Effectiveness of Impulse Control Training in Self-Efficacy of High School Students

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Abstract

Introduction and Objective

Impulsive behaviors are dysfunctional behaviors that harm others; hence, it is essential to teach some methods to control impulses. In this regard, this study was conducted to examine effectiveness of impulse control training on self-efficacy among high school students. Materials and Methods this is an experimental with pretest-posttest plan. Statistical population of study consisted of all students educating at first grade of high school in Roodsar, Iran; in this regard, 60 students that were not able to control impulse were selected as sample size form several schools through purposeful method then were assigned into two 30-members groups (control and experimental). Then, Sherer Self-efficacy Questionnaire was distributed among members in both groups within pretest then experimental groups received the protocol of impulse control training and control group remained in waiting list; ultimately, self-efficacy questionnaire was again distributed among members in both groups to examine effect of impulse control training protocol as posttest. The obtained data were analyzed using ANCOVA through SPSS22 Software. Findings the obtained results showed that impulses control training could affect self-efficacy of students (P<0.005). Conclusion it is concluded in accordance with obtained findings that impulse control training can increases self-efficacy among students.

Keywords: Impulse Control, Self-Efficacy, High School Students.

Introduction

Self-efficacy means skills and abilities of person in successful achievement in a competent performance [1]. Individual judgments of individuals on their thoughts, feelings, and behaviors [2].

Self-efficacy plays a vital role in self-regulation of emotional state; belief in inability to effect on events and conditions that are effective in life of person is the judgment of person on his/her efficacy that is also the main core for sense of incompetency among individuals with mental disorders [3].

Self-efficacy in academic scope is defined as the belief of student in his/her ability to achieve a certain level of task [4] that shows trust of student in his/her ability to be successful in difficult tasks [5]. Results of study conducted by [6] indicated a significant relationship between self-efficacy and academic achievement.

Impulsivity is one of the most significant determinants for reaction of persons toward environmental stimulants and adaptive mechanisms with current situations so that
impulsivity is the main core for psychiatric disorders [7]. Impulsive behaviors lead to incorrect responses; hence they required more concentration and better organization [8].

These behaviors consist of a broad range of actions done without thinking within an immature behavior all of sudden also without ability to concentrate on a specific task in absence of an appropriate planning [9]. On the other hand, increased attention and decreased impulsivity are some outcomes of training impulse control skills [10]. According to Diefendorff et al. [11] impulse control training contributes to academic achievement reducing negative emotions and mental events.

According to the effect of impulse control training on increase in positive behaviors and decline in negative emotions and behaviors, this study aimed at examining effect of impulse control training on self-efficacy among high school students.

**Method**

This is an experimental study with pretest-posttest plan. Statistical population of study consisted of all students educating at first grade of high school in Roodsar, Iran; in this regard, 60 students that were not able to control impulse were selected as sample size form several schools through purposeful method then were randomly assigned into two 30-members groups (control and experimental).

Then, Sherer Self-efficacy Questionnaire was distributed among members in both groups within pretest then experimental groups received the protocol of impulse control training and control group remained in waiting list; ultimately, self-efficacy questionnaire was again distributed among members in both groups to examine effect of impulse control training protocol as posttest.

The obtained data were analyzed using ANCOVA through SPSS22 Software. Moreover, the consent was signed by students after obtaining required permission from relevant education and training organization.

**Data Collection Instrument**

**Sherer Self-efficacy Questionnaire (1982)**

This instrument was used to measure self-efficacy. This scale consists of 17 items that are measured based on 5-point Likert scale.

This scale does not consider specific conditions for implementation without any limitation for various age ranges [12]. Sherer reported the calculated reliability by Cranach’s alpha to 0.86 for general self-efficacy [13]. In addition, quoted from Mirzaee Kondori [12] reported alpha coefficient of 88%. [8]. Conducted a study in Iran in which, Cranach’s alpha obtained to 78%. Also, Asgharnejad et al. [14] reported Cranach’s alpha for this scale to 83%.

**Educational Package**

Impulse control training program was conducted by Sperry in 1999; this program was implemented to identify and management impulsive behaviors. This intervention consists of following 8 sessions:

Session 1: Familiarity and determining sessions as well as introducing impulsive behaviors

Session 2: Self-regulation of impulsive behaviors

Session 3: Teaching relaxation and diaphragmatic breathing

Session 4: Postponing impulsive responses and postponing them. Students were taught in this session to postpone their decisions for several hours consulting with some persons before implementation.

Session 5: teaching students to think before they speak and do any action.

Session 6: training cognitive skills examining benefit of loss of impulsive behaviors as well as examining worse outcomes of impulsivity behaviors.

