

E-group art journal therapy to reduce adolescents' levels of stress, anxiety, and depression

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Keyword : Adolescent, DASS; group; psychotherapy; virtual.	Abstract Depression, anxiety, and stress in adolescents require therapy as these conditions are likely to cause harm to both the individuals experiencing them and their surroundings. Therefore, it is important to create an intervention for this age group. E-Group Art Journal Therapy is an intervention which involves art as its approach and is conducted in groups through an online platform, Zoom Meeting. In this study, ten participants were divided into two groups: the control group and the experimental group. Participants were recruited through non-random sampling using these criteria: they were required to be active students, reside in Bali, be between 18-23 years old, have a moderate level of stress, moderate level of anxiety, low level of depression based on Depression Anxiety Stress Scale (DASS), and agree to participate in the study. This study employed a mixed method which produced both quantitative and qualitative data that were analyzed with Wilcoxon rank-sum test and theoretical coding. The results showed that there were score differences between the control group and the experimental group in terms of depression, anxiety, and stress levels. Qualitatively, there were also psychological changes among the five participants from the experimental group. Implementing an intervention in groups could be beneficial because the group activities created mutual situations. Creating artwork also contributed to therapeutic processes. Quantitatively, there was a significant decrease in depression score. Qualitatively, E-GAJT encouraged the participants to believe in their potential despite their upbringing in an unsupportive environment. This encouragement fostered greater courage, enabling them to take steps toward achieving goals and creating healthier boundaries.			
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INTRODUCTION

Hall mentioned that adolescents are individuals who are 12 to 23 years old (Santrock, 2007). Like adults, adolescents can also experience various emotional states, including depression, anxiety, and stress. Depression, anxiety, and stress are three emotional states in humans which are considered to be negative. Depression is an emotional state marked by deep sadness, feelings of guilt and worthlessness, withdrawal from others, having difficulty sleeping, and loss of appetite, sexual desires, passion, as well as pleasures from doing the usual activities (Davison et al., 2012). According to the American Psychological Association (2015), anxiety is an emotion marked by apprehension and somatic symptoms of tension in which an individual expects upcoming danger, calamity, or misfortune.

Moreover, stress is the body's reaction to changes that require physical, psychological, and emotional responses, regulations, and/or adaptations (Silverman, 2010). Stress can originate from situations, conditions,

and thoughts, and/or lead to frustration, anger, nervousness, and anxiety (Silverman et al., 2010). If not properly regulated, these three emotional states can disrupt an individual's life.

Depression is a major risk factor for suicide in adolescents and has become the cause of two out of three deaths among adolescents (Windfurh et al., 2008). More than half of adolescents who committed suicide are reported to have had depressive disorder at the time of their death (Hawton & Van-Heeringen, 2009). Depression is also known to cause serious social and academic disruptions (Fletcher, 2010; Lewinsohn et al., 1988), increases in cigarette consumption, substance abuse, and obesity (Hasler et al., 2005; Keenan-Miller et al., 2008) that could result in negative impacts on adolescents if not being treated properly.

Correspondingly, failure to properly treat anxiety disorder in adolescents can also create negative impacts by becoming comorbid for other mental disorders, such as depression, substance abuse, and suicidal behaviors (Bronisch & Wittchen, 1994). In addition, suicide is the fourth highest cause of death among 15-19-year-old adolescents (James et al., 2013; Beidel & Alfano, 2011). Moreover, prolonged stress in adolescents can lead to high blood pressure, weakened immune system, obesity and heart disease (American Psychological Association, 2019). Prolonged stress can also cause psychological disorders, such as anxiety and depression (American Psychological Association, 2019).

