

Abstract

Objective: This study aimed to investigate the effectiveness of hope-oriented psychotherapy in motivation for treatment among drug dependent individuals. **Method:** A quasi-experimental research design along with pretest-posttest and control group was employed in this study. All drug dependent individuals who had referred to addiction rehabilitation centers and clinics of districts 9, 10, and 11 in Mashhad city constituted the statistical population of this study. The number of 40 volunteers was selected as the sample from among this population. Then, the participants were randomly assigned to two experimental and control groups, each group containing 20 subjects. The experimental group received eight 90-minute sessions of hope-oriented group psychotherapy and the control group received no intervention. Both groups completed Stages of Change Readiness and Treatment Eagerness Scale as the pre-test and post-test. **Results:** The results demonstrated that hope-oriented psychotherapy has a significant effect on increasing motivation for treatment, recognition, ambivalence, and taking steps among the drug dependent individuals in the experimental group. **Conclusion:** The utilization of the principles of hope-oriented psychotherapy has an important role in increasing motivation for treatment in drug dependent individuals and can lead to the success of therapeutic programs and other positive treatment outcomes.

Keywords: hope-oriented psychotherapy, motivation for treatment, drug dependency

On the Effectiveness of Hope-Oriented Psychotherapy in Motivation for Treatment among Drug Dependent Individuals

Tayebeh Rahimi-Pordanjani, Ali
Mohammad-Zadeh-Ebrahimi, Zahra
Sabour

Tayebeh Rahimi Pordanjani

Assistant Professor, Department of
Psychology, University of Bojnord, Bojnord,
Iran. Email: tayebe.rahimi@yahoo.com

Ali Mohammad Zadeh Ebrahimi

Assistant Professor, Department of
Psychology, University of Bojnord, Bojnord,
Iran

Zahra Sabour

MA in Counseling, University of Bojnord,
Bojnord, Iran



Research on Addiction
Quarterly Journal of Drug
Abuse

Presidency of the I. R. of Iran
Drug Control Headquarters
Department for Research and Education
Vol. 10, No. 39, Autumn 2016
<http://www.etiadpajohi.ir>

Introduction

Today, an increasing interest has been created in the study of addiction and substance dependence behavior in daily life. Such an interest, on the one hand, arises from the fact that a large part of society is involved and affected by such problematic behaviors, and its diversity and prevalence are expanding (Linskiy et al., 2012; cited in Deleuze et al., 2015); on the other hand, there are heavy consequences of addiction on physical health and psychological well-being (such as social exclusion and social isolation, psychological disorders and physical illnesses), and its social and economic concerns (such as economic costs, health, and care) (Deleuze et al., 2015). There are multiple reasons for the prevalence of addiction and vary considerably depending on the characteristics of different communities. No human being is suddenly and unjustifiably victimized by addiction, but attitudes, beliefs, goals, expectations, and ineffective motivational patterns, or maladaptive motivational structures usually play an important role in this regard (Cox, & Klinger, 2002).

At present, research has been focused on the importance of the role of motivation in the regulation of drug use from the early to advanced stages, reduction of consumption, and its definitive treatment (Sjoerds et al., 2014). In particular, efforts for the treatment of substance dependence cannot be successfully made without the full consideration of motivation. Most of the people who suffer from substance use problems are involved with complex unpredictable problems that are associated with reduced levels of motivation, reluctance to change, and resistance to treatment (Mulia, 2002). In fact, motivation is the first important step for each action or any kind of change in behavior; furthermore, clients' motivation for change is one of the important points of clinical interest in the treatment of drug use disorders (DiClemente, Bellino, & Neavins, 1999). Miller, & Rollnick (2006) argued that the majority of drug addicts are inherently doubtful about change in addition to having poor resistance, weak intent, or personally-minded anomalies.

Motivation for treatment is defined as the state of preparedness or readiness for change, which may vary from one time to another and from one position to another (Miller, & Rollnick, 2006). According to Miller & Tonigan (1996), motivation for addiction treatment includes three stages, including recognition, ambivalence, and taking steps. Recognition refers to the understanding that there is a problematic behavior in a person. Ambivalence is a motivation stage of treatment that comes after the recognition of the problem where the individual is hesitant to stop drug use or not. Finally, taking step is the third stage in treatment motivation where the person takes action to quit his/her problematic behavior.

