Pakistan Journal of Clinical Psychology, 2022 21, 2 , 59-87 | PJCP

SELF-EFFICACY BELIEFS AMONG INDIVIDUALS WITH DEPRESSION: A FUNCTION OF CREATIVITY-BASED POSITIVE PSYCHOTHERAPY

Sukaina Kasem and Sidra Farooq Butt **(**sukaina.merchant4@gmail.com)
Institute of Professional Psychology, Bahria University Karachi Camp, Pakistan

ABSTRACT

Objectives*: The current research aims to explore the efficacy of a Creativity-based Positive Psychotherapy intervention in treating low levels of Self-Efficacy among individuals with depression; subsequently, the study further attempts to examine the intervention's overall effects on Depression (through the mediation of Self-Efficacy).*
The Design of The Study*: The study has a quantitative Pre-test Post-test quasi Experimental research design.*
Place and Duration of the study*: Karachi, Pakistan; March, 2020 – October, 2020.*
Sample and Method: *A purposive snowball sampling technique has been used to recruit N=10 young adults, age ranging from 18 to 30 years, who were experiencing low levels of Self-Efficacy due to Depression in addition to having low Creativity levels. It is hypothesized that the Creativity-based Positive Psychotherapy intervention will positively affect Self-Efficacy, have a subsequent negative effect on Depression and that there will be a significant difference between those participants who will receive the intervention and those from the waiting-list control group. To test the hypotheses, the data has been collected through the Patient Health Questionnaire (PHQ), the General Self-Efficacy Scale (GSE); and the Short Scale for Creative Self (SSCS). The Paired Sample and Independent Sample t-tests were utilized to analyze the hypotheses using the Statistical Package for Social Sciences, version 22 (SPSS V.22).*
Results and Conclusion*: The results of the study supported the proposed hypotheses and confirmed the effectiveness of the Creativity-based Positive Psychotherapy intervention in treating low Self-Efficacy ($p<.05$), as well as, Depression ($p<.05$) within individuals experiencing mild to moderate depression.*

Keywords: *Creativity; Depression; Self efficacy; Creativity based Positive; Psychotherapy Intervention*

INTRODUCTION

This study aims to explore the role of creativity in the lives of individuals who experience low levels of self-efficacy, particularly, due to depression. The effectiveness of Positive Psychotherapy (PPT) and its efficacy in treating mental illnesses has been evidenced by a variety of researches till date (Rashid, 2015; Schrank, 2014). The said psychotherapy is found to be rooted in the central principles of positive psychology and can be utilized as a tool to treat psychopathology (Forgeard & Eicner, 2014). This study is theorized to make apparent whether the innate quality of being creative or inducing this strength within individuals will indeed improve their self-efficacies that had previously been lowered due to depression. A number of researches have attempted to study the role creativity plays in elevating moods and enhancing subjective well-being of individuals. Despite continuous efforts, significant gaps in literature still exist restricting our understanding of the therapeutic benefits of creativity. Uptil now, creative activities have mostly been used as secondary means to enhancing other psychological mechanisms, such as: flow, emotional regulation etc. which positively affect mental health (Csikszentmihalyi, 1996; Drake & Winner, 2012; Forgeard & Eichner, 2014). Therefore, it still remains uncertain whether the improvement of psychological health is due to creative thinking or other elements. Thus, this will be a ripe opportunity to assemble significant evidence that affirm the therapeutic importance of creativity and creative thinking.

The primary idea for this study has been extracted from the Values in Action (VIA) model as proposed by Peterson and Seligman (2004). This theoretical approach is used by numerous mental health professionals to assist clients in exploring, and practicing, particular qualities and traits that are unique and dominant in them – also known as their character strengths (Park & Peterson, 2009). Peterson and Seligman (2004) label these psychological characteristics as the fundamentals of personal growth, development, and goodness. Creativity is one of the twenty-four (24) character strengths incorporated in the VIA model. Positive psychologists hypothesize that any and all forms of psychological distress can be treated and reduced by enriching an individual's positive emotions and character strengths rather than limiting the focus of treatment only to the negative symptoms (Seligman et al., 2006). Extending his research, Seligman proposed the theory of *Authentic Happiness* which highlights the importance of Meaning, Pleasure and Engagement as three different pathways leading an individual towards subjective happiness. A lifestyle that embraces all three pathways is labelled as 'the full life' and ensures utmost life satisfaction and a sense of contentment (Peterson et al., 2007). Based on the above discussed

model, it was presumed that upon enhancing the character strength of *creativity* within an individual, one would also observe positive changes in self-efficacy (associated with depression) as according to the model all the character strengths (when enhanced) ultimately lead to a life of pleasure, engagement and meaning. As evidenced by numerous researches, (Peyvastegar et al., 2010; Wright & Walton, 2003) a reciprocal relationship exists between creativity and mood states.

The etiology of depression can be understood as an intricate combination of several psychological, biological and social factors (Safford et al., 2006) that work together to produce a number of explicit as well as implicit symptoms of the said disorder (Beck, 1993). He revealed that depressive symptoms stem from negative automatic thoughts (NATs) which are further rooted in irrational assumptions and faulty negative beliefs developed at some point during the individual's life. In the Cognitive Behavioral Therapy, pioneered by Beck (2005), several perpetuating factors from a behavioral perspective have also been discussed. For instance, in what he termed as a vicious cycle, he claims that an individual experiencing a dull mood, loss of interest, self-deprecating thoughts and a low motivation level would demonstrate reluctance in initiating an activity or accomplishing a task. With a declining sense of mastery, his depressive symptoms would aggravate and further keep him from engaging in any activities (Beck, 2011). Among a number of other symptoms, depression also manifests through the lowering of self-efficacy among individuals (Kangas et al., 2015); which further restricts and demotivates them to take part in pleasurable activities and as a result pushes them further into the pit of depression (Milanovic, 2018).

The pool of literature studying the relationship between creativity and depression is vast (Forgeard & Elstein, 2014). However, most of these studies have devoted their focus on exploring how psychopathology motivates individuals to engage in creative activities or how creativity may make individuals susceptible to mental illness (Kaufman & Baer, 2002). Till date, very few researches have attempted to understand the therapeutic benefits of creativity in association with psychopathology and its ability to alleviate suffering and enhance wellbeing (Ludwig, 1995).

The curiosity to identify relevant links between creativity and psychological wellbeing has led many researchers to conduct a number of insightful studies exploring the relationship between mental health and creative interventions/activities.

