

Comparison of Transdiagnostic Group Therapy with Cognitive Group Therapy in University Students with Adjustment Disorder

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Unified Protocol (UP) is a kind of transdiagnostic psychotherapy for emotional disorders as a new psychotherapy. The current study intended to compare severity of symptoms, happiness and quality of life of adjustment disorder in two groups of university students treated by UP or cognitive therapy. This study was a randomized clinical trial. The sample included 23 university students with the adjustment disorder. Patients were assigned to 2 groups randomly (UP and cognitive therapy groups). The intervention in UP group was conducted based on Barlow & his colleagues (2011) manual for unified protocol for transdiagnostic treatment of emotional disorders. For the cognitive group therapy, researchers applied Ferry's cognitive group therapy protocol (2007). Ten therapeutic sessions administered for each group. The instruments included the Beck Depression Inventory-II (BDI-II), Beck Anxiety Inventory (BAI), Oxford Happiness Inventory (OHI) and World Health of Quality of Life (WHO QOL-BREF). The data were analyzed using Multivariate analysis of variance (MANOVA). Results showed that clients receiving UP reported a significantly decrease in severity of Adjustment Disorder symptoms, and an increase in happiness and improvement in quality of life at post- treatment state. However, the results of comparison of all the variables in 2 groups were not statistically significant.

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Adjustment disorder is a state of subjective distress and emotional disturbance, usually interfering with social functioning and performance, arising in the period of adaptation to a significant life change or a stressful life event. The stressor may have affected the integrity of an individual's social network (bereavement, separation experiences) or the wider system of social supports and values (migration, refugee status), or represented a major developmental transition or crisis (going to school, becoming a parent, failure to attain a cherished personal goal, retirement). Individual predisposition or vulnerability plays an important role in the risk of occurrence and the shaping of the manifestation of adjustment disorders, but it is nevertheless assumed that the condition would not have arisen without the stressor. The manifestation vary and include depressed mood, anxiety or worry (or a mixture of these), a feeling of inability to cope, plan ahead or continue in the present situation, as well as some degree of disability in performance of daily routine. The predominant feature may be a brief or prolonged depressive reaction or a disturbance of other emotions and conduct (Sadock, Sadock & Ruiz, 2009).

Adjustment disorders manifestations include disorders such as worry, depression, anxiety decrease patient's happiness and quality of life (Sarafino, 2008).

Psychological well-being or happiness is a multidimensional construct comprising emotional and cognitive elements. According to Bradburn (1969) an individual will be high in psychological well-being in the degree of which he has an excess of positive over negative affect. Subsequently Andrews and Withey (1976) showed that well-being could better be represented by the additional of a third, cognitive-evaluation element, life satisfaction, of which self-esteem, a sense of personal control, optimism and goal fulfillment are some specific aspects. Psychological well-being or happiness represents a major way to assess quality of life.

Most of the research about psychotherapy of adjustment disorder is due to adjustment disorders caused by physical illnesses (Shimizu, Akizuki, Nakaya, Fujimori, Fujisawa, Ogawa, Uchitomi, 2011). As it is mentioned before, because adjustment disorder includes depressed mood, anxiety, worry or a mixture of these, it is an emotional disorder (Macklem, 2008).

In an effort to improve the efficacy of treatment for emotional disorders, several promising new treatments have recently been developed. One of these treatments is the unified protocol for transdiagnostic treatment of emotional disorders (UP) (Barlow et al., 2011). UP is based on the emotion regulation skills and can be applied to a broad range of emotional disorders. It consists of 5 core modules: increasing emotional awareness, facilitating flexibility in appraisals, identifying and preventing behavioral and emotional avoidance, increasing awareness and tolerance of emotion-related physical sensations and situational and interoceptive exposure to emotion cues. Clearly, effective treatments for anxiety and mood disorders that can be widely disseminated are sorely needed to address this significant public health risk. In service of this goal, a number of evidence-based cognitive-behavioral treatments targeting specific anxiety and mood disorders have been developed over the last 20-plus years (Antony & Stein, 2009; Barlow, 2002; Norton & Price, 2007; Smits & Hoffman, 2008).

