



ACT Treatment on Increasing Psychological Well-Being and Decreasing Avoidance Behavior in Adolescents with Illness Disorder in The Post-Corona Era

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A B S T R A C T

This study aimed to explore the efficacy of Acceptance and Commitment Therapy (ACT) in enhancing psychological well-being and decreasing avoidance behaviors in adolescents with illness anxiety disorder during the post-corona era. The research utilized a semi-experimental pre-test-post-test design with a control group. 30 adolescents with illness anxiety disorder who were referred to a psychological and counseling clinic in Tehran in 2021-2022 were randomly assigned to two groups: experimental (15 individuals) and control (15 individuals). The results of the multivariate covariance analysis indicated that acceptance and commitment therapy led to a significant increase in psychological well-being scores and its various dimensions (independence, mastery of the environment, personal growth, positive relationships with others, purpose in life, and self-acceptance). Additionally, the results of the one-way covariance analysis demonstrated that acceptance and commitment therapy effectively reduced avoidance behaviors in adolescents with illness anxiety disorder during the post-corona era. It is likely that fostering acceptance and desire, emphasizing values, and committing to them contributed to the improvement in psychological well-being and reduction in avoidance behaviors among adolescents with illness anxiety disorder in the acceptance and commitment group. These findings suggest that acceptance and commitment therapy can be beneficial in enhancing psychological well-being and addressing avoidance behaviors in adolescents with anxiety disorders.

Keywords: Psychological Well-Being, Avoidance Behavior, Illness Anxiety, Treatment Based on Acceptance and Commitment, Corona.

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INTRODUCTION

In December 2019, the emergence of a viral disease was reported in the city of Wuhan, China. The cause of this disease was a new type of genetically modified virus from the coronavirus family, named SARS-COV-2, which was designated as COVID-19 ([Arnout et al., 2020](#); [Nugraha, Basriani, Susanti, Akbar, & Awaluddin, 2020](#)). Unfortunately, due to its high transmission capability, this virus quickly spread throughout the world and almost within a short period (less than four months) infected all countries worldwide ([shahyad & Mohammadi, 2022](#)). According to official reports, as of April 4, 2020, more than one million people worldwide have been infected with this virus, and the number of deaths caused by this virus has exceeded 50,000 ([Barrot, Llenares, & Del Rosario, 2021](#)). COVID-19, caused by an RNA virus, predominantly affects the respiratory system of the affected individuals and is tragically spreading ([Noviani, 2021](#)). Unfortunately, this virus has infected our beloved country Iran, like other countries worldwide, and the fight against this virus is being conducted comprehensively and universally throughout the country, especially by nurses, including those in the COVID ward. Although due to the novelty of this virus and the limited information available about the pathogenicity of the SARS-COV-2 virus and its control and treatment methods, the most important strategy to combat it at present is to reduce the problems arising from it in the post-corona era ([Rubin & Wessely, 2020](#)).