For instance, a research conducted by Bujacz et al. (2016) verifies that when individuals engage in creative activities, they can significantly improve their mental health and enhance their sense of subjective well-being. Furthermore, a bidirectional relationship has been established between mood states and various cognitive patterns (Bar, 2009). Evidenced by Chermahini and Hommel's (2012) study on divergent thinking, it has been found that such a cognitive process increases the consistency of positive mood states, as experienced by an individual.

Similarly, engagement in creative activities, for as little as once a day, can facilitate the development of positive affective states (Tamlin et al., 2016). A greater sense of internal security is achieved by individuals who carry out creative activities often and make subjective yet substantial ingenious contributions (Perach & Wiseman, 2016).

A number of researches further reveal that participation in creative interventions increased positive emotions within individuals, reduced negative affective states and enhanced their sense of subjective wellbeing (Puig, 2006). A sound subjective well-being is found to be directly associated with divergent/creative thinking, pro-social activities, and physiological healthiness (Huppert, 2009). Additionally, life satisfaction was found to be directly proportional to creative participation and engagement (Lorenzen-Huber, 1991).

Creative activities produce a healing effect on the mental as well as physical/physiological well-being of individuals. It is known to promote mental relaxation, provide avenues for self-expression, ease stressfulness and lower down high blood pressure (Leckey, 2011). Various researchers have associated overall life satisfaction with creativity alongside humility, decision-making tendency, gratitude, and the yearning to gather knowledge (Peterson et al., 2007).

A study conducted by Perruzza and Kinsella (2010) reveals significant qualitative outcomes with respect to the enhancement of mental health of individuals when creative interventions are used in therapeutic practices. The study proposes six noteworthy outcomes: enhanced self-control, increased sense of personal growth, ope n communication, optimistic outlook on life, building a sense of purpose and developing healthy social networks.

Various art-based activities are being used extensively to yield positive effects on people's mental health. Dancing, for instance, not only enhances the

physical health of the dancer but it also helps in promoting his self-esteem (McLellan, 2012). Similarly, Thaut and Abiru (2010), in their study, confirm the positive impact of creating music/ listening to music on the mental health of individuals.

Stuckey and Nobel (2010), in their comprehensive research, affirm the finding that creative involvement can potentially reduce various psychopathological states such as acute stress and/or depression. Moreover, a significant positive relationship has been found between creative attitudes and positive emotions, which eventually leads an individual to feeling happier contented in his life (Cohn, 2009). Richards (2006) reports various benefits of "everyday creativity" in his study and highlights how daily involvement in creative activities can foster and enhance the psychological health of individuals significantly.

Studies exploring the relationship between creative performance and self-efficacy have increased significantly over the past few years (Haase, 2018). The majority of these studies established a significant positive relationship (up to 0.85) between creativity and general/creative self-efficacy beliefs of individuals (Chuang et al., 2010). Similarly, a positive impact of creative involvement and curiosity on self-efficacy levels of individuals, when they actively encourage themselves for creative activities, has been observed by Puente-Diaz (2017).

Self-efficacy is described as individuals' belief in their capabilities that helps them evaluate their creative potential by engaging in creative problem solving (DiLiello & Houghton, 2008). According to Goldsmith and Matherly (2012) there is a positive relationship between self-esteem and creativity, as also verified by a number of other studies (Charati et al., 2016; Safara & Alkaran, 2017). As mentioned earlier, a positive correlation exists between self-efficacy and self-esteem (Kohn, 1994; Bandura, 1999; Schwarzer & Born, 1997) thus, it is safe to presume that there would be a positive relationship between self-efficacy and creativity as well.

Interestingly, a study conducted by Lee et al. (2018) proposes that a curvilinear relationship exists between self-efficacy and creativity instead of a positive linear relationship. That is, in moderate proportions both the variables show a positive correlation, but if self-efficacy is increased to an extreme, it might negatively affect people's quality as well as quantity of performance.

Seligman et al. (2002) extracted the basic principles of positive psychology and applied them in real world to develop an independent therapeutic approach commonly known as Positive Psychotherapy. The fundamentals of positive psychology revolve around positive emotions and their impact on an individual's psychological and physiological health. Fredrickson and Branigan (2005) define creativity as one of these many positive emotions which can help to wave off negative emotions and their impact on psychological wellbeing. As discussed earlier, "Authentic Happiness" (the ultimate goal of positive psychology) can be achieved by embracing three significant lifestyles: the meaningful life, the pleasant life (enriched with positive emotions) and the engaged life. All three lifestyles are interdependent and complement each other (Seligman, 2002). Engaging in meaningful activities can lead an individual to live a happier life characterized by positive emotions (Csikszentmihalyi, 1996; Lyubomirsky et al., 2005). Depression is known to filter out positive emotions and "authentic happiness" from an individual's life, thus positive psychotherapy works by substituting depressive symptoms with positive emotions, enhancing engagement and encouraging the pursuit of meaning in life (Seligman et al., 2006). In other words, the primary goal of positive psychotherapy is to improve perceived psychological wellbeing (subjective) within individuals by cultivating positive emotions, reinforcing their character strengths and using them to reduce traces of psychological distress, if any.

Positive psychotherapy has offered great help in the treatment of depression and its likes. It successfully increases happiness and reduces depressive symptoms and allows, comparatively, a greater degree of remission (Seligman, 2006). A study suggests that positive psychology interventions - where the prime focus is on stimulating positive emotions, cognitions and actions– can enhance the psychological well-being of individuals and can reduce anguish in people with clinical disorders (ChakShssi et al., 2018). The findings of another study conducted by Guo etal. (2016) assert the effectiveness of positive psychotherapy in treating depression and self-efficacy. In an eight weeks long intervention program, 76 nursing students were observed through a randomized controlled trial.

To attain the research objectives, it is being hypothesized that:

- The Creativity-based Positive Psychotherapy intervention will have a positive effect on self-efficacy among individuals with depression.
- The Creativity-based Positive Psychotherapy intervention will have a negative effect on depression.
- There will be a significant difference between those participants who will receive the Creativity-based Positive Psychotherapy intervention and those from the wait-list control group.

METHOD

The current study is a Quantitative Pre-Test-Post-Test Quasi-Experimental design in which three structured Self-Report Questionnaires were used to objectively measure depression, self-efficacy and creativity prior to and after the intervention.

