

Original Article

The effect of intensive short-term dynamic psychotherapy (ISTDP) an emotional suppression and negative affect in patients with treatment-resistant depression: a single-subject study

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Abstract

Emotional suppression and the experience of negative affect are the main problems of patients with treatment-resistant depression. In previous research, Intensive Short-Term Dynamic Psychotherapy (ISTDP) has been recognized as one of the effective methods in patients with treatment-resistant depression. However, the role of ISTDP in emotional suppression and negative affect is not clear in these patients. The present study aimed to explore the effectiveness of intensive short-term dynamic psychotherapy in the treatment of emotional suppression and negative affect using a single-subject study. Three patients with treatment-resistant depression diagnosis were selected by convenience sampling from psychotherapy clinics in Tabriz-Iran during a 3-month recruitment period in July 2019. In the next step, the participants underwent ten one-hour sessions of intensive short-term dynamic therapy. After each intervention process, the filled Weinberger Adjustment Inventory (WAI) and the Positive and Negative Affect Scale (PANAS). The results showed that intensive short-term dynamic therapy led to a reduction of negative affect and emotional suppression. Accordingly, it could be concluded that ISTDP is an effective method for ameliorating negative affect and emotional suppression in treatment-resistant depression.

Keywords

Intensive short-term dynamic therapy, depression, treatment-resistant, negative affect, suppression.

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Introduction

Major depressive disorder (MDD) is one of the most debilitating psychiatric conditions. It is considered to be the most prominent factor of disability among 15 to 44 years old people in the United States and all around the world (Depression, 2017; Kessler et al., 2005). According to WHO's estimation, over three hundred million people suffer from depression across the world (Depression, 2017). Depression disorder can acutely affect person's thoughts, behavior, feelings along with ability to work, and its lifetime risk is 10-20% for women and 5-12% for men (Zhu et al., 2017). Depressed individuals experience sadness, anxiety, hopelessness, worry, agitation or restlessness and in the worse cases it could be terminated with suicide (Kessler et al., 2003). Presently, about 60-70 % of people who suffer from depression respond to the standard antidepressants or psychotherapy; however, one-third of this population does not respond to these

therapies, and it is known as Treatment-Resistant Depression (TRD). Its prevalence in the United States is more than 1% and is reported as a hazardous, debilitating disorder (Serafini et al., 2015). Pioneer psychoanalysts were the first people who helped us to know depression through the psychoanalysis frame. Karl Abraham (1911) and Sigmund Freud (1917), in their classic paper emphasized the importance of internally directed aggression in the development of depression (Seligman et al., 2001). Psychoanalytic theories have consensus on the issue that depression stems from childhood experiences, which hinder children from developing a positive, robust ego (Heshmati et al., 2016; Heshmati et al., 2010). Many of recent psychoanalytic theoreticians, continuously rely on Freud's theory about depression (1911), internally directed aggression incentives (Halonen & Santrock, 1999). According to the psychoanalytic theories, the most common and fundamental way of altering psychological facts is suppression. Suppression is the voluntary form of

repression proposed by Sigmund Freud in 1892. It is the conscious process of pushing unwanted, anxiety-provoking thoughts, memories, emotions, fantasies and desires out of awareness (Wittgenstein, 2009). Suppressed thoughts and emotions exist in more powerful potentials as they are not accessible for logical control. They can express their latent contents in dreams and fantasies, a slip of the tongue, under hypnotism circumstances, and as symptoms or even as mental illness (Seligman et al., 2001). Threatening, painful thoughts and feelings do not find the opportunity of entering consciousness. It was assumed most of the painful events of the first five or six years in life are interred; however, they affect future behaviors (Corey, 2015; Heshmati et al., 2010). Evidence shows that emotion express in depressed individuals is impaired like other areas (Ahola et al., 2011; Ahmadi et al., 2010).

Most of the emotional states can be categorized in positive and negative affect rubrics. Positive affect refers to the pleasant interaction between a person and his milieu. Individuals with higher positive effects have a higher sense of consciousness, vigilance, and vibrancy to their life. On the contrary, negative affect is defined as an aspect of mental distress and untoward interaction with the environment and includes different emotional states like fear, anger, compunction, and helplessness. Thus, it is highly correlated with health problems and plays a significant role in depression (Gill et al., 2017).