With the global spread of COVID-19, a range of psychological, physical, and social problems related to the coronavirus disease 2019 have emerged in many people worldwide ([Weerahandi et al., 2021](#)). Undoubtedly, one of the most significant consequences of this pandemic, in addition to its social and economic impacts and high mortality rates, is the psychological repercussions that remain. These repercussions have led to increased stress, anxiety, and fear in various segments of society ([Rothe et al., 2020](#)). If these issues are not addressed, the psychological aftermath of the pandemic may persist in the general population for an extended period and evolve into a global medical crisis ([Sinha & Manna, 2020](#)). One of the most important groups affected are adolescents; mental health is a crucial aspect of adolescent well-being as they are the future builders of any country. Due to their age and specific social circumstances, this group is exposed to high levels of stress and anxiety. Factors such as age-related conditions, academic issues, competition with other students, career prospects, and life in quarantine can be considered as existing stressors for students. These factors can lead to physical and mental illnesses ([Bagheri Sheykhangafshe & Fathi-Ashtiani, 2022](#)), and pose risks to adolescent mental health, especially in terms of academic decline and increased anxiety disorders ([Taylor, Landry, Rachor, Paluszek, & Asmundson, 2020](#)). Generalized anxiety, known as severe anxiety and worry about multiple events or activities simultaneously, is accompanied by physical symptoms such as muscle tension, irritability, sleep problems, and restlessness. It may persist for at least six months to the extent that controlling it becomes challenging for the individual. Anxiety disorder is one of the fundamental disorders in psychopathology, and its symptoms can reflect core processes present in all emotional disorders ([Horenstein & Heimberg, 2020](#); [Kenwood, Kalin, & Barbas, 2022](#); [Rowa, Waechter, Hood, & Antony, 2017](#)). Individuals with this type of disorder experience constant worry about everyday life issues and are consistently anxious about everything. With the spread of the coronavirus, we were expecting a wave of fear, anxiety, and mental pressure in society, which is natural and not unexpected. However, some members of society have experienced anxiety beyond normal levels and have developed "illness anxiety," which undoubtedly requires psychiatric and psychological interventions due to the intensity of their anxiety and the possibility of impaired functioning ([De France, Hancock, Stack, Serbin, & Hollenstein, 2022](#); [Stankovska, Memedi, & Dimitrovski, 2020](#)). Therefore, the main goal of this research has been to

assess the effectiveness of ACT therapy in increasing psychological well-being and reducing avoidant behavior in adolescents with illness anxiety disorder during the post-COVID era.

The Acceptance and Commitment Therapy (ACT) is a new therapeutic approach that plays a significant role in the psychological well-being of patients by integrating acceptance and commitment interventions with mindfulness to help patients achieve a vibrant, purposeful, and meaningful life ([Fazeli Kebria, Hassanzadeh, Mirzaeian, & Khajevand Khosheli, 2018](#)). The primary goal of ACT is to enhance psychological flexibility ([Hayes, Strosahl, & Wilson, 1999](#); [Powers, Zum Vörde Sive Vörding, & Emmelkamp, 2009](#); [Zemestani, Gholizadeh, & Alaei, 2018](#)). Hayes and colleagues believe that in this therapeutic approach, patients learn to live in a valuable way in the presence of mental and physical experiences that are sometimes uncontrollable ([Hayes, Strosahl, & Strosahl, 2004](#)). The ACT model examines how a specific behavioral repertoire can interfere with valuable life goals and how an individual can psychologically adapt to what life presents flexibly ([Bach & Moran, 2008](#)). The primary goal of using ACT therapy to increase psychological well-being and reduce avoidant behavior in adolescents with illness anxiety disorder during the post-COVID era is to move the individual towards meaningful, interpersonal, rich, and affirming life values. Mosadeghi and colleagues demonstrated that this approach had a positive response in reducing mental health problems ([Hajikaram, Ghamari, & Amirimajid, 2019](#)). Brothers and colleagues showed that Acceptance and Commitment Therapy (ACT) is perceived as an effective intervention in mental health ([Baradaran, Zare, Alipour, & Farzad, 2016](#)). Sabour and Kakabraee (2016), concluded that this approach was effective in reducing job burnout, depression, and stress. Yu, Norton, and McCracken (2017), demonstrated that providing treatment based on Acceptance and Commitment Therapy led to self-concept improvement and enhanced the performance of individuals with chronic pain. Kakavand, Baqeri, and Shirmohammadi (2016), found that ACT therapy was effective in reducing perceived negative tension in individuals. Trompetter, Lamers, Westerhof, Fledderus, and Bohlmeijer (2017), have shown the effectiveness of Acceptance and Commitment Therapy (ACT) in reducing depressive/anxiety symptoms and promoting positive mental health.