Over the past few years, researchers and therapists have shown great interest in the concept of motivation and its role in the resolution of drug use problems. Londgren (2015) concluded that increased motivation for treatment has a

significant role in the prediction of participation in treatment and efforts for improvement. Sjoerds et al. (2014) carried out a study on drug users and showed that low motivation is one of the causes of drug dependence, drug use, and drug abuse. Craig, & Sprang (2010) state that drug dependent clients' motivation for change should increase so that they can reach success in their treatment goals. They also view motivation to be a critical factor, which is very effective in people's desire for change and treatment. In other studies, the emphasis has been placed on the role of motivation in the search for and the successful completion of treatment (Crits-Christoph et al., 2009) and readiness to change drug use (Easton, Swan, & Sinha, 2000).

Researchers have investigated the effect of some therapeutic and educational interventions on drug addicts' motivation for treatment. In a study conducted by Knight et al. (2016) on young drug users residing in five care centers, it was revealed that the Treatment Readiness and Induction Program (TRIP) has an impact on the problem recognition, decision-making, onset of treatment, participation in the treatment, and satisfaction with treatment in drug-dependent individuals. In another study, the results showed that the TRIP is directly effective in the recognition of the problem and indirectly affects the willingness to receive help and readiness for change (Becan et al., 2015). Vidrine et al. (2013) showed that motivation and problem solving (MAPS), which is a program based on cognitive-behavioral approach and social cognitive theory, is effective in the success and maintenance of drug use abstinence, and treatment, and the modification of other health risk behaviors. Finally, Kaldavi, Borjali, Falsafinejad & Sohrabi (2011) showed that the mindfulness-based relapse prevention has a great effect on the treatment motivation of opiate addicts.

One of the therapeutic interventions whose effects on the motivation for treating opiate addicts have not been investigated is hope-oriented psychotherapy. This therapy is based on positive psychology in which such factors as welfare, optimism, creativity, meaning in life, continence, social support, hope, etc. have been focused rather than attention to injuries or mental disorders for the purpose of the prevention and treatment of mental and physical illnesses (Snyder, & Mc Cullough, 2000; Seligman, & Csikszentmihalyi, 2000; and Carr, 2004; translated by Pasashashriffi, Najafivad & Jafari, 2008). The hope-oriented psychotherapy has been extracted from Snyder's theory of hope, the ideas of cognitive-behavioral therapy, solution-focused therapy, and narrative therapy (Snyder & Peterson, 2000). Indeed, hope-oriented psychotherapy aims to help clients formulate their goals, build multiple passages to reach them, push themselves forward to pursue goals, and define barriers as the challenges to overcome (Carr, 2004; translated by Pasasharifi et al., 2008). Researchers believe that hopeful people act more effectively in dealing with stressful situations, use more and better coping strategies, and enjoy a higher psychological well-being (Raeasian, Golzari & Borjali, 2010). In addition, research suggests that hope is accompanied by self-efficacy (Lane, & Chapman,

2011; Magaletta, & Oliver, 1999) and the motivation to change individual problems (Haug, Sviki, & Diclemente, 2004; Medalia, & Saperstein, 2011). It has also been shown that hope is associated with therapeutic efficacy and is primarily considered an essential element for patient improvement (Werner, 2012).

Overall, motivation for treatment in drug addicts is one of the important variables in determining the success of treatment programs for addiction; and researchers have put emphasis on the importance of meaning, purpose, and hope in the creation and sustainability of motivation (Ryan, & Deci, 2008). Therefore, the present study seeks to answer the question whether hope-oriented psychotherapy significantly affects the motivation of treatment and its components, i.e. recognition, ambivalence, and taking step in drug addicts?