The recurrent and chronic identity of depression has made it a treatment-resistant disorder (Chew, 2006). Depression, as a treatment-resistant disorder, has long been challenged therapeutic approaches Allan Anthony (Abbass, 2006). Myriad of approaches have evolved for treatment and reduction of symptoms in treatment-resistant depressed individuals. Some of these efforts could be found in behavioral, cognitive-behavioral, existential approaches. Nevertheless, one of the primary avenues to depression treatment is psychoanalysis and psychodynamic psychotherapies. Intensive Short-Term Dynamic Psychotherapy (ISTDP) was developed by Habib Davanloo (1980) as a technique to break through the patient's defensive barrier (Davanloo, 2001; Laikin et al., 1991). In accordance with precedent dynamic psychotherapies, ISTDP is rested on the understanding that difficulties presented by a patient are adaptations to anxiety or psychic pain caused by intrapsychic conflicts (Frederickson, 2013; Neborsky, 2018). The characteristic feature of intensive short-term psychoanalytic interventions is their dynamic focus on time limitation, and therapists' constant effort is to provide a profound affective/emotional experience for patients as a therapeutic factor. ISTDP is a short-term psychotherapy model that helps patients to distinguish feelings worsening emotional distress (depression, anxiety) and target them and empowers patients in

tolerating anxiety. In some cases, the therapist uses rating scales to create affective capacities in patients and by uncovering elements (i.e., clarification and challenging defense mechanisms), tries to reduce avoidant behaviors in patients. The ultimate goal of a dynamic therapy procedure is to establish awareness and ability in patients to experience and cope with emotions, which affect their mood (Town et al., 2017). It is possible to consider that the essential focus of psychodynamic therapy is on painful feelings or a feeling by which life is considered as a problematic, frustrating procedure. The psyche, burgeons, and becomes adapted to embark upon and face this life, and develops defense mechanisms to avoid pain. These unconscious struggles to avoid pain in most cases fail; however, as our consciousness is limited, they frequently are put into practice. ISTDP helps patients to face their painful feelings and experience them in a therapeutic ambience. The understanding promoted by patient and therapist's collaboration about these problems extends patients awareness and represents new methods in conflict management. Also, it increases the patient's capacity to tolerate and cope with adverse emotions and the ability to think about his experiences. (Johnstone & Dallos, 2013). Case-studies and randomized-controlled studies have confirmed the effectiveness of this psychotherapy approach (Allan A Abbass et al., 2008). ISTDP are widely used, having been found as effective for reducing depressive symptoms as other first-line psychological treatments (Connolly-Gibbons et al., 2016; Driessen et al., 2013). For example, Town, Abbass, Stride, and Bernier (2017) showed that time-limited ISTDP was an effective treatment option for TRD, showing large advantages over routine treatment delivered by secondary care services. Moreover, Solbakken, and Abbass (2015) indicated that ISTDP-based residential treatment with an eight-week time-limit appears to be effective for alleviating common and severe, treatment resistant mental disorders. Although the effect of ISTDP in different psychopathologies and personality disorders has been supported (Abbass et al., 2008), its effect an improving emotional suppression and negative affect have not been examined in the previous literature. Thus, in this study, we tried to investigate the effectiveness of ISTDP an emotional suppression and negative emotions in treatment-resistant depressed patients.

Method

Participants

The present study is a single-case study. Three treatment-resistant depressed patients were selected by convenience sampling method from a private clinic in Tabriz city in July 2019. The inclusion criteria were: 1) treatment-resistant depression diagnosis, 2) high-school

or higher education, 3) ability to fill in the questionnaires, and relate/collaborate well with the researcher. The exclusion criteria were having a comorbid personality disorder, psychotic spectrum disorder, brain injury, or other physical problems prior to the experiment. After the selection process and explaining the goals of the study and taking ethical considerations (i.e., confidentiality, voluntary consent form sign) into account, participants filled the Weinberger Adjustment Inventory (WAI) and the Positive and Negative Affect Schedule (PANAS), respectively. After that, participants underwent ten one-hour ISTDP sessions with a licensed ISTDP therapist. In each session, after intervention, participants filled the questionnaires.