The strict social distancing measures and home quarantine caused the closure of many schools and recreational centers worldwide, impacting adolescents the most ([Einvik, Dammen, Ghanima, Heir, & Stavem, 2021](#)). Quarantine led to the loss of freedom for adolescents, and the uncertainty about the disease had significant negative effects on them ([Alexandru Burlacu et al., 2021](#)). As a result, individuals turned to substance abuse, smoking, alcohol misuse, gambling, and online games to cope with their stress, leading to a notable increase in domestic violence and mental health problems ([Balachandar et al., 2020](#)). Quarantine, school closures, and social distancing brought changes in the way adolescents interacted with family members, peers, and teachers. Limited peer relationships in social settings restricted social support networks for children and adolescents and increased their inclination towards using virtual spaces, potentially leading to internet addiction. Jaywant et al. (2021), investigated the cognitive performance of hospitalized patients post-recovery from COVID-19. Findings showed that 84% of patients were living independently at home before contracting the virus and none had cognitive impairment. 88% had respiratory failure, and 81% reported mild to severe pervasive anxiety disorders. Additionally, 55% had avoidance behaviors, 46% had attention issues, and 40% experienced disrupted processing speed. While estimating the long-term effects of this deadly virus is challenging, initial concerns after the outbreak of a pandemic include the emergence of mental health issues such as post-traumatic stress, exacerbation of pre-existing psychological, social, and family problems ([Liang et al., 2020](#)). Therefore, it is essential to pay more attention to vulnerable groups such as adolescents with anxiety disorders, patients with chronic illnesses, and students in the post-COVID era ([Flaxman, Blackledge, & Bond, 2010](#)). In fact, measures to support and

improve the mental health of vulnerable groups should be targeted, and a universal mental health screening for different groups should be conducted to identify at-risk individuals and take necessary actions([Liang et al., 2020](#)).

Kamal, Abo Omirah, Hussein, and Saeed (2021), examined the consequences of COVID-19 post-recovery. Their findings indicated that only 8.10% of individuals exhibited symptoms of anxiety and avoidance behaviors after treatment, while 9% faced chronic fatigue. Kidney failure, depression, shortness of breath, and anxiety were observed in many individuals, warranting further investigation. Although COVID-19 is the third coronavirus in the past 20 years to have a significant impact on global mental health and economy, for the first time in the 21st century, all countries worldwide were affected by this deadly virus([Sher, 2021](#)). Uncertainty, lack of definitive treatment, and unpredictability due to the unclear end of the COVID-19 pandemic have led to numerous psychological issues such as reduced psychological well-being, anxiety, and stress([Liu et al., 2020](#)). Additionally, images portrayed by media and social networks of COVID-19 patients, death statistics, bodies, and coffins being buried deep in the ground while their families couldn't bid them farewell have caused social distress, avoidance behaviors, and widespread disease-related anxiety([Torales, O'Higgins, Castaldelli-Maia, & Ventriglio, 2020](#)).

Mental health plays a crucial role in ensuring the dynamism and efficiency of any society and is considered as one of the pillars of health assessment([Saltzman, Hansel, & Bordnick, 2020](#)). In fact, mental health leads to happiness, vitality, and increased self-confidence in families, and its absence will be accompanied by anxiety, stress, worry, and despair([Ranieri, Guerra, & Giacomo, 2021](#)). Studies indicate extensive psychological, social, and physical damage that COVID-19 has had and will continue to have long-term irreversible consequences([Van den Borst et al., 2021](#); [Zhou et al., 2020](#)). Given the pandemic situation that has affected almost all-important aspects of the economy, politics, and society, the discussion of the psychological effects of this disease on individuals' mental health at different levels of society is of paramount importance. In this regard, the present review study was conducted with the aim of examining the effectiveness of ACT therapy in increasing psychological well-being and reducing avoidance behaviors in adolescents with anxiety disorders during the post-COVID era.

