The relationship between emotional regulation and anger control skills and self-esteem of correctional center adolescents

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ARTICLE INFORMATION	*ABSTRACT*
Article type Original research Pages: 52-58 **Corresponding Author's Info** Email: khazaei.s2021@gmail.com **Article history:** Received: 2023/01/26 Revised: 2023/05/13 Accepted: 2023/05/27 Published online: 2023/12/01 **Keywords:** *emotional regulation, anger control skill, self-esteem.*	**Background and Aim:** Every year we face a significant increase in juvenile delinquency in many countries and Iran, which has negative psychological consequences for this group; Therefore, the present study was conducted with the aim of determining the relationship between emotional regulation and anger control skills and self-esteem of adolescents in Tehran Correctional Center. **Methods:** This research was a descriptive-correlational study. The population of this study consisted of all adolescents of the Rehabilitation and Training Center of Tehran in 1607 in 2018. Of these, 113 were selected by simple random sampling. To collect data, emotional regulation, anger control and self-efficacy were used. Data analysis was performed using Pearson correlation coefficient and regression analysis with Spss.22 software. **Results:** The findings showed that with an increase in the mean (SD) of emotional regulation, the anger control skill decreases (r=0.27, P<0.001) and with an increase in emotional regulation, the mean of self-esteem increases (r=0.25, P<0.001). The results of multiple linear regression analysis using simultaneous method showed that the multiple linear regression coefficient for emotional regulation and predictive variables are significant (p<0.01, $F_{(2,197)}$=11.697, R^2=0.11, R=0.33). **Conclusion:** The study showed that with increased emotional regulation with anger control skill and self-efficacy in adolescents, the correctional center of Tehran is related. Therefore, emotional regulation in adolescents is an important psychological construct in anger control skill and self-efficacy.

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Introduction

Adolescence bridges childhood and youth. This period, marked by puberty, brings about physical, psychological, and social changes, culminating in the development of sexual and social identity and readiness to assume personal and social responsibilities (Paluck et al., 2017). Due to the transformations of puberty and shifts in values and identity, this period often sees an increase in delinquency and other destructive behaviors. Adolescents, facing hormonal and cognitive maturation and broader social networks, often experience heightened emotional and affective experiences. Factors such as isolation, lack of affection, chaotic family systems, and absence of happiness drive adolescents away from their families towards delinquent, aggressive, and norm-breaking behaviors (Ho, Adnan, & Omar, 2015).

One characteristic observed in adolescents in correctional institutions is emotional regulation. Emotional control involves creating thoughts and behaviors that make individuals aware of their emotions, their emergence, and how to express them (Bjorjeberg et al., 2016). Therefore, emotional regulation is defined as physiological, behavioral, and cognitive processes that enable individuals to modulate their emotional experiences and expressions (Gross & John, 2003). Emotional regulation is central to all aspects of human functioning, playing a vital role in how individuals cope with stress and experience joy. Deficits in emotional regulation are linked to internalizing disorders (e.g., depression, anxiety, social isolation) and externalizing disorders (e.g., delinquency, aggressive behavior) (Etikin et al., 2016).

Another variable prominently observed in adolescents in correctional settings is their limited anger control. Anger, a form of risk-taking behavior, can impact adolescents' mental health, especially when they lack skills in controlling and managing it. Anger may stem from internal factors like irrational thoughts, unrealistic expectations, and feelings of failure, or external factors like betrayal, neglect, disregard by others, and experiencing insults or assaults (Mishnbam, 2017). Anger is a dangerous emotion as it aims to destroy what it perceives as obstacles. Physical reactions like increased blood pressure and heart rate due to anger can be hazardous. Unexpressed anger, internalized, increases hostility within an individual,