Method

Population, sample, and sampling method

A quasi-experimental research design along with pre-test-post-test design and control group was used for the conduct of this study. The statistical population consisted of the drug addicts referring to clinics and addiction treatment centers in municipal districts 9, 10, and 11 of Mashhad in 2015. The sampling method was as follows: At first, three addiction treatment centers were randomly selected from each district (a total of 9 centers) from; a call for participation in the psychotherapy sessions was then announced in the centers. A total of 87 individuals were enrolled in the Call Register Program. Then, 42 participants were selected via purposive sampling method by considering the entry and exit criteria. From among this sample, 21 participants were randomly assigned to each of the experimental and control groups. Eventually, due to the inability of one participant in the experimental group to complete the treatment sessions and subsequently the exclusion of one participant from the control group (to observe the equality of the number of the subjects in two groups), the sample size was reduced to 40 ($n = 20$ for each group). It should be noted that the criteria for entry into the present study included placement in the age range of 18 to 40 years, holding minimum education diploma, minimum 12 months of drug dependence, and being under treatment at one of the addiction treatment centers. The exit criteria were also resignation or inability to complete the treatment sessions.

Instrument

The Stages of Change Readiness and Treatment Eagerness Scale: This scale was developed by Miller & Tonigan (1996) to assess the alcoholics' eagerness for change, but, today, it is also used to evaluate the addicts to other types of drugs. This scale contains 19 items, and respondents should specify their degree of agreement or disagreement with each of the items on a 5-point Likert scale (strongly disagree = 1 to strongly agree = 5). The maximum score that can be earned on this scale is 95 and the minimum score is 19. This scale has three

components, namely recognition, ambivalence, and taking step. The recognition subscale reflects the individual's awareness of the problem and his/her desire for change. The ambivalence subscale represents the individual's suspicion and uncertainty about the existence of the problem and the related harms. The step taking subscale entails the activities that the individual has performed to make the change. Miller & Tonigan (1996) reported the Cronbach's alpha coefficient of recognition in the range of 0.85 to 0.95, ambivalence in the range of 0.60 to 0.88, and taking step in the range of 0.83 to 0.96. The convergent validity has been reported through correlation with its 39-item version as follows: 0.96 for recognition, 0.88 ambivalence, and 0.94 for taking step. In Iran, Bashpour, Jafartabar, Narimani & Massah (2013) obtained the Cronbach's alpha coefficients of 0.76, 0.71, 0.85, and 0.83 for recognition, ambivalence, taking step, and for the whole test, respectively. In this study, Cronbach's alpha coefficient was used to measure the reliability of the scale and obtained the values of 0.73, 0.71, 0.69, and 0.70 for the whole scale, recognition component, ambivalence component, and taking step component.

Procedure

After the selection of members of the experimental and control groups, the pre-test was administered to both groups during a session (one week before the treatment sessions). The Stages of Change Readiness and Treatment Eagerness Scale was completed by the individuals in both groups. Prior to the start of the therapy sessions, members of the experimental group were asked to attend a justification session and they were told about the treatment of addiction; its harmful effects on the individual, the family, and the community; the effect of hope and purpose in life; as well as the present research project, goals and duration. They were also provided with information about the confidentiality, the right to resign the research participation whenever they wished, and the time and place of the sessions. Then, the group hope-oriented psychotherapy sessions (Snyder, Michelle & Cheavens, 1999; Snyder, 2000; Snyder & Peterson, 2000) were conducted for the experimental group in 8 weekly 90-minute sessions. One week after the end of the therapy sessions, both groups were post-tested. Table 1 provides a brief description of the sessions of the hope-oriented psychotherapy protocol.

Table 1: A brief description of the sessions of hope-oriented psychotherapeutic protocol