Inadequate treatment of depression, anxiety, and stress is likely to inflict harm on the individuals involved as well as their surroundings. Therefore, it is important to create an intervention that can regulate these conditions, especially in adolescents. One of the approaches that can be employed is through art. Creating artwork helps many people express themselves without the need to use any words (Fancourt et al., 2016; Guest Author, 2018; Ockelford, 2016). Art has also been known to help improve one's confidence (Eising, 2019; Guest Author, 2018), enhance resilience, as well as reduce anxiety, depression (Eising, 2019), and stress (Guest Author, 2018; Eising, 2019). Creating artwork can help individuals understand themselves and recognize feelings that are in the subconscious mind (Guest Author, 2018).

Art therapy which involves art-based techniques such as painting, dancing, and acting, is known as a form of intervention that is evidence-based and used for mental health issues, including anxiety and depression (Lusebrink, 2004; Zhang et al., 2015). The main functions of art therapy are to improve cognitive and sensorimotor functions, develop self-esteem and self-awareness, build emotional resilience, promote insights, improve social skills, reduce and resolve conflicts as well as stress, and promote social and ecological changes (American Art Therapy Association, 2018). Art therapy has been proven to be effective in treating anxiety, depression, trauma, stress and other common psychological symptoms (Feen-Calligan et al., 2020; Kalmanowitz & Lloyd, 2005; Schouten et al., 2019; Thabet et al., 2006; Thabet et al., 2011).

A study conducted by Calear and Christensen (2010) showed that interventions carried out through the internet are also effective in reducing anxiety and depression in adolescents. Additionally, group therapy delivered through video conferences also has similar effects to face-to-face ones (Marton & Kanas, 2016). Wagner et al. (2014) mentioned that there is no significant difference between groups undergoing internet-based therapy for depression and the groups participating in face-to-face therapy. The current study used

internet-based group intervention because the effectiveness is expected to be similar to that of face-to-face interventions.

This particular intervention is called E-Group Art Journal Therapy (E-GAJT). E-GAJT is an art therapy that utilizes a combination of psychodynamic and humanistic approaches, in which the former highlights the internal world dynamic of an individual, while the latter emphasizes acceptance and development of an individual at present (Rubin, 2010). E-GAJT is done in groups and uses the internet as the media, specifically video conferences. This intervention uses a journaling technique, which is a worksheet that is arranged in the form of a diary. Journaling has positive impacts on mental health, such as reducing anxiety, creating opportunities for individuals to reflect on their experiences, inducing awareness and creating new perspectives on the experiences, helping with emotion regulations, accelerating physical recoveries, and encouraging individuals to open up and seek help (Brennan, 2021). Journaling also has positive impacts on individuals who show symptoms of anxiety, depression, and suicidal ideation (McLafferty et al., 2017). Moreover, journaling is beneficial in various situations, including for personal and academic matters, and complements psychiatric therapies (Koziol, 2021). This study primarily utilized visual media, such as drawing or painting, to concentrate on capturing psychodynamic processes through inner representations, which are revealed through the creative process (Steinbauer et al., 1999). The visual outputs can reflect different psychopathologies and even therapeutic processes based on certain rules and criteria (Steinbauer & Taucher, 2001).

Based on the above explanation, this study argues that the E-GAJT would be a suitable alternative to reduce the level of depression, anxiety, and stress in adolescents. The process of creating artwork is expected to help adolescents practice catharsis symbolically and recognize their emotions. This may potentially lower the levels of depression, anxiety, and stress. The therapy that utilizes video conference as the media is also expected to give similar therapeutic effects as the face-to-face therapies. Therefore, this study hypothesises that E-GAJT can reduce the levels of stress, anxiety, and depression in adolescents.

METHOD

This study used the concurrent triangulation mixed method, which involves both quantitative and qualitative approaches to collect and analyze the data simultaneously, but separately, to obtain a better understanding of the research problems (Creswell & Clark, 2007). The separated results are then combined in the interpretation or could as well be transformed to facilitate the integration between the two different data during the analysis (Creswell & Clark, 2007). In this study, the quantitative data were collected from the pretest and posttest administered to the participants. On the other hand, the qualitative data were obtained from the reflective journals written by each participant. A field note created based on the observations during each intervention session was also a source for the qualitative data.

