77 [31]. In Iran, the reliability of MARS was 0.75 in 60 subjects (30 girls and 30 boys) using the split-half method and 0.80 using Cronbach's alpha. Also, the validity of MARS for each subscale group has been reported from 0.63 to 0.70, which indicates its high validity [29].

Procedure

First, a letter of introduction was obtained from the university for Guilan Province Prisons Organization and the necessary permits were received. Then, the addresses of the temporary detention centers and the Guilan province juvenile detention centers were obtained. The researcher personally went to the detention centers, provided the experts in those centers with written explanations in the questionnaire, and that the questionnaires were anonymous and had no effect on the administrative process of subjects in the prisons, temporary detention centers, and juvenile detention center.

The researcher obtained informed consent, and provided them with the study tools. Subjects were asked in writing to answer questions with honesty. Each subject answered the questions individually without any time limit. After completing the questionnaire, 3 of the 73 questionnaires were incomplete or not answered, which were excluded from the research process. Therefore, questionnaires of 70 juvenile delinquents in detention centers were analyzed. The questionnaires were distributed to the participants and data were collected during the 2017-2018 academic year.

Data analysis

Descriptive statistics such as frequency, percentage, mean and standard deviation of research variables, as well as skewness and kurtosis were used to study the normality of data distribution, and inferential statistics of Pearson correlation coefficient and stepwise multiple regression were used in the SPSS V. 22 software.

Results

The subjects included a sample of 70 juvenile delinquents aged 12 to 18 years old with a mean age of 16.89 ± 1.67 years. In terms of education level, 18 were (25.7%) at elementary school level, 41 (58.6%) at middle school level, and 11 (15.7%) at high school level. Descriptive indices of study variables are reported as mean and standard deviations in Table 1. Also, the skewness and kurtosis values were used to investigate the normal distribution of variables in subjects.

Table 1. Descriptive indices of research variables and skewness and kurtosis values (n=70)

Variable	Mean±SD	Skewness	Kurtosis
Total score of self-control capacity	48.271±4.449	0.215	-1.461
Total score of affect self-regulation	13.785±0.064	-0.037	-0.881
Cognitive self-regulatory	2.357±1.216	0.170	-1.556
Behavioral self-regulatory	2.185±0.782	0.190	-0.280
Changing position	2.628±0.995	-0.004	-1.077
Changing affection	2.414±0.892	0.329	-0.588
Decreasing negative mood	2.057±0.930	0.328	-0.970
Increasing positive mood	2.042±0.891	0.672	-0.112
Permissive parenting style	11.100±2.187	0.193	-1.120
Authoritarian parenting style	19.028±4.465	0.376	-1.252
Authoritative parenting style	17.957±3.338	0.553	-0.838



As **Table 1** shows, the values of skewness and kurtosis between +2 and -2 indicate that research variables had a normal distribution. Pearson correlation coefficient was used to test the first and second hypotheses of this study, the results of which are presented in **Table 2**.

As **Table 2** shows, there was a positive and significant relationship between authoritative parenting style and self-control capacity and there was a negative and significant relationship between permissive parenting style

and self-control capacity ($P < 0.01$). However, there was no significant relationship between authoritarian parenting style and self-control capacity ($P > 0.05$). In other words, juvenile delinquents with a higher perceived authoritative parenting style and a lower perceived permissive parenting style had more favorable self-control capacity and vice versa. In addition, there was a positive and significant relationship between authoritative parenting style and the total score of affective self-regulation

Table 2. Correlation coefficients between perceived parenting styles and capacities of self-control and affect self-regulation and juvenile delinquents (n=70)

Variables	Permissive Parenting Style	Authoritarian Parenting Style	Authoritative Parenting Style
	r	r	r
Total score of self-control capacity	-0.357*	0.142	0.503*
Total score of affect self-regulation	-0.470*	-0.641*	-0.464*
Cognitive self-regulatory	-0.340*	-0.351*	0.404*
Behavioral self-regulatory	-0.254**	-0.284**	0.204
Changing position	-0.109	-0.288**	0.178
Changing affection	-0.452**	-0.388*	0.492*
Decreasing negative mood	-0.117	-0.279**	-0.130**
Increasing positive mood	-0.232	-0.473*	0.307*