Sessions	Goal and method	Practices
First	Objective: To familiarize members with the therapy and provide guidelines for participation, to introduce the programs and familiarity with the goals of the group, to establish communication and empathy; method: general lines of the sessions for the group members	Members were asked to briefly write a story or a narrative of their life that included their successes and failures in a few pages (up to a maximum of 4 pages) and bring them to the next session.
Second	Objective: To work on the stories and narratives of the members' lives, and to identify the components of hope, including goals, pathways, and agencies in these stories; Method: Voluntary expression of the life story and the expression of the narratives of success and failure; emphasizing the importance of goal in life	Members were asked to write the goals they pursue in life, and write "they have no clear purpose" if they do not pursue any goal.
Third	Objective: To discuss goals and identify the features of appropriate goals (teach how to prioritize achievable and measurable goals). Method: Selection of a positive goal and its maintenance during these sessions	Members were asked to reconsider their goals based on the training they were receiving, to rewrite them, and to mention one of them in the next session.
Fourth	Objective: To provide a list of routes and identify the appropriate pathways for achieving goals (i.e., to change from the abstract state to an objective one); Method: Conversion of the general goals to micro goals and determination of the routes to reach the goals	Members were asked to write all the possible and effective ways to achieve their goals, and to present them at the next session.
Fifth	Objective: To work on increasing the agency force by using positive thinking and repeating positive words; Method: expressing goals positively and emphasizing positive thinking	Members were asked to use this technique in their everyday lives and try to use positive sentences and positive thoughts in daily interactions and present the results to the group in the next session.
Sixth	Objective: To identify barriers, including negative self-reports and cognitive errors. Method: Discussing the obstacles in order to achieve the goal and reviewing the negative self-beliefs	Members were asked to provide a list of the barriers and negative self-statements that were created in pursuit of their intended goals.
Seventh	Objective: To teach how to combat obstacles by creating successive pathways through creativity. Method: How to deal with the obstacles and to show creative thinking to create successive pathways	Members were asked to write a brief summary of the progress of the objectives set in the first sessions and to present them at the next session.
Eighth	Objective: To sum up and conclude from the whole group sessions, and to hold the final celebration; Method: Keeping in mind to have hope in life and enjoy it	-

Results

The mean age of patients in the experimental group equaled 31.6 years, with a standard deviation of 5.62 years and that was 30.45 years in the control group, with a standard deviation of 5.64 years. In terms of education levels in the

experimental group 20 % of those had diploma, 40% had associate degree, 30 % had bachelor and master's degree were 10 % . Also, in the control group 22% had diploma, 38 % had associate degree, 32 % of them had bachelor and master's degree were 8% . Descriptive statistics treatment eagerness and its components in separate groups and types of tests are presented in Table 2.

Table 2: Descriptive statistics treatment eagerness and its components in separate groups and types of tests

<i>Variables</i>	<i>Groups</i>	<i>Pretest</i>		<i>Posttest</i>	
		<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
treatment eagerness	Experimental	61.25	8.90	81.90	3.60
	Control	57.05	11.04	54.55	9.62
recognition	Experimental	26.35	5.08	33.25	1.33
	Control	24.20	6.27	23.50	6.06
ambivalence	Experimental	14.70	2.72	11.65	3.36
	Control	14.15	2.72	14.55	3.28
taking step	Experimental	18.40	5.16	37	1.97
	Control	17.45	5.30	16.50	4.57

Multivariate analysis of covariance should be used to evaluate the effectiveness of hope-oriented psychotherapy. One of the assumptions of this analysis is the normal distribution of scores. Kolmogorov-Smirnov test results showed that this assumption is established in the experimental group in subscale of recognition ($P>0.05, z=0.95$), ambivalence ($P>0.05, z=0.55$), and taken step ($P>0.05, z=0.89$). Also in control group this assumption is established in subscale of recognition ($P>0.05, z=0.54$), ambivalence ($P>0.05, z=0.58$), and taken step ($P>0.05, z=0.76$). Levene's test was used to evaluate the homogeneity of variances. The results showed that this assumption is established in terms of recognition ($P>0.05, z=0.13$), ambivalence ($P>0.05, z=0.40$), and taking step ($P>0.05, z=0.43$). The results of regression slope homogeneity default are presented in the table below.

Table 3: Results of regression slope homogeneity

<i>Interactions</i>	<i>Sum of squares</i>	<i>df</i>	<i>Mean of square</i>	<i>F statistic</i>	<i>Sig.</i>
Independent variable* pretest of recognition	1855.22	2	927.61	46.8	0.052
Independent variable *pretest of ambivalence	4.75	2	2.37	0.28	0.75
Independent variable *pretest of taking step	25.41	2	12.7	1.65	0.21

As in Table 3, assumption of homogeneity of regression slopes in all components is established. To verify the linearity of the relationship between the dependent variables, scatter diagram of dependent variables were drawn in case none of the components of non-linearity was observed. So multivariate analysis of covariance was performed and results suggest difference was significant ($P<0.001, F=182.45, \text{Lambda Weeks}=0.89$). Univariate analysis of covariance was used to investigate different patterns as following table.