Recent scientific advances suggest that there may be more that unites anxiety and mood disorders than previously conceived, potentially making the need for numerous diagnosis-specific treatments obsolete and opening the possibility for a more parsimonious application of evidence-based treatments in clinical practice. Over the last several years, research emerging from the fields of neuroscience, emotion science, and descriptive and functional psychopathology has begun to identify common, higher-order factors that underlie anxiety, mood and related emotional disorders. Unified protocol approaches such as unified protocol for transdiagnostic treatment of emotional disorders can be used for this purpose and it has

implications for dimensional conceptualization of psychopathology (Ellard, Fairholme, Boisseau, Farchione, Barlow, 2010).

The UP was developed to be applicable across anxiety and mood disorders, as well as other disorders in which anxiety and emotion dysregulation play a significant role because the growing literature on emotion regulation has found deficits in the ability to regulate emotional experiences, emerging out of unsuccessful efforts to avoid or dampen the intensity of negative emotions, to be prevalent across anxiety and mood disorders (e.g., Campbell-Sills, Barlow, Brown, Hoffman, 2006; Liverant, Brown, Barlow, & Roemer, 2008; Mennin, Heimberg, Turk, 2005; Tull, 2006). On the other hand, investigations into unifying features across mood and anxiety disorders have identified common cognitive, behavioral, and emotion-regulation processes that may serve as targets for therapeutic change and it has some strategies utilized in treating anxiety and mood disorders (Ellard et al., 2010; Barlow et al., 2011). The current version of the UP (Barlow et al., 2011) consists of five core treatment modules that target key aspects of emotional processing and regulation of emotional experiences: (a) present-focused emotional awareness, (b) cognitive flexibility, (c) emotional avoidance and emotion-driven behaviors, and (d) awareness and tolerance about physical sensation, (e) interoceptive and situation-based emotion exposure. In addition, the protocol contains 3 other modules (psychoeducation, motivational enhancement, relapse prevention) consistent with standard cognitive-behavioral protocols. Because there is not enough research about adjustment disorder and UP is a new psychotherapy, we decided to examine its efficacy in an Iranian sample with adjustment disorder. In addition, we compared UP group with the cognitive group as a control group. The questions are as follows:

- 1) Is there any difference between UP group therapy and cognitive group therapy in the reduction of the symptoms of adjustment disorder (depression and anxiety) in the university students?

2) Is there any difference between UP group therapy and cognitive group therapy in the promotion of happiness and quality of life in the university students with adjustment disorder?

Method

This study is a comparative or a relative efficacy study that compared two therapeutic models with each other based on the outcomes scales. As we know, the cognitive therapy is a common and useful intervention (Rachman, 2009) and a standard treatment was considered for one of the two groups. Therefore, the current study compared UP group therapy with the classical cognitive group therapy.

Participants and Procedure

Statistical population included university students with adjustment disorder. Inclusion criteria were: having diagnosis of adjustment disorder with depressed mood and anxiety symptoms (scores in depression and anxiety should be more than the cut-off-point of the inventories). Exclusion criteria were: other diagnosis of axis I such as grief, MDD, psychosis, PTSD, drug abuse, getting another psychological treatment or using psychiatric drugs and. having physical defects. Based on these criteria, 30 patients who were screened with the version of the Persian SCID-I (Structured Clinical Interview for DSMIV Axis I disorders) and were interviewed by the clinical psychologists and psychiatrists in Tehran and Sharif Universities to confirm the diagnosis of adjustment disorder, were assigned to 2 groups randomly (UP and cognitive group therapies). All patients signed informed consent. At the end of the screening stage the patients were informed about the study. Both UP group and cognitive group attended 10 sessions (each session was 2 hours in a week). The instruments of the study were administered one week before the treatment and after the 10th session (posttest). There were 3 dropouts in UP group (20%). They did not participate after 2 or 3 sessions because of the long

distance to the clinic where the therapy was administered and because of a travel. There were 4 dropouts in the cognitive group (26%). They did not participate after 2 or 3 sessions because of the long distance and their university exams. At the post test the final samples in the 2 groups consisted of 12 people in the UP group and 11 people in the cognitive group. For the UP group, the treatment method used in this study was unified protocol for transdiagnostic treatment of emotional disorders (Barlow et al, 2011) and for the cognitive group, the cognitive group therapy designed by Ferry (2007), was used.

