

Caspian Journal of Health Research "Caspian J Health Res"

Journal Homepage: https://cjhr.gums.ac.ir

Research Paper Effectiveness of Reality Therapy on Emotion Regulation Difficulty and Academic Self-Handicapping of Students: A Pilot Study



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Citation Yazdizadeh P, Hafezi F, Ehteshamzadeh P, Heidari A, & Eftekhar Saadi Z. Effectiveness of Reality Therapy on Emotion Regulation Difficulty and Academic Self-Handicapping of Students: A Pilot Study. Caspian Journal of Health Research. 2023; 8(3):163-170. https://doi.org/10.32598/CJHR.8.3.446.2

Running Title Emotion Regulation Difficulty in Students

doi https://doi.org/10.32598/CJHR.8.3.446.2

ABSTRACT

Background: The ability to experience and express emotions is considered a key factor in mental health, and difficulty in effective emotion regulation is a major symptom of many psychiatric disorders.

Objectives: The present study aimed to investigate the role of reality therapy on emotion regulation difficulty and academic self-handicapping in high school students.

Materials & Methods: This quasi-experimental research adopted a pre-test and post-test control group design. The statistical population included all male high school students of Ahvaz in 2021, 30 of whom were selected through cluster random sampling and were then randomly assigned to an experimental group and a control group (15 participants per group). For the pre-test, participants from both groups completed the self-handicapping scale and the difficulties in emotion regulation scale (DERS). The 10-session reality therapy intervention was then implemented in the experimental group, whereas the control group received no intervention. At the end of therapy sessions, the post-test was given to participants in both groups. Data analysis was performed using analysis of covariance (ANCOVA).

Results: The adjusted post-test mean score of difficulty in emotion regulation among intervention and control groups were 77.5 (95%CI: 75.1-79.9) and 113.35 (95%CI: 110.9-115.7), respectively. The values for academic self-handicapping in the intervention and control groups were 75.1 (95%CI: 72.8-78.4) and 97.3 (95%CI: 92.4-99), respectively. According to the result of ANCOVA, reality therapy had significant effects on academic self-handicapping (F=87.79, P=0.001, η^2 =0.78) and emotion regulation difficulty (F=461.15, P=0.001, η^2 =0.95) among students.

Conclusion: Reality therapy mitigated academic self-handicapping and difficulties in emotion regulation among male high school students. It is recommended that schools help students improve emotion regulation and control self-handicapping by providing appropriate conditions for implementing reality therapy sessions.

Keywords: Reality therapy, Emotional regulation, Disability, Students

Accepted: 28 May 2023 Published: 01 Jul 2023

Received: 14 Feb 2023

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1. Introduction



fter childhood, people experience a new stage of life with completely different conditions, called adolescence, and is an important stage in the process of personal and social development. Adolescence

usually begins with puberty [1, 2]. The emergence of the sexual instinct, consolidation of occupational and social interests and benefits, and desire for freedom and independence are among the prominent characteristics of adolescents [3]. Parents are mainly concerned with their children's academic achievements. This concern often depends on how successful students are in education due to worries about their future. In fact, worries about their academic improvements are considered favorable in all education systems [4, 5]. Some students may encounter specific problems in their educations, a serious one of which can be self-handicapping [6].

Self-handicapping means taking an action or a series of actions that will increase the chances of excluding failure and including success in addition to protecting an individual from the negative outcomes of failure [7]. In other words, self-handicapping acts as a mechanism for protecting self-esteem based on the exclusion principle. Accordingly, in case of failure, an individual does not use internal and stable characteristics such as incapability but instead attributes the failure to the lack of effort in order to avoid being threatened by evaluative judgments [8]. At the same time, if success is achieved miraculously, the successful individual will use internal and stable characteristics to present his/her ability [9]. Students usually adopt academic self-handicapping strategies to avoid being labeled incompetent. In fact, self-handicapping is defined as creating some imaginary or real obstacles to self-performance, which helps an individual come up of with pretexts for potential failures. Self-handicapping strategies help students maintain their self-values. Nevertheless, although these strategies are temporarily soothing, they will finally have adverse effects on academic performance [10]. According to the review of empirical evidence regarding studies of selfhandicapping, researchers have emphasized the decisive roles of many factors such as personality traits, achievement goals, metacognitive strategies, and perfectionism in order to predict self-handicapping in learners [11-13].