The research design used in this study was the pretest-posttest control group design because it allows the researchers to compare the conditions before and after the intervention (Sugiyono, 2022). The comparison can show the effectiveness of the intervention more accurately (Sugiyono, 2022). Furthermore, the dependent

variables in this study were the level of depression, anxiety, and stress among students, and the independent variable was E-Group Art Therapy.

The quantitative approach was implemented through the quasi-experimental design, namely the untreated control group design with dependent pretest and posttest samples. The participants' levels of depression, anxiety, and stress were measured using the quantitative approach implemented through the quasi-experimental design, specifically the untreated control group design with dependent pretest and posttest samples. The participants' levels of depression, anxiety, and stress were measured using the Depression, Anxiety, and Stress Scales (DASS) from Lovibond and Lovibond (1995) which has been adapted to Indonesian by Mutaqqin and Ripa (2021). The scale consists of 21 items with 7 items for each subscale (depression, anxiety, and stress). Responses are scored on a 4-point scale, ranging from 0 (never) to 3 (very often). In this study, the scale was used to measure the negative emotional states of participants, such as depression (for example "I felt I was not worth much as a person"), anxiety (for example "I felt I was close to panic"), and stress (for example "I found it difficult to relax"). Item discrimination values ranged from 0.58 to 0.70 for depression, 0.58 to 0.66 for anxiety, and 0.64 to 0.70 for stress. This version of DASS has satisfactory composite reliability, with reliability values of 0.872 for depression, 0.806 for anxiety, and 0.816 for stress, indicating good differential power and high internal consistency. In addition, this version has invariant gender measurement which suggests that it is not biased in its measurement across different gender groups. The scale was administered twice in this study, before (pretest) and after (posttest) the intervention.

The analysis of quantitative data used the nonparametric statistics test, namely the Mann-Whitney U test or Wilcoxon rank-sum test to compare the score differences between two samples (Field, 2013; Santoso, 2015). In this study, the compared score values were the differences between posttest and pretest scores obtained from the DASS that were administered to the experimental group and the control group. Meanwhile, the analysis of qualitative data was done using theoretical coding, which involved open coding, axial coding, and selective coding (Strauss & Corbin, 1990). The coding was done on the data obtained from the observations and the reflective journals.

The population selected for this study were 18-23-year-old adolescents residing in Bali at the time of the study. The sample chosen for this study was 10 male and female students divided into two groups: the experimental group and the control group. The criteria used to recruit the participants were active students, residing in Bali, aged 18-23 years old, and willingly agreed to participate in the study.

The recruitment of participants was done through non-random sampling. We used social media and posters displayed within higher education campuses in Bali to recruit participants. The potential participants were selected based on their initial DASS scores, with minimum requirements being: moderate level of stress (19-25), moderate level of anxiety (10-14), and low level of depression (10-13). The selected participants were then randomly divided into two groups: the experimental group and the control group, each consisting of five participants. Finally, they were interviewed online to ensure their willingness to participate in the study, obtain sufficient information regarding the study, sign the informed consent form, and receive the tools and materials

to be used during the intervention. This process was in compliance with the guidelines of the ethics committee of the Konsorsium Psikologi Ilmiah Nusantara (KPIN).

The E-GAJT for this study was held once a week in 12 sessions. Each session was conducted for 90 minutes through a Zoom Meeting and delivered in Bahasa Indonesia. Each session consisted of four parts: check-in, art activities, sharing, and check-out. The check-ins involved identifying the emotional level of each participant, who rated their emotions on a scale of 1 to 5. Emotions are conscious mental responses which are subjectively experienced as strong feelings and directed toward a specific object and typically accompanied by physiological and behavioral changes (American Psychological Association, 2015). A score of 1 represented the most negative emotions or those causing the most discomfort, whereas a score of 5 indicated the most positive emotions or those causing the least discomfort. This part also helped understand changes in the emotional level of each participant before and after the session. The sessions were facilitated by a therapist certified through the Academy of Play and Child Psychotherapy (APAC) program by PTI (Play Therapy International).