Instrument

Weinberger Adjustment Inventory (WAI; Weinberger, 1991):

This inventory includes 84 items and ten subscales. It was designed to assess the long-term signs and has validated for both clinical and non-clinical populations. WAI has 3 components: distress, restraint, and defensiveness. Distress (29 items) is categorized into 4 dimensions (anxiety, depression, low self-esteem, and low well-being). Restraint (30 items) is categorized into 4 dimensions: suppression of aggression, impulse control, consideration of others, and responsibility. Defensiveness (11 items) is categorized into 2 dimensions: repressive defensiveness and denial of distress. The self-restraint and defensiveness subscales specifically measure the severity of emotional suppression. We used these subscales in our study. The emotional repression score was calculated as follows: $(\text{restraint}/3) + 1 \text{ repressive-defensiveness}$. A higher score represented a high level of emotional repression (Paget et al., 2010). The Cronbach's Alphas reported for distress scale is 0.91, for self-restraint is 0.87, and for denial of distress is 0.75, and restraint 0.79. Heshmati and Caltabiano (2020) reported acceptable construct validity and internal consistency ($\alpha = 0.82$) of the WAI in an Iranian sample.

Positive and Negative Affect Scales (PANAS, Watson, Clark, & Tellegen, 1988):

Affect was assessed using the Positive and Negative Affect Schedule (PANAS), constructed by Watson, Clark and Tellegen (1988), which treats both variables, positive affect (PA: 10 items) and negative affect (NA: 10 items), as separate dimensions rather than dichotomous ends of the same scale. It uses a 5-point scale (1 = very slightly or not at all, 5 = extremely) to indicate the extent of generally feeling the respective mood state. The Authors calculated Cronbach alpha coefficients in different samples range from 0.90 to 0.96 for PA and from 0.84 to 0.87 for NA, (Watson et al., 1984). Other researchers have also been reported the same to demonstrate high internal consistency, and to provide a valid index of what it purports to measure (Kercher, 1992; Watson et al., 1988). Heshmati (2013) reported acceptable construct validity and internal consistency of the PANAS in an Iranian sample.

Procedure

Ethical approval was obtained from the Research Ethics Committees of University of Tabriz. Participants were informed that they would be free to participate and could discontinue at any time. All patients signed an informed consent form after having been provided with complete information about the study. Participant responses were processed anonymously and only reported on in aggregate. Mean, Standard Deviation, the percentage improvement, percentage of non-overlapping data (PND), effect size, and Standard Mean Difference (SMD) were calculated. For interpretation, data were analyzed by visual analysis method and determination of effect size.

Results

The results for emotional suppression are presented in Table 1.

Table 1. Emotional Suppression Statistics (WAI)

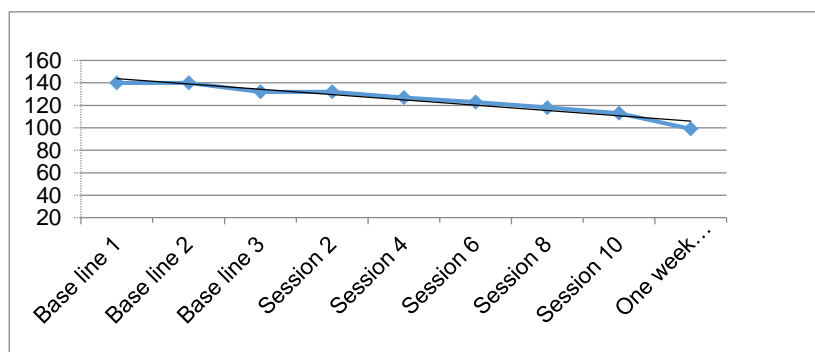
	Subject N.1	Subject N.2	Subject N.3
Baseline 1	140	132	131
Baseline 2	140	132	131
Baseline 3	132	129	132
Mean	137.33	131.00	131.33
SD	4.16	1.73	0.56
Session 2	132	129	132
Session 4	127	126	128
Session 6	123	120	120