Another problem that students may face is difficulty in emotion regulation. In fact, emotions play a key role in behavioral responses, decision-making processes, memory enhancement for important events, and facilitation of interpersonal interactions [14]. Emotion regulation is considered a process by which people moderate their emotions to consciously and unconsciously respond to environmental expectations. It is also a mechanism that people adopt (knowingly or unknowingly) to alter their emotions in order to achieve the desirable outcome [15]. Difficulty in emotion regulation is not a homogenous process; it is realized through various mechanisms. Emotion dysregulation is often described as the inability to experience and process emotions [16]. Some researchers have found that difficulty in emotion regulation necessitates activating some cognitive processes, the diversity of which will lead to separate emotion regulation difficulty strategies [17, 18]. In a broad concept, the emotion regulation difficulty model includes difficulty in identifying and describing feelings as well as difficulty in regulating emotions and behavior [19]. Therefore, emotion dysregulation is defined as the use of maladaptive methods in response to emotions. It also includes unacceptable responses, difficulty in controlling behavior within the context of distress, and failure to practically use emotions as environmental and intrinsic information [20]. According to various research results, the capacity and ability to determine how people experience and express emotions can be considered a key factor in mental health, whereas difficulty in effective emotion regulation is a major symptom of many psychiatric disorders [21, 22].

Sometimes, these problems (i.e. academic self-handicapping and emotion regulation difficulty) can make students face serious problems, which highlight the need for psychological and psychiatric interventions. Reality therapy is a therapeutic approach that can be effective. This therapy presents a system with which people can control their lives more effectively and take responsibility for their emotional problems [23]. In fact, reality therapy helps humans have positive feelings by distinguishing right from wrong and identifying their needs in life. The reality therapy approach can help people accept the realities of life, take responsibility, and control their intrinsic behaviors [24]. Affection, support, and compassion play central roles in this approach. Moreover, a consultant acts more like an instructor than a therapist in reality therapy. This method should be considered a kind of prevention technique that emphasizes personal involvement, responsibility, success, positive planning, and practicality. Hence, reality therapy is a common psychological intervention that leads to satisfaction, happiness, success, life control, and enhancement of interpersonal relationships. The main goal of this therapy is to change unsuccessful identities and help individuals adopt responsible behavior [25]. Overall, studies have reported the effectiveness of reality therapy in creating a feeling of positive control, improving flexibility, extend-



ing happiness, boosting self-esteem, and enhancing academic performance [23, 26, 27]. Accordingly, the present study aimed to investigate the effectiveness of reality therapy on emotion regulation difficulty and academic self-handicapping in high school students.

2. Materials and Methods

This quasi-experimental pilot research adopted a pretest and post-test control group design. The statistical population included all male high school students of Ahvaz in the 2021-22 academic year. The stratified cluster sampling method was employed to select 30 students as the research sample. One out of four education districts of Ahvaz was selected randomly, and one high school was selected randomly in the designated district. The research sample (30 students) was then selected from the classes of the designated high school. The students were then randomly assigned to an experimental group and a control group (15 per group). The inclusion criteria were as follows: being aged 15-18 years, having mental health and physical health. However, the exclusion criteria were as follows: unwillingness to continue participation in the research, absenteeism in therapy sessions, the occurrence of a disease, and concurrent reception of other pharmaceutical or psychological interventions. Before the intervention, both groups received a pre-test, after which ten 90-minute sessions (one session a week) of the intervention were implemented in the experimental group.

The intervention session was conducted by the first author in the school counseling room. Table 1 presents an overview of the real therapy sessions [28]. The control group received no interventions during those sessions and was placed on the waiting list. The post-test was conducted in both groups after the intervention sessions were finished in the experimental group. In order to comply with ethical considerations, informed consent was obtained from the participants before entering the research.

