



Research paper

The Effectiveness of Acceptance and Commitment Approach based on Self-Compassion on Psychological Well-Being and Flexibility in Adolescents

HasanSajedi, Mozhdeh ¹; Ghodrati Mirkouhi, Mehdi ²; Abdollahi Boghrabadi, Ghasem ³

1. MA, In Family Counseling, Payame Noor University, Qazvin, Iran. sajedimozhdeh@gmail.com
2. Corresponding Author: Associate Professor, Department of psychology, Payame Noor University, Tehran, Iran. mahdi.ghodrati@pnu.ac.ir
3. Assistant Professor Department of Psychology, Payame Noor University, Tehran, Iran. psy-abdollahi@pnu.ac.ir

Abstract

The present study aimed to determine the effectiveness of acceptance and commitment approach based on self-compassion on psychological well-being and flexibility. The research design was a semi-experimental pre-test and post-test type with a control group. The sample was 30 adolescents from the Tonekabon, Tehran, and Qazvin cities. They entered by purposive sampling that invited by online and displaced 15 in experimental group and 15 in control group as a waiting list. Instruments encompassed psychological well-being and acceptance and action questionnaire-II for psychological flexibility that completed before and after intervention. The acceptance and commitment based self-compassion intervention was implemented in eight online 90 minutes' sessions for experimental group. Multivariate and univariate analysis of covariance were used to analyze the data. The results showed that the approach of acceptance and commitment based on self-compassion has been significantly effective in increasing psychological well-being and psychological flexibility.

Keywords: Adolescent, acceptance and commitment, psychological flexibility, psychological well-being, self-compassion.

Introduction

Anxiety and Depression are common psychological problems in adolescents that makes adolescents vulnerable and negatively affected their personal, social and academic functions (Govender & et al., 2020). Acceptance and commitment therapy (ACT) is a powerful contextual approach to promoting adolescent mental health. ACT as a functional contextual approach fostered youth health and well-being within school settings. It emphasizes the importance of promoting psychological flexibility skills and value-driven actions in realistic concerns (Peterson & et al., 2021). Moreover, Hayes and Ciarrochi (2015) developed the DNA-V (Disocerer, Noticer, Advisor- Values) model by adapting the ACT model for adolescents' developmental context. This model was adapted for adolescents not using adult concepts, and its necessary considered human development from birth to adulthood. During adolescence, individuals undergo numerous changes that encompass physiological, emotional and psychological transformations, shifts within the social environment, and modifications to the cerebral neural network and cognition. The main purpose of the DNA-V program is to help adolescents adapt to these changes (Hayes & Ciarrochi, 2015) and facilitate the psychological

wellbeing and psychological flexibility. Emerging research showed applying self-compassion combined with acceptance and commitment approach reduce anxiety, depression, psychological distress, and improved well-being, flexibility and mental health (Ferreira and et al., 2024; Carvalho and et al., 2020). Therefore, this research follows effectiveness' of acceptance and commitment approach based on self-compassion in well-being and flexibility in adolescents. Hence, the study hypotheses were:

- (a) the acceptance and commitment approach (DNA-V) based on self-compassion would increase psychological well-being in adolescents,
- (b) this program would also improve psychological flexibility among adolescents.

Method

The research design was a semi-experimental pre-test and post-test type with a control group. Statistical population included 150 adolescents' girls (87) and boys (63) between 13 to 18 ages from the Tonekabon, Tehran, and Qazvin cities, who entered the study by online invitation. Research sample included 30 adolescents who selected through the purposeful sampling and displaced randomly in two experimental (8 girls and 7 boys) and control (8 girls and 7 boys) groups. Instruments encompassed Ryff's psychological well-being (cutoff point 54 and lower) and Bond and colleagues' acceptance and action questionnaire-II (cutoff point 30 and lower) for assessing psychological flexibility that completed before and after intervention in pre-test and post-test. The intervention program acceptance and commitment therapy based self-compassion was implemented in eight online 90 minutes' sessions while control group was also placed on the waiting list. Acceptance and Commitment approach base on self-compassion (DNA-V) developed by Hayes and Ciarrochi (2015). Inclusive criteria: ages between 13 to 18, parents and adolescents' consent to participate in study, having cell phone and internet to attending in sessions and exclusive criteria: absence more than two sessions, don't doing exercise, and no have cooperation in sessions. Multivariate and univariate analysis of covariance were used to analyze the data.

Tools

Psychological Well-being Questionnaire (PWQ). This scale developed by Ryff in 1989. 18 items version which was used to measure the psychological well-being on a 6-point Likert scale (from 1 = strongly disagree to 6 = strongly agree). Ryff (2006) reported internal consistency by alpha coefficient range from 0.70 to 0.89. Internal coefficient in Khanjani and colleagues (2014) was 0.71 for total score. In this research test reliability base on coefficient alpha was calculated 0.83.

Acceptance and Action Questionnaire-II (AAQ-II). This questionnaire included 10 items that designed and developed by Bond and colleagues (2011) for psychological flexibility. Subscales are acceptance, experiential avoidance and psychological inflexibility. Internal consistency by coefficient alpha was 0.84 in clinical and general populations. In our study reliability was 0.82.