Session 8	118	90	110
Session 10	113	65	72
One week later	99	48	48
Mean	118.66	96.33	101.66
SD	11.70	34.25	33.99
Improvement percentage	-27.91	-63.35	-63.45
percentage of non-overlapping data (PND)	83.33	83.33	83.33
Mean improvement percentage	-51.57		
Mean PND	83.33		
Mean Baseline	133.32		
Baseline SD	2.15		
Treatment Mean	105.55		
Treatment SD	26.64		
Effect Size (d)	-1.46		
Standard Mean Deviation (SMD)	-12.91		

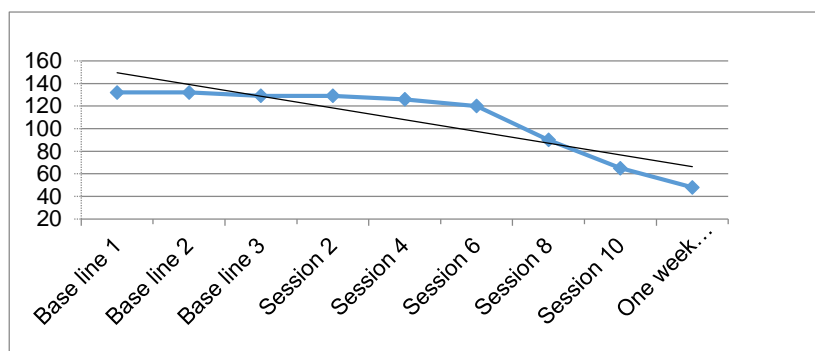
As it is shown in Table 1 improvement percentage for subject numbers 1, 2, and 3 are 27%, 63%, and 63%, respectively and mean improvement percentage is about 51% which indicates treatment on subject one was not successful. Still, it had a moderate effect on the subjects 2 and 3. The effect's mean is moderate also. The value of PND for all three subjects is 83.33, and betokens variations in emotional suppression during treatment is high and favorable. Effect size is equal to 1.46, and

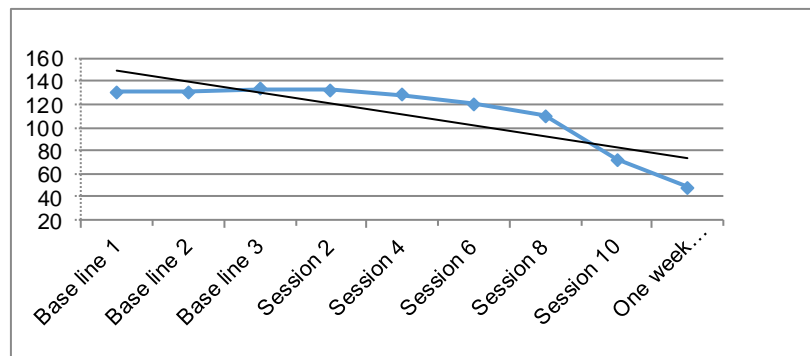
SMD is 12.91, which shows that emotional suppression alterations during treatment are considerably high. Visual analysis of the emotional suppression trend in Figure 1 shows that subject one's trend line has not considerable gradient during treatment sessions. Still, subjects two and three have sizeable gradients, and a significant part of the slope had occurred from session 8. The results of the second hypothesis for negative emotion are presented in Table 2.

Subject 1:



Subject 2:



Subject 3:**Figure 1.** Visual Analysis of Emotional Repression Trend**Table 2.** Negative Affect Scale (PANAS) Statistics