Research tools

Difficulties in emotion regulation scale (DERS): The DERS is a self-reporting tool that evaluates the emotion regulation patterns of participants. In this 36-item questionnaire, responses range from 1 ("nearly never") to 5 ("nearly always"). The DERS investigates the difficulty of emotion regulation in the following 6 components: nonacceptance of negative emotions (non-acceptance) (6 items), difficulties engaging in goal-directed behaviors (goals) (5 items), difficulties controlling impulsive behaviors (impulse) (6 items), limited access to effective emotion regulation strategies (strategies) (8 items), lack of emotional awareness (awareness) (6 items), and lack of emotional clarity (clarity) (5 items). The total score for difficulties in emotion regulation of a participant is obtained from the summation of scores on six subscales. The range of scores of this scale is between 36 and 180.

Sessions	Contents
1	Establishing initial communications, presenting goals and rules of sessions, and making learners acquainted with the framework of motivational and emotional elements in the reality therapy approach based on the choice theory
2	Making learners acquainted with the basic needs and health principles of social communications as well as effective and ineffective behaviors from the perspective of the reality therapy
3	Making learners acquainted with motivational needs and their roles in social relationships, academic achievement, and emotion management
4	Making learners acquainted with methods of intrinsic control over emotions based on they cybernetics theory and its function in human relations
5	Making learners acquainted with effective growth behaviors and ineffective recurrent behaviors as well as the model of the control element and recurrent steps focused on failure
6	Making learners acquainted with explicit or implicit signs of the tendency towards effective choices, assertive behaviors, and effective self-talk in consistence with the choice theory
7	Making learners acquainted with the features of motivational needs such as neutrality, intensity and power, overlapping, mutual contradiction, hierarchy, and undeniability
8	Making learners acquainted with the desires of the qualitative world, realistic fulfillment and unrealistic fulfillment, prioritization of desires, and changeability of images in the qualitative world
9	Making learners acquainted with the relationships of desires and perceptions with the outside world for sympathetic actions, basic principles of feelings, thinking, and behavior, visionary training in interpersonal and social decisions
10	Making learners acquainted with different types of self-evaluation, standards of self-evaluation for the system of beliefs, self- evaluation of other people's feedback regarding the use of metaphors, narratives, and stories, final review and conclusion, and post-test

Table 1. The reality therapy sessions



A higher score of each subscale and a higher total score indicates higher levels of difficulties in emotion regulation [29]. Ghazanfari Shabankare et al. [30] reported the total Cronbach's alpha coefficients of this questionnaire to be 0.81.

Self-handicapping scale (SHS): The SHS was developed by Jones and Rhodewalt [31] to measure self-handicapping. This scale includes more than 25 items. The responses are scored on a six-point Likert scale ranging from 0 ("totally disagree") to 5 ("totally agree"). The range of scores of this scale is between 0 and 125. A score between 0 and 50 indicates a low level of self-handicapping, whereas a score between 50 and 100 indicates an average level of self-handicapping. Finally, a score above 100 indicates a high level of self-handicapping. Heidari et al. [32] reported the total Cronbach's alpha coefficients of this questionnaire to be 0.77.

Statistical analyses

Descriptive statistics (e.g. mean and standard deviation) and inferential statistics (e.g. the independent t-test, ANCOVA, and the post hoc Bonferroni test) were used for data analysis in SPSS software, version 23. The Kolmogorov–Smirnov test was conducted to analyze the data normality assumption. Also, Levene's test was used to evaluate the homogeneity of variances.

3. Results

The participants were 30 male high school students with an average age of 17.06 years. The demographic

Table 2. Demographic variables of hig	th school students

variables of the students were presented in Table 2. Table 3 reports the means and standard deviations (SD) of difficulties in emotion regulation and academic self-handicapping in the experimental group and the control group. According to Table 3, the Mean \pm SD of difficulties in emotion regulation was 116.93 \pm 12.04 on the pre-test in the reality therapy group, whereas it was 76.13 \pm 9.30 on the post-test. Moreover, the Mean \pm SD of Academic self-handicapping was 98.57 \pm 16.44 on the pre-test in the reality therapy group, whereas it was 74.20 \pm 17.23 on the post-test, which decreased by 24.7% compared to the baseline.

