

Vitality and Resilience of Students with Physical Disabilities: The Effectiveness of Short-term Solution-focused Approach Training

1. Mehrnoosh Okhovat , 2. Shekoofeh Mottaghi *, 3. Fatemeh Behjati Ardakani,
4. Zobeyde Dehghan Manshadi

1. M.A. in School Psychology, Ardakan University, Ardakan, Iran. Email: okhovatm58@yahoo.com

2. Corresponding Author and Assistant Professor, Department of Psychology, Ardakan University, Ardakan, Iran.
Email: sh.mottaghi89@yahoo.com

3. Assistant Professor, Department of Psychology, Ardakan University, Ardakan, Iran. Email:
behjatifatemeh@yahoo.com

4. PhD student of psychology, The Academic Center for Education, Culture & Research (ACECR) -Fars Branch, Behavioral Sciences Group, Shiraz, Iran. Email: maryamdehghan71@yahoo.com

Abstract

Considering the psychological problems of adolescents with physical disabilities, the present study aimed to investigate the effectiveness of short-term solution-focused approach training on vitality and resilience of the students with physical disabilities. This research was a pretest-posttest quasi-experimental study design with a nonequivalent control group. The research sample consisted of 34 students using convenience sampling method and was randomly assigned into two experimental (17 individuals) and control (17 individuals) groups. Deci Vitality and Conner and Davidson Resilience Scale were applied to collect data in pretest and posttest. The therapeutic model was implemented during 10 sessions on weekly bases for the experimental group, but the control group received no training. The data were analyzed by multivariate analysis of covariance. The results showed that short-term solution-focused therapy had a significant influence on vitality and negative affect tolerance ($P < 0.05$). Short-term solution-focused training can be used to promote the positive psychological among adolescences with physical disabilities.

Keywords: Adolescence, resilience, physically-handicapped, Short-term solution-focused approach, vitality

Introduction

Disability is more than just a physical restraint for adolescents. Discrimination, social labeling, and environmental pressures can create constraints that exclude them from society (Lestari, et al., 2020).

Vitality and resilience are two protective factors that can prevent psychological problems in adolescents with physical disabilities.

Vitality is defined as a measurable subjective positive concept which includes fluctuating physiological and psychological energy that could be regulated and curbed (Lavrusheva, 2020), and resilience refers to the ability to react positively to the problems and turning them into opportunities for growth (Sisto, et al., 2019). In order to increase the vitality and resilience of the physically-handicapped adolescents, treatments adaptable to their conditions should be applied. Short-term solution-focused therapy, in which it is believed that humans have the ability to improve their lives

and overcome their shortcomings (Vallaire-Thomas, et al., 2011), may be effective for physically disabled adolescents with mobility impairments.

Studies on vitality and resilience have shown that short-term solution-focused therapy can increase academic resilience (Hendar, et al., 2020) and vitality subscale in psychological well-being (Sabria, et al., 2017). However, its effectiveness on resilience and vitality has not been studied directly and specifically on adolescents with physical disabilities. In this study, the hypothesis that short-term solution-focused therapy has an effect on the vitality and resilience of adolescents with physical disabilities was investigated.

Method

The present research was a pretest-posttest quasi-experimental study with a control group. The statistical population included the middle and high school students with physical disabilities in Isfahan in 2017-2018, of whom 34 who were willing and able to participate in the study were selected through convenience sampling and were divided into the experimental (n= 17) and control (n = 17) groups. At the end of treatment, two subjects were excluded from the experimental group. The inclusion criteria consisting of having a physical disability, not having been diagnosed with mental disorders, not taking medication, and participating voluntarily. The experimental group attended ten 45-minute sessions of short-term solution-focused therapy provided in 1997 using De Shazer & Berg's model and the protocol of solution-focused psychotherapy groups (Ates, 2016) on a weekly basis. Both groups completed the questionnaires before and after the sessions in pretest and posttest phases. The questionnaires used in this study were as follows:

Resilience Questionnaire The 25-item resilience questionnaire developed by Conner and Davidson in 2003 included five subscales: Imagination of personal competence, Trust in one's instinct and tolerance of negative effects, Accepting positive emotions and secure relationships, Control, and Spiritual effects. Cronbach's alpha reliability and validity with the perceived stress scale were reported 0.87 and 0.88, respectively (Conner and Davidson, 2003).

Vitality Scale The vitality scale developed by Ryan & Frederick in 1997 had seven items. Ryan and Friedrich (1997) reported the internal consistency of the scale as 0.96. In the research by Arfa, Ghamrani, and Yarmohammadian (2015), the face and content validity of the scale was confirmed

by one of the professors of the Department of Psychology, University of Isfahan, and its reliability coefficient was reported to be 0.87 using the Cronbach's alpha method.

Findings

Chi-square test were used to match two groups in demographic characteristics. The results showed that the two experimental and control groups were peer and not significantly different in terms of gender ($\chi^2= 0.25$, $P> 0.15$), educational status ($\chi^2= 0.32$, $P> 0.22$), and age ($\chi^2=0.35$, $P> 0.27$).