METHODOLOGY

Due to the nature of the research, which requires measuring and examining the effectiveness of ACT therapy in increasing psychological well-being and reducing avoidance behaviors in adolescents with anxiety disorders during the post-COVID era, a quantitative approach is used. It is worth mentioning that based on its objective, the present study is of an applied research type, as its findings can contribute to solving practical problems. The current research design is quasi-experimental with pretest-posttest control group. Participants in two experimental groups were selected based on convenience sampling. The intervention of Acceptance and Commitment Therapy (ACT) was provided to the experimental group, and its effects on psychological well-being and avoidance behaviors were assessed. Before the start of the intervention, pretests were conducted on both experimental and control groups. Then, based on random assignment, the ACT therapy was implemented in the experimental group. Posttests were conducted on the experimental groups to determine the impact of the independent variable. Additionally, posttests were also conducted on the control group for comparison.

The target population of this study consists of all adolescents with anxiety disorders who have referred to psychological clinics and counseling centers in Tehran during the years 2023-2022. Using convenience sampling and random replacement, individuals were assigned to two experimental and control groups. After necessary coordination with drug addicts who met the

necessary conditions for participation, 40 individuals in the experimental and control groups (20 individuals in each group) were randomly replaced. Therefore, the inclusion criteria for the study were being an adolescent (14-18 years old), suffering from an anxiety disorder, seeking treatment at psychological clinics and counseling centers in Tehran, being female, residing in Tehran, and participating in educational interventions. The exclusion criteria included not attending therapy sessions for 2 consecutive sessions without a valid reason and not cooperating with the therapist or not completing the proposed main task by the therapist.

In this study, library studies were used to collect information related to the literature and research background. A field method with questionnaire distribution was used to investigate "Comparing the effectiveness of two therapeutic methods based on Acceptance and Commitment Therapy and Mindfulness-Based Therapy on resilience, chronic pain, and treatment adherence in drug addicts".

1 -Ryff's Psychological Well-being Scale: This test, developed by Ryff, Singer, and Love (1998), consists of 84-item long form, 54-item medium form, and 18-item short form. It evaluates six main components of psychological well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Each component has 3 questions, and the minimum score for each component is 3, and the maximum is 18. This scale has been validated in previous research with a reliability coefficient of 0.81. In the current study, the internal consistency of the scale was 0.84.

2 -Avoidance Coping Behaviors Questionnaire: This 40-item questionnaire, developed by Yang (1994), assesses avoidance coping strategies using a 6-point Likert scale. The questionnaire measures behaviors such as deliberate avoidance of unpleasant issues, substance abuse, denial of unpleasantness, excessive control and rationality, suppression of anger, mental and physical symptoms, withdrawal and isolation from people, denial of memories, avoidance through eating/loss of energy, distractibility through engaging in various activities, self-soothing, passive inhibition of emotions, passive distractibility, and avoidance of unpleasant situations. The reliability coefficient of this questionnaire was 0.79 in previous research and 0.81 in the current study.

In this study, the Acceptance and Commitment Therapy group received an 8-session group therapy based on William Glasser's book (2002) over four consecutive weeks. The structure of the therapy sessions was as follows:

Table 1. Summary of Acceptance and Commitment Therapy (ACT) sessions

Session	Description
First	Welcome and introduction and acquaintance of group members with the therapist and each other, the reason for attending this session and the expectations they have from the therapy sessions, setting the group's frameworks and rules, familiarizing individuals with the research topic. Homework: Write down 5 of their major life problems. Explaining the group rules and tenets of choice theory. Homework: Prepare a list of tasks they cannot perform.
Second	Reviewing the homework from the previous session, assessing patients' problems from an ACT perspective (extracting experiences of avoidance, fusion, and values of the individual). Homework: Creating a list of strategies for controlling issues and weighing their pros and cons.
Third	Reviewing the assignment from the previous session, explaining the control of negative events using metaphors, and teaching inclination towards emotions and negative experiences. Homework: Documenting cases where patients have been successful in abandoning ineffective control methods.
Fourth	Replacing the theory of internal locus of control with external control. Examining desires and actions to determine whether they are aligned with achieving goals. Homework: Creating a list of behaviors that are under external control and how to bring them under internal control.