Participants

The target population for this study was individuals with depression. A fraction of the total participants N=10 were initially approached through a social media platform and later through the existing participants' referrals. Purposive Snowball sampling was used to approach these participants aged between18–30 years.

Measures

The short scale of creative self (SSCS)

The Short Scale of Creative Self (SSCS) is a self-report measure containing 11 items (Karwowski et al., 2013). It is a 5-point likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). The Cronbach's alpha was found to be $\alpha = .86$ which establishes the test's internal consistency as high (Karwowski et al., 2013). A comparison with the Test of Creative Thinking-Drawing Production as well as self-rated Originality has revealed a substantial convergent and divergent validity of the test (Karwowski et al., 2013).

Patient health questionnaire-9 (PHQ-9)

The PHQ-9 was developed in 1999 Spitzer and his colleagues from Columbia University. It consists of 9 questions and can be effectively utilized to provide a diagnosis for depression (according to DSM-5) and also offers a descriptive interpretation of its severity level. A Cronbach's alpha of 0.89 and 0.86 (on two different populations) was found through reliability tests. Moreover, when conducted on the same sample twice (first in-person then via telephonic interviews) the scale displayed high Test-Retest reliability (0.84). A correlation coefficient between the PHQ-9 and the SF-20 mental health scale was found to be 0.73 which verifies the scale's construct validity. For the assessment of criterion validity, the depression diagnoses of 580 participants obtained from PHQ-9 were also confirmed by a team of mental health professionals. The assessment resulted in 88% specificity and 88% sensitivity (Kroenke et al., 2001).

General self-efficacy scale

The GSE was first designed by Jerusalem and Schwarzer (1992) and has been translated into several languages ever since. It was designed to measure the strength of an individual's beliefs in his/her capabilities. The scale consists of 10 items; each based on a 4-point likert scale ranging from Not at All True (1) to Extremely True (4), the higher the score, the stronger one's belief in his/her capabilities. Based on numerous researches, it has been found that GSE has high reliability as well as construct validity. Cronbach's Alpha was found to fluctuate between the ranges of 0.75 to 0.94 when measured across a variety of languages. The validity of the test was also confirmed when comparisons were made between GSE and other significant social cognitive constructs such as self-regulation, expectations etc. and they proved to be highly compatible with each other (Luszczynska & Schwarzer, 2005).

Procedure

Before administrating the pre-test, the participants were requested to sign an informed consent (confirming their voluntary participation) and fill out a demographic information questionnaire. After describing the research objectives to the participants, three self- report questionnaires, namely, the Personality Health Questionnaire (PHQ-9), the Generalized Self-Efficacy

Scale (GSE) and the Short Scale for Creative Self (SSCS) were provided to the experimental and waiting-list control groups, respectively. The participants were requested to carefully read the instructions given for each test before filling out the items and to ask for assistance in case of any query regarding the scales. Prompt assistance was provided when needed. All forms/questionnaires were administered online using the platform of Google Forms. Once the pre-test observations had been made and measured, the Positive Psychotherapy intervention (using creativity/creative activities) was administered on the participants of the experimental group (in the form of group therapy) online via the Zoom application. In the end, the post-intervention observations were made using the respective scales.

Intervention plan

The set duration of the study was three weeks, where one week was dedicated to the intervention program (after collecting pre-test scores) and then after a span of two weeks the participants' post-test scores were collected for analysis. The intervention plan was based on six individual sessions and was divided into two parts: Relaxation/Mindfulness exercises and Creative activities. A large pool of recent literature has illuminated the importance of integrating mindfulness and relaxation activities in the positive psychotherapeutic approach to treatment (Ivtzan & Lomas, 2016). It claims that relaxation exercises and mindfulness training work in a similar way as all other positive psychotherapy interventions that is, by enriching positive emotions, encouraging a positive view of self and consequently improving overall psychological wellbeing (Hwang et al., 2016). In fact, meditation and other mindfulness activities can now be considered as an applied positive psychology practice that facilitates the cultivation of positive emotions within people (Shapiro et al., 2007). Each session was designed in a way to start off with a relaxation/mindfulness exercise which would enable de-crowding of negative emotions and thoughts to make space for the experience of positive mood states (Li, 2015; Morgan & Jorm, 2008). The treatment plan was extracted and compiled from four different researches which highlight the importance of creative art therapy and positive interventions (creativity tools) on psychological wellbeing (Bohlmeijer et al., 2005; Darewych & Bowers, 2018; Dunphy et al., 2019; Martin et al., 2018). A detailed discussion of the intervention plan can be found in the table illustrated below:

Sessions and Intervention Plan

1. Introduction using Craft Activity (Drawing + Coloring) (Dunphy et al., 2019) and brief counseling session

Goal: Introductions, rapport building and brief psycho-educative counseling.

Objectives: To introduce the facilitators to the participants using a creative medium and encourage reciprocation; to further clarify the research objectives and purpose of the study; psycho-education around depression, its symptoms and healthy coping strategies.

2. Starfish Breathing (Lozier, 2018); Scribble Drawing (Darewych & Bowers, 2018)

Goal: Mindfulness, relaxation & catharsis

Objective: To help the participants get in touch with their present feelings and automatic thoughts while allowing them to relax (Starfish Breathing); to disperse out the crowding of negative emotions and replace it with positive emotions using scribble drawing (catharsis).

3. 5-Senses Mindfulness (Lozier, 2018); Craft Activity (Clay) (Martin et al., 2018)

Goal: Mindfulness, relaxation & identification of strengths (personal resources)

Objective: To reconnect participants with their feelings and thoughts in a non-threatening manner; using play dough/clay as a creative activity to encourage exploration of personal resources (strength/s)

4. Guided Imagery (Case, 2018); Bridge Drawing with Path (Darewych & Bowers, 2018)

Goal: Relaxation, Mindfulness & Creative Problem Solving.

Objective: To sweep out any negative emotions currently being experienced and allow space for the enrichment of positive emotions; to encourage generation of novel, creative and unexpected solutions to a problem.

5. Square Breathing (Lozier, 2018); Creative Reminiscence (Bohlmeijer et al., 2005)

Goal: Relaxation, Mindfulness & Life Review (creative expression)

Objective: To creatively reminisce about each of their lives and highlighting good memories while staying mindful of the experience.

6. Progressive Muscle Relaxation (Li, 2015); Tree of Life (Darewych & Bowers, 2017)

Goal: Relaxation, Mindfulness & Exploration of self (life, personality etc).