The Kolmogorov–Smirnov test was conducted to analyze the data normality assumption, which was confirmed for the research variables. The hypotheses and prerequisites of MANCOVA indicated no significant differences between the covariance matrices of the two groups (P=0.876, Box's M=2.76). According to the tests on the homogeneity of the regression line slope, the research variables had the same slope. Moreover, Levene's test for the homogeneity of error variances indicated no significant differences between the two groups in the error variance of dependent variables. Hence, the hypothesis of variance homogeneity was confirmed, and there were the necessary prerequisites for the ANCOVA.

According to the results of multivariate ANCOVA on the experimental group and the control group with regard to the research variables, the intervention had significant effects on emotion regulation and academic selfhandicapping in the intervention group after the pre-test

Verichler		No. (%)/N	_	
Variables)	Experimental	Control	- P
Age (y)		17.13±0.83	16.86±1.24	0.489
Deventel education	High school	9(60.0)	7(46.7)	0.472
Parental education	Academic	6(40.0)	8(53.3)	0.472
	10 th	5(33.3)	6(40.0)	
Grade	11 th	6(40.0)	6(40.0)	0.889
	12 th	4(27.6)	3(20.0)	
	Low	3(20.0)	4(26.7)	
Socioeconomic status of the family	Middle	8(53.3)	8 53.3)	0.866
	High	4(26.7)	3(20.0)	
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Variables	Phase –	Experimental	Control	(Between Group)	
	Pre-test	116.93±12.04	120.80±12.37	0.392	
Difficulties in emotion regulation	Post-test	76.13±9.30	114.73±10.27	<0.001	
	P (within groups)	<0.001	0.155	-	
	Pre-test	19.53±4.42	19.73±6.88	0.925	
Non-acceptance	Post-test	10.93±3.23	18.66±5.44	<0.001	
	P (within groups)	<0.001	0.640	-	
	Pre-test	17.46±4.62	15.73±5.02	0.335	
Goals	Post-test	12.13±3.97	15.33±3.82	0.032	
	P (within groups)	0.002	0.808	-	
	Pre-test	20.93±5.32	23.33±3.65	0.161	
Impulse	Post-test	13.66±4.46	22.73±4.04	<0.001	
	P (within groups)	<0.001	0.673	-	
	Pre-test	24.26±8.02	25.53±6.72	0.642	
Awareness	Post-test	14.73±4.62	23.68±6.41	<0.001	
	P (within groups)	<0.001	0.447	-	
	Pre-test	18.20±6.14	19.33±5.85	0.610	
Strategies	Post-test	13.33±4.82	19.06±4.69	0.003	
	P (within groups)	0.022	0.890	-	
	Pre-test	16.53±5.04	16.13±5.12	0.831	
Clarity	Post-test	11.33±3.90 16.26±4.02		0.002	
	P (within groups)	0.004	0.939	-	
	Pre-test	98.57±16.44	95.37±16.81	0.602	
Academic self-handicapping	Post-test	74.20±17.23	96.84±17.64	0.001	
	P (within groups)	<0.001	0.854	-	

Table 3. Mean and standard deviation (SD) of the research variables in experimental and control groups

effects were controlled. Based on the results, no interaction between the dependent variables was observed. The observed F-score had significant effects on difficulties in emotion regulation (F=461.15, P=0.001) and academic self-handicapping (F=87.79, P=0.001). Hence, reality therapy had significant effects on the dependent research variables (Table 4). According to the mean scores of groups in Table 3, each dependent variable indicated that the reality therapy in the post-test alleviated difficulties in emotion regulation and academic self-handicapping in the experimental group.

4. Discussion

The present study aimed to investigate the effect of reality therapy on emotion regulation difficulty and aca-



	Groups	Adjusted St Means		95% Confidence Interval				
Variables			Std. Error	Lower Bound	Upper Bound	F	Ρ	η²
Difficulties in	Experimental	77.52	1.72	75.11	79.92	461.15	0.001	0.95
emotion regulation	Control	113.35	1.72	110.94	115.75		0.001	0.95
Academic self-	Experimental	75.13	1.69	72.80	78.41	87.79	0.001	0.78
handicapping	Control	97.28	1.69	92.37	99.02			
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Table 4. The results of analysis of covariance and adjusted means in the experimental group at the post-test stage

demic self-handicapping in high school students. The results indicated that reality therapy managed to significantly mitigate academic self-handicapping and improve emotion regulation among male high school students. The results of this study were implicitly consistent with the results of previous studies [33, 34]. Behmanesh et al. [34] reported that reality therapy-based group training was effective in promoting cognitive emotion regulation in adolescents.