Fifth	In psychology, examining the agenda of the previous session, establishing connection with the present moment, considering oneself as the background (metaphorically similar to a chessboard), and teaching mindfulness techniques. Defining and understanding the qualitative and real world and the differences between individuals in this realm . Homework: What transpires in your qualitative world? And the relationship between meeting needs and your qualitative world
Sixth	In the field of psychology, the presentation of defining emotion regulation strategies, somatic imagery, and resilience, their relationship with the qualitative world and fundamental needs. Teaching the design and planning to achieve desires. Homework: Implementing the design and planning to achieve desires.
Seventh	Reviewing the agenda of the previous session, presenting practical solutions to overcome obstacles, employing metaphors, and planning for commitment to follow values. Homework: Reporting on the steps of pursuing values and reflecting on the outcomes of the sessions.
Eighth	Summarizing the presented concepts, requesting members to present their achievements, and their life plan.

To analyze the data, two sections of descriptive and inferential statistics were utilized. In the descriptive statistics section, measures of central tendency (mean) and measures of dispersion (standard deviation) were employed. In the inferential statistics section, for assessing the effectiveness of therapeutic methods, data were analyzed using covariance analysis. To examine the normality of the data, the Kolmogorov-Smirnov test was used, and for testing the homogeneity of variances, the Levene's test was applied. In this study, SPSS software was used to analyze the research data.

RESULTS

In Table 2, the descriptive indicators of the pre-test and post-test studies are reported separately by groups.

Table 2. Descriptive indices of the research variables according to the experimental (therapy based on acceptance and commitment) and control (n=30)

Variables	Groups	pre-test		post-test	
		Mean	Std. Deviation	Mean	Std. Deviation
Autonomy	ACT	24.26	3.34	33.92	3.36
	Control	24.12	3.36	24.14	3.28
Environmental mastery	ACT	6.92	1.63	11.86	0.58
	Control	6.98	1.61	6.99	2.12
Personal growth	ACT	28.52	8.32	34.86	7.14
	Control	27.96	8.71	27.98	9.66
Positive social relationships	ACT	28.91	7.48	31.12	7.01
	Control	27.99	3.23	28.04	2.31
Purpose in life	ACT	8.72	1.86	11.59	2.21
	Control	9.12	3.23	9.76	2.31
Self-acceptance	ACT	11.86	2.63	19.32	1.81
	Control	11.84	1.67	11.93	2.11
Total (Psychological Well-Being)	ACT	109.19	6.01	142.67	5.61
	Control	108.01	6.53	108.84	6.17
Decreasing Avoidance Behavior	ACT	33.46	8.32	18.045	7.14
	Control	33.56	5.54	34.64	5.05

As shown in Table 2, there is a difference between the post-test averages of the experimental group and the control group. To investigate whether the changes are due to measurement errors, confounding variables, or the independent variable (acceptance and commitment-based treatment), it is necessary to utilize inferential statistical findings. To

investigate the difference between the two experimental and control groups in terms of psychological well-being dimensions, the results of one-way analysis of variance are reported in Table 3.

Table 3. The results of one-way variance analysis of the difference between the experimental and control groups in psychological well-being

variable	Sum of squares in ACT	Sum of squares in error	Mean squares in ACT	Mean squares in error	f	Sig.	Effect size
Autonomy	536.134	149.615	536.134	6.234	86.002	0.001	0.782
Environmental mastery	164.162	66.497	164.162	2.771	59.249	0.01	0.712
Personal growth	19.447	12.127	19.447	0.507	38.345	0.001	0.615
Positive social relationships	156.407	113.273	156.407	4.72	33.139	0.001	0.58
Purpose in life	159.346	64.345	159.346	2.454	54.623	0.01	0.689
Self-acceptance	152.467	62.123	152.467	2.321	53.731	0.01	0.672
Total (Psychological Well-Being)	2808.772	824.869	2808.772	30.551	91.938	0.001	0.773

The results indicate that there are significant differences between the experimental and control groups in the dimensions of independence, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance, and the psychological well-being of the experimental group has significantly increased. To examine which group's mean is higher in the post-test dimensions of psychological well-being (independence, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance) after adjusting and controlling for pre-test scores, the corrected means are reported in Table 4.