Objective: To help the participants understand how depression can cause muscle tension and a relaxation exercise to deal with it effectively; to help the participants reconnect with themselves (in entirety) while staying mindful of the experience.

Table1. Intervention Program.

Note: The intervention program included six one-hour sessions that lasted for one week. Each session group consisted of n=5 participants and two session facilitators. The intervention was mainly activity-based, and the facilitators' primary responsibility was to organize structured activities which encouraged creative thinking within participants.

RESULTS

Table 1
Socio-demographic Characteristics of Participants at Baseline

Baseline characteristic	Experimental Group		Wait-list Control Group		Full sample	
	f	%	*f*	%	*f*	%
Age						
18-24	3	30	2	20	5	50
25-30	2	20	3	30	5	50
Gender						
Male	2	20	2	20	4	40
Female	3	30	3	30	6	60
Marital Status						
Married	2	20	1	10	3	30
Single	3	30	3	30	6	60
Other	0	0	1	10	1	10
Socioeconomic Status						
Upper Class	0	0	0	0	0	0
Middle Class	4	40	5	50	9	90
Lower Class	0	0	0	0	0	0
Other	1	10	0	0	1	10
Education						
Matriculation	1	10	0	0	1	10
Intermediate	0	0	0	0	0	0
Graduation	3	30	4	40	7	70
Post-Graduation	1	10	1	10	2	20
Occupation						
Private Job	4	40	3	30	7	70
Government Service	0	0	0	0	0	0
Self-employed	1	10	1	10	2	20
Other	0	0	1	10	1	10

Note. f=Frequency; N = 10 (n = 5 for each condition). Participants were on average 25.2 years old (SD = 1.87), and participant age did not differ by condition.

Table 1 shows the frequency distribution and the percentages of all the demographic variables that were considered in the present study.

Table 2

Psychometric Properties of the Patient Health Questionnaire (PHQ-9; N=10), General Self-Efficacy Scale (GSE; N=10), and the Short Scale for Creative Self (SSCS; N=10).

Variables	Items	*N*	*M*	*SD*	*SK*	*K*	Ranges	
							Actual	Potential
Depression Pre-test	10	10	10.80	1.75	.68	-.56	03-14	0-27
Post-Test	10	10	8.50	4.42	-.03	-.24	03-14	0-27
Self-Efficacy Pre-test	10	10	17.80	1.47	-.16	.56	14-33	10-40
Post-test	10	10	21.70	6.29	.62	-1.00	14-33	10-40
Creativity Pre-test	11	10	17.10	5.17	.25	-.10	09-32	0-44
Post-test	11	10	20.70	9.39	-.17	-.08	09-32	0-44

Note. M= Mean, SD= Standard Deviation, SK= Skewness, K= Kurtosis.

Mean, Standard Deviation, Skewness, Kurtosis along with the potential and actual ranges of the scales have been outlined in Table 2. The respective values of skewness and kurtosis, for all scales, are indicative of the normal distribution of the data.

Table 3

Paired Samples t-tests for Self-Efficacy, Depression and Creativity between Pre and Post-Intervention of Experimental group (n=5)

	Pre-Test (n=5)		Post-Test (n=5)		*t(4)*	*p*	95% CI		Hedge's g
Variables	*M*	*SD*	*M*	*SD*			*LL*	*UL*	
SE	17.20	1.92	26.80	4.65	-6.12	.004	-13.95	-5.24	2.74
DEP	10.40	1.94	4.40	1.14	13.41	.00	4.75	7.24	3.75
CR	16.80	5.44	29.20	1.78	-6.66	.003	-17.56	-7.23	3.05

Note. M=Mean, SD= Standard Deviation, p= Probability Value (Significance), SE= Self-Efficacy, DEP= Depression, CR=Creativity; p<.05.

Table 3 indicates that the Creativity-based positive psychotherapy intervention, which resulted in a significant increase (p=.003) in the participants' (n=5) creativity levels, had a significant positive effect (p=.004) on the self-efficacy of individuals with depression. As a consequence to this, the intervention plan was further found to have a significant negative effect (p=.00) on overall depression of the participants belonging to the Experimental research group. The effect size for the variables of self-efficacy and depression was found to be large, whereas, for that of creativity was small.

Table 4

Paired Samples t-tests for Self-Efficacy, Depression and Creativity between Pre and Post intervention of Waiting-list Control group (n=5)

Variables	Pre-Test (n=5)		Post-Test (n=5)		*t(4)*	*p*	95% CI		Hedge's g
	M	*SD*	*M*	*SD*			*LL*	*UL*	
SE	16.60	1.51	18.40	.54	2.09	.10	-.588	4.18	-
DEP	11.20	1.64	12.60	.89	-1.42	.22	-4.12	1.32	-
CR	17.40	5.50	12.20	3.83	4.67	.01	2.10	8.29	1.09

Note. CI=Confidence Interval, LL=Lower Limit, UL=Upper Limit, SE= Self-Efficacy,

DEP= Depression, CR=Creativity.

Table 4 reveals a non-significant difference between the pre-test and post-test scores of self-efficacy (p=.10) and depression (p=.22) for the participants (n=5) belonging to the waiting-list control group. However, the results showed a significant decrease (p=.01) in the creativity levels of these participants throughout the duration of the study, albeit with a small effect size.

Table 5

Independent Samples t-test values for Self-Efficacy, Depression and Creativity between Experimental and Control Groups (n=5)

	Control (n=5)		Experimental (n=5)		*t(8)*	*p*	95% CI		Hedge's g
Variable	*M*	*SD*	*M*	*SD*			*LL*	*UL*	
SE	16.60	1.51	26.80	4.65	4.65	.002	5.14	15.25	2.94
DEP	12.60	.89	4.40	1.14	-12.65	.00	-9.69	-7.60	8.03
CR	12.20	3.83	29.20	1.78	8.98	.00	12.63	21.36	5.68

Note. SE= Self-Efficacy, DEP=Depression, CR=Creativity.

Table 5 indicates that a significant difference ($p<.05$) exists between the self-efficacy, depression and creativity scores of those participants (n=5) who had received the positive psychotherapy intervention (creativity-based) and those (n=5) who had not. In other words, the participants of the Experimental group showed a significant increase in self-efficacy (p=.002) and creativity (p=.00) levels as well as a significant reduction in the overall severity of depression (p=.00) when compared to the participants of the Waiting-list Control group. The effect size as calculated for self-efficacy and creativity came out to be large and moderate respectively. A small effect size was simultaneously assessed for depression.

