

## ONLINE AND OFFLINE ART THERAPY BASED INTERVENTIONS IN PANDEMIC TIMES

Zsuzsanna Geréb Valachiné<sup>1</sup>, Adél Dancsik<sup>1</sup>, Michelle M. Fitos<sup>1</sup>, Balázs Simon<sup>3</sup>,  
& Renata Cserjési<sup>2</sup>

<sup>1</sup>Eötvös Loránd University Budapest (ELTE), Doctoral School of Psychology, Affective Psychology Department (Hungary)

<sup>2</sup>PhD, Eötvös Loránd University Budapest (ELTE), Doctoral School of Psychology, Affective Psychology Department (Hungary)

<sup>3</sup>DLA, Theatre and Film Art University (SZFE) (Hungary)

### Abstract

In our paper, we would like to give a summary of two art therapy based research projects, one online and one offline, conducted by ELTE EMIND laboratory. The online study is a mixed qualitative and quantitative methods research, exploring how online individual art-therapy based (ATB-SHOT) self-help tasks could support international students during the COVID 19 pandemic lockdown. Partially based on the result of ATB-SHOT, a similar in-person group protocol was designed for students. Both the effectiveness of the different settings and the correlations of outcomes with personality constructs are shown. The preliminary results suggest that art therapy might be an effective method for supporting in stressful times, even if tasks are not focused directly on the stressor. The importance of our findings might be further utilized in preventive mental health structures.

**Keywords:** *Time limited art therapy protocols, ATB-SHOT, stress reduction.*

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### 1. Introduction

Due to social crisis and economic funding and restrictions in the health system, there is a growing interest in time limited short term art therapy protocols (LST-AT) and brief art psychotherapy (ed Hughes, R., 2016). However, the practical utilization in psychiatric care and social systems and social recognition of art therapy is still at its beginning. In order to prove that this approach is capable of enhancing wellbeing and can be used in numerous settings, it is necessary to have evidence-based art therapy protocols which are cost effective and capable of being either online or offline.

Many theoreticians agree that there are some main components of art making that contribute to wellbeing (Secker et al., 2018). Artmaking is a transition from inner unconscious content to external conscious content that helps individuals to gain distance from overwhelming emotional content (Malchiodi, 2011). The expression of an individual's inner reality in art combines interoceptive, sensory and motor experiences and affective and cognitive processes so that implicit, non-verbal, somatic experience becomes reflectable (Camansky-Cohen & Wehis, 2016). The visual image, or object, fosters access to association, and in the creative process, the engagement with the art material helps to release stress (Aaron et al, 2011), and to experience flow and immersion (Chilton, 2013). The created artwork is often a container for ambivalent feelings, and for symbols of certain life phases and events (Machioldi, 2011). Moreover, art material creates a transitional space (Winnicott, 1971) where new perspectives can be gained, trial acts can happen, and new mindsets can be evaluated in the pretend mode of play and art. Re-scripting of the image (Arntz, 2012) is a direct technique offering the possibility to experiment with the emotionally saturated artwork, where re-creation or transformation of the materialized object can effect betterment in the affective system - similar to cognitive restructuring - often revealing insights and solutions.

Divergent thinking and creativity is supported in art therapy within a group setting as well, although such opportunities were limited during the pandemic. An initiative growing out of this challenge was the creation of self help art therapy-based tasks (ATB-SHOT).

#### 1.1. Introduced protocol of ATB-SHOT

In the beginning of the pandemic, a seven session long online self help protocol was designed for university students, in order to introduce methods of art therapy based interventions, and to help them release stress and facilitate coping, based on the benefits of art making with reflexivity (Geréb Valachiné

et al., 2021). The art-based intervention tasks were based on art therapy clinical practices (Haeyen, 2018; Malchiodi, 2006), and reflective writing substituted for verbal elaboration. A qualitative analysis of 22 student images texts revealed (Geréb Valachiné et al., 2021) that ATB-SHOT helped participants externalize their pandemic related tensions and find personal resources. Emergent stressors were: frustration of isolation, loss of control, uncertainty about future and academic career. Found resources were support from memories and fantasies connected to nature, transpersonal themes, attachment figures, and relationships. The qualitative findings (based on data from 57 participants, from four tasks), showed that all ATB-SHOT tasks significantly reduced negative mood and two increased positive mood and control. (Geréb Valachiné et al., 2022)

## **1.2. Introduced protocol ATG: art therapy group**

Based on the experiences of ATB-SHOT results, and in keeping with the positive focus, symbolism, and re-scripting, another seven-session protocol was designed. This was an in person group art therapy for university students, which coincided with the beginning of the post-lockdown economic and social crisis. The group setting was augmented with pairwork, which naturally contained verbal sharing, but lacked the deeper individual reflection which would have been achieved with reflective writing. Comparison of effectiveness and characteristics ATB-SHOT and ATG were objectives of the research.