The UP consists of five core treatment modules that were designed to target key aspects of emotional processing and regulation of emotional experiences: a) increasing present-focused emotion awareness; b) increasing cognitive flexibility, c) identifying and preventing patterns of emotion avoidance and maladaptive emotion driven behaviors (EDBs); d) increasing awareness and tolerance of emotion-related physical sensations; and e) interoceptive and situation-based emotion focused exposure. The five core modules are preceded by a module focused on enhancing motivation and readiness for change and treatment engagement, as well as an introductory module educating patients on the nature of emotions and providing a framework for understanding their emotional experiences. A final module consists of reviewing progress over treatment and developing relapse prevention strategies.

The cognitive group therapy mostly consists of the cognitive flexibility techniques and cognitive reappraisals. The techniques were included psychoeducation on emotions, cognitions, behaviors and their connection with each other, identifying the cognitive distortions and changing them with alternative appropriate logic, using vertical arrows for finding schemas, cognitive map, applying of some techniques such as adversarial analysis or investigatory analysis and scientific analysis for challenge with negative beliefs.

Measures

Structured Clinical Interview for DSMIV Axis I Disorders (SCID-I). This is a comprehensive and standardized instrument for assessing major mental disorders in clinical and research atmospheres. SCID-I is administrated in a single session and takes about 45 to 90 minutes to be completed. The validity and reliability of this instrument have been confirmed previously. Zanarini, Skodol, Sanislow, Schaefer (2000) reported inter-rater diagnostic reliability with Kappa higher than 0.7 in most diagnoses of axis I disorders. Persian version of this questionnaire has been provided by Sharifi, Asadi, Mohammadi, Amin Homayoun, Semnani, Shabanikia (2004). The validity of the instrument has been confirmed by clinical psychologists and its test-retest reliability was 0.95 for one week.

Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). The Depression Inventory-II is a 21-item self-report inventory to assess the presence and severity of depressive symptoms in clinical and nonclinical samples. It is rated on a four-point Likert-type scale ranging from 0 to 3, based on the severity of each item. Scores range from 0 (no symptoms) to 63 (very severe symptoms). The Cronbach's alpha for the total score in the American population was 0.86 with 0.92 for internal consistency correlation (Beck, Steer, & Garbin, 1988). In the Iranian sample Cronbach's alpha for the total score was 0.91 with 0.94 for the internal consistency (Fata, Birashk, Atef Vahid, & Dobson, 1384).

Beck Anxiety Inventory (BAI). The BAI (Beck, Epstein, Brown, & Steer, 1988) is a 21-item self-report measure assessing the frequency of physical and cognitive anxiety symptoms over the past week, with scores ranging from 0 to 63. The BAI demonstrates good internal consistency reliability, and validity (e.g., Fydrich, Dowdall, & Chambless, 1992). The instrument has excellent internal consistency ($\alpha = .92$) and high test-retest reliability ($r = .75$; Beck & Steer, 1990).

The Oxford Happiness Inventory (OHI). The Oxford Happiness Inventory (Argyle, Martin, & Crossland, 1989) is a 29-item questionnaire that has been used extensively in happiness research (Argyle, 2001; Cheng & Furnham, 2003; Furnham, Cheng, & Shirasu, 2001). Items are responded to on a 7-point rating scale. It demonstrated high scale reliabilities with values 0.92 and 0.91, respectively. The inter-item correlations for the OHI ranged from 0.03 to 0.58, with a mean of 0.28.

Brief form of world health quality of life (WHO QOL-BREF). The WHOQOL-BREF is an abbreviated 26-item version of the WHOQOL-100 containing items that were extracted from the WHOQOL-100 field trial data. It comprises 26 items and includes 4 domains of quality of life (physical health, psychological health, environment and relationships). This questionnaire was translated by Nasiri (2007) into the Persian language. He reported a.87 split-half reliability coefficient and reasonable concurrent validity with GHQ. Also, this is a sensitive instrument to measure change in clinical settings.

Data analysis

To confirm symptomatic differences between the UP and the control group, that is, the cognitive group (CT), multivariate analysis of variance (MANOVA) was performed comparing the two groups on the severity of adjustment mood, anxiety symptoms, happiness, and quality of life. The MANOVA was performed on the difference scores which existed between the scores of the pre-test and those of the post-test in the dependent variables of this study (scores of BDI-II, BAI, OHI, WHO QOL-BREF). It is necessary to mention that there was no significant difference between the 2 groups in the pre-tests of the variables.