Table 4. Paired comparison of groups in psychological well-being

Variables	Group	Mean	Mean different	Std. error	Sig.
Autonomy	ACT	33.92	9.78	1.001	0.001
	Control	24.14			
Environmental mastery	ACT	11.86	4.87	0.667	0.001
	Control	6.99			
Personal growth	ACT	34.86	6.88	0.783	0.001
	Control	27.98			
Positive social relationships	ACT	31.12	3.08	0.435	0.001
	Control	28.04			
Purpose in life	ACT	11.59	1.83	0.287	0.001
	Control	9.76			
Self-acceptance	ACT	19.32	7.39	0.943	0.001
	Control	11.93			
Total (Psychological Well-Being)	ACT	142.67	33.83	3.124	0.001
	Control	108.84			

As can be seen in Table 4, there are significant differences between the experimental and control groups in the dimensions of psychological well-being (independence, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance). Therefore, based on these findings, it can be said that acceptance and commitment therapy have an impact on the psychological well-being of adolescents with anxiety disorders during the post-COVID-19 period, leading to an improvement in psychological well-being.

Table 5. The results of one-way covariance analysis of the difference between experimental and control groups in decreasing avoidance behavior

Resources	Sum of squares	df	Mean squares	F	Sig.	Effect size
Pre-test	539.868	1	539.868	13.967	0.01	0.349
Groups	2879.967	1	2879.967	80.849	0.001	0.737
Error	976.93	27	976.93			

According to Table 15, the F statistic for avoidance behavior in the post-test (849.80) is significant at the 0.001 level, indicating a significant difference in avoidance behavior between the two groups. The effect size of 0.737 also shows that this difference is substantial and meaningful in the larger population. The F statistic for the pre-test of avoidance behavior (13.967) is also significant at the 0.01 level, meaning that the pre-test has a significant impact on the post-test scores, and the use of analysis of covariance to control for this effect is necessary.

CONCLUSION

The studies have shown that the global spread of COVID-19 has led to fear, insecurity, lack of confidence, and widespread anxiety among many people worldwide ([Weerahandi et al., 2021](#)). Anxiety is a defense system that takes action to confront potential threats in the face of new and unfamiliar situations ([Torales et al., 2020](#)). Research indicates that in times when the public health is at risk, psychological responses such as anxiety, depression, stress, and fear have a significant impact on the physical and mental health of individuals ([Ranieri et al., 2021](#)). Adolescents were among the vulnerable groups affected by COVID-19 ([A. Burlacu et al., 2021](#)). Additionally, with the spread of this disease, many educational, sports, and recreational facilities for adolescents were closed. Some adolescents were not in a good physical or mental state and suffered from disease-related anxiety. Therefore, the aim of this study was to investigate the effectiveness of ACT therapy in improving psychological well-being and reducing avoidant behavior in adolescents with anxiety disorder during the post-COVID era.

Given that psychological well-being includes 6 dimensions, a multivariate analysis of covariance (MANCOVA) was used to respond to the research hypotheses. The results indicated a significant difference in psychological well-being between the two experimental and control groups. According to Table 12, the mean for the experimental group in the autonomy component (92.33) was significantly different from the mean for the control group (14.24), with a mean difference of 78.9 at the 0.001 level of significance. Similarly, the mean for the experimental group in the environmental mastery component (86.11) was significantly different from the mean for the control group (99.6), with a mean difference of 87.4 at the 0.01 level of significance. The mean for the experimental group in the personal growth component (86.34) was significantly different from the mean for the control group (98.27), with a mean difference of 88.6 at the 0.001 level of significance. Additionally, the mean for the experimental group in the positive relations with others component (12.31) was significantly different from the mean for the control group (04.28), with a mean difference of 8.3 at the 0.001 level of significance. Moreover, the mean for the experimental group in the purpose in life component (59.11) was significantly different from the mean for the control group (76.9), with a mean difference of 83.1 at the 0.001 level of significance. Lastly, the mean for the experimental group in the self-acceptance component (32.19) was significantly different from the mean for the control group (93.11), with a mean difference of 39.7 at the 0.001 level of significance.