Table 4: Results of univariate analysis of covariance to evaluate patterns of differences in eagerness factors

Variables	Sum of squares	df	Mean of square	F statistic	Sig.	Size effect
recognition	572.58	1	572.58	90.92	0.0005	0.72
ambivalence	103.93	1	103.93	11.56	0.002	0.25
taking step	3442.43	1	3442.43	434.66	0.001	0.92

As can be seen in the table above, there is a difference in all components. In other words hope-oriented psychotherapy has been able to improve eagerness factors.

Discussion and Conclusion

The aim of this study was to examine the effectiveness of hope-oriented psychotherapy in the treatment motivation of drug addicts. The results indicated that hope-oriented psychotherapy is effective in increasing the motivation for treatment and its components, i.e. recognition, ambivalence, and taking step in drug addicts. In fact, no research has yet examined the effect of hope-oriented psychotherapy on the motivation for treatment in drug-dependent people. Hence, the results of this study were compared with the following studies and were consistent with them: Hampton et al. (2011) on the mediating role of motivation in the relationship between hope and addiction treatment; Koehn, O'Neil, & Sherry (2012) on the critical role of hope in substance abuse counseling; Raeasian et al. (2010) on the impact of hope therapy training on the reduction of depression and prevention of relapse in female drug addicts; DiClemente et al. (1999) on the role of motivation for change and treatment in alcohol-dependent individuals; and Rubak, Sandbæk, Lauritzen, & Christensen (2005) on the impact of hope on changing the level of motivation.

Induction of hope in psychotherapy sessions is an active process that emphasizes mobility, directional change, and activity rather than passive expectation. Hope therapy is a creative process that develops a different perspective from the previous perspective of clients (Koehn et al., 2012). The individuals who gain a higher level of hopefulness as a result of exposure to hope-oriented psychotherapy are more creative in finding alternative ways to achieve their goals, are more motivated to pursue their goals, and, more importantly, consider challenges as barriers. They believe that they are able to learn from past successes and failures to achieve future goals. They choose the goals that need more effort. They are confident in their skills and goals and focus on them. In fact, the individuals with a high level of hope do not only enjoy the outcome and product of the goal achievement but also enjoy the process (Chan, 2009). All these changes are accompanied by increased motivation for treatment in drug addicts. An important part of the effectiveness of hope-oriented psychotherapy in drug-dependent people's motivation for treatment returns to the high level of thinking of the agency thinking and motivation (Snyder et al., 2002). Agency thinking is an important motivational component for moving the

individual into the paths that s/he has taken to achieve the goal. In fact, the agency thinking is a sense of confidence in succeeding in achieving the goal, which creates a sense of power in the individual in which s/he regards him/herself an effective factor in the conditions. This brings about motivation. In other words, the individuals with a high level of hope feel that they are controlling their personal events on their own. As a result, they consider themselves as active creatures that are able to self-regulate and regulate their own behavior. This sense of control is the basis for the creation of motivation, well-being, and individual achievements in all spheres of life (Rand, Martin, & Shea, 2011).

Additionally, the goal setting strategy, which is emphasized in the hope-oriented psycho-therapy sessions increases individual self-efficacy in order to acquire the skills necessary to pursue goals and overcome the challenges that bar the achievement of these goals (Cervone, Artistic, & Berry, 2006). In fact, people's perceived capacity and ability in the development of strategies for achieving goals may increase through hope therapy (Snyder, 1999; cited in Hampton et al., 2011). This lead to an increase in the rate of motivation for treatment. Hopeful people have more energy and positive emotions. Hope creates a motivational and meaningful state and provides the necessary energy for the person who has been entrapped in difficult situations so that s/he can deal with the hardships to reach the goal and adapt him/herself to the conditions (Cabral, Suescun, Zigman, & Perello, 2012).

