



PSIWORLD 2013

Relaxation and hypnosis in reducing anxious-depressive symptoms and insomnia among adults

Irina Holdevici*

**Faculty of Psychology, Titu Maiorescu University, Calea Văcărești nr.187, sector 4, Bucharest, 040051, Romania*

Abstract

The effects of insomnia carries along a physical and psychological state of dysfunctionality felt by the individual. The purpose of the study was to investigate the effects of a hypnotherapeutic and relaxation intervention applied in the case of patients who present anxious - depressive symptomatology and insomnia. A sample of 61 patients ($M_{age} = 41.8$; $SD = 11.17$) completed measures of anxiety, depression and insomnia. Our findings revealed that the psychotherapeutic intervention that involves relaxation and clinical hypnosis techniques leads to positive results among the anxious-depressive symptomatology patient who experience primary or secondary insomnia.

© 2014 The Authors. Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](https://creativecommons.org/licenses/by-nc-nd/4.0/).
Selection and peer-review under responsibility of Romanian Society of Applied Experimental Psychology.

Keywords: hypnosis, relaxation, anxiety, insomnia.

1. Introduction

In a hypnotic state, the unconscious comes in the first line of attention, leaving the hyperactive conscious in a state of suspension (Michaux et al., 2007). With the help of the psychotherapist and the applied hypnotherapy techniques, it is possible that unexploited resources of the brain might allow several competencies to find a way to self healing.

* Corresponding author. Tel.: +4-023-220-1293; fax: +4-023-220-1293.
E-mail address: barbaracraciun@yahoo.com

Using hypnosis as a support intervention in controlling anxiety and depressive symptoms accompanied by insomnia allows the patient to reach better control over these symptoms. Hypnosis is a technique which is more and more taken in consideration in managing anxiety disorders, with benefic results, as many studies have shown (Chaves et al., 2000; Gilbertson & Kemp, 1992; Smith, 1990; Robertson, 2012). Relaxation and hypnosis are techniques which have been included in psychotherapeutic processes. During such processes, the impact of anxious-depressive disorders over the patient, family and entourage are taken into consideration.

Studies conducted in the past years have shown that insomnia as primary or secondary manifestation is accompanied by anxious-depressive symptomatology (Yapko, 2006).

Insomnia can be a primary or secondary symptom reported to other pathologic problems such as depression, anxious disorders, the bipolar affective disorder, panic attacks, substance abuse or other medical or psychopathological conditions.

Insomnia is characterized by difficulty initiating or maintaining sleep that results in psychological distress and impaired social or occupational functioning (DSM IV-TR, 1994).

From a medical point of view, insomnia generates different types of co-morbidity such as obesity, cardiovascular, cognitive and psychiatric complications (Benoit & Goldenberg, 2004; Graci et al., 2007). From a social and professional point of view, insomnia is associated to lower life quality, higher rate of absenteeism and lower productivity, accidents and interpersonal difficulties (Zammit et al., 1999; Taylor et al., 2007).

The frequency of insomnia is mostly high among female population, and also, its incidence rises along with age (Ford & Kamerow, 1989).

In the case of specific depressive symptomatology, one of the main accuses of the participants is related to the presence of insomnia (Goodwin & Jamison, 1990). Some of the studies support the hypothesis that insomnia might lead to developing depressive symptoms (Kales et al., 1984), while other studies do not confirm this fact (Marchini et al., 1983). Also, these authors consider that a more likely hypothesis is the one supporting the idea that people suffering from insomnia are in fact anxious (being hyperactive). They also suggested that insomniacs might be hypoactive during the day and hyperactive at night. A report of the University of Alberta Evidence-based Practice Center from 2005 show that there is evidence that chronic insomnia is associated with older age, female gender, present or past psychiatric illness and psychological problems, medical conditions and poor general health, increased healthcare utilization, and decrements in memory, mood and cognitive function (Manifestations and Management of Chronic Insomnia in Adults, 2005).

The main objective of this study which follows the considerations found in science literature is to investigate the effects of hypnotherapeutic and relaxation interventions among patients who present anxious and depressive symptoms and insomnia.