Session 7: teaching hesitation skill, the skill of drawing attention, and cognitive skills to correct automatic behaviors.

Session 8: summarization and posttest.
Findings
Respondents of this study were 60 male students at age range of 14-16 who were educating at first, second, and third grades of high school; these participants were at average level of IQ and economic status in society; their parents had maximum BA degree.

Table 1: Mean, standard deviation, maximum and minimum, variance of pretest and posttest in both experimental and control groups

<table>
<thead>
<tr>
<th>Group</th>
<th>pretest</th>
<th>posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>40.1000</td>
<td>5.70299</td>
</tr>
<tr>
<td>Experimental</td>
<td>Max</td>
<td>Min</td>
</tr>
<tr>
<td></td>
<td>65.00</td>
<td>30.00</td>
</tr>
<tr>
<td></td>
<td>43.059</td>
<td>32.524</td>
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<tr>
<td>Control</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>40.9000</td>
<td>5.84709</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>Min</td>
</tr>
<tr>
<td></td>
<td>56.00</td>
<td>30.00</td>
</tr>
<tr>
<td></td>
<td>35.059</td>
<td>34.189</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>40.5000</td>
<td>6.20962</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>Min</td>
</tr>
<tr>
<td></td>
<td>56.00</td>
<td>30.00</td>
</tr>
<tr>
<td></td>
<td>35.059</td>
<td>34.189</td>
</tr>
<tr>
<td></td>
<td>Var</td>
<td></td>
</tr>
<tr>
<td></td>
<td>38.559</td>
<td>363.504</td>
</tr>
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</table>

According to table 1, mean of self-efficacy obtained to 40.1000 and 77.6000 within pretest and posttest, respectively in experimental group indicating effect of impulse control training in this group; whereas, mean of self-efficacy in control group was not different within pretest and posttest. Therefore, self-efficacy was improved among students in experimental group after providing them with impulse control training.

Table 2: Skewness and Kurtosis of variables for distribution normality

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Value</td>
<td>Standard error</td>
</tr>
<tr>
<td>Pretest</td>
<td>60</td>
<td>30.00</td>
<td>56.00</td>
<td>40.5000</td>
<td>6.20962</td>
<td>.624</td>
<td>.309</td>
</tr>
<tr>
<td>Posttest</td>
<td>60</td>
<td>32.00</td>
<td>56.00</td>
<td>59.5667</td>
<td>9.06578</td>
<td>.000</td>
<td>.309</td>
</tr>
</tbody>
</table>

Since the values of Skewness (0.624, 0.000) and Kurtosis (0.285, -1.766) are at interval of (-2, +2), they have probably normal distribution.

Table 3: ANCOVA

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>792.383</td>
<td>1</td>
<td>792.383</td>
<td>39.540</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>19942.846</td>
<td>1</td>
<td>19942.846</td>
<td>995.149</td>
<td>.000</td>
</tr>
<tr>
<td>Error</td>
<td>1142.284</td>
<td>57</td>
<td>20.040</td>
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<td></td>
</tr>
</tbody>
</table>
According to the obtained F value and significance level (0.000), impulse control training could effect on self-efficacy in students.

**Discussion**

The obtained results showed that impulse control training could effect on self-efficacy in students; in other words, impulse control training could improve self-efficacy in students. This finding is in line with results obtained from following studies: Study of Lee & Hinshaw[15], Biderman et al.[16] Ramsay &Rostain [17] and Nijmei [18] that showed significant effect of impulse control training on increasing self-efficacy beliefs; study conducted by Rajabi et al. [19] in which, effect of impulse control training was examined on self-efficacy among hyperactive students; finding obtained by about positive effectiveness of group interventions of impulse control in reducing self-injury, emotion regulation, and reducing academic burnout and negative affections; findings obtained by Narimani [20] about effect of impulse control training on emotional process, impulsivity, and distraction in students with mathematical disorder so that results showed effect of impulse control training on reducing negative affections, impulsivity and distractions in students with mathematical disorders; results obtained from studies of Barkley [21] Henrich et al.[22] and Messer [23] about effect of teaching impulse control skills on improvement of attention deficit and distraction; results obtained by Greenberg [24] and Ostafin et al. [25] that proved effectiveness of impulse control training in increasing positive affections in students with learning inability.

**Conclusion**

Teaching some skills to control impulses and impulsive behaviors makes the person feel control ability making fewer mistakes; therefore, impulse control training would increase self-efficacy.

**Limitation**

The studied population in this research consisted of 30 members that is a small sample size; hence, it is recommended to consider a larger sample size in further studies; this study was just conducted on male high school students; therefore, it would be better to consider female and other education levels in further studies.

**Acknowledgement**

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**References**