The art activities were all different throughout every session, and it depended on which stage each session was in. There were three stages in this intervention: the initial stage (initial rapport), the middle stage (expression of intense emotion), and the final stage (representing autonomy). The initial stage sessions aimed to assist the participants in becoming acquainted with one another and build connections among them. The middle-stage sessions aimed to encourage the participants to express their emotions and disturbing memories of traumatic events. The final stage sessions aimed to develop a sense of autonomy within each participant and to conclude the whole intervention process.

Table 1. Details of Intervention

Stage	Session	Description
Initial Stage	Session 1: Initial Consideration Part of Nature	Participants drew symbols of themselves from nature.
	Session 2: Building Link	Participants used music as their expressions and built a sequential story.
	Session 3: Get to Know Deeper	Participants metaphorically created a drawing of themselves as part of the group in the study.
	Session 4: The Rosebush Fantasy	Participants drew symbols of themselves that included roses.
Middle Stage	Session 5: Draw Your Emotion	Participants drew or painted the representations of their own emotions during the session.
	Session 6: Postcard of Emotions You Will Never Send	Participants drew on postcards to express the emotions that had been suppressed.
	Session 7: Self, Other, and Context	Participants expressed their connections with both their inner selves and the social environment.
	Session 8: My Life Timeline	Participants created a graph depicting the timeline of their life from birth to the time the session was conducted.
Final Stage	Session 9: Symbols of My Life Timeline	Participants continued the graphs from the previous session by adding symbols that could represent important events in their life.

Session 10: Under My Control vs Beyond My Control	Participants drew symbols representing life aspects that could and could not be controlled.
Session 11: Things I Take with Me and Leave Behind	Participants illustrated all the things obtained from the previous sessions that were needed and not needed for the next chapters in their life.
Session 12: Prayer Flag	Participants created flags that incorporated their wishes and prayers for themselves and for other participants in the group.

The sharing activities of each session were done by the group after all the participants finished the art activities. Participants were asked one by one to explain the artworks they created, then the other participants gave comments or asked questions regarding the artworks. The sharing activities were done on a voluntary basis, which allowed the participants to choose not to provide explanations about the artworks. Lastly, the check-outs were done similarly to the check-ins, with participants assessing their current emotional levels from 1 to 5, while also providing a single word that encapsulated the whole process of that session. One day after each session ended, the participants were asked to submit the reflective journals, called the "Process Diary" to the therapists via email. The reflective journals contained self-reflections recorded by the participants throughout each session.

RESULTS AND DISCUSSION

The study evaluated the impact of E-GAJT on participants' depression, anxiety, and stress levels through a comprehensive analysis of pretest and posttest data, observational records, and reflective journals. Based on the quantitative analysis of the pretest, there was no difference in depression scores between the experimental group ($M=5.50$) and the control group ($M=5.50$) before the intervention ($U=12.500$, $p>0.05$). Similarly, there was no difference ($U=10.500$, $p>0.05$) in anxiety scores between the experimental group ($M=5.10$) and the control group ($M=5.90$) before the intervention. In terms of stress scores, there was also no difference ($U=6.000$, $p>0.05$) between the experimental group ($M=4.20$) and the control group ($M=6.80$) before the intervention.

In the posttest, a significant difference was found ($U=0.000$, $p<0.05$) in depression scores between the experimental group ($M=3.00$) and the control group ($M=8.00$) after the intervention. A significant difference ($U=1.000$, $p<0.05$) was also observed in anxiety scores between the experimental group ($M=3.20$) and the control group ($M=7.80$) after the intervention. Additionally, there was also a significant difference ($U=0.000$, $p<0.05$) in stress scores between the experimental group ($M=3.00$) and the control group ($M=8.80$) after the intervention.