damaging their performance in interpersonal and social situations, goal attainment, family life, and work settings (Robertson et al., 2015). Belief in one's inability to influence events significantly impacting one's life leads to feelings of futility, sadness, and vulnerability to stressful events. When individuals perceive themselves as incapable of achieving valuable outcomes, they become angry (Morris, 2002). Therefore, adolescents, due to their unique developmental stage, face numerous transitional events biologically, educationally, and socially. They must find solutions to problems and confront them. Their success in facing these developmental challenges is linked to their self-esteem. An adolescent with a weak belief in self-efficacy passively succumbs to these pressures (Bowen & Neill, 2013). Numerous studies have shown that adolescents are weak in several domains of self-esteem (Bowen & Neill, 2013; Morris et al., 2001). Therefore, self-esteem reflects an individual's belief in their ability to cope in specific situations and influences cognitive, behavioral, and emotional patterns across different levels of human experience (Bandura, 2006). According to this model, self-esteem plays a central role in the self-regulation of emotional states. Smith (2011) found a positive relationship between spirituality and self-esteem. Erreygers et al. (2019) concluded that the more effective parents were in anger control and the less anxiety they had, the more effective their children were. Hosseini Dolatabadi and Saadat, Ghasemi Jobaneh (2013) found a significant negative relationship between authoritative parenting style and positive attitudes towards delinquency, and a significant positive relationship between authoritarian and permissive parenting styles and positive attitudes towards delinquency. A significant negative relationship was found between self-esteem and positive attitudes towards delinquency. Also, a significant positive relationship was found between authoritative parenting style and self-efficacy, and a significant negative relationship between authoritarian parenting style and self-esteem.

The factors contributing to delinquency and its irreversible consequences, on the one hand, and the lack of examination of emotional regulation, anger control, and personal and family reactions to it in Iran, on the other, call for deeper studies on these phenomena. Social harms are issues that undoubtedly hinder social progress and

development and waste the active force and youth population of the country, leading to irreparable damage if this energy is neglected. Therefore, in the cycle of delinquency and crime, the Tehran Correctional Center is only a temporary phase unrelated logically to the pre-arrest and post-release phases of children and adolescents. This characteristic reduces the mission of the Tehran Correctional Center to merely a temporary shelter. The reality is that delinquent children and adolescents in the Tehran Correctional Center are highly transient, and there are no behavior-based plans such as emotional regulation, anger control, and self-esteem for such a population. Thus, the aim of the current study was to examine the relationship between emotional regulation, anger control skills, and self-esteem in adolescents at the Correctional Center.

Method

The present study was descriptive-correlational. The statistical population consisted of all adolescents at the Tehran Correctional Center, totaling 173 individuals in 2021. The sample included 123 individuals selected through simple random sampling. The inclusion criteria for the sample were: 1) residing in the Correctional Center, 2) consent from the center for the adolescents' participation, 3) currently aged between 12 and 17 years, and 4) absence of psychological and behavioral problems. The exclusion criteria included unwillingness to continue treatment, non-cooperation in the questionnaire process, and others.

Materials

1. Emotional Regulation Questionnaire: This questionnaire, developed by Gratz (as cited in Helaniak et al., 2016), consists of 36 items across six dimensions (acceptance of emotional responses, goal-directed behavior, impulse control, emotional awareness, access to emotional regulation strategies, and emotional clarity) using a 5-point Likert scale. It has been validated for content by experts, with a Cronbach's alpha reliability of 0.89.

2. Anger Control Questionnaire: Developed by Spielberger et al. (as cited in Shamburg et al., 2016), this questionnaire contains 57 items across various dimensions (anger state, trait anger, anger expression, and anger control

scales) using a 4-point Likert scale. It has been content validated and achieved a Cronbach's alpha reliability of 0.85.

3. Coopersmith Self-Esteem Inventory (SEI): Originally developed by Coopersmith in 1967, this scale consists of 58 items covering feelings, beliefs, or reactions, with respondents choosing between "Like me (Yes)" or "Not like me (No)." It includes five subscales: general (26 items), social (8 items), family (8 items), academic or occupational (8 items), and lie (8 items). The scoring is binary (zero or one), with the lie scale being excluded from the total score calculation. If respondents score more than 4 on the lie scale, it indicates low test credibility. The total score ranges from 0 to 50, with higher scores indicating higher self-esteem. It has a Cronbach's alpha of 0.88, indicating good reliability. In Iran, Boroomand (2001) normed the SEI on high school and pre-university students in Islamshahr, obtaining a Cronbach's alpha of 0.89. The correlation coefficient of 0.814 with Eysenck's questionnaire indicates acceptable criterion validity for the Coopersmith scale. Aghadadashi (2005) also conducted a normative study, confirming its reliability and validity, with a Cronbach's alpha of 0.796 (Darbani & Parsakia, 2022).