DISCUSSION

The primary purpose of this research was to obtain a profound understanding of the efficacy of a Creativity-based Positive Psychotherapy intervention in treating low levels of self-efficacy among individuals with depressive symptomatology. The study also theorized that with an increase in self-efficacy levels, the overall severity of depression would also be reduced for the recruited participants. Additionally, the study aimed to explore whether or not a significant difference would exist between the participants receiving the treatment versus those belonging to the waiting-list control group, in order to validate the efficacy of the intervention plan. The results of this study offer supporting evidence for the hypotheses under observation. The three key findings of the current study are: Creativity-based positive psychotherapy intervention has a significant positive effect (p=.004) on self-efficacy beliefs of individuals with depression (table 3), the designed intervention plan had a significant negative effect (p=.00) on depression (overall severity) (table 3) and that there is a significant difference in the post-intervention scores of self-efficacy (p=.002), creativity (p=.00) and depression (p=.00) between the participants of the experimental group and those of the waiting-list control group (table 5). These findings serve to validate the literature that establishes a connection between creativity and self-efficacy (Chuang et al., 2010; Puente-Diaz, 2017) and contributes further to the scarce literature (Forgeard & Elstein, 2014) exploring the negative effect of Creativity-based therapies on depression.

Among several determinants, the one factor that is known to firmly bind creativity with self-efficacy is cognitive flexibility. It refers to the ability of an individual to adapt to unforeseen circumstances, environmental stressors and challenging situations with the knowledge that there are always several accessible alternatives/solutions to every problem that arises (Martin & Anderson, 1998). A cognitively flexible individual would be able to modify his/her cognitions and redirect them towards a more conducive pattern of problem-solving based on the situation's demand (Dennis & Vander, 2010). In other words, such individuals are capable of changing their maladaptive cognitions (thoughts, assumptions etc.) into useful, adaptive ones which helps them cope with seemingly difficult circumstances (Gülüm & Dağ, 2012). Creativity requires an individual to adopt patterns of divergent thinking (an integral part of creativity) which allow him/her to explore a variety of alternatives and multiple solutions to a problem in the most unique and innovative way possible (Runco & Acar, 2012). Cognitive flexibility most

commonly manifests through the process of divergent thinking and facilitates a flexible transition from one cognitive model to another in order to satisfy the need of the situation (Intasao & Hao, 2018). Cognitive flexibility is also found to be positively related with positive affective states and negatively related with negative mood states (Intasao & Hao, 2018).

Furthermore, according to the Broaden and Build theory, broadening of the participants' thought-action repertoires (using creativity as a tool) resulted in a greater degree of cognitive flexibility and subsequently enhanced their creative potential (personal resource). An increase in the creativity levels of participants resulted in an enhanced sense of accomplishment and mastery which in turn helped the participants break out of the vicious cycle of depression and towards a more virtuous cycle with the introduction of positive activities (Beck, 2011). With the accomplishment of every creative task, the participants experienced an increase in their self-efficacious beliefs and were then motivated to engage more and more in meaningful activities resulting in increased productivity levels, improved mood states, a reduction in self-deprecating thoughts and a regaining of the lost interest in pleasant activities (Bandura, 1994; Bandura, 1999; Brinkmann, 2008; Disabato et al., 2016; Freidlin et al., 2017)

Moving ahead, where there was no significant difference in the self-efficacy ($p=.10$) and depression ($p=.22$) scores (pre-test and post-test) of the waiting-list control group participants, their creativity levels had significantly decreased ($p=.01$) over a period of three weeks (the set duration of the study). This finding can be attributed to the unfortunate impact of the pandemic (Covid'19) on several psychosocial factors associated with everyday living, particularly that of employment (Bari, 2020). Due to the pandemic, many people have taken voluntary breaks from their jobs, some have been sent home on furloughs while the remaining ones have been shown pink slips. Owing to this unprecedented situation, there is a dearth of any such platforms where people can translate their creative mind-sets into tangible performance. Since creativity beliefs are largely determined by creative performance (Tierney & Farmer, 2011), it is highly possible that a gradual decline in self-beliefs about creativity is due to the aforementioned condition.

Another convincing interpretation for the present set of findings can be derived from Albert Bandura's (2008) comprehensive research conducted on self-efficacy. Based on his conceptualization, self-efficacy is found to be influenced significantly by four factors, namely: *mastery experiences*, *social*

modelling, social persuasion and *physiological states*. First, he proposed that the most effective way to enhance self-efficacy is by accumulating a sense of mastery that can only be attained by actually accomplishing a task. The degree of complexity to be maintained for the task is entirely subjective to the capacity of the performer. The present study incorporated an intervention plan based on simple creative activities keeping in mind the clinical nature of the population. The purpose of introducing such positive as well as creative activities was to break down the vicious cycle of depression (Beck, 2011) by helping the participants develop a sense of accomplishment and consequently increasing their motivation levels. Second, by witnessing demonstrations of competence and determination by people who are similar to them, individuals can enhance their own self-efficacy (Bandura, 1997; Bandura, 2008).

The current study was carried out in a group therapy setting where all five participants were required to engage in creativity activities individually while interacting with each other at the same time. They were encouraged to share ideas with one another, ask for help in case of any difficulties and share their experiences (either positive or negative) pertaining to the task at hand; thereby, enhancing learning through vicarious experiences. Moving on, the third factor required verbal persuasion from a person of an equal or a greater position. When people are encouraged into believing that they have what it takes to accomplish tasks, they are more likely to accomplish them (Eden & Zuk, 1995). Bandura proposed a similar idea according to which a good mentor is not just someone who is a good role model, but also someone who serves as a trusted voice of encouragement (Bandura, 2008). During all the sessions of the intervention plan, both the facilitators had attempted to remain as encouraging and motivating as possible for the participants.

Past researches assert that in order to observe a significant difference in the scores of major depression, a relatively longer duration of the employed treatment program as well as the post-test observations is required (Duval et al., 2006; Holtzheimer & Nemeroff, 2006). Since the duration of the present study was brief, it warrants further investigation as to how such a significant difference in the scores of depression had been observed. Based on the researcher's systematic observation, it can be assumed that since all the participants were only mildly to moderately depressed, the symptoms were not acute in nature and thus did not resist the therapeutic effects of the intervention provided (as rigidly as they commonly do). The brief clinical interview with all participants (n=5) during the first session had revealed that for most of them, the depressive state

had been triggered or exacerbated due to the on-going pandemic and its adverse effects on different aspects of their lives. It must also be brought under consideration that although there has been a reduction in the symptom severity for all participants of the experimental group, the findings of this study do not claim a full-recovery from the disorder within a span of three weeks. It does, however, assert a reduction in the overall severity of depression.