Results

The contents of Table 1, show that the two research groups did not have significant differences in the variables of psychological well-being and flexibility cohesion in the pre-test stage; Because the average and standard deviation of the groups were almost close to each other, but in the post-test phase, the average and standard deviation of the experimental group had noticeable changes in the variables of psychological well-being and flexibility cohesion.

Table 1. Descriptive findings of research variables in the experimental and control groups

Variable	Stage	Experimental group M (SD)	Control group M (SD)
Psychological well-being	pre-test	53.80 (4.86)	53.02 (4.12)
	post-test	72.09 (5.51)	59.87 (3.90)
Psychological flexibility	pre-test	20.46 (2.18)	23.03 (2.10)
	post-test	40.53 (3.68)	21.06 (2.39)

Multivariate Analysis of Covariance (MANCOVA) was used to investigate the effectiveness of the intervention on the psychological well-being and flexibility in experimental group participants. The assumptions of normality of data and homogeneity of variance in groups were confirmed ($P > 0.05$). The value of the Wilks' lambda test was significance ($P < 0.05$). Therefore, the results of ANCOVA are reported in Table 2. According to Table 2, it can be said that the intervention had a significant effect on the psychological well-being and flexibility of the experimental participants ($P < 0.05$).

Table 2: Results of ANCOVA of the psychological well-being and flexibility

Variables	SS	Df	MS	F	Sig	Eta	Statistical power
Well-being pre-test	101.556	1	101.556	6.94	0.014	0.20	0.71
Group Membership	297.92	1	297.92	20.35	0.001	0.43	0.99
Flexibility pre-test	30.20	1	30.20	5.72	0.024	0.17	0.63
Group Membership	46.85	1	46.85	8.87	0.006	0.24	0.81

Discussion and Conclusion

The results supported our hypotheses that this model effective on well-being and psychological flexibility in adolescents. This approach highlights the importance of supporting psychological flexibility skills and value base actions to address a wide range of adolescent's concerns, including anxiety, peer relationships, and well-being. The finding of this study supports the learning self-compassion can be developed self- acceptance in well-being. Self-compassion skill in this intervention helps to adolescents moved to reduce suffering and accept their experiences as a person who has pain but can be self-care. Also, with increasing flexibility

through this program, adolescents can be given space to accept their unwanted traits. Adolescents might observe themselves as a context with flexible, broad, and compassionate scope. This model (DNA-V) enhanced adolescents' psychological flexibility from applying discoverer, noticer, and advisor skills through living toward valuable actions. However, additional studies are necessary to further expand the evidence base for ACT in adolescence context and to discover its integration with other-based practices for adolescents, their parents and teachers. Overall, this program is effective to increase psychological well-being and flexibility in adolescents.

References

- Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., Waltz, T., & Zettle, R. D. (2011). Preliminary psychometric properties of the acceptance and action questionnaire–II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior therapy*, 42(4), 676-688 .doi: [10.1016/j.beth.2011.03.007](https://doi.org/10.1016/j.beth.2011.03.007)
- Carvalho, A., Gillanders, D., Forte, T., Trindade, A., Pinto-Gouveia, J., & et al. (2022). Self-compassion in acceptance and commitment therapy for chronic pain: a pilot study. *Scandinavian journal of pain*, 22(3), 631-638. doi: [10.1515/sjpain-2021-0214](https://doi.org/10.1515/sjpain-2021-0214).
- Ferreira, C., Pereira, J., Matos-Pina, I., Skvarc, D., Galhardo, A., & et al. (2024). eLIFEwithIBD: Study protocol for a randomized controlled trial of an online acceptance and commitment therapy and compassion-based intervention in inflammatory bowel disease. *Frontiers in Psychiatry*, 15:1369577. doi: [10.3389/fpsyg.2024.1369577](https://doi.org/10.3389/fpsyg.2024.1369577).
- Govender, D., Naidoo, S., & Taylor, M. (2020). Antenatal and postpartum depression: prevalence and associated risk factors among adolescents' in KwaZulu-Natal, South Africa. *Depression research and treatment*, 6, 1-12. doi: [10.1155/2020/5364521](https://doi.org/10.1155/2020/5364521)
- Hayes, L., & Ciarrochi, J. (2015). *Using acceptance and commitment therapy to help young people develop and grow to their full potential*. In *Promoting Psychological Well-Being in Children and Families* (pp. 102-122). Springer .doi: [10.1057/97811374799697](https://doi.org/10.1057/97811374799697)
- Petersen, J. M., Hayes, L., Gillard, D., & Ciarrochi, J. (2021). *ACT for children and adolescents*. Oxford Academic doi:[10.1093/oxfordhb/9780197550076.013.27](https://doi.org/10.1093/oxfordhb/9780197550076.013.27)
- Ryff, C.D. (2006). Best news yet on the six factor model of well-being. *Social Science Research*, 35(4), 1103-1119. <https://doi.org/10.1016/j.ssresearch.2006.01.002>

Acknowledgements

We thank all of Adolescents and their parents from cities who participated in this research.

Funding

This study has not received any financial support.

Conflicts of interest

There is no conflict of interests for researchers.



This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution-Noncommercial 4.0 International (CC BYNC4.0 license) (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).