* $P \leq 0.05$; ** $P \leq 0.01$


Table 3. Summary of model and statistical characteristics of regression of self-control capacity

Step	Model	Sum of Squares	df	Mean Squares	F	P	R	R ²	ΔR ²
1	Regression	346.045	1	346.045	23.074	0.001	0.503	0.253	0.242
	Residual	1019.798	68	14.997					
2	Regression	518.684	2	259.342	20.511	0.001	0.616	0.380	0.361
	Residual	847.159	67	12.644					

Step 1: Predictor variable: Authoritative parenting style.

Step 2: Predictor variable: Authoritative parenting style, Authoritarian parenting style



Table 4. Regression coefficients of self-control capacity scores based on perceived parenting styles

Variables	Indices	B	Standard Error b	β	t	P
Constant (a)		16.409	5.852		2.804	0.007
Authoritative parenting style		1.207	0.194	0.906	6.233	0.001
Authoritarian parenting style		-0.535	0.145	-0.537	-3.695	0.001



tory and subscales of cognitive self-regulatory, changing affection and increasing positive mood ($P < 0.01$).

There was a negative and significant relationship between authoritarian parenting style and total score of affective self-regulatory and subscales of cognitive self-regulatory, behavioral self-regulatory, changing affection, changing position, decreasing negative mood, and increasing positive mood ($P < 0.01$). There was a negative and significant relationship between permissive parenting style and total score of affective self-regulatory and subscales of cognitive self-regulatory, behavioral self-regulatory, and changing affection ($P < 0.05$).

No significant relationship was observed in other cases ($P < 0.05$). In other words, juvenile delinquents with a higher perceived authoritative parenting style and a lower perceived permissive and authoritarian parenting style had more favorable affective self-regulatory and vice versa.

Two separate stepwise regression analyses were used to test the third and fourth hypotheses of this study. The total score of self-control and affective self-regulatory capacities were entered into the regression equation as criterion variables and perceived parenting styles were entered as predictor variables (Table 3).

The results of the regression analysis showed that finally, two predictive variables of authoritative and authoritarian parenting styles separately predicted the variance of self-control capacity of juvenile delinquents, in which authoritative parenting style explained 25% and authoritarian parenting style explained 13% of the variance. Totally, these variables can predict 38% of the variance in criterion variables ($R^2 = 0.380$). Also, the observed F level for predictor variables was significant at the level of 0.001. This finding shows that these two variables can predict self-control capacity of juvenile delinquents. Table 4 shows the regression coefficients and the significance of these coefficients.

Table 5. Summary of the model and statistical characteristics of regression of affective self-regulatory capacity

Step	Model	Sum of squares	df	Mean Squares	F	P	R	R ²	ΔR ²
1	Regression	266.520	1	266.520	47.535	0.001	0.641	0.411	0.403
	Residual	381.265	68	5.607					

Step 1: Predictor variable: Authoritarian parenting style.



Table 6. Regression coefficients of affective self-regulatory scores based on perceived parenting styles

Variables	Indices	B	Standard error b	β	t	P
Constant number (a)		22.160	1.247		17.768	0.001
Authoritarian parenting style		-0.440	0.064	-0.641	-6.895	0.001

 CJNS

According to [Table 4](#), the effect of authoritative parenting style and authoritarian parenting style is $\beta=0.906$ and $\beta=-0.537$, respectively, in which the authoritative parenting style predicts the juvenile delinquents' self-control capacity positively and the authoritarian parenting style predicts it negatively. That is, the index of juvenile delinquents' self-control capacity will improve by increasing levels of perceived authoritative parenting style and reducing the levels of authoritarian parenting style. Meanwhile, the permissive parenting style was removed from analysis due to statistical insignificance. [Table 5](#) shows a summary of the regression model of affective self-regulatory capacity scores based on perceived parenting styles.