As observed in Table 12, there are significant differences in the dimensions of psychological well-being (autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance) between the two experimental and control groups. Therefore, based on these findings, it can be concluded that Acceptance and Commitment Therapy (ACT) has an impact on improving psychological well-being in adolescents with anxiety disorders during the post-COVID era. These results are consistent with the findings of Hayes et al. (1999), Bach and Moran (2008).

Acceptance and Commitment Therapy (ACT) is a behavioral therapy that focuses on values in life. This treatment guides clients towards openness and real experiences in thoughts and feelings of all kinds, whether dark or bright, by means of six core processes: acceptance and willingness, cognitive diffusion, self as context, present moment awareness, values, and committed action. ACT advocates for openness to internal experiences not because there is a sense of pain, glory, or grandeur in them, but because the effort to avoid painful emotions creates pain and suffering, distancing us from things that are important and give meaning and validity to life. ACT aims to identify thoughts and feelings that have acted as barriers (such as anxiety) to living a valuable life and focuses on changing our relationship with these internal experiences instead of changing the experiences themselves. The effectiveness of this treatment lies in the fact that clients like it. The goal of an ACT therapist is not to reduce symptoms of stress and anxiety, but these are by-products that will be achieved in the therapeutic process. ACT changes the relationship between problematic thoughts and feelings so that individuals perceive them as symptomatic signs and even learn to understand them as harmless (even if they are distressing and unpleasant). This approach is always a form of empowerment that makes a values-based, rich, and meaningful life accessible to everyone.

Training in acceptance and commitment therapy involves guiding the patient towards becoming aware of their emotions, internal experiences, and feelings, accepting them, and using them appropriately and effectively. This approach allows the patient to establish a healthy relationship with their situations and interactions, experiencing them with a fresh perspective. By focusing on improving avoidant behaviors through acceptance and commitment training, the belief is that clarifying values and engaging in committed actions during therapy provides individuals with sufficient motivation to continue facing unpleasant experiences. Additionally, two key processes in acceptance and commitment therapy, namely present moment awareness and self as context, help increase individuals' self-awareness and understanding of their current needs. By replacing the self as context, patients can easily experience unpleasant internal events in the present moment, separate themselves from reactions, memories, and unpleasant thoughts, and find greater motivation to adhere to treatment.

The mindfulness processes used in acceptance and commitment therapy create a different perspective on mental events, allowing individuals to observe these events as events rather than as part of themselves. This approach is always empowering, making a values-based, rich, and meaningful life accessible to everyone. Pain is considered a part of life rather than an external entity to escape from, and progress is defined not by an absolute level of success but by incremental growth in the present moment towards a valuable life. The goal of acceptance and commitment therapy is to reduce experiential avoidance by accepting unavoidable unpleasant emotions like anxiety and cultivating mindfulness to counter excessive engagement with thoughts, identifying personal values related to behavioral goals. Patients are encouraged to fully engage with their experiences without resistance while moving towards their valuable goals, accepting them without judgment of their rightness or wrongness when they arise. This approach increases motivation for change despite inevitable obstacles and encourages individuals to strive towards achieving their valuable life goals, ultimately leading to an improvement in the quality of life, especially in the psychological domain.

One of the limitations of this research is the small sample size and intervention only on adolescents suffering from anxiety disorder, which reduces the generalizability of the results to some extent.

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