Previous studies suggest the availability of a strong relationship between self-esteem and hope (Frieson, & Frieson, 1997). It has also been revealed that self-esteem plays an important role in drug use (Lewis, Phillippi, & Neighbors, 2007; Rao, Czuchry, & Dansereau, 2009; Rowan-Szal, Joe, Simpson, Greener, & Vance, 2009). The principles and concepts used in hope-oriented psychotherapy can be accompanied by increased self-esteem in drug-dependent individuals, and this change in self-esteem level, in turn, increases their motivation to pursue goals (Law, & Gou, 2012).

Finally, hope-oriented therapy can lead to increased therapeutic motivation in drug addicts due to some other changes. Research has shown that the increase in the level of hope, as a mediator, serves to improve the outcomes of mental health, job seeking, and reduced dependence on others. People who have gained a higher level of hope through hope therapy are more likely to use strategies, such as coping styles, receipt of support, and cessation of unpleasant and negative thoughts in order to better manage stressful situations. It has also been found that hope-oriented interventions reduce the level of anxiety and depression and increase self-esteem (Hergenrather, Geishecker, Clark, & Rhodes, 2013). In particular, the factor of agency thinking, which is emphasized in hope therapy sessions, is effective in improving the symptoms of depression and anxiety in drug-dependent people (May, Hunter, Ferrari, Noel, & Jason, 2015).

According to the findings of the present study, the application of hope-oriented psychotherapy principles by psychologists and other professionals in clinics and other centers of addiction treatment is of great importance as it can play a crucial role in increasing the motivation for treatment in drug dependent people and, consequently, it leads to the success of therapeutic programs and other positive therapeutic outcomes. The absence of a follow-up stage, the limited statistical population of the research to drug addicts in municipal districts 9, 10, and 11 of Mashhad were among the limitations of this study. In addition, motivation for treatment is, in fact, one of the most important facilitating conditions that provides the basis for the success of addiction treatment. It was not investigated to what extent the current therapy has been successful in treatment and withdrawal of addiction in increasing the motivation of treatment in those who were under the therapy sessions in the present study. It is also suggested that the rate of success in relapse prevention be investigated by comparing a control group with an experimental group through hope-oriented psychotherapy. On this basis, it is also suggested that future research examines the extent to which increased motivation for treatment through hope-oriented psychotherapy leads to success in the treatment and withdrawal of addiction. It is also recommended that researches examine the rate of relapse or return to addiction in people who receive hope-oriented psychotherapy.

Reference

- Basharpoor, S.; Jafartabar, AR.; Narimani, M.; and Messah, O. (2013). The role of risk perception and self-reflection treatment eagerness in predicting drug-dependent individuals. *Rehabilitation Journal*, 14 (60), 9-21.
- Becan, J.E.; Knight, D.K.; Crawley, R.D.; Joe, G.W.; & Flynn, P.M. (2015). Effectiveness of the Treatment Readiness and Induction Program for increasing adolescent eagerness for change. *Journal of Substance Abuse Treatment*, 50, 38-49.
- Cabral, A.; Suescun, O.; Zigman, J.M.; & Perello, M. (2012). Ghrelin indirectly activates hypophysiotropic CRF neurons in rodents. *Plos one*, 7(2), 10-3. DOI: 10.1371/journal.pone.0031462.
- Carr, A. (2008). *Positive psychology, the science of human happiness and strength*, translated by Pasha Sharifi, H.; Najafi Zand, J.; Sanaee, B. Tehran: Sokhan.
- Cervone, D.; Artistic, D.; & Berry, J. (2006). Self-efficacy and adult development. In C. Hoare (Ed.), *Handbook of adult development and learning* (pp. 169-195). New York: Oxford University Press.
- Chan, C.Y. (2009). *Hope, Participation, and subjective well-being of people with spinal cord injuries in the community*. Doctoral Dissertation, University of Wisconsin-Madison.
- Cox, W.; & Klinger, E. (2002). Motivational structure: relationship with substance use & processes of change. *Addictive behavior*, 27(6), 925-40. DOI: 10.1016/S0306-4603(02)00290-3.
- Craig, C.D.; & Sprang, G. (2010). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety, Stress, & Coping*, 23(3), 319-39.
- Crits-Christoph, P.; Gallop, R.; Temes, C.M.; Woody, G.; Ball, S.A.; Martino, S.; & Carroll, K.M. (2009). The alliance in motivational enhancement therapy and counseling as usual for substance use problems. *Journal of Consulting and Clinical Psychology*, 77, 1125-35.