Implementation

Questionnaires were presented to participants with necessary explanations. To consider ethical aspects of the research, participants were orally informed about the study and assured that all information would be confidential and used only for research purposes. To respect privacy, participants' names and surnames were not recorded. In this research, data were analyzed at descriptive and inferential levels. Descriptively, means, standard deviations, and correlation matrices were reported. Inferentially, Pearson correlation coefficients and multivariate regression analyses were conducted using SPSS-22, due to the correlational nature of the research design.

Results

The mean (standard deviation) age of boys was 16.6 (3.7) and girls 16.4 (4.1), ranging from 12 to 17 years. There were 55 (48.6%) male and 58 (51.3%) female students.

Table 1. Mean (standard deviation) of the variables and the correlation between emotion regulation with anger and self-esteem			
Variable	Subscale	Mean (SD)	r
Anger	State	31.80 (14.1)	-0.273
	Trait	28.60 (6.3)	-0.212
	Control and expression	21.30 (2.8)	-0.192
	Total	35.7 (7.1)	-0.272
Self-esteem		31.4 (4.3)	0.253
Emotional self-regulation	Emotional acceptance and response	13.55 (4.9)	0.63
	Purposeful behavior	13.73 (4.3)	0.58
	Impulse control	15.01 (5.2)	0.70
	Emotional awareness	15.32 (4.1)	0.59
	Access to emotional strategies	18.25 (6.5)	0.64
	Emotional clarity	10.21 (3.7)	0.69
	Total	20.49 (94.6)	-

Findings indicated that with increased emotional regulation average (standard deviation) of 20.49 (94.6), anger control skills average (standard deviation) of 35.7 (7.1) decreased (r = -0.27, p < 0.001), and with increased emotional regulation, self-esteem average (standard deviation) of 31.4 (4.3) increased (r = 0.25, p < 0.001). The correlation between the components and total score of emotional regulation with components and total score of self-esteem and anger was significant. Pearson correlation values between the components and total score of emotional regulation with components and total score of self-esteem were positively significant (p < 0.05), and values for anger were negatively significant (p < 0.05). Thus, the null hypothesis was rejected, supporting the research hypothesis of a significant relationship between emotional regulation and anger control skills and self-esteem in adolescents at the Tehran Correctional Center.

Table 2. The estimation of parameters of regression model				
Model	Standard coefficient	Standard error	T	p
Constant	0.395	0.089	2.190	0.000
Anger	0.428	0.216	1.981	0.001
Self-esteem	0.718	0.142	5.056	0.026
Emotion regulation	0.529	0.121	4.372	0.000

The coefficient of determination was 0.73, indicating the chosen model accounted for 73% of the variance in emotional regulation. Adjusted coefficient of determination was 0.62, suggesting the model accounted for 62% of the changes in emotional regulation scores, indicating its suitability for predicting emotional regulation. The standard error of estimate was 0.61.

The constant coefficient was 0.395, significant at p < 0.000, implying its presence in the regression model (p<0.05). Similarly, the coefficients for anger (0.428) and self-esteem (0.718) were significant, indicating their impact in the model. Emotional regulation coefficient was 0.529, significant at p < 0.000 (p<0.05). So, the role of the dependent variable is significant in the regression model.

Table 3. Predicting emotional self-regulation with anger and self-esteem								
Model	B	SE	β	t	P	R	R²	F
Emotion regulation					0.001	0.326	0.106	11.679
Constant	86.242	4.703		18.339	0.001			
Anger	-0.355	-0.167	-0.146	-2.133	0.034			
Self-esteem	0.520	0.135	0.265	3.861	0.001			

Based on this, the multiple correlation coefficient between the linear combination of predictor variables and emotional regulation was 0.33 (0.326), and these predictor variables together

explain 11% (0.106) of the variance in emotional regulation. As observed in Table 3, for each unit increase in the standard deviation of scores in anger and self-esteem, the scores of emotional regulation change by 0.146 and 0.265 standard deviations, respectively. In other words, the results of this test have demonstrated that anger and self-esteem have the ability to predict the emotional regulation of adolescents in the juvenile correction and education center of Tehran city.