The decrease in depression score was found to be significant ($U=1.000$, $p<0.05$) in the experimental group ($M=3.20$) compared to the control group ($M=7.80$). Similarly, the decrease in anxiety score was significant ($U=0.500$, $p<0.05$) in the experimental group ($M=3.10$) compared to the control group ($M=7.90$). Lastly, the decrease in stress score was significant ($U=3.000$, $p<0.05$) in the experimental group ($M=3.60$) compared to the control group ($M=7.40$). These results indicated that E-GAJT effectively reduced depression,

anxiety, and stress levels among all participants. These results are in line with those of previous research that suggests that group art therapy interventions are helpful in alleviating symptoms of depression, anxiety, and stress (Başlı et al., 2020; Dalimunthe et al., 2022).

Table 2. Comparison of the Results of the Pretest and Posttest

	Pretest	Posttest	Difference	p-value
Depression				
Experimental Group	5.50	3.00	3.20	< 0.05
Control Group	5.50	8.00	7.80	
Anxiety				
Experimental Group	5.10	3.20	3.10	< 0.05
Control Group	5.90	7.80	7.90	
Stress				
Experimental Group	4.20	3.00	3.60	< 0.05
Control Group	6.80	8.80	7.40	

Observational records showed that participants exhibited various dynamics between one another since the first session, becoming more connected as a group toward the last session. Early group dynamics were evident from the shared vision within the group to find peace. This reflects stages of group development, where forming and norming stages are crucial for establishing engagement, intimacy, and cohesion (Yalom & Leszcz, 2020). After realizing this shared vision, the group dynamics progressed to a stage where a sense of relief emerged as participants had the opportunity to express emotions that had been suppressed for some time. Additionally, some participants gained insights from sharing with other participants. The insights that emerged during the sessions were about the importance of recognizing one's own limits and the importance of not overexerting oneself in resolving issues that are beyond the control of the participants. This aligns with the concept of acceptance, which emphasizes the importance of embracing all experiences without trying to change, avoid, or control them and focusing on values-driven behavior (Luoma et al., 2017).

Furthermore, participants collaborated to achieve the common goals among the participants, and they found that it was important to work together as a group to reach the desired outcomes. Some participants believed that it was essential not to debate who was right or wrong about different views and opinions expressed. Instead, they focused on trying to understand the underlying intentions behind these opinions to ensure that the common goals could still be achieved despite all the differences. This mirrors Yalom's therapeutic factors of group therapy, particularly interpersonal learning where feedback from others, self-reflection, and self-observation, enhance the awareness of strengths, limitations, interpersonal distortions, and maladaptive behaviors, hence promoting personal responsibility (Yalom & Leszcz, 2020).

The results of the observations and reflective journals indicated that the participants gained five aspects from the art therapy sessions: a belief in their potential despite growing up in an unsupportive environment, acceptance of themselves, others, and their past circumstances with courage, an acknowledgment that perceptions could change the environment, a growing ability to recognize what was good and what was bad for themselves, and an understanding that emotions could be expressed in more positive ways.

Believing in one's potential despite an unsupportive environment could be found in participants' reflective journals. An illustration of this was documented by CL from the fourth session. During that session, participants were asked to draw roses that could represent the participants' self-awareness. From the drawing, CL believed that they had the potential to develop the inner dimensions of themselves, which had yet to manifest. CL was also optimistic that these aspects could later be moved to a better place. Participant ML's reflective journal from the twelfth session indicated a courage to accept themselves, others, and past circumstances. ML expressed their gratitude toward the therapy group, where ML shared issues that had been suppressed. At that time, ML also recognized an increase in courage in accepting themselves, others, and the situations they had encountered.