2. Method

Participants and procedure

The present study involved a number of 61 participants, aged between 32 and 51 years old ($M_{age} = 41.8$; $SD = 11.17$), the patients being selected from two private clinics in Bucharest. Initially a number of 70 patients were selected but following the preliminary clinic interview, a number of 61 subjects was identified to correspond to the criteria of including in the study. These criteria were: the presence of various anxious disorder diagnoses, the presence of depressive tendencies and alerting insomnia. The participants have given their consent to be voluntarily included in the research and have received to financial awards. Participants were distributed in two groups according to the gender variable ($N_1 = 31$ women; $N_2 = 30$ men). All participants were guaranteed the confidentiality of their data and were explained that the tests are part of a research related to the evaluation of results obtained after applying the hypnotherapeutic treatment.

The patients were evaluated in three different moments: before the relaxation and hypnosis intervention, after the participation to the relaxation program and follow-up, two months after finalizing the psychotherapeutic intervention. The hypnotherapeutic intervention consisted of group sessions where relaxation techniques were applied by breathing control and hypnotherapeutic techniques of visualizing locations that patients found to be pleasant and peaceful. The relaxation scenarios were built by a therapeutic model proposed and used by Holdevici

(2011) being adapted according to the previously identified needs of these patients. During this hypnotherapeutic program, the patients received positive post-hypnotic suggestions related to eliminating the anxiety, the depressive tendencies and reducing insomnia. The therapeutic protocol was sustained by the participation of two psychotherapists specialized in applying hypnosis techniques.

Measures

All participants completed three self-report questionnaires with answers distributed on a Likert scale: The Center for Epidemiological Studies Depression Scale (CES-D, Radloff 1977), The Hamilton Anxiety Rating Scale (HAM-A, Hamilton, 1959) and The Insomnia Severity Index (ISI, Morin et al. 2001).

The Center for Epidemiological Studies Depression Scale (CES-D, Radloff, 1977) is a freely available and widely used 20 item self-report scale which measures the current level of depressive symptomatology in the general population, with an emphasis on depressed mood during the past week (Radloff, 1977). The CES-D incorporates the main symptoms of depression. The CES-D has been shown to be a reliable measure for assessing the number, types, and duration of depressive symptoms across racial, gender, and age categories (Knight, Williams, McGee & Olan, 1997; Radloff, 1977; Roberts, Vernon, & Rhoades, 1989).

High internal consistency has been reported with Cronbach's alpha coefficients ranging from .85 to .90 across studies (Radloff, 1977). For this study Cronbach's alpha coefficients was .85.

The Hamilton Anxiety Rating Scale (HAM-A, Hamilton, 1959) is a scale developed to measure the severity of anxiety symptoms, and is still widely used today in both clinical and research settings. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56, where <17 indicates mild severity, 18–24 mild to moderate severity and 25–30 moderate to severe. The Ham-A showed good internal consistency (Cronbach's alpha=0.89) and a cutoff score of 10/11 is suggested to screen for GAD (Kummer et al., 2010).

The Insomnia Severity Index (ISI, Morin et al., 2001) is a 7-item self-report measure of severity of insomnia symptoms over the past 2 weeks. It has good reliability and validity. Scores on this measure range from 0 to 28. Scores between 0 and 14 indicate mild insomnia symptoms, scores between 15 and 21 indicate insomnia symptoms of moderate severity, and scores mai mari 22 indicate severe insomnia symptoms. ISI internal consistency was excellent in a study from 2011 (Cronbach $\alpha = .90$) (Morin et al., 2011). For ISI the calculus of the Cronbach's alpha coefficient on Romanian population for a 74 subjects sample has shown good internal consistency, $\alpha = .88$.

3. Results

The preliminary statistical analysis sustained the normality of all distributions for both groups. Therefore, in order to check our hypotheses, we applied parametric statistical tests.

To test the research hypothesis a variance analysis was made using ANOVA repeated measures. This analysis was applied to verify if the independent variable, the psychotherapeutic intervention which included relaxation and hypnosis techniques, has a significant effect on the dependent variable, the anxiety which was measured using the HAM-A instrument. The same type of analysis was also used for the depression variable and also for the insomnia dependent variable. The Box test was significant in the situation of variance equality ($p < .01$).