Conclusion

Findings demonstrated that as emotional regulation increased, anger control skills improved, and self-esteem heightened. Adolescents who utilized emotional regulation had higher self-esteem and were more skilled at controlling anger. Successful emotional regulation in adolescents is associated with positive outcomes like the development of social competencies and psychological well-being, whereas unsuccessful regulation can be attributed to cognitive control deficits, such as inability to manage negative emotions arising from negative thoughts and beliefs about worry and ineffective coping strategies (Kompus et al., 2017). Dysfunction in emotional regulation is linked with prominent psychological issues, suggesting that diminished emotional regulation can herald problematic behaviors like anger. Therefore, a crucial educational endeavor for adolescent emotional regulation is the "Anger Management" program. Correctional centers aid in anger control, teaching adolescents to remain calm and manage pre-anger negative feelings. Anger control skills can reduce societal misconduct and adverse events, as the goal is to maintain organismic control and balance against daily stresses, leading to enhanced adolescent self-esteem. When adolescents have a strong belief in self-esteem and high self-efficacy, they are likely to have higher emotional regulation, leading to a negative attitude towards delinquency (Robertson et al., 2015). This study suggests incorporating emotional regulation as part of the negative affect modulation and anger control process to optimize adolescents in correctional facilities. Strong self-esteem plays a crucial role in motivation, well-being, and individual achievements in all life domains. The relationship between emotional regulation and adolescent self-esteem is bidirectional, not unidirectional, hence emphasizing the enhancement of their emotional regulation. If adolescents perceive control over their environment and behavior (Pivetti et al., 2015), their self-esteem will accordingly increase.

Results also showed a significant negative relationship between emotional regulation and anger control skills in Tehran's correctional center adolescents. The findings indicate that adaptive emotional regulation is associated with positive social adaptability and interactions, and an increase in positive emotional experiences helps in effectively coping with stressful situations and enhances social functioning. Therefore, anger management training is effective in challenging and changing futile behaviors and thoughts, managing intense emotional responses, and promoting self-control. Further findings revealed a significant positive relationship between emotional regulation and self-esteem in correctional center adolescents, indicating that adolescents' ability in emotional regulation plays a crucial role in their life successes. Emotional regulation aids in initiating, maintaining, modifying, or changing the emergence, intensity, or duration of internal feelings and emotions associated with social-psychological and physical processes in achieving individual goals. These beliefs impact thinking, feeling, motivation, or behavior. Strong self-esteem improves positive individual perspectives and better engagement in activities, goal setting, and work commitment.

In studies conducted by Sheppes et al. (2015), a significant relationship was found between the difficulty coefficient and emotional regulation with social competence, but no significant relationship was observed between the difficulty coefficient and emotional regulation. Also, a positive and significant relationship exists between the difficulty coefficient and all its dimensions (control, stability, expansion, responsiveness) with social competence. Simultaneous regression results showed that stability from difficulty coefficient dimensions and strategies and clarity from emotional regulation dimensions could significantly predict social competence.

Limitations of this research included the low inclination of some correctional center adolescents to respond to the questions, perceptual differences in questionnaire concepts affecting responses, and obtaining necessary permissions for questionnaire implementation.

Therefore, it is suggested to provide life skills training, engage adolescents in social programs, offer educational programs to practice responses in anger-inducing situations, focus on education for mental health improvement, attend to their psychological needs, enhance their capability in emotion management, and offer appropriate problem-solving methods. Overall, it is essential to create an environment for all adolescents in Tehran's correctional center to acquire necessary skills for emotional regulation and draw family attention to emotional regulation.

Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

References

Bandura, A. (2006). Adolescent development from an agentic perspective. In Self-efficacy Beliefs of Adolescents (pp. 1-43).

Bjureberg, J., Ljótsson, B., Tull, M. T., Hedman, E., Sahlin, H., Lundh, L. G., Bjärehed, J., DiLillo, D., Messman-Moore, T., Gumpert, C. H., & Gratz, K. L. (2016). Development and validation of a brief version of the difficulties in emotion regulation scale: The DERS-16. Journal of Psychopathology and Behavioral Assessment, 38(2), 284-296.