An example of realizing that perception could change the environment could be found in the seventh session's reflective journal written by ML. During that session, the participants were asked to be aware of themselves, others, and the surroundings by imagining they were in a place that had clear glass or clear water. The objects that appeared in the imagination were then drawn inside a circle that was divided into three parts. Participant ML gained an insight that they were in a familiar place, but it felt different because they believed that they could change the environment. For example, ML drew a torchlight and bonfire. At first, ML regarded these two objects as representations of danger that could inflict burns. However, when ML changed their perception, the objects turned into something warm, like the presence of other participants in the group.

The eleventh session highlighted the importance of recognizing good things and bad things for oneself. Participants were asked to imagine themselves getting ready for an exciting trip to the most comfortable place they had always dreamt of. This involved considering the items they would pack for the trip and recognizing those that they would leave behind and that were not needed. The participants then mentioned different types and number of bags they would use. They also mentioned various things they would bring, including the reasons behind them. This indicated that the participants had the ability to assess both good and bad things and to identify what they needed to carry forward and what to set aside in this life.

Participants also started to realize that their emotions could be expressed in more positive ways. Participant GL mentioned that during the most tiring moment in their life, GL was no longer inclined to react prematurely compared to before. Additionally, from the whole intervention process, GL also concluded that emotions were not only about impulsively expressing anger, but it was also about directing them in other ways, such as writing, singing, or drawing.

The five aspects gained from the whole art therapy sessions also evoked four further impacts, such as the decision to continue personal growth despite adversities, turning painful past experiences into strengths and self-defense for the present time, exhibiting greater courage in pursuing goals, and creating healthy boundaries. An example of the commitment to growth despite adversities could be observed in participant IN, who grew coconut trees that represented their wishes to thrive despite obstacles.

Turning painful past experiences into strengths and self-defense could also be seen in the fourth session's reflective journal written by participant IN. They perceived the thorns from the roses they drew as a symbol of the pain and journey they had undertaken. However, the thorns were also seen as a symbol of

strength and defense within this participant, embodying the insights gained from those painful experiences. Being more courageous to take steps towards achieving goals was evident in a reflective journal written by participant EL. During the eighth and ninth sessions, EL drew imperfect wings that reflected their feelings of not being able to continue their life because of the death of their significant other. However, in the last session, EL drew red wings symbolizing their desire to pursue bolder actions with renewed spirits.

Creating healthy boundaries was observed during the tenth session, where participants were asked to reflect on the aspects of their life that they could and could not control. Each participant had different proportions, where some of them were found to have more things under control, while others had fewer. Finally, the ability to recognize them helped the participants create healthier boundaries because they started to understand which aspects of their life could still be controlled. This was similar to the eleventh session which focused on the good and bad things that the participants would bring and leave behind.

Group-based intervention can be beneficial because group activities foster interactions among participants, encourage mutual support, and empower participants to help each other's growth in positive ways (Erford, 2018). Creating artwork also has its therapeutic process (Zhang et al., 2017) for the participants to gain various effects. In this study, the activities involved drawing as the art approach. By drawing, individuals could project their emotional burdens that were unhealthy into artworks, express their feelings and experiences in the creative process, which may lower psychological anxiety and maladaptive behaviors (Abbing et al., 2019). The process of drawing conducted in this study could also improve the incongruent cognitions through abstract thinking and imagination that enhanced cognitive functions and self-acceptance (Huang et al., 2021).

The five aspects gained by the participants contributed significantly to their development of self-acceptance. These aspects included a belief in one's potential despite unsupportive circumstances, the courage to accept oneself, others, and past events, understanding that perceptions can influence and change the environment. Additionally, participants developed an awareness of personal boundaries between what is beneficial and harmful, and the recognition that emotions can be expressed in more constructive ways. This self-acceptance shows that individuals are able to accept and view themselves objectively, determine their self-worth based on their self-validation, and show self-respect (Huang et al., 2021; Kelemen & Shamri-Zeevi, 2022). Self-acceptance is characterized by openness and honesty toward one's inner experiences, rather than avoidance or denial. It involves the willingness to acknowledge and embrace one's feelings, values, and personal characteristics, fostering a sense of wholeness (Klussman et al., 2022). According to Hurlock (1990), key factors that contribute to self-acceptance include self-awareness, realistic expectations, positive social attitudes, the absence of severe emotional disturbances, past successes, identification with well-adjusted role models, a broad self-perspective, supportive parenting, and a stable self-concept.