The results of regression analysis showed that in the final step, the predictor variable of authoritarian parenting style could separately predict the changes of affective self-regulatory of juvenile delinquents. The share of authoritarian parenting style in predicting affective self-regulatory of juvenile delinquents was about 41% ($R^2=0.411$). Also, the observed F level for predictor variables was significant at the level of 0.001. This finding suggests that the perceived authoritarian parenting style can predict affective self-regulatory of juvenile delinquents. [Table 6](#) shows the standardized and non-standardized regression coefficients and the investigation of the significance of these coefficients.

According to [Table 6](#), the effect of authoritarian parenting style was $\beta=-0.641$, which negatively predicts the affective self-regulatory of juvenile delinquents; that is, by decreasing the level of perceived authoritarian parenting style, the index of affective self-regulatory of juvenile delinquents in the detention center will improve.

Discussion

The results relating to the first hypothesis showed that juvenile delinquents with a higher perceived authoritative parenting style and a lower perceived permissive parenting style had more favorable self-control capacity and vice versa. These findings are implicitly consistent with previous studies [[9](#), [32](#), [33](#)]. This finding can be explained as the authoritative parenting style with a com-

ination of parental control and high emotional support provides adequate levels of independence and a mutual relationship between the child and the parents.

This style is associated with positive developmental outcomes such as higher academic achievement, higher self-reliance, less behavioral deviations, and better relationships with peers [[34](#)]. While these parents apply controlling methods to their children, they explain about them and reinforce ways to change their behavior. In this style, a set of social support, mutual relationship, acceptance, accountability, tolerance, and satisfaction with children can be seen [[11](#), [35](#)].

Parents with an authoritative parenting style warmly extend their relationship with their children, but authoritarian parents insist on conformance, obedience, and respect for the parents, and permissive parents employ a low level of order and few rules at home. This indicates that the authoritative parenting style is more efficient for strengthening self-control, which requires the ability to delay immediate satisfaction of needs, control thoughts, regulate emotions and inhibit impulses.

Self-control is one of the predictors of desirable adaptability, lack of vulnerability, and interpersonal relationships. Individuals with higher self-control are more likely to have fewer behavioral problems and healthier behaviors [[36](#)]. Therefore, it appears that juvenile delinquents who have a higher authoritative parenting style and a lower permissive parenting style manifest a more favorable self-control capacity and are less likely to endure the consequences of delinquent behaviors in the future.

The results of the second hypothesis showed that juvenile delinquents with a higher perceived authoritative parenting style and a lower perceived permissive parenting style had more favorable affective self-regulatory and vice versa. These findings are implicitly consistent with previous studies [[37-39](#)]. This finding can be explained in that unlike permissive and authoritarian parents (the main characteristic of whom is the escaping order and creating obedience in children, respectively), the

authoritative parents, while controlling their children's behavior, provide the grounds to achieve high levels of self-regulatory.

The dominant role of authoritative parents is the expansion of affective relationships with their children, and this kind of parenting style appears to provide more grounds for affective self-regulatory. In contrast, the permissive parents are merely receptive and have few requests and expectations of their children, and refrain from any kind of control over their children. While their children have not grown sufficiently and are still unable to make decisions in many matters, these parents allow them to decide on their own at any age and even make decisions that require experience and knowledge that they do not possess.

They allow children to eat anything at any time and sleep and watch TV or stay out any time and as much as they want. Given the educational approach of parents with a permissive parenting style, the children of such families without knowing the consequences of their behaviors, exhibit high-risk behaviors harmful to themselves and others. In this case, juveniles of such families are likely to have delinquent behaviors. Therefore, it appears rational that juvenile delinquents with a higher perceived authoritative parenting style and a lower perceived permissive parenting style have more favorable affective self-regulatory.

The results obtained from the third hypothesis, using multiple stepwise regression analysis, showed that by increasing the levels of perceived authoritative parenting style and reducing the levels of perceived authoritarian parenting style, the index of self-control capacity of juvenile delinquents will improve. These findings are implicitly consistent with previous studies [9, 32, 33]. The explanation of this finding is similar to the first hypothesis. It should be noted that in this style, a set of social support, mutual relationship, acceptance, accountability, tolerance, and satisfaction with children can be seen [11, 35].