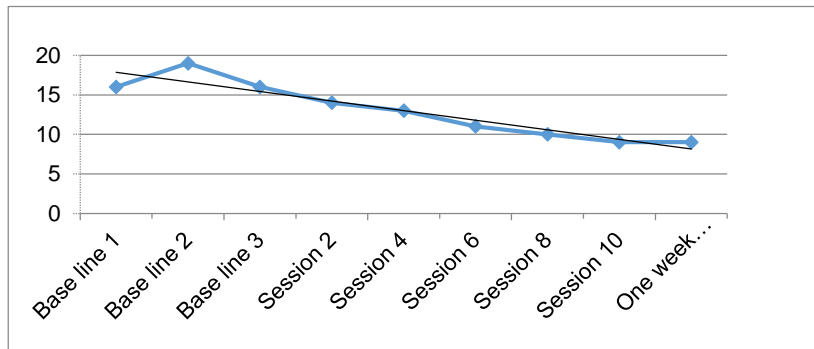
	Subject N.1	Subject N.2	Subject N.3
Baseline 1	16	13	14
Baseline 2	19	16	14
Baseline 3	16	15	16
Mean	17.00	14.66	14.66
SD	1.73	1.52	1.15
Session 2	14	15	13
Session 4	13	12	9
Session 6	11	11	9
Session 8	10	8	7
Session 10	9	8	6
One week later	9	7	5
Mean	11.00	10.16	8.16
SD	2.09	3.06	2.85
Improvement percentage	-47.58	-52.25	-65.89
Percentage of Non-overlapping Data (PND)	100	83.33	100
Mean improvement percentage	-55.24		
Mean PND	94.44		
Mean Baseline	15.44		
Baseline SD	1.46		
Treatment Mean	9.77		
Treatment SD	2.66		
Effect Size (d)	-2.64		
Standard Mean Deviation (SMD)	-3.88		

According to Table 2, the improvement percentage for subjects is 47%, 52%, and 65%, respectively, and their average is 55%. According to these parameters, the first subject had undergone slight improvement; however, subjects 2 and 3 had had moderate improvement in negative affect. The mean improvement percentage for subjects indicates moderate to low efficacy for negative affect abatement. For the PND parameter, acquired portions for subject's number 1 and 3, are 100%, and for the second subject is 83% which indicates the treatment had reduced negative affect appropriately. Effect size is

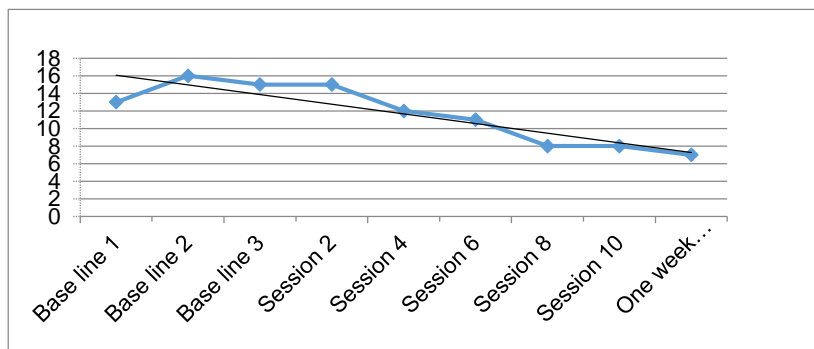
equal to 2.64, and SMD is 3.88, which shows that negative effect alterations during treatment are considerably high.

Negative affect's visual analysis in Figure 2 shows that trend line for all of the subjects during baseline sessions had no significant slope; nonetheless, during treatment, all three trends had a declining gradient, which indicates a reduction in negative affect during treatment. In short, the concerned indices showed the desirable efficacy of the intervention in reducing negative affect in TRD patients.

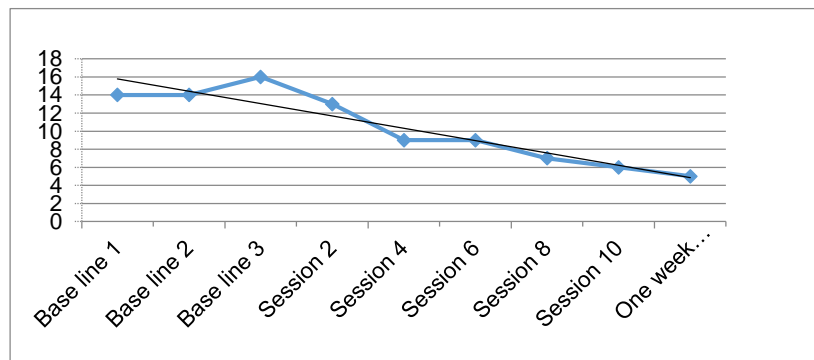
Subject 1:



Subject 2:



Subject 3:



Discussion

The aim of this study was to examine the effectiveness of Intensive Short-Term Dynamic Psychotherapy (ISTDP) an emotional suppression and negative affect in treatment-resistant depressed patients using a single-subject study. The result showed Intensive Short-Term Dynamic Psychotherapy was effective in the treatment of emotional suppression among depressed, resistant to treatment individuals. The results of this study are in line with [Khorianian et al. \(2013\)](#) as they showed this treatment is suitable for increasing emotional expression. Also, our findings are in line with the work of [Driessen et al. \(2015\)](#), in which they examined the efficacy of this treatment on

depressive symptoms. To elucidate, in emotional suppression, treatment-resistant depressed individuals generally act defensively in revealing their unpleasant feelings or even they prevent it from being exposed. Emotional suppression and internalizing negative feelings like anger, resentment, and sadness target the person at last. However, this treatment approach leads depressed individuals toward a comprehensive experience of their adverse feelings and challenges defense mechanisms preventing emotional expression. In this process, it tries to break transference and provoke transference feelings and overcome suppression. Davanloo's emphasis is on the removal of barriers from profound experience of affects which engenders depressive symptoms. To what extent the patient can

acquire insight into the relationship between his symptoms and suppressed emotions, the symptoms would be relieved, and improvement would be obtained. Thus, it seems logical these techniques and processes could reduce emotion suppression and approval of real self, which in return brings positive upshots in the improvement trend.

Also, this research revealed Intensive Short-Term Dynamic Psychotherapy was effective in reducing negative affect in treatment-resistant depressed individuals. Our findings align well with the results of [De Roten, Drapeau, and Michel \(2008\)](#) in which they found therapeutic alliance promotes affect regulation in depressed patients. Indeed, affect regulation is an automatic process that reduces adverse effect and increases positive affect. To explain this finding, it could be stated that therapeutic processes, including pressure and disclosure, as core techniques in ISTDP, play a crucial role in affect regulation and, as a result, cause negative affect reduction and, in total, improves interpersonal relations. Negative affect is an internal facet of being unoccupied with a pleasing activity that follows a sequence of avoidant mood states, including anger, sadness, resentment, inferiority, compunction, and fear. In this mood states, a situation emerges in which individuals face essential people in their life with this negative attitude and then experience these states physically and mentally. It seems touching these feelings could provide a context to bear them. By feeling negative affect closely, tolerance is increased, and consequently, setting for experiencing positive affect is provided. On the other hand, by releasing negative emotions such as anger and resentment, the setting is provided for positive feelings like happiness and cheer increases. Experiencing trauma engenders negative emotions, and by re-experiencing this trauma during ISTDP, a person can look into life's facts realistically and separate them from negative emotional influence.

Conclusion

Due The findings of this study support the effectiveness of Intensive Short-Term Dynamic Psychotherapy in reducing emotional suppression and negative affect among treatment-resistant depressed individuals. Accordingly, interventions in depression treatment that focus on decreasing depressive symptoms in treatment-resistant patients, specifically those aiming at emotional suppression and negative affect decrease, can benefit from this treatment approach. As the clinical reference for emotional disorders occupies a high proportion of clinical setting, this approach could yield promising results.

Limitation

The limitation of single-subject research is that conclusions drawn about the effects of treatment under controlled conditions are based on one single subject and cannot be generalized. Therefore, the findings of the present study regarding the effectiveness of ISTDP on emotional depression and negative affect cannot be generalized to the female patient's population with TRD. The other limitation of this work refers to self-assessments by questionnaires, and a comprehensive evaluation of participants via other means could improve the precision of assessment. Moreover, future investigations using samples, including both male and female subjects and a larger sample for repeating the findings of this study seems inevitable.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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References