Results

The participants in the experimental group (UP) were university students (3 males and 9 females) with the average age of 25.9 years and the

participants in the control group (CT) were university students (3 males and 8 females) with the average age of 27.3 years. Data analysis showed no significant difference between the 2 groups in age ($M=1.44$, $P=.48$, $t=.71$, $SD=2.02$) and gender ($X^2=.015$, $P=.9$). Table 1 indicates the means and standard deviations of the difference scores between the pre-test and post-test scores for the variables of this study in UP and CT.

Table 1
Means and Standard Deviations of the Outcome Measures of the Difference scores between the Pre-Treatment and Post-Treatment States in UP and CT

	Group	M	SD	N
Difference of Depression	UP	7.41	7.52	12
	CT	6.36	8.38	11
Difference of Anxiety	UP	7.08	10.02	12
	CT	3.36	7.78	11
Difference of happiness	UP	-9.58	13.73	12
	CT	-11.81	13.76	11
Difference of Quality of life	UP	-9.41	11.97	12
	CT	-6.54	13.75	11

Box's Test of Equality of variance-covariance matrices showed that the observed covariance matrices of the dependent variables are equal across the groups (Box's $M= 16.389$, $F= 1.294$, $sig= .228$). Table 2 provides Levene's Test of Equality of error variance used in this study. It shows that the error variance of the differences between the pre-test and post-test of the dependent variables is equal across the groups. Therefore, we can use MANOVA.

Table 2
Levene's test of Equality of Error Variances

	F	df1	df2	Sig
Difference of Depression	.006	1	21	.936
Difference of Anxiety	.379	1	21	.545
Difference of happiness	.005	1	21	.944
Difference of Quality of life	.299	1	21	.590

Table 3 provides the relevant findings concerning the differences between the severity of BDI, BAI, happiness and quality of life of the two therapies.

Table 3
Comparison of the Outcome Measures of the Difference Scores of Pre-Test and Post-Test States in UP and CT

Source	Type III Sum of Squares	df	F	Sig	Effect Size
Difference of Depression	6.36	1	.101	.754	.005
Group Difference of Anxiety	79.4	1	.974	.335	.044
Difference of happiness	28.66	1	.152	.701	.007
Difference of Quality of life	47.31	1	.286	.598	.013

As the results in Table 3 show, there is no difference between the unified protocol of transdiagnostic and the cognitive therapies in decreasing the severity of depression and anxiety and increasing the severity of happiness and quality of life. In other words, the UP group therapy is not superior to the cognitive group therapy in reduction of symptoms of adjustment disorder (depression and anxiety) and in the promotion of university students' happiness and quality of life. Thus, the analysis of data gives negative answers to the questions of this study.

Figures 1-4 present the differences of depression, anxiety, happiness and quality of life in the 2 groups of the pretest and posttest. It appears that in both groups, therapy, regardless of its kind, can decrease the severity of depression and anxiety and increase the happiness and quality of life in the two groups of participants. The differences between the pre-test and post-test of variables in 2 the groups are statically and clinically significant.