Bowen, D. J., & Neill, J. T. (2013). A meta-analysis of adventure therapy outcomes and moderators. The Open Psychology Journal, 6(1).

Chung, H., Kim, J., Park, R., Bamer, A. M., Bocell, F. D., & Amtmann, D. (2016). Testing the measurement invariance of the University of Washington Self-Efficacy Scale short form across four diagnostic subgroups. Quality of Life Research, 25(10), 2559-2564.

Compas, B. E., Jaser, S. S., Bettis, A. H., Watson, K. H., Gruhn, M. A., Dunbar, J. P., Williams, E., & Thigpen, J. C. (2017). Coping, emotion regulation, and psychopathology in childhood and adolescence: A meta-analysis and narrative review. Psychological Bulletin, 143(9), 939.

Erreygers, S., Vandebosch, H., Vranjes, I., Baillien, E., & De Witte, H. (2019). The longitudinal association between poor sleep quality and cyberbullying, mediated by anger. Health Communication, 34(5), 560-566.

Etkin, A., Büchel, C., & Gross, J. J. (2016). Emotion regulation involves both model-based and model-free processes. Nature Reviews Neuroscience, 17(8), 532.

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. Journal of Personality and Social Psychology, 85(2), 348.

Heleniak, C., Jenness, J. L., Vander Stoep, A., McCauley, E., & McLaughlin, K. A. (2016). Childhood maltreatment exposure and disruptions in emotion regulation: A transdiagnostic pathway to adolescent internalizing and externalizing psychopathology. Cognitive Therapy and Research, 40(3), 394-415.

Ho, H., Adanan, A. M., & Omar, R. (2015). Psychiatric morbidity and socio-occupational dysfunction in residents of a drug rehabilitation centre: challenges of substance misuse management in a Bruneian context. BJPsych Bulletin, 39(5), 213-217.

Hosseini Dowlatabadi, F., Saadat, S., & Ghasemi Jobaneh, R. (2013). Relationship between Parenting Styles, Self- Efficacy and Attitude to Delinquency among High School Students. Criminal Law Research, 4(2), 67-88.

Meichenbaum, D. (2017). The evolution of cognitive behavior therapy: A personal and professional journey with Don Meichenbaum. Taylor & Francis.

Muris, P. (2002). Relationships between self-efficacy and symptoms of anxiety disorders and depression in a normal adolescent sample. Personality and Individual Differences, 32(2), 337-348.

Muris, P., Schmidt, H., Lambrichs, R., & Meesters, C. (2001). Protective and vulnerability factors of depression in normal adolescents. Behaviour Research and Therapy, 39(5), 555-565.

Paluck, E., Banka, D., McCarron, M. C., & Pandey, M. (2017). Effectiveness of the Dedicated Substance Abuse Treatment Unit in the Regina Correctional Centre: A seven-year retrospective analysis. Journal of Community Safety and Well-Being, 2(3), 91-100.

Parsakia, K. (2022). The effectiveness of strength-based counseling on the self-esteem of marital conflicted women. Psychology of Woman Journal, 3(1), 47-55.

Pivetti, M., Camodeca, M., & Rapino, M. (2016). Shame, guilt, and anger: Their cognitive, physiological, and behavioral correlates. Current Psychology, 35(4), 690-699.

Roberton, T., Daffern, M., & Bucks, R. S. (2015). Beyond anger control: Difficulty attending to emotions also predicts aggression in offenders. Psychology of Violence, 5(1), 74.

Roberton, T., Daffern, M., & Bucks, R. S. (2015). Beyond anger control: Difficulty attending to

emotions also predicts aggression in offenders. Psychology of Violence, 5(1), 74.

Schamborg, S., Tully, R. J., & Browne, K. D. (2016). The use of the State–Trait Anger Expression Inventory–II with forensic populations: A psychometric critique. International Journal of Offender Therapy and Comparative Criminology, 60(11), 1239-1256.

Sheppes, G., Suri, G., & Gross, J. J. (2015). Emotion regulation and psychopathology. Annual Review of Clinical Psychology, 11, 379-405.

Smith II, J. P. (2011). The effects of self-efficacy and spirituality on the job satisfaction and motivation to lead among redeploying soldiers as moderated by transformational leadership. Regent University.