Conclusion

Taken together, the findings of this study support the effectiveness of the Creativity-based Positive Psychotherapy intervention in treating low levels of self-efficacy among individuals with depressive symptomatology. The treatment plan was also observed to be significantly effective in reducing the overall severity of depression for these participants. Even though the generalizability of the current finding must be established by future research, the present study has provided a clear line of direction for the treatment of particular depressive symptoms.

Limitations and Recommendations

The efficacy of the present study had been contained due to being conducted during a global pandemic, COVID'19. These limitations, however, also highlighted new directions and avenues for future research in a similar sphere. One limitation of the study is that it was not possible to recruit a large sample for the study as none of the mental health clinics in the city were operating and the process of recruitment was, thus, limited to Purposive Snowball sampling. Moreover, the intervention program had to be carried out online (via Zoom) which had resulted in a weakly controlled clinical setting, despite the researcher's best efforts to control the variables and the conditions of the study as extensively as possible. Lastly, the duration of the intervention program had to be cut short due to the unfortunate circumstances created by the global pandemic, and was limited to one week only. As a result of which it was difficult to examine whether the effects of the Creativity-based psychotherapy on depression and depression-associated self-efficacy are temporary or would be long-lasting. If replicated or advanced, the present study would benefit significantly if the aforementioned limitations are taken under consideration. Additionally, all the participants of this study were mildly to moderately depressed. Therefore, where the present study confirms the efficacy of the designed intervention plan among individuals with mild to moderate depressive

symptoms, it cannot make a similar claim for individuals who are severely depressed. It is, thus, recommended that if the current study is replicated in the future, an analysis should also be made particularly involving participants with severe depressive symptoms.

REFERENCES

Bandura, A. (1994*). Social cognitive theory of mass communication*. In J. Bryant & D. Zillman (Eds.), *Media effects: Advances in theory and research* (pp. 61-90). Hillsdale, NJ: Erlbaum.

Bandura, A. (1997). *Self-efficacy and health behaviour*. In A. Baum, S. Newman, J. Wienman, R. West, & C. McManus (Eds.), *Cambridge handbook of psychology, health and medicine* (pp. 160-162). Cambridge: Cambridge University Press.

Bandura, A. (1999). *A Social Cognitive Theory of Personality* (2nd ed.). Guilford Publications.

Bandura, A. (2008). Social cognitive theory. In W. Donsbach, (Ed.) *International Encyclopedia of Communication* (pp. 4654-4659). Blackwell.

Bar, M. (2009). A cognitive neuroscience hypothesis of mood and depression. *Trends in Cognitive Sciences, 13,* 456–463.

Beck, A. T. (1993). Cognitive therapy: Past, present, and future. *Journal of Consulting And Clinical Psychology, 61(2),* 194–198.

Beck, A. T. (2005). The Current State of Cognitive Therapy: A 40-Year Retrospective. *Archives of General Psychiatry, 62(9),* 953–959.

Beck, J. S. (2011). *Cognitive Behavior Therapy: Basics & Beyond* (2nd ed.). Guilford Press.

Bohlmeijer, E., Valenkamp, M., Westerhof, G., Smit, F., & Cuijpers, P. (2005). Creative reminiscence as an early intervention for depression: results of a pilot project. *Aging And Mental Health, 9(4),* 302–304.

Brinkmann, S. (2008). Identity as Self-Interpretation. *Theory & Psychology, 18*(3), 404–422.

Bujacz, A., Dunne, S., Fink, D., Gatej, A. R., Karlsson, E., Ruberti, V., & Wronska, M. K. (2016). Why do we enjoy creative tasks? Results from a multigroup randomized controlled study. *Thinking Skills and Creativity, 19(5)*, 188–197.

Case, L. K. (2018). Guided Imagery Improves Mood, Fatigue, and Quality of Life in Individuals With Multiple Sclerosis: An Exploratory Efficacy Trial of Healing Light Guided Imagery. *Journal of Evidence-Based Integrative Medicine, 23,* 1-8. https://doi.org/10.1177/2515690X17748744

Chakhssi, F., Kraiss, J. T., Sommers-Spijkerman, M., & Bohlmeijer, E. T. (2018). The effect of positive psychology interventions on well-being and distress in clinical samples with psychiatric or somatic disorders: A systematic review and meta-analysis. *BMC Psychiatry, 18,* 1-17.

Charati, J., Joybari, M., Ashlaghi, S.M., & Gorji, M.A. (2016). Creativity and self-esteem of staffs in Medical Sciences University Mazan daran. *International journal of humanities and social sciences, 3*, 429-436.

Chermahini, S. A., & Hommel, B. (2012). Creative mood swings: Divergent and convergent thinking affect mood in opposite ways. *Psychological Research, 76(5),* 634–640.

Chuang, C., Shiu, S., & Cheng, C. (2010). The Relation of College Students-Process of Study and Creativity: The Mediating Effect of Creative Self-Efficacy. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, 4*, 1780-1783.

Cohn, M. (2009). Happiness Unpacked: Positive Emotions Increase Life Satisfaction by Building Resilience. *Emotion, 9,* 8-361.

Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. Harper & Row.

Csikszentmihalyi, M. (1996). *Creativity: Flow and the Psychology of Discovery and Invention.* HarperCollins Publishers.

Conner, T. S., DeYoung, C.G., & Silvia, P. J. (2016): Everyday creative activity as a path to flourishing. *The Journal of Positive Psychology, 13(2),* 1-9. http://dx.doi.org/10.1080/17439760.2016.1257049

Darewych, O. H., & Bowers, N. (2018). Positive arts interventions: Creative clinical tools promoting psychological well-being. *International Journal of Art Therapy*, *23*(2), 62–69.

Dennis, J. P., & Vander, W. J. S. (2010). The cognitive flexibility inven-tory: Instrument development and estimates of reliability and validity. *Cognitive Therapy and Research, 34*, 241-253.

DiLiello, T. C., & Houghton, J. D. (2008). Creative Potential and Practiced Creativity: Identifying Untapped Creativity in Organizations. *Creativity and Innovation Management, 17,* 37-46.