- Abbass, A., Sheldon, A., Gyra, J., & Kalpin, A. (2008). Intensive short-term dynamic psychotherapy for DSM-IV personality disorders: A randomized controlled trial. *The Journal of Nervous and Mental Disease*, 196(3), 211-216. doi:10.1097/NMD.0b013e3181662ff0
- Abbass, A. A. (2006). Intensive short-term dynamic psychotherapy of treatment-resistant depression: A pilot study. *Depression and Anxiety*, 23(7), 449-452. doi: 10.1002/da.20203
- Abbass, A. A., Joffres, M. R., & Ogrodniczuk, J. S. (2008). A naturalistic study of intensive short-term dynamic psychotherapy trial therapy. *Brief Treatment and Crisis Intervention*, 8(2), 164. doi:10.1093/brief-treatment/mhn001
- Ahola, P., Valkonen-Korhonen, M., Tolmunen, T., Joensuu, M., Lehto, S. M., Saarinen, P. I., Lehtonen, J. (2011). The patient-therapist interaction and the recognition of affects during the process of psychodynamic psychotherapy for depression. *American Journal of Psychotherapy*, 65(4), 355-379. doi:10.1176/appi.psychotherapy.2011.65.4.355
- Ahmadi, M., Abdollahi, M. H., Ramezani, V., & Heshmati, R. (2010). The impact of written emotional expression on depressive symptoms and working memory capacity in Iranian students with high depressive symptoms. *Procedia-Social and Behavioral Sciences*, 5, 1610-1614. doi:10.1016/J.SBSPRO.2010.07.334

- Chew, C. E. (2006). The effects of dialectical behavioral therapy on moderately depressed adults. University of Denver.
- Corey, G. (2015). Theory and practice of counseling and psychotherapy: Nelson education.
- Davanloo, H. (2001). Intensive short-term dynamic psychotherapy: Selected papers of Habib Davanloo: John Wiley & Sons Inc.
- de Roten, Y., Drapeau, M., & Michel, L. (2008). Are there positive emotions in short-term dynamic psychotherapy or is it all Freude-less? *Journal of Psychotherapy Integration*, 18(2), 207. doi:10.1037/1053-0479.18.2.207
- Depression, W. (2017). Other common mental disorders: Global health estimates. Geneva: World Health Organization, 1-24.
- Driessen, E., Hegelmaier, L. M., Abbass, A. A., Barber, J. P., Dekker, J. J., Van, H. L., . . . Cuijpers, P. (2015). The efficacy of short-term psychodynamic psychotherapy for depression: A meta-analysis update. *Clinical Psychology Review*, 42, 1-15. doi: 10.1016/j.cpr.2015.07.004
- Driessen, E., Van, H. L., Don, F. J., Peen, J., Kool, S., Westra, D., ... & Dekker, J. J. (2013). The efficacy of cognitive-behavioral therapy and psychodynamic therapy in the outpatient treatment of major depression: A randomized clinical trial. *American Journal of Psychiatry*, 170(9), 1041-1050. doi: 10.1176/appi.ajp.2013.12070899
- Frederickson, J. (2013). Co-creating change: Seven Leaves Press.
- Gibbons, M. B. C., Gallop, R., Thompson, D., Luther, D., Crits-Christoph, K., Jacobs, J., ... & Crits-Christoph, P. (2016). Comparative effectiveness of cognitive therapy and dynamic psychotherapy for major depressive disorder in a community mental health setting: A randomized clinical noninferiority trial. *JAMA Psychiatry*, 73(9), 904-912. doi: 10.1001/jamapsychiatry.2016.1720
- Gill, N. P., Bos, E. H., Wit, E. C., & de Jonge, P. (2017). The association between positive and negative affect at the inter-and intra-individual level. *Personality and Individual Differences*, 105, 252-256. doi: 10.1016/j.paid.2016.10.002
- Halonon, J. S., & Santrock, J. W. (1999). *Psychology contexts & applications*: McGraw-Hill.
- Heshmati, R. (2013). Factor structure of international positive and negative affect schedule short-form (I-PANAS-SF) in patients with coronary artery disease. *Applied Psychology*, 8(2); 41-56. doi:10.7717/peerj.1822
- Heshmati, R., & Caltabiano, M. L. (2020). Pathway linking dispositional mindfulness to fatigue in oncology female nurses: Exploring the mediating role of emotional suppression. *European Journal of Oncology Nursing*, 48, 101831. doi: 10.1016/j.ejon.2020.101831
- Hashmati, R., Ghorbani, N., Rostami, R., Ahmadi, M., & Akhavan, H. (2010). Comparative study of alexithymia in patients with psychotic disorders, non psychotic and normal people. *Avicenna Journal of Clinical Medicine*, 17(1), 56-61.
- Heshmati, R., Hoseinifar, J., Rezaeinejad, S., & Miri, M. (2010). Sensation seeking and marital adjustment in handicapped veterans suffering from PTSD. *Procedia-Social and Behavioral Sciences*, 5, 1783-1787. doi: 10.1016/j.sbspro.2010.07.364
- Heshmati, R., Onari Asl, R., & Shokrallah, R. (2016). The effectiveness of group play therapy techniques on state anxiety, positive emotions and general compatibility level in special students with learning disabilities. *Journal of Learning Disabilities*, 5(4), 7-24.
- Johnstone, L., & Dallos, R. (2013). *Formulation in psychology and psychotherapy: Making sense of people's problems*: Routledge.
- Kercher, K. (1992). Assessing subjective well-being in the old-old: The PANAS as a measure of orthogonal dimensions of positive and negative affect. *Research on Aging*, 14(2), 131-168. doi:10.1177/0164027592142001
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K. R., . . . Wang, P. S. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication (NCS-R). *Jama*, 289(23), 3095-3105. doi: 10.1001/jama.289.23.3095
- Kessler, R. C., Chiu, W. T., Demler, O., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, 62(6), 617-627. doi: 10.1001/archpsyc.62.6.617
- Khoranian, M., Heidari, N. L., Tabibi, Z., & Aghamohammadian, S. H. (2013). Effectiveness of intensive short-term dynamic psychotherapy in decreasing the symptoms of depression and increasing emotional disclosure in patients suffering from depression.
- Laikin, M., Winston, A., & McCullough, L. (1991). Intensive short-term dynamic psychotherapy. *Handbook of short-term dynamic psychotherapy*.
- Neborsky, R. J. (2018). *Mastering intensive short-term dynamic psychotherapy: A roadmap to the unconscious*: Routledge.
- Paget, V., Consoli, S., & Carton, S. (2010). French translation and validation of the weinberger repression questionnaire. Paper presented at the annales medico-psychologiques. doi: 10.1016/j.amp.2009.09.021
- Seligman, M. E., Walker, E. F., & Rosenhan, D. L. (2001). *Abnormal psychology*: Norton.
- Serafini, G., Pompili, M., Murri, M. B., Respino, M., Ghio, L., Girardi, P., . . . Amore, M. (2015). The effects of repetitive transcranial magnetic stimulation on cognitive performance in treatment-resistant depression. A systematic review. *Neuropsychobiology*, 71(3), 125-139. doi: 10.1159/000381351