- Deleuze, J.; Rochat, L.; Romo, L.; Van der Linden, M.; Achab, S.; Thorens, G.; Khazaal, Y.; Zullino, D.; Muraige, P.; Rothen, D.; & Billieux, J. (2015). Prevalence and characteristics of addictive behaviors in a community sample: A latent class analysis. *Addictive Behaviors Reports, 1*, 49–56.
- DiClemente, C.C.; Bellino, L.E.; & Neavins, T.M. (1999). Motivation for change and alcoholism treatment. *Alcohol Research & Health, 23*(2), 86-92.
- DiClemente, C.C. (1999). eagerness for change: Implications for substance abuse treatment. *Psychological Science, 10*(3), 209-13.
- Easton, C.; Swan, S.; & Sinha, R. (2000). Motivation to change substance use among offenders of domestic violence. *Journal of Substance Abuse Treatment, 19*(1), 1-5.
- Frieson, T.C.; & Frieson, C.W. (1997). Relationship between hope and self-esteem in transplant recipients. *Transplantation Proceedings, 29*, 3739-40.
- Hampton, A.S.; Conner, B.T.; Albert, D.; Anglin, M.D.; Uradab, D.; & Longshore, D. (2011). Pathways to treatment retention for individuals legally coerced to substance use treatment: The interaction of hope and treatment motivation. *Drug and Alcohol Dependence, 118*(2-3), 400-7.
- Haug, N.A.; Svikis, D.S.; & DiClemente, C. (2004). Motivational Enhancement Therapy for Nicotine Dependence in Methadone-Maintained Pregnant Women. *Psychology of Addictive Behaviors, 18*(3), 289-92.
- Hergenrather, K.H.; Geishecker, S.; Clark, G.; & Rhodes, S.D. (2013). A pilot test of the hope intervention to explore employment and mental health among African American gay men living with HIV/AIDS: results from a CBPR study. *AIDS Education and Prevention, 25*(5), 405–22.
- Kaldoi, A.; Borjali, A.; Falsafinejad, M.R.; Sohrabi, F. (2011). The effectiveness of relapse prevention model based on the mind-awareness in relapse prevention and motivation in Individual with opiate dependence. *Journal of Clinical Psychology, 3* (12), 79-69.
- Knight, D.K.; Joe, G.W.; Crawley, R.D.; Becan, J.E.; Dansereau, D.F.; & Flynn, P.M. (2016). The Effectiveness of the Treatment readiness and induction program (TRIP) for improving during-treatment outcomes. *Journal of Substance Abuse Treatment, 62*, 20-7.
- Koehn, C.; O'Neill, L.; & Sherry, J. (2012). Hope-Focused Interventions in Substance Abuse Counselling. *International Journal of Mental Health Addiction, 10*(3), 441–52. DOI: 10.1007/s11469-011-9360-3.
- Lane, F.; & Chapman, N. (2011). The Relationship of Hope and Strength's Self-efficacy to the Social Change Model of Leadership. *Journal of Leadership Education, 10*(2), 116-37.
- Law, F.M.; Gou, G.J. (2012). Hope and recovery from substance abuse for female drug offenders in Taiwan. *International Journal of Offender Therapy and Comparative Criminology, 56*(8), 1258–82.
- Lewis, M.A.; Phillippi, J.; & Neighbors, C. (2007). Morally based self-esteem, drinking motives, and alcohol use among college students. *Psychology of Addictive Behaviors, 21*, 398-403.
- Londgren, J.K. (2015). *A Phenomenological Study of the Experience of Counseling for Women with Addictions*, (Doctoral dissertation), Minnesota State University, Mankato.
- Magaletta, P.R.; & Oliver, J.M. (1999). The hope construct, will, and ways: their relations with self-efficacy, optimism, and general well-being. *Journal of Clinical Psychology, 55*(5), 51-3.
- May, E.M.; Hunter, B.A.; Ferrari, J.; Noel, N.; & Jason, L.A. (2015). Hope and Abstinence Self-Efficacy: Positive Predictors of Negative Affect in Substance Abuse Recovery. *Community health public journal, 51*, 695- 700.
- Medalia, A.; & Saperstein, A. (2011). The Role of Motivation for Treatment Success. *Schizophrenia Bulletin, 37*(s2), s122-8. DOI: 10.1093/schbul/sbr063.
- Miller, W.R.; & Rollnick, S. (2006). Motivational Interviewing: Preparing People for Change. *Developmental and Behavioral Pediatrics, 27*(5), 417-20.