Children of these parents have higher levels of self-determination and have more social competencies and less aggression than others [40, 41]. By contrast, authoritarian parents exercise strict control over their children and consider them obedient, submissive and passive, and in situations where the children's behavior and performance conflicts with their established criteria, they use punishment and enforcement to control their children. In such families, children are always thinking of escaping the limitations of their parents' parenting style and they get away from the home environment before they learn proper self-control manners.

The outcome of such behavior is committing delinquencies and the subsequent problems associated with them. Therefore, it is logical that the juvenile delinquents' self-control capacity improves by increasing levels of perceived authoritative parenting style and reducing the levels of authoritarian parenting style.

The results obtained from the fourth hypothesis by stepwise multiple regression analysis showed that by reducing the level of perceived authoritarian parenting style, the affective self-regulatory index of the juvenile delinquents in the detention center will improve. These findings are implicitly consistent with previous studies (38-40). This finding can be explained in that dictator parents apply cold relationships with great control over their children. They often despise their children and do not give any explanation about the punishment they employ.

Authoritarian parents have very high expectations of their children and show little affection in relationship with their children. These parents see no need to give reasons for their commands and emphasize the unwavering obedience and respect from their children, which provides the grounds for children's behavioral and psychological damage. One of the consequences of the damage is children's tendency to commit high-risk and delinquent behaviors that result from their inability in affective self-regulatory.

Children with authoritarian parents are isolated, unhappy and dissatisfied, and respond to their peers with aggression and hostility in the event of failure. These children also show their aggression in a passive way, they are isolated, sad and vulnerable and show less curiosity. Reduced self-esteem, independence and creativity, and delayed moral transformation are of the characteristics of the children of authoritarian families. Therefore, it appears logical that affective self-regulatory of juvenile delinquents improves with reducing the level of perceived authoritarian parenting style.

The study limitations include a sample limited to male juvenile offenders in Guilan Province, and the impossibility of controlling the socioeconomic status of the juvenile delinquents' family. Although the sample size was sufficient for the present analysis, it is suggested to include girls for the sake of comparison. It is recommended that further studies follow-up and compare juvenile delinquents with high levels of self-control and affective self-regulatory with juvenile delinquents with lower levels of these psychological traits over time. Longitudinal studies can more clearly explain the complexity of the relationship between parenting styles and delinquent behaviors.

Conclusion

The findings of this research revealed that parenting styles can play an effective role in the incidence and control of delinquent behaviors. Authoritarian and authoritative parenting styles appear to affect the delinquent behaviors of juveniles by improving and weakening self-control and affective self-regulatory capacities, respectively.

Ethical Considerations

Compliance with ethical guidelines

All the study procedures were in compliance with the ethical guidelines of the Declaration of Helsinki 1957.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for profit sectors.

Authors contributions

Draft: Shadi PourHadi, Reza Shabahang; Writing review and editing: Sajjad Rezaei; Resources: Reza Shabahang; Supervision: Sajjad Rezaei; and Data collecting: Shadi PourHadi.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

We thank all the participants who answered the tests in this research. We also appreciate the assistance provided by the experts of the organizational units mentioned in the methodology section of this research.