The multivariate tests analysis firstly shows that the effect of the psychotherapeutic intervention which includes relaxation and hypnosis techniques, evaluated in the three phases of our study, has a significant effect on the anxiety level, $F(2, 58) = 37.69, p = .05$, partial $\eta^2 = .623$.

By analysing the size of effect, partial square eta ($\eta^2 = 0.623$) we notice that the treatment has a very high impact of the results on anxiety levels (dependent variables). We may say that 62.35% of the results obtained after measuring the anxiety score, is due to the psychotherapeutic intervention effects based on relaxation and hypnosis techniques.

Moreover, as we expected, the statistical data revealed the fact that the perceived level of depression varied as a result of the psychotherapeutic intervention, $F(2, 58) = 37.81, p = .000$. The effect size indicator partial $\eta^2 = .554$ showed that 55.4 % of the variable variance of the depression dependent variable is due to the effect of the

independent variable (the psychotherapeutic intervention using relaxation and hypnosis techniques). In other words, we may say that 55.4% of the results obtained by measuring the depression indicator are due to the effects of the psychotherapeutic intervention using relaxation and hypnosis techniques on the analyzed sample of subjects.

Similarly, the ANOVA repeated measures variance of the insomnia dependent variable showed that the psychotherapeutic intervention using relaxation and hypnosis techniques, evaluated in the three phases of the study has a significant effect on the level of insomnia severity, $F(2, 58) = 46.95, p = .000$, partial $\eta^2 = .749$). In other words, we may say that 74.9% of the results obtained after measuring the severity of insomnia are due to the effects of the hypnotherapeutic intervention in the case of the analyzed patients.

In addition, for each of the three dependent variables we conducted a repeated measures analysis of variance depending on the participants' gender. As represented in Table 1, the results for both females and males were consistent with the previously mentioned ones that were obtained for the total group.

Table 1. Means, standard deviations and ANOVA results depending on gender

		Women (N = 31)			Men (N = 30)				
		M	SD	F	partial η^2	M	SD	F	partial η^2
HAM-A	Pre intervention	24.09	4.13	35.67**	.63	29.34	6.78	37.21**	.58
	Post-intervention	16.74	3.29			18.22	5.03		
	Follow-up	16.82	3.44			18.48	5.17		
CES-D	Pre-intervention	28.76	5.29	34.81**	.51	28.89	6.41	35.02**	.51
	Post intervention	17.09	4.37			16.79	5.04		
	Follow-up	17.38	4.02			16.91	5.12		
ISI	Pre-intervention	18.76	3.07	44.79**	.69	27.31	5.12	41.36**	.63
	Post-intervention	8.84	2.71			16.37	4.11		
	Follow-up	9.56	2.68			16.29	4.32		

Note. * $p < .05$; ** $p < .01$

All in all, the statistical data from Table 1 suggest that the symptoms of anxiety, depression and insomnia reported by both women and men patients varied significantly along the three moments in which they were measured and that this variation could be explained by the effect of the hypnotherapeutic program.

4. Discussion

The reported results showed that using relaxation techniques and medical hypnosis has been an effective intervention in the case of patients presenting diagnosis of anxious-depressive disorders (of low and moderate intensity) associated with insomnia. Hypnotherapy and hypnosis can bring their contribution to diminishing problems related to anxiety reported by patients, helping them to explore the connections between their own mind and bodies.

Moreover, our study may sustain the fact that the efficacy of this kind of psychotherapeutic intervention could not be related to gender. More precisely, the analyses of variance which we conducted, indicated that the relaxation and hypnosis sessions were beneficial in reducing the anxiety, depression and insomnia symptoms for both women and men patients that participated in this study.

Our results were consistent with the ones obtained in previous research, supporting the fact that hypnosis and relaxation techniques could help patients in gaining a better control over the anxiety, depression and insomnia symptoms that they experienced (e.g., Robertson, 2012).

However, considering the limitations of our study such as the absence of a control group and the lack of representativeness of our sample implied by the low number of participants, we recommend further research on this topic.