Disabato, D. J., Goodman, F. R., Kashdan, T. B., Short, J. L., & Jarden, A. (2016). Different types of well-being? A cross-cultural examination of hedonic and eudaimonic well-being. *Psychological Assessment, 28(5),* 471–482.

Drake, J. E., & Winner, E. (2012). Confronting sadness through art-making: Distraction is more beneficial than venting. *Psychology of Aesthetics, Creativity, and the Arts, 6(3).* 255–261.

Dunphy, K., Baker, F. A., Dumaresq, E., Carroll-Haskins, K., Eickholt, J., Ercole, M., Kaimal, G., Meyer, K., Sajnani, N., Shamir, O. Y., & Wosch, T. (2019). Creative Arts Interventions to Address Depression in Older Adults: A Systematic Review of Outcomes, Processes, and Mechanisms *Frontiers in Psychology, 9,26-55*.

Faure, S., & Loxton, H. (2003). Anxiety, depression and self-efficacy levels of women undergoing first trimester abortion. *South African Journal of Psychology, 33,* 28–38.

Forgeard, M. J. C., & Elstein, J.G. (2014) Advancing the clinical science of creativity. *Frontiers in Psychology, 5(2),* 165-169.

Forgeard, M. J. C., & Eichner, K. V. (2014). *Creativity as a target and tool for positive interventions.* In A. C. Parks & S. M. Schueller (Eds.), *The*

Wiley Blackwell handbook of positive psychological interventions (pp. 137-154). Wiley Blackwell.

Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Biological Sciences. 359 (1449).* 1367 – 1377.

Fredrickson, B. L., & Branigan C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition and Emotion, 19(3),* 313-332.

Freidlin, P., Littman-Ovadia, H., & Niemiec, R. M. (2017). Positive psychopathology: Social anxiety via character strengths underuse and overuse. *Personality and Individual Differences, 108***,** 50-54.

Goldsmith, R., & Matherly, T. (1988). Creativity and Self-Esteem: A Multiple Operationalization Validity Study. *The Journal of Psychology, 122(1),* 47-56.

Guo, Y., & Zhang, X., Plummer, V., Lam, L., Cross, W., & Zhang, J. (2016). Positive PsychoTherapy for Depression and Self-efficacy in Undergraduate Nursing Students: A Randomized Controlled Trial. *International Journal of Mental Health Nursing, 26(4),* 375-383.

Gülüm, İ. V., & Dağ, İ. (2012). Adaptations, validation and reliability of Ruminative Thinking Scale and Cognitive Flexibility Questionnaire. *Anatolian Journal of Psychiatry, 13(1),* 216-223.

Haase, J. (2018). A Meta-Analysis of the Relation between Creative Self-Efficacy and Different Creativity Measurements. *Creativity Research Journal, 30(1),* 1-16.

Holtzheimer, P. E., & Nemeroff, C. B. (2006). Future prospects in depression research. *Dialogues in clinical neuroscience*, *8*(2), 175–189.

Huppert, F. (2009). Psychological Well-Being: Evidence Regarding Its Causes and Consequences. *Applied Psychology: Health and Well-Being, 1,* 137 - 164.

Hwang, K., Kwon, A., & Hong, C. (2016). A Preliminary Study of New Positive Psychology Interventions: Neurofeedback-Aided Meditation Therapy and Modified Positive Psychotherapy. *Current Psychology*, *36,* 1-13.

Intasao, N., & Hao, N. (2018). Beliefs About Creativity Influence Creative Performance: The Mediation Effects of Flexibility and Positive Affect. *Frontiers in Psychology, 9(1),* 1-17.

Ivtzan, I., & Lomas, T. (Eds.). (2016). *Mindfulness in positive psychology: The science of meditation and wellbeing.* Routledge/Taylor & Francis Group. https://doi.org/10.4324/9781315747217

Jerusalem, M., & Schwarzer, R. (1992). Self-efficacy as a resource factor in stress appraisal processes. In R. Schwarzer (Ed.), Self-efficacy: Thought control of action (pp. 195–213). Hemisphere Publishing Corporation.

Kangas, J. L., Baldwin, A. S., Rosenfield, D., Smits, J. A., & Rethorst, C. D. (2015). Examining the moderating effect of depressive symptoms on the relation between exercise and self-efficacy during the initiation of regular exercise. *Health psychology: official journal of the Division of Health Psychology, American Psychological Association*, *34*(5), 556–565.

Karademas, E. C. (2006). Self-efficacy, social support and well-being: The mediating role of optimism. *Personality and Individual Differences, 40(6),* 1281-1290.

Karwowski, M., Lebuda, I., Wisniewska, E. & Gralewski, J. (2013). Big Five personality factors as the predictors of creative self-efficacy and creative personal identity: Does gender matter? *Journal of Creative Behavior, 47*, 215-232.

Kaufman, J. C., & Baer, J. (2002). I bask in dreams of suicide: mental illness, poetry, and women. Review of General Psychology, 6(3), 271–286.

Kavanagh, D. J. (1992). *Self-efficacy: Thought control of action*. *Self-efficacy and depression* (pp. 177–194). Hemisphere Publishing Corporation.

Kohn, A. (1994). The Truth about Self-Esteem. *Phi Delta Kappan, 76(3),* 272-283.

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606–613.

Layne, C., Lefton, W., Walters, D., & Merry, J. (1983). Depression: Motivational deficit versus social manipulation. *Cognitive Therapy and Research, 7(2),* 125–132.

Leckey, J. (2011). The therapeutic effectiveness of creative activities on mental well-being: a systematic review of the literature. *J Psychiatric Mental Health Nursing, 18(6),* 9-501.

Lee, J., Yun, S., Lee, S. (2019). The Curvilinear Relationship between Self-efficacy and Creativity: The Moderating Role of Supervisor Close Monitoring. *Journal of Business and Psychology, 34(1),* 377–388.

Li, Y. (2015). Progressive muscle relaxation improves anxiety and depression of pulmonary arterial hypertension patients. *Evidence-based complementary and Alternative Medicine, (4),* 1-8.

Lorenzen-Huber, L. (1991). Self-perceived creativity in the later years: Case studies of older Nebraskans. *Educational Gerontology, 17(4),* 379–390.

Ludwig, A. (1995). *The Price of Greatness: Resolving the Creativity and Madness Controversy*. Guilford Press.