Based on this foundation, self-acceptance creates a stable emotional core that helps reducing the internal disturbances linked to anxiety, stress, and depression. Through the belief in their ability to manage challenges, self-accepting individuals are able to cultivate a sense of hope. This hope, in turn, strengthens self-acceptance by allowing individuals to picture a future where their efforts lead to growth and positive outcomes. It offers a framework to view setbacks as temporary, thereby reducing feelings of despair and hopelessness that can

contribute to depression. This is consistent with research by Izzaty et al. (2023) which finds that higher levels of hope are correlated with lower levels of anxiety, stress, and depression. Therefore, hope not only alleviates immediate emotional symptoms but also fosters long-term psychological resilience. Adolescents, in particular, benefit from this process between self-acceptance and hope, as it encourages engagement in behaviors that enhance their self-acceptance and psychological well-being.

Further impacts identified in this study also included the ability to create clear personal boundaries. Personal boundaries allow individuals to build and protect their unique world (Volkova et al., 2022). Consequently, personal boundaries help individuals become stronger, and most importantly, stay true to their perceptions (Volkova et al., 2022). The main feature of healthy personal boundaries is their flexibility which allows individuals to adapt to various stressors in life (Volkova et al., 2022). According to the theory of Personal Space Boundary (Scott, 2009), the permeability of boundaries regulates the quantity and quality of stimuli that enter and exit an individual's physical, mental, and spiritual internal environment. However, individuals with excessively open boundaries tend to have a poor sense of identity (Mathe & Kelly, 2023).

By understanding that boundaries serve as filters that protect individuals from excessive environmental burdens and potential disorganization (Moiseeva et al., 2020), it is expected that individuals who have healthier boundaries are also able to develop better coping mechanisms to deal with stress. This can be illustrated by the participants' experiences during the intervention where they recognized which aspects of life could be controlled or not. Additionally, participants were able to focus on the good things that they needed to carry into the next chapters in their lives, as well as the negative aspects they needed to leave behind. As the individuals recognize them, they could also reduce the potential stressors and have better coping mechanisms as a result.

Future researchers are recommended to apply E-GAJT to more diverse and larger samples, including individuals of different age groups, regions, cultural backgrounds, and mental health conditions. This would provide valuable insights into the generalizability of the findings and identify any necessary adaptations for specific groups (Sue et al., 2019). Future researchers are also recommended to conduct longitudinal studies to examine long-term effects of E-GAJT. Longitudinal designs can provide a more comprehensive understanding of the intervention's impacts (Voelkle et al., 2018). These studies offer valuable insights into whether the benefits of the intervention are sustained over extended periods and help identify any potential relapse or the need for booster sessions.

CONCLUSION

Quantitatively, the findings indicate a significant decrease in depression score in the experimental group compared to the control group, in addition to a notable decrease in anxiety score and a marked decline in stress score relative to the control group. Qualitatively, the E-GAJT encouraged the participants to believe in their potential despite growing up in an unsupportive environment. It encouraged them to courageously accept themselves, others, and past circumstances. It made them come to realize that perceptions could change the environment. They began to recognize the positive and negative aspects of their lives and realize that emotions

could be expressed in more positive ways. The further impacts of the intervention also encouraged the participants to continue their personal growth despite adversities, turn painful past experiences into strengths and self-defense, have greater courage in striving for their goals, and create healthier boundaries. Future research is recommended to focus on diverse samples and longitudinal studies to obtain more comprehensive evidence about the efficacy of E-GAJT in promoting mental health and well-being.

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