## **1.3. Personality traits and protocols**

Evaluation of participants' personality constructs may help to determine the best fit between client and method. Both protocols were analyzed using this perspective. In our previous findings (Valachiné et al, 2022), we found that considering ATB-SHOT overall strengths (baseline measures of emotional intelligence - and resilience) had little effect on outcomes (statistically significant results were not supported by g power). In contrast, participants with higher susceptibility profile (sum of baseline anxiety measured with STAI-T and somatic complaints measured by PHQ-15) showed significantly greater decrease in negative mood. Trait anxiety by itself had a strong correlation with negative affect reduction, which was an unpredicted result. This finding related to trait anxiety was the opposite of what the literature shows about in-person therapy effectiveness studies (Min et al, 2012; Meier, 2019). In this paper, our research question is whether this outcome is due to the online aspect, or the art therapy-based format.

## **2. Objectives**

ATB-SHOT and AGT are based on similar constructs: thematized sessions, same number of sessions, and similar themes (see Table 1) same mediums, nonverbal artmaking, followed by verbal elaboration (in forms of written texts or as verbal sharing). On the other hand, they were very different in terms of therapeutic frame: presence of art therapist and peers, time and space (constant in ATG, flexible in ATB-SHOT). The quality of feedback was also different, as ATB-SHOT was more of an introspection, and in ATG there was an interpersonal exchange.

In this paper, we would like to investigate whether short protocols in individual online format (ATB-SHOT) and in person group settings (ATG) differ in their effectiveness, or in outcomes, in groups of young university students. First, we compared the 2 groups, using PANAS to measure the change between the pre-intervention and post intervention self-reported negative and positive mood. Second, we correlated the protocol effectiveness (average means of PANAS changes) with baseline trait anxiety measured by STAI-T, and somatic complaints (measured by PHQ-15), using the sum of these measures as the Susceptibility score of the participants in both settings (ATB-SHOT and ATG). 3. We also correlated the susceptibility profile and its components with the affective changes (average means of PANAS) in the whole dataset, in order to solely see the effect of the art therapy based protocol format.

## **3. Methods**

### **3.1. Participants**

In this study, we included native Hungarian students, who participated in the protocols 1-6. Our participants for both online and offline groups were recruited at Eötvös Loránd University of Budapest, from within those students who were enrolled in the Arts and Research elective course, and received course credit for participation. The online (ATB-SHOT) group included 19 students (17 female, age 31,55 SD 14,36), whilst the offline (ATG) group included 25 students (23 female, age 22,11 SD 1,75). All students had no prior art therapy experience.

### **3.2. Measure**

Mood changes were measured with the self-reported validated PANAS questionnaire. *Positive and Negative Affect Schedule (PANAS)* was used to measure positive and negative emotions. PANAS was developed by Watson and Tellegen (1988), aiming toward a more precise emotional measurement. It is a widely used self-administered questionnaire with a 5-point scale. It consists of two 10-item scales

measuring both positive and negative affect. In college samples, both subscales demonstrate high reliability and excellent psychometric properties (Watson et al., 1988).

Personality traits were measured with self-reported validated questionnaires such as:

*Trait Anxiety (STAI*; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) was used to measure trait anxiety, which describes the overall person in terms of dimensions of anxiety. All items are rated on a 4-point scale, with higher scores indicating greater anxiety. Both internal consistency and test-retest reliability were high. It is a sensitive predictor of distress, which correlates with general negative mood and depressive symptoms.

The *Patient Health Questionnaire (PHQ -15*; Kroenke et al, 2002) is a brief self-report questionnaire that screens for somatization and in monitoring somatic symptom severity in research. The scale contains 15 questions about somatic symptoms or symptom clusters. On a 3 point Likert scale, participants had to rate how much their symptoms bothered them in the last 4 weeks. A score of 2 was considered severe. 2 questions referring to tiredness and insomnia have a high correlation with depression.

#### 4. Protocols

Both protocols, ATB-SHOT and ATG, along with the targets of sessions, are shown in Table 1, and the structure and setting of the occasions in Table 2.