References

- [1] Statistical Centre of Iran. [The arrests of various crimes in terms of gender and age (Persian)]. Tehran: Statistical Centre of Iran; 2019.
- [2] Azami K, Ghaderi SR, Fathi M, Rafiey H, Ghaedamini, HG. [A study on relationship between parenting styles and companionship with delinquent peers (Persian)]. *Journal of Social Problems of Iran* 2016; 7(1):57-77. [DOI:10.18869/acadpub.jspi.7.1.57]
- [3] Berk LE. *Child Development*. London: Pearson; 2013.
- [4] Regoli RM, Hewitt JD, DeLisi M. *Delinquency in society*. Burlington, Massachusetts: Jones & Bartlett Learning; 2016.
- [5] Balogun SK, Chukwumezie M. Influence of family relationship, parenting style and self-esteem on delinquent behaviour among juveniles in remand homes. *Global Journal of Human-Social Science Research* 2010; 10(2), 46-6.
- [6] Mussen PH, Conger JJ, Kagan J, Huston AC. *Child development and personality*. New York: Harpercollins College Division; 1990.
- [7] Kauser R, Pinquart M. Gender differences in the associations between perceived parenting styles and juvenile delinquency in Pakistan. *Pakistan Journal of Psychological Research*. 2016; 31(2):549-68.
- [8] Chowdhury IA, Khan MM, Uddin I. Causes and consequences of juvenile delinquency in Bangladesh: A sociological analysis. *International Journal of Social Science Tomorrow*. 2016; 1(4):1-11.
- [9] SeyedMosavi SP, Nad Ali H, Ghanbari S. [The study of relationship between parenting styles and externalizing symptoms in 7 to 9 year old children (Persian)]. *Journal of Family Research* 2008; 4(1):37-49.
- [10] Patterson GR, DeBaryshe BD, Ramsey E. A developmental perspective on antisocial behavior. *American Psychologist*. 1989; 44(2):329-35. [DOI:10.1037//0003-066X.44.2.329] [PMID]
- [11] Baumrind D. Current patterns of parental authority. *Developmental Psychology*. 1971; 4(1p2):1-103. [DOI:10.1037/h0030372]
- [12] Álvarez-García D, García T, Barreiro-Collazo A, Dobarro A, Antúnez Á. Parenting style dimensions as predictors of adolescent antisocial behavior. *Frontiers in Psychology*. 2016; 7(1383):1-9. [DOI:10.3389/fpsyg.2016.01383] [PMID] [PMCID]
- [13] Pinquart M. Associations of parenting dimensions and styles with externalizing problems of children and adolescents: An updated meta-analysis. *Developmental Psychology*. 2017; 53(5):873-932. [DOI:10.1037/dev000295] [PMID]
- [14] Angrist JD, Evans WN. Children and their parents' labor supply: Evidence from exogenous variation in family size. Cambridge, Massachusetts: National Bureau of Economic Research; 1996. [DOI:10.3386/w5778]
- [15] Wilder EI, Watt TT. Risky parental behavior and adolescent sexual activity at first coitus. *Milbank Quarterly*. 2002; 80(3):481-524. [DOI:10.1111/1468-0009.00020] [PMID] [PMCID]
- [16] Kapetanovic S, Skoog T, Bohlin M, Gerdner A. Aspects of the parent-adolescent relationship and associations with adolescent risk behaviors over time. *Journal of Family Psychology*. 2019; 33(1):1-11. [DOI:10.1037/fam0000436] [PMID]
- [17] Moitra T, Mukherjee I, Chatterjee G. Parenting behavior and juvenile delinquency among low-income families. *Victims & Offenders*. 2018; 13(3):336-48. [DOI:10.1080/15564886.2017.1323062]
- [18] Katz LF, Gottman JM. Patterns of marital conflict predict children's internalizing and externalizing behaviors. *Devel-*