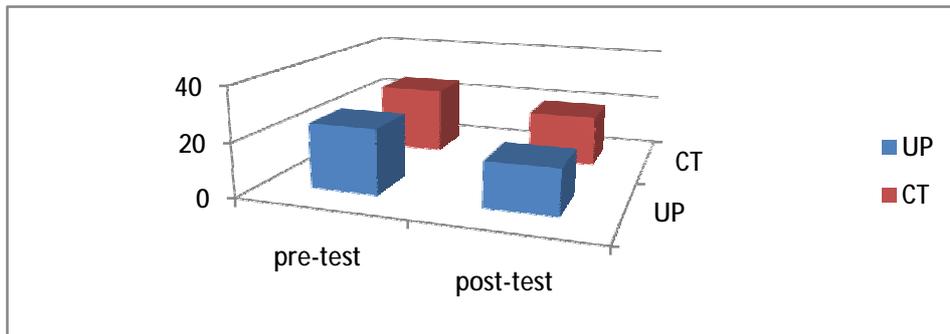


Figure1. Means of Pre-Test and Post-test in Severity of Depression for UP and CT

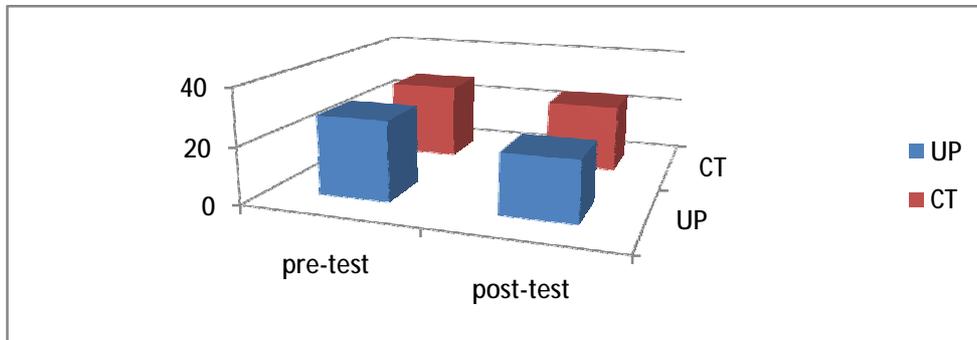


Figure 2. Means of Pre-Test and Post-Test in Severity of Anxiety for UP and CT

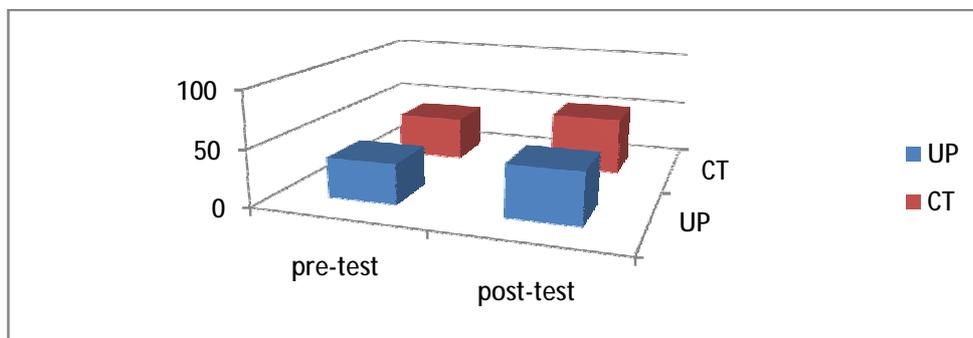


Figure 3. Means of Pre-Test and Post-Test in Happiness for UP and CT

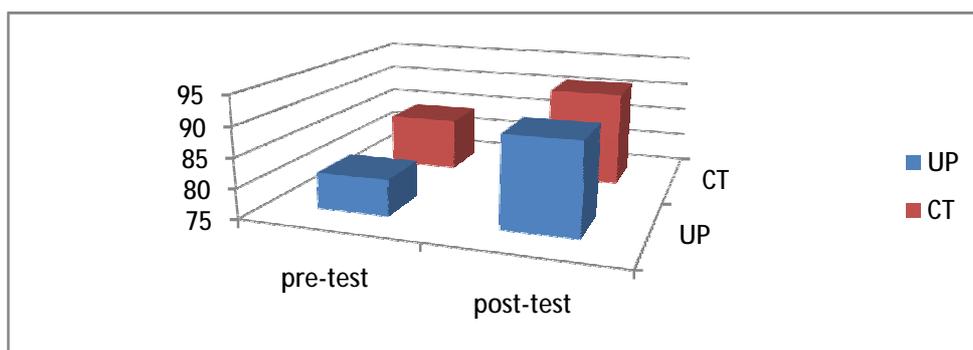


Figure 4. Means of Pre-Test and Post-Test in Quality of Life for UP and CT

Discussion

The purpose of this study was to investigate whether a randomized controlled trial of a 10-week group transdiagnostic therapy program (UP), would be an acceptable and effective treatment for patients suffering from adjustment disorder and to compare it to the standard cognitive group therapy in the reduction of anxiety and depressive symptoms and in improvement of the quality of life and increasing the happiness. Figures 1-4 show that UP group therapy could reduce the emotional components