Table 1. Protocols.

	individual ATB-SHOT	group AT GROUP added pair work
1 color task	individual color dictionary, matching recent emotions to color	colors of the here and now, joint creation
2 squiggle task	creating emotional squiggles, meaningful creature -> and making narrative	attunement: Winnicott squiggle game
3 blot task	inkblots-> meaningful form, scenes	mirroring characteristics and providing holding (scene)
4 object task/ clay task	personal representation mindfulness drawing task	expression of personal stress in clay work→ supportive response art
5 avatar task	self-representation with wishes + body focus	interactive dramatic drawing: “crossing the swamp”
6 safety task	creating safe place	sharing safety: “making the bridge”
7 transformation task	overview of personal changes during the protocol	group discussion, highlighting shared values

As shown above, session four was changed, but the rest of the sessions used the same art mediums, topics, and aims. The structure of the sessions have both features in common and different features (different features highlighted in grey), as seen in Table 2.

Table 2. Structure of design.

ATB-SHOT/ ATG
0. personality baseline tests google forms (STAI-T, PHQ-15)
1. pretest on google forms (PANAS)
2. art making instructions (containing positive suggestions) / short warm up activity in group
3. art making
4. reflective writing /pairwork verbal sharing and co-creation
5. rescripting art making / individual and pairwork
6. reflective writing / group discussion, verbal sharing
7. post test on google form (PANAS)

## 5. Statistics

**Efficacy of the protocol** was calculated on the average group means of the variables of pre and post intervention Positive and Negative Affect Schedule (PANAS). The data was not normally distributed, we conducted non parametric Wilcoxon tests.

In order to **compare the two changes of the protocols**, the Man-Whitney test was used on the average means of the differences of post-pre intervention data of PANAS scales. Each individual had a variable based on PANAS positive /and negative Pre intervention data subtracted from Panas positive /and negative post intervention data.

Correlation between the personality traits of the two groups, such as trait anxiety (STAI), somatic complaints (PHQ-15), susceptibility profile (STAI+PHQ-15), and the effective changes (mean difference of PANAS changes) was analyzed by Spearman Correlation.

*Susceptibility profile* was calculated based on a new variable which was generated by summing baseline Trait Anxiety (STAI) and Patient Health Questionnaire (PHQ -15) variables.

## 6. Results

Since the relatively different setting of protocols could have modified the outcomes, we compared means of the 6 tasks' pre-post differences. Effectiveness of protocol shows that the ATB-SHOT is effective in reducing negative affect, and ATG is effective both in reducing negative affect and increasing positive affect. (See Table 3)

When we compared the average differences of PANAS changes of the groups, we found that the difference of the PANAS positive change in the two settings was not significant. However, the Panas negative changes have significant differences in favor of in person group settings.

Table 3. Results.

	Wilcoxon test		Man-Whitney
*0,05	ATB-SHOT	ATG	ATB-SHOT vs. ATG
PANAS Pozitive	Z:-0,852 (p:0,394)	Z:-2,565* (p:0,010)	Z: 0, 492 p: 0,623
PANAS Negative	Z:2,870* (p0,04)	-1,969* (p0,049)	Z: -3,406 *p:0,01

However, in our previous study with ATB-SHOT (where more participants showed a significant correlation), this time susceptibility had no significant correlation with PANAS changes in either ATB-SHOT or ATG. However, if we drew together the two datasets and consider them as a combined six session protocol, we get similar results as the previous online study. Within this combined analysis, STAI correlates with the Panas Negative change, meaning that the more anxious an individual, the greater his/her negative affect lowers as a result of the art therapy protocol. ( R -0,393 p:0,01). Susceptibility in general shows even stronger effects ( Z:-0,416 p:0,06. ).

## 7. Discussion

Both protocol settings are effective in general betterment of the affective system. However, in person protocol increased positive emotions, and had a greater effect on the reduction of negative emotions. Social support and the bigger sample size both could influence this result. However, the fact that an online self help art therapy based intervention can reduce negative affect is a promising result, both for future research and for supplementary treatment in therapy. Due to COVID, there was a collective shift even in art therapy toward implementing online digital and technological practices (Zubala & Hacket, 2020). Young service users can adapt to digital self-care approaches easily (Fischer et al., 2020)

Personality trait analysis did not show strong correlations, but this was affected by the small sample size. On the other hand, this could also mean that artmaking in general has a strong correlation with trait anxiety and susceptibility. There is some evidence that art therapy reduces participants' state anxiety (Abbing et al,2018), especially in females undergoing cancer treatment (Tang et. Al, 2019). A bigger sample indicated that such a nonverbal approach as visual art therapy is beneficial even for more anxious and vulnerable individuals, that balances susceptibility, as Fonagy (2012) claims: "art therapists...succeeding in creating communication and interpersonal understanding where others struggle".

## 8. Conclusion

In person group art therapy has stronger therapeutic effects. Online art therapy based methods, however, might be good supplements of in person therapies, especially in stressful times. These changing and challenging times call for action in research and therapeutic approaches in order to balance crises, stress, and struggles, particularly in vulnerable populations.

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