Before examining the research hypothesis using the multivariate analysis of covariance, its assumptions were investigated. The results showed that all the assumptions of normality (Shapiro-Wilk test, $P> 0.05$), homogeneity of variances (Levin test, $P <0.05$), and homogeneity of regression slope ($P> 0.05$) existed for vitality and negative affect tolerance. The results of intragroup trace tests for the vitality variable showed that the Pillai's Trace test ($F = 31.80$) was significant in influencing the vitality of the experimental group ($P <0.01$) and there was a significant difference between the scores of vitality in the pre-test and post-test stages. Furthermore, the calculated F value of the vitality variable for the difference between the post-test scores of the two groups by matching the pre-test scores at a significance level of $p = 0.001$ was 16.31 (Table 1).

The results of the intragroup trace tests for the negative affect tolerance of the resilience variable showed that the Pillai's Trace test ($F = 241.52$) was significant in influencing the negative affect tolerance of the experimental group ($P <0.01$) and there was a significant difference between the scores of negative affect tolerance at pre-test and post-test stages. The calculated F value of negative affect tolerance for the difference between the post-test scores of the two groups by matching the pre-test scores at a significant level ($p = 0.006$) was equal to 8.70 (Table 1).

Table 1: Results of multivariate analysis of covariance of the effectiveness of solution-based therapy on vitality and negative affect tolerance

	Variable	Total squares	Degrees of freedom	Mean squares	F value	Significance level	Effect size	statistical power
Vitality	Model	1004.600	2	502.30	275.28	0.001	0.95	1
	Pre-test	1001.267	1	1001.26	548.73	0.001	0.95	1
	Vitality	29.76	1	29.76	16.31	0.001	0.37	0.97

	Error	49.26	27	1.82				
	Total	66574	30					
negative affect tolerance	Model	394.999	2	197.500	549.69	0.001	0.97	1
	Pre-test	394.166	1	394.16	1097.07	0.001	0.97	1
	negative emotion tolerance	3.12	1	3.12	8.70	0.006	0.24	0.81
	Error	9.70	27	0.35				
	Total	12285	30					

Discussion and Conclusion

The solution-focused approach is based on the premise that all human beings have the required ability to develop solutions that improve their lives. This therapy helps increase the belief in empowerment and also helps physically disabled adolescents who do not believe in their abilities to tolerate negative emotions they encounter and to be vital. One limitation of this research is the lack of a follow-up session. It is suggested to determine the long-term effects of the therapy by having repeated research follow-up periods. Considering that this therapeutic approach is one of the short-term approaches that provides faster results, and in line with the findings of this study and the effect of this therapeutic approach on vitality and negative affect tolerance, the therapy can be useful for the counselors, therapists, and clients in psychological clinics who are looking for faster recovery and achieving desired conditions.

Reference

- Ates, B. (2016). Effect of solution focused group counseling for high school student in order to struggle with school burnout. *Journal of Education and training studies*, 4(4), 27-34.
- Conner, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Conner-Davidson Resilience Scale (CD- RISC). *Depression and Anxiety*, 18, 76-82. doi.org/10.1002/da.10113
- De Shazer, S., & Berg, I. K. (1997). 'What works?' Remarks on research aspects of solution-focused brief therapy. *Journal of Family therapy*, 19(2), 121-124.
- Hendar, K., Awalya, A. & Sunawan, S. (2020). Solution-Focused Brief Therapy Group Counseling to Increase Academic Resilience and Self-Efficacy. *Jurnal Bimbingan Konseling*, 9(1), 1 – 7.
- Lavrusheva, O. (2020). The concept of vitality. Review of the vitality-related research domain. *New Ideas in Psychology*, 56, 1-14. doi.org/10.1016/j.newideapsych.2019.100752
- Lestari, T. R., Adyas, A., Karma, A., Rachmawaty, E., Ardesa, Y. H., & Pasaribu, E. S. (2020). Model of social support for adolescent mental health with disabilities. *Medico Legal Update*, 20 (1), 2316-2321.

- Macdonald, A. (2011). *Solution-focused therapy: Theory, research & practice* (translated by Nazari, Ali Mohammad, Moziri, Abbas and Naderi, Fatemeh). Tehran: Elm. (Text in Persian)
- Ryan, R. M., & Frederick, C. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of personality*, 65(3), 529-565.
- Sabria, F., Sumarib, M., Jenciusc, M., & McGlothlinc, J. (2017). The Effects of Solution-Focused Group Therapy in Treatment Outcomes and Psychological Well-Being of Substance Abuse Clients. *International Journal of Academic Research in Business and Social Sciences*, 7, 119-129. DOI: 10.6007/IJARBSS/v7-i13/3188 URL: <http://dx.doi.org/10.6007/IJARBSS/v7-i13/3188>
- Sisto, A., Vicinanza, F., Leondina Campanozzi, L., Ricci, G., Tartaglini, D., & Tambone, V. (2019). Towards a transversal definition of psychological resilience: A literature review. *Medicina*, 55 (745), 1-22.
- Vallaire-Thomas, L., Hicks, J., & Growe, R. (2011). Solution-focused brief therapy: An interventional approach to improving negative student behaviors. *Journal of Instructional Psychology*, 38(4), 224-234.

Funding

No funding was obtained.

Acknowledgments

We would like to grateful all students who agreed to participate in this investigation in Isfahan city.