- opmental Psychology 1993; 29(6):940-50. [DOI:10.1037/0012-1649.29.6.940]
- [19] Tangney JP, Baumeister RF, Boone AL. High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personalized*. 2004; 72(2):271-324. [DOI:10.1111/j.0022-3506.2004.00263.x] [PMID]
- [20] Baumeister RF, Vohs KD, Tice DM. The strength model of self-control. *Current Directions in Psychological Science*. 2007; 16(6):351-5. [DOI:10.1111/j.1467-8721.2007.00534.x]
- [21] Duckworth AL. The significance of self-control. *Proceedings of the National Academy of Sciences of the United States of America*. 2011; 108(7):2639-40. [DOI:10.1073/pnas.1019725108] [PMID] [PMCID]
- [22] Vohs KD, Baumeister RF, Schmeichel BJ. Motivation, personal beliefs, and limited resources all contribute to self-control. *Journal of Experimental Social Psychology*. 2012; 48(4):943-7. [DOI:10.1016/j.jesp.2012.03.002]
- [23] Bunch JM, Iratzoqui A, Watts SJ. Child abuse, self-control, and delinquency: A general strain perspective. *Journal of Criminal Justice*. 2018; 56:20-8. [DOI:10.1016/j.jcrimjus.2017.09.009]
- [24] Meldrum RC, Trucco EM, Cope LM, Zucker RA, Heitzeg MM. Brain activity, low self-control, and delinquency: An fMRI study of at-risk adolescents. *Journal of Criminal Justice*. 2018; 56:107-17. [DOI:10.1016/j.jcrimjus.2017.07.007] [PMID] [PMCID]
- [25] Meldrum RC, Barnes JC, Hay C. Sleep deprivation, low self-control, and delinquency: A test of the strength model of self-control. *Journal of Youth and Adolescence*. 2015; 44(2):465-77. [DOI:10.1007/s10964-013-0024-4] [PMID]
- [26] Bandura A, Caprara GV, Barbaranelli C, Gerbino M, Pastorelli C. Role of affective self-regulatory efficacy in diverse spheres of psychosocial functioning. *Child Development*. 2003; 74(3):769-82. [DOI:10.1111/1467-8624.00567] [PMID]
- [27] Buri JR. Parental authority questionnaire. *Journal of Personality Assessment*. 1991; 57(1):110-9. [DOI:10.1207/s15327752jpa5701_13] [PMID]
- [28] Bahadori KJ, Khanjani Z. [Personality traits predicting self-control and affective adjustment in offenders: An analysis of crime commission in terms of personality psychology (Persian)]. *Entezam-E-Ejtemaei*. 2017; 9(2):1-18.
- [29] Vohs KD, Baumeister RF. *Handbook of self-regulation: Research, theory, and applications*. New York: Guilford Press; 2016.
- [30] Prizmic-Larsen Z, Larsen R, Augustine A. Individual differences in affect regulation strategies. *Personality and Individual Differences*. 2014; 60:559. [DOI:10.1016/j.paid.2013.07.251]
- [31] Salehi Moorkani B. [Analysis and Comparison of emotional self-regulation strategies among students with anxiety disorders and depression with normal students in Isfahan]. Unpublished thesis of Master of Science, University of Al-Zahra, Tehran; 2006.
- [32] Finkenauer C, Engels R, Baumeister R. Parenting behaviour and adolescent behavioural and emotional problems: The role of self-control. *International Journal of Behavioral Development*. 2005; 29(1):58-69. [DOI:10.1080/01650250444000333]
- [33] Georgiou SN, Ioannou M, Stavrinides P. Parenting styles and bullying at school: The mediating role of locus of control. *International Journal of School & Educational Psychology*. 2017; 5(4):226-42. [DOI:10.1080/21683603.2016.1225237]
- [34] Shokoohi-yekta M, Parand A, Faghihi A. [A comparative study on child rearing styles (Persian)]. *International Congress on Psychology, Religion and Culture*. Tehran: Iran; 2011.
- [35] Querido JG, Warner TD, Eyberg SM. Parenting styles and child behavior in African American families of preschool children. *Journal of Clinical Child and Adolescent Psychology*. 2002; 31(2):272-7. [DOI:10.1207/153744202753604548]
- [36] Laxmi AV, Kadapatti M. Analysis of parenting styles and interpersonal relationship among adolescents. *International Journal of Scientific and Research Publications* 2012; 2(8):96-100.
- [37] Kharazi A, Karashki H. [The study of relationships between parents' perceptions and self-regulation learning (Persian)]. *Advances in Cognitive Science*. 2009; 11(1):49-55.
- [38] Ghasemi A, Fouladchang M. [A study on the role of parental goal emphases on the students' self-regulation (Persian)]. *Journal of Educational Psychology Studies*. 2010; 7(11):69-86.
- [39] Karami J, Fayazi Y. [Role of perceptions of parental, problem solving, and self-regulation in predicting incidence of high-risk behaviors among students in Kermanshah City, Iran (Persian)]. *Medical Journal of Tabriz University of Medical Sciences & Health Services*. 2017; 38(6):48-55.
- [40] Deslandes R. Direction of influence between parenting style and parental involvement in schooling practices, and students' autonomy: A short-term longitudinal design. Paper presented at: 10th Annual International Roundtable on School, Family, and Community Partnerships. 24-28 April 2000; New Orleans, United States of America.
- [41] Domitrovich CE, Bierman KL. Parenting practices and child social adjustment: Multiple pathways of influence. *Merrill-Palmer Quarterly*. 2001; 47(2):235-63. [DOI:10.1353/mpq.2001.0010]