- Miller, W.R.; & Tonigan, J.S. (1996). Assessing Drinkers' Motivation for Change: The Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES). *Psychology of Addictive Behaviors*, 10(2), 81-9.
- Mulia, N. (2002). Ironies in the pursuit of well-being: The perspectives of low-income, substance-using women on service institutions. *Contemporary Drug Problems*, 29(4), 711-48.
- Raisiian, A.; Golzari, M.; Borjali, A. (2011). The effectiveness of hope therapy on depression symptoms and prevention of relapse in drug-dependent women. *Research on Addiction*, 5(17), 40-21.
- Rand, K.L.; Martin, A.D.; & Shea, A.M. (2011). Hope, but not optimism, predicts academic performance of law students beyond previous academic achievement. *Journal of Research in Personality*, 45, 683-6.
- Rao, S.R.; Czuchry, M.; & Dansereau, D.F. (2009). Gender differences in psychosocial functioning across substance abuse treatment. *Journal of Psychoactive Drugs*, 41, 267-73.
- Rowan-Szal, G.; Joe, G.W.; Simpson, D.; Greener, J.M.; & Vance, J. (2009). During-treatment outcomes among female methamphetamine-using offenders in prison-based treatments. *Journal of Offender Rehabilitation*, 48, 388-401.
- Rubak, S.; Sandbæk, A.; Lauritzen, T.; & Christensen, B. (2005). Motivational interviewing: a systematic review and meta-analysis. *British Journal of General Practice*, 55(30), 305-12.
- Ryan, R.M.; & Deci, E.L. (2008). A Self-Determination Theory Approach to Psychotherapy: The Motivational Basis for Effective Change. *Canadian Psychology*, 49(3), 186-93.
- Seligman, M.; & Csikszentmihalyi, M. (2000). Positive psychology: an introduction. *American psychology*, 55, 5-14.
- Sjoerds, Z.; Luijckx, J.; Brink, W.; Denys, D.; & Yucel, M. (2014). The Role of Habits and Motivation in Human Drug Addiction: A Reflection. *Front Psychiatry*, 5(8), 1-5. DOI: 10.3389/fpsy.2014.00008.
- Snyder, C.R. (2000). *Handbook of hope: theory, measures, and applications*. ACADEMIC PRESS, USA.
- Snyder, C.R.; & McCullough, M.E. (2000). A positive psychology field of dreams: If you build it, they will come. *Journal of Social and Clinical Psychology*, 19(1), 151-70.
- Snyder, C.R.; & Peterson, C. (2000). *Handbook of hope: theory, measures & applications*. San Diego: Academic Press.
- Snyder, C.R.; Michael, S.; & Cheavens, J. (1999). Hope as a psychotherapeutic foundation of nonspecific factors, placebos, and expectancies. In M. A. Hubble, B. Duncan, & S. Miller (Eds.), *Heart and soul of change* (pp. 179-200). Washington, DC: American Psychological Association.
- Snyder, C.R.; Shorey, H.S.; Cheavens, J.; Pulvers, K.M.; Adams, V.H.I.; & Wiklund, C. (2002). Hope and academic success in college. *Journal of Educational Psychology*, 94(4), 820-6.
- Vidrine, J.I.; Reitzel, L.R.; Figueroa, P.Y.; Velasquez, M.; Mazas, C.A.; Cinciripini, P.M., & Wetter, D.W. (2013). Motivation and Problem Solving (MAPS): Motivationally Based Skills Training for Treating Substance Use. *Cognitive and Behavioral Practice*, 20(4), 501-16.
- Werner, S. (2012). Subjective well-being, hopes, and needs of individuals with serious mental illness. *Journal of Psychiatry Research*, 14(2), 1-6.