References

- Benoit, O, Goldenberg, F. (2004). *L'insomnie chronique* [Chronic insomnia]. Elsevier Masson.
- Chaves, J., F. (2000). Hypnosis in the Management of Anxiety Associated with Medical Conditions and Their Treatment. In Mostofsky, David I. (Ed); Barlow, David H. (Ed), *The Management of Stress and Anxiety in Medical Disorders*, (pp. 119-142). Needham Heights, MA: Allyn & Bacon.
- Diagnostic and statistical manual of mental disorders, fourth ed. (1994). Washington, DC: American Psychiatric Association.
- Evidence Report: Manifestations and Management of Chronic Insomnia in Adults. (2005). Prepared by: University of Alberta Evidence-based Practice Center Edmonton, Alberta, Canada. AHRQ Publication No. 05-E021-2.
- Gilbertson, A. D. & Kemp, K. (1992). Uses of Hypnosis in Treating Anxiety States. *Psychological Medicine*, 10, 13-20.
- Goodwin, F.K., Jamison, K.R. (1990). Manic-depressive illness. New York: Oxford.
- Graci, G., M. & Hardie, J., C. (Jul 2007). Evidence-Based Hypnotherapy for the Management of Sleep Disorders. *International Journal of Clinical and Experimental Hypnosis*, 55(3), 288-302.
- Flammer, E. & Bongartz, W. (2003). On the Efficacy of Hypnosis: A Meta-Analytic Study. *Contemporary Hypnosis*, 20, 179-197.
- Hamilton, M. (1959). The assessment of anxiety states by rating. *British Journal of Medical Psychology*, 32, 50-55.
- Holdevici, I. (2009). *Hipnoza clinică*, Ed. Trei, București.
- Kales, J., Kales, A., Bixler, E.O., Soldatos, C.R., Cadieux, R.J., Kashurba, G.J. & Vela-Bueno, A., (1984). Biopsychobehavioral correlates of insomnia. V: Clinical characteristics and behavioral correlates. *Am J Psychiatry* ;141(11),1371-1376.
- Knight, R.G., Williams, S., McGee, R., & Olaman, S. (1997). Psychometric properties of the Center for Epidemiologic Studies Depression Scale (CES-D) in a sample of women in middle life. *Behavior Research & Therapy*, 35(4), 373-380.
- Kummer, A., Cardoso, F., & Teixeira, A.L. (2010). Generalized anxiety disorder and the Hamilton Anxiety Rating Scale in Parkinson's disease. *Arquivos de Neuro-Psiquiatria*, 68(4):495-501.
- Marchini, E., Coates, T.J, Magistad, J.G. & Waldum, S.J. (1983). What do insomniacs do, think, and feel during the day? A preliminary study. *Sleep*, 6:147-155.
- Michaux, D., Halfon, A. & Wood, C. (2007). *Manuel d'hypnose pour les professions de santé*, [Handbook of hypnosis for health professions], Ed. Maloine, Paris.
- Morin, C.M. (1993). *Insomnia: Psychological Assessment and Management*. New York: Guilford Press.
- Radloff, L.S. (1977). The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.
- Roberts, R., Vernon, S., W., & Rhoades, H. M. (1989). Effects of language and ethnic status on reliability and validity of the CES-D with psychiatric patients. *Journal of Nervous and Mental Disease*, 177, 581-592.
- Robertson, D. (2012). *The Practice of Cognitive-Behavioural Hypnotherapy: A Manual for Evidence-Based Clinical Hypnosis*, Karnac Books.
- Smith, W. H. (1990). Hypnosis in the Treatment of Anxiety. *Bulletin of the Menninger Clinic*, 54, 209-216.
- Taylor, D.J., Mallory, L.J., Lichstein, K.L., Durrence, H.H., Riedel, B.W. & Bush, A.J. (2007). Comorbidity of chronic insomnia with medical problems. *Sleep*, 30(2), 213-218.
- Zammit, G.K., Weiner, J., Damato, N., Sillup, G.P., McMillan, C.A., (1999). Quality of life in people with insomnia. *Sleep*, 22(2): 379-385.
- Yapko, M., D. (2006). Utilizing Hypnosis in Addressing Ruminative Depression-Related Insomnia. In Yapko, Michael D. (Ed), *Hypnosis and Treating Depression: Applications in Clinical Practice*, (pp. 141-159). New York, NY: Routledge/Taylor & Francis Group.