Luszczynska, A., & Schwarzer, R. (2005). The Role of Self-Efficacy in Health Self-Regulation. In W. Greve, K. Rothermund, & D. Wentura (Eds.), *The adaptive self: Personal continuity and intentional self-development* (pp. 137–152). Hogrefe & Huber Publishers.

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: does happiness lead to success? *Psychological Bulletin, 131(6),* 803-855.

Martin, L., Oepen, R., Bauer, K., Nottensteiner, A., Mergheim, K., Gruber, H., & Koch, S. (2018). Creative Arts Interventions for Stress Management and Prevention—A Systematic Review. *Behavioral Sciences, 8(2),* 28.

Martin, M. M., & Anderson, C. M. (1998). The Cognitive Flexibility Scale: Three validity studies. *Communication Reports, 11(1),* 1-9.

Mclellan, (2012). The impact of creative initiatives on wellbeing: A literature review. *Creativity Culture & Education, 2,* 71-74.

Milanovic, M. (2018). Self-efficacy in depression: bridging the gap between competence and real-world functioning. *US National Library of Medicine National Institutes of Health, 206(5),* 350-355.

Morgan, A. J., & Jorm, A. F. (2008). Self-help interventions for depressive disorders and depressive symptoms: A systematic review. *Annals of General Psychiatry, 7(2),* 1-23. http://dx.doi.org/10.1186/1744-859X-7-13.

Park, N., & Peterson, C. (2009). Character Strengths: Research and Practice. *Journal of College and Character, 10 (4).* https://doi.org/10.2202/1940-1639.1042.

Perach, R., & Wisman, A. (2016), Can Creativity Beat Death? A Review and Evidence on the Existential Anxiety Buffering Functions of Creative Achievement. *The Journal of Creative Behaviour, 53(2),* 193-210. http://dx.doi.org/10.1002/jocb.171.

Perruzza, N., & Kinsella, E. (2010). Creative Arts Occupations in Therapeutic Practice: A Review of the Literature. *British Journal of Occupational Therapy, 73,* 261-268.

Peterson, C., & Seligman, M. E. P. (2004). Character strengths and virtues: A classification and handbook. *American Psychological Association*. Oxford University Press.

Peterson, C., Park, N., & Seligman, M. E. P. (2004). Assessment of character strengths. In G. P. Koocher, J. C. Norcross, & S. S. Hill, *III Psychologists' desk reference* (2nd ed.). Oxford University Press.

Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M. E. P. (2007) Strengths of character, orientations to happiness, and life satisfaction. *The Journal of Positive Psychology*, *2*(3), 149-156. https://doi.org/10.1080/17439760701228938.

Peyvastegar, M., Dastjerdi, E., & Dehshiri, G. R. (2010). Relationship between creativity and subjective well-being in university students. *Journal of Behavioral Sciences, 4,* 207-213.

Puente-Díaz, R. (2017). The influence of creative mindsets on achievement goals, enjoyment, creative self-efficacy and performance among business students. *Thinking Skills and Creativity, 24,* 1–11.

Puig, A. (2006). The efficacy of creative arts therapies to enhance emotional expression, spirituality, and psychological well-being of newly diagnosed Stage I and Stage II breast cancer patients: A preliminary study. *The Arts in Psychotherapy, 33*, 218-228.

Rashid, T. (2015). Positive psychotherapy: A strength-based approach. *The Journal of Positive Psychology, 10(1),* 25-40.

Richards, R. (2006). Frank Barron and the Study of Creativity: A Voice That Lives on. *Journal of Humanistic Psychology, 46(3),* 352–370. https://doi.org/10.1177/0022167806287579

Runco, A., & Acar, S. (2012). Divergent Thinking as an Indicator of Creative Potential. *Creativity Research Journal*, *24(2)*, 66-75.

Safara, M., Alkaran, Z.B., Salmabadi, M., & Rostami, N. (2017). Comparison of Creativity and Self-Esteem in Students with Employed and Household Mothers. *International Education Studies, 10*, 63-67.

Safford, S. M., Alloy, L. B., Abramson, L. Y., & Crossfield, A. G. (2006). Negative cognitive style as a predictor of negative life events in depression-prone individuals: a test of the stress generation hypothesis. *Journal of affective disorders, 99(1-3),* 147-54.

Schrank, B., Riches, S., & Coggins, T. (2014). WELLFOCUS PPT – Modified Positive Psychotherapy To Improve Well-Being In Psychosis: Study Protocol For A Pilot Randomised Controlled Trial. *Trials, 15(203),* 1-14. http://dx.doi.org/10.1186/1745-6215-15-203

Schwarzer, R., & Born, A. (1997). Optimistic self-beliefs: Assessment of general perceived self-efficacy in thirteen cultures. *World Psychology*, *3*(2), 177-190.

Seligman, M. E., P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfilment* (pp. 561-562). Free Press.

Seligman, M. E., Rashid, T., & Parks, A. C. (2006) Positive psychotherapy. *US National Library of Medicine National Institutes of Health*, *61,* 774-788.

Seligman, M. E. P., Railton, P., Baumeister, R. F., & Sripada, C. (2013). Navigating Into the Future or Driven by the Past. *Perspectives on Psychological Science, 8(2),* 119–141. https://doi.org/10.1177/17 456 916124 74317

Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching Self-Care to Caregivers: Effects of Mindfulness-Based Stress Reduction on the Mental Health of Therapists in Training. *Training And Education In Professional Psychology, 1(2),* 105-115.

Stuckey, H. L., & Nobel, J. (2010). The connection between art, healing, and public health: a review of current literature. *American journal of public health*, *100*(2), 254–263.

Tak, Y. R., Brunwasser, S. M., Lichtwarck-Aschoff, A., & Engels, R. C. (2017). The Prospective Associations between Self-Efficacy and Depressive Symptoms from Early to Middle Adolescence: A Cross-Lagged Model. *Journal of Youth and Adolescence*, *46(4),* 744–756.

Thaut, M., & Abiru, M. (2010). Rhythmic Auditory Stimulation in Rehabilitation of Movement Disorders: A Review of Current Research. *Music Perception, 27,* 263-269.

Tierney, P., & Farmer, S. M. (2011). Creative self-efficacy development and creative performance over time. *Journal of Applied Psychology, 96*(2), 277–293.

Wright, T. A., & Walton, A. P. (2003). Affect, Psychological Well-Being and Creativity: Results of a Field Study. *Journal of Business and Management, 9*, 21-32.