Academic self-handicapping reduces academic encouragement and causes indecisiveness, depression, worry, and anxiety, each of which can prevent an individual from making academic achievement in life. The potential capability of a person is evaluated highly when he/she improves his/her interest in self-handicapping [6]. When these situations are common, the person's selfprotection and self-esteem are threatened, and coping mechanisms are activated. These mechanisms initiate self-handicapping. In such situations, poor performance is considered a failure, making a person experience a great deal of stress; thus, he/she resorts to the self-handicapping strategy [7]. The students who adopt self-handicapping strategies to lessen their unpleasant emotions will not make intentionally informed attempts. In fact, these students postpone their studies and homework assignments until the very last minute. Self-handicapping and academic performance have mutual effects and can strengthen one another. Difficulties in emotion regulation caused by failure can facilitate self-handicapping [9]. The students who have higher levels of self-handicapping will face further problems in regulating their emotions, for their minds are preoccupied with many negative and judgmental thoughts which prevent their constructive activities and lead to discouragement. These self-reactive, judgmental, and self-criticizing thoughts deprive students of any encouragement to do homework.

Reality therapy can mitigate self-handicapping and boost academic performance. It can also enable an individual to attribute failure to extrinsic factors but success to intrinsic factors. This therapy has positive effects on academic success and improves both self-esteem and endeavor. In addition, the effectiveness of reality therapy can be backed by the fact that group therapy provides an individual with an opportunity to talk about his/her problems and express his/her feelings. At the same time, many people think that they are the sole sufferers. Reality therapy establishes and strengthens a kind of communication network by improving different factors such as group solidarity and the generalizability of problems. Therefore, individuals can experience hope, compassion, and peace in mutual relationships by joining the foregoing network [23]. Controlling self-handicapping as a key factor and the impetus for encouraging students can greatly affect their progress and success, something which can enhance their emotion regulation skills.

The students who have emotion regulation skills can act constructively in the face of problematic conditions because they experience higher levels of welfare and mental health and benefit from further behavioral skills. As a result, they express higher levels of encouragement. By contrast, the students who have difficulties in regulating their emotions will face problems in accepting emotional responses, showing purposive behaviors, controlling their emotions, having purposive clarity, benefiting from emotional knowledge, and accessing emotion regulation strategies [16]. Hence, their academic performance may decline. Since emotion regulation monitors, evaluates and modifies emotions, students can be provided with the opportunity for achieving academic performance due to the resultant positive outcomes. Moreover, emotion regulation can greatly help people moderate and manage their pleasant and unpleasant emotions; therefore, they will not easily be affected by their negative emotions. As a result, they will be less likely to adopt problematic behaviors such as academic self-handicapping.



5. Conclusion

According to the research results, reality therapy was effective in alleviating academic self-handicapping and improving the emotion regulation of students. In other words, given the effectiveness of reality therapy, it should be implemented to mitigate emotion dysregulation. It is also recommended that in-service training and educational workshops should be held to acquaint high school consultants with reality therapy interventions. The results also indicate that schools can and should provide students with the opportunity to mitigate academic self-handicapping, improve emotion regulation, and boost academic performance by setting appropriate conditions for holding reality therapy sessions for students.

Every study may face some limitations on implementation. The results of this study are limited to male high school students aged 15–18 years old; therefore, caution should be taken into account while generalizing the results to other age groups and students. The small sample and lack of proper randomization were other limitations of the present study.

Ethical Considerations

Compliance with ethical guidelines

The Ethics Review Board of Islamic Azad University, Ahvaz Branch (Code: IR.IAU.AHVAZ.REC.1401.155).

Funding

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

Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgements

The authors would like to extend their sincere thanks to all those who contributed to this study.

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