(depression and anxiety) of the adjustment disorder and increase happiness and quality of life. These findings are consistent with Norton's (2008, 2012) and Ellard's et al., (2010) and lotfi's study (2013) and Lopez's (2013). Ellard et al., (2010) in their primary study, in order to construct and evaluate the primary protocol, found that UP could be effective for a range of emotional disorders. Boisseau and his colleagues (2010) reported similar results in a case study. Generally, a transdiagnostic approach such as UP has benefits in the treatment of symptoms of adjustment disorder (depression and anxiety). Treatment with the UP has resulted in significant reductions in diagnosis specific symptom severity across both principal and comorbid disorders, as well as significant decreases in functional impairments. In Farchione, Fairholme, Ellard, Boisseau, Thompson-Hollands, Carl, Barlow (2012) research, the findings showed that the UP evidenced moderate to large treatment effects on the measures of temperamental affectivity, with effects on positive affectivity being somewhat larger than those for negative affectivity when contrasting the UP with the waiting list condition. In addition, the revised version of the UP places specific emphasis on reducing avoidance of positive emotions, and thereby encouraging greater approach to positive emotional experiences. Adjustment disorders have various representations and some kind of emotional symptoms. In capitalizing on the commonalities across these various presenting problems, the UP targets each of these ostensibly separate presenting problems simultaneously using a common language and set of treatment principles. This facilitates patient improvement by helping them to identify the similarities among their various presenting problems. Core modules within the UP can be directed towards addressing symptoms of depression, including negative thoughts and rumination; a motivation and social withdrawal; and physical sensations of heaviness and fatigue. Patients are encouraged to use mindfulness and present-focused awareness exercises to break the cycle of rumination and anchor their mood within the current context rather than fueling their low mood

through ruminations about past events or worries about the future. Finally, emotion exposures are tailored to specifically target triggers for low mood. For example, writing exercises can be used as exposures to core beliefs, and situational exposures can be used to increase the patient's exposure to positive emotions (Boisseau, Farchione, Fairholme, Ellard & Barlow, 2010). Additionally, it appears that increasing the quality of life and decreasing the adjustment disorder symptoms are related and it is common in other treatments such as acceptance commitment therapy (Hayes, Orsillo, Roemer, 2010; Zargar, AsgharnejadFarid, Atef-Vahid, Afshar, Maroofi, & Omranifard, 2012) and a new approach like transdiagnostic therapy.

In comparing scores of the two groups, no significant difference was found. Generally, we can reach this conclusion that in reduction of anxiety and depression and improving the quality of life and increasing happiness, unified protocol as a transdiagnostic of emotional disorders group therapy is the same as the cognitive therapy. These findings are consistent with Mohammadi, Birashk and Gharraie's (2012) and with lotfi's (2013) and with McEvoy and Nathan's (2007). The cognitive appraisal and restructuring as a useful technique in UP, is a basic technique in cognitive therapy, too and it helps the emotion regulation which can reduce depression and anxiety. So it can be said that the same effectiveness of UP and CT on depression and anxiety is due to this technique. It seems that there are similar mechanisms in both therapies which should be studied in the future research. Both of the group therapies (UP and CT) could increase happiness and quality of life. These findings were expected because reduction in depression and anxiety improved participants' function resulting in the improvement of happiness and quality of life.

It is notable that the differentiation between specific therapies and transdiagnostic is difficult. Specific therapies mostly are different in the content not in the process. For example, selective attention to treat is most likely to be experienced by individuals with anxiety disorders but its content can be different in a variety of anxiety disorders. The

transdiagnostic therapies are process oriented and the main diagnosis is not important in the therapies. Although, there are some limitations for this approach, more studies should be applied to answer the questions related to this novel approach (Clark & Taylor, 2009).

The results of this study add to the growing evidence base for transdiagnostic treatment models and provide preliminary support for the assumption that individuals with different symptoms can be treated equally within the same treatment protocol and in comparison with the cognitive therapy, it is not more effective but because of its focus on emotion regulation, it may be preferable.

The present study involved some limitations. There may be limitations with respect to the generality of the findings because of the sample selection that was among college students. Furthermore, dropout in the sample has been occurred. There were some reasons for dropping out such as: educational problems and transportation problems. Another limitation in this study is that no follow-up about the therapeutic outcomes was considered.

We Recommend that the future studies apply UP to a variety of samples such as children, elderly and in different levels like school, family, and at multi levels. Furthermore, to compensate for the dropout, it is suggested that samples with much more members could be useful in the future research. It would be difficult nowadays to imagine any research claiming to evaluate the effectiveness of a new intervention method, without reporting results of a follow-up. Then follow-up for outcomes of UP group therapy is suggested. The study of UP mechanism and its effectiveness on the other disorders and problems is necessary in the future studies. Finally, it seems that transdiagnostic interventions, such as UP, need to investigate more comparisons with other specific interventions.

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