- Solbakken, O. A., & Abbass, A. (2015). Intensive short-term dynamic residential treatment program for patients with treatment-resistant disorders. *Journal of Affective Disorders*, 181, 67-77. doi: 10.1016/j.jad.2015.04.003
- Town, J. M., Abbass, A., Stride, C., & Bernier, D. (2017). A randomised controlled trial of intensive short-term dynamic psychotherapy for treatment resistant depression: The halifax depression study. *Journal of Affective Disorders*, 214, 15-25. doi: 10.1016/j.jad.2017.02.035
- Watson, D., Clark, L. A., & Tellegen, A. (1984). Cross-cultural convergence in the structure of mood: A Japanese replication and a comparison with US findings. *Journal of Personality and Social Psychology*, 47(1), 127. doi:10.1037/0022-3514.47.1.127
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063. doi: 10.1037/0022-3514.54.6.1063
- Weinberger, D. (1991). Social-emotional adjustment in older children and adults. *Psychometric Properties of the Weinberger Adjustment Inventory*.
- Wittgenstein, L. (2009). Neuroscience meets psychoanalysis. *Scientific American mind*. doi:10.1038/scientificamericanmind0409-16
- Zhu, Y., Shang, Y., Shao, Z., & Guo, G. (2017). Automated depression diagnosis based on deep networks to encode facial appearance and dynamics. *IEEE Transactions on Affective Computing*, 9(4), 578-584. doi: 10.1109/TAFFC.2017.2650899