Comparing the training effects of problem-solving and coping skills with stress

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Abstract
This research compares the effect of problem-solving and stress management skills by two methods, tradition and workshop, in reducing tendency to addiction on male students in the academic years 91–92. The research population included all male students in the College of literature, Science and humanities in Arak University, in which, 30 students were selected by available sampling method. The students were placed in two groups with random selection. The first group were trained by the traditional method of problem-solving and stress management skills, and the second group were trained each skills with workshop method. Statistical analysis of the data demonstrated that training problem solving and stress management skills using both traditional and workshop method have been effective in reducing the tendency to addiction. Providing training on the problem-solving and stress management skills can enable individuals behave effectively, and thus, as a coping strategy, prevent them from tendency to addiction.

Keywords: Problem-solving skills, traditional training methods, tendency to addiction.

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1. Introduction

Despite extensive efforts have been made worldwide to control drug, the prevalence of drug abuse continues to grow and age of drug use is declining. However, addiction is considered as a very real threat to the physical, mental, moral, economic and cultural societies. In the majority of countries, particularly in the developing countries, its use caused serious negative implications. The National Institute on Drug Control in America, according to a comprehensive long-term study, has announced that, in many cases, the persons used the drug were between 13 and 17 years of age (Abdolahpoor, 2008). Therefore, a strong solution to eliminate or at least limiting its use is needed. Some studies have shown that drug addicts did not learn some life skills and had weaknesses in character (Yarmohamadi, Arjmand & Ghanadi, 2009). A person who is not adequately equipped to deal with problems, prone to drug addiction to relieve the anxiety brought down. Extensive research has also shows that young people with poverty and inadequate social skills are not only more susceptible to the effects of drug use, rather, they are motivated to use drugs as a coping method. Life skills and mental ability affect social and adaptive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. Learning these skills can promote personal and social development, human rights protection and the prevention of mental health-social problems (World Health Organization, 1997). So what’s the flaw may have more coping skills deficiencies or skills training to master the more it becomes necessary to overcome the inhibiting factors. Robab (2012) states that, in his research paper, primary prevention through training and approach—oriented school, all of which are focused on education, is being done; in this struggle, the problem of drug abuse in young adults is lack of basic skills as well there is a lack of basic data. So, education provided by schools can save adolescents against drug use. Botvin and Griffin (2004) also believe that Life Skills Training Program have positive effects in reducing alcohol, tobacco, marijuana and illicit drugs. So, this kind of primary prevention should be based largely on school programmes. People cope with stress in many ways; we can group most of them into two major categories. In the style known as monitoring in which one attends carefully to the stressful event or at least avoids thinking about it. Some people tend to rely more on one style than on the other, but it is best to alternate between the two depending on circumstances as most people do. The study of stress in humans began to rise decades ago with the publication of Holmes and Rahe’s (1967) checklist of major life changes and their associated readjustments. Thoits (1995) indicated that exposure to negative events and social statuses of the disadvantaged social groups are more vulnerable to stressors than groups that are not disadvantaged. Thoits conducted a study comparing similar levels of impact to stress among women, the elderly, the unmarried and those with low socioeconomic statuses. Thoits found evidence showing that there were higher levels of psychological distress or depression in the low economic population than their counterparts. Mothers who raise children alone often are faced with vulnerability, which can lead to emotional instability (Thoits, 1995).

Building a support system will increase stability, but without support, single mothers begin to fit into the category of the disadvantage social group. Thoits emphasised not all socially disadvantaged groups are generally vulnerable to all types of stress. According to Thoits, ‘When cumulative indices of events or strains are disaggregated into particular types of stressors (e.g., love loss events, income loss events, uncontrollable events, and so on), different groups appear to be vulnerable to specific subsets of stressors instead’ (p. 55). Women seem to be more vulnerable to attachments, or events that happened to loved ones among their social network such as declined health, becoming unemployed, divorce or loss of a love one. According to Lazarus (1990) psychological stress refers to a particular kind of relationship between a person and environment. A stressful relationship involves high demands. There are high numbers of demands in parenting stress for single mothers, such as, childcare, finding employment, finances, assistance from previous partners/spouses, family support and social support (Lazarus, 1990). Single mothers are vulnerable to stressful life experiences when parenting. While searching for employment, the single mother’s education will often determine the type of job she finds. Mothers with a higher education tend to report less parenting anxiety and
experience less constriction while reporting more joy and new meaning to life (Nomaguchi & Brown, 2011). Thoits (2010) found ‘early stress research in psychology and sociology focused only on the health effects of acute changes in people’s lives, such as divorce, job loss, bereavement and child’s car accident’. Thoits also emphasised that previous researchers disregarded other problems or demands that were recurrent or lasting, requiring individuals to readjust their behaviours over long periods of time. Thoits provided examples of persistent and repeated demands which were similar situations that may have contributed to single mothers’ stressors, such as insufficient income to pay monthly bills, work-family conflict, caring for a disabled child or frail parent, troubled relationships with coworkers and living in a dangerous environment. The ongoing problems continue to exist among single parenting households, especially among single mothers.

Lazarus (1990) identified stress as a particular kind of relationship between a person and environment, while Thoits (1995) suggested that disadvantaged social groups are more vulnerable or emotionally reactive to stressors due to inconsistency in regards to social status and exposure to negative events. Thoits emphasised that previous researchers focused mainly on health effects on people lives and ignored other problems or demands of stress which were recurrent or lasting, requiring individuals to readjust their behaviours over long periods of time. Stress-related problems still continue to exist among single mothers. Thoits suggested that researchers should focus on specific subsets of stressors instead. The study will focus on the subnet of stressors to identify the factors and effects of stress among single mothers and married mothers. The concept of coping exists among previous studies involving individuals with minor and major events. It began to spread during the 1960s and 1970s along the interest in stress. Lazarus’s (1993) views of coping theory had begun to change in the late 1970s. Lazarus no longer viewed coping as a major standing. Instead, Lazarus treated coping in a different approach, which in turn, people were treated based on their behaviour and action. From a coping perspective, Lazarus found that coping reflected every aspect of a situation based on the occurrences of condition and circumstance that will change over a period of time. Lazarus conducted a study using ways of coping and adopted the ideas of using other scales demonstrating related viewpoint and methods. In the research, Lazarus found that some coping strategies were somewhat consistent, and others were very consistent across stressful encounters. For an example, ‘seeking social support was very inconsistent, whereas positive reappraisal was modestly—but insignificant statistically—consistent’ (Lazarus, 1993). Lazarus (1993) emphasised that ‘approaches to coping as style and as process are both essential in that they each address different aspects of the problem’, but yet found that both approaches concur with one another. In helping single mothers cope through crisis situations, professionals must first examine how they are responding to new situations and what they are doing about themselves in an effort to cope. In doing so, professionals must determine what coping strategies are working and which ones are not working in creating short- and long-term goals for single mothers (Lazarus, 1993). Stress theories were chosen for this study in efforts to understand and further identify the stressful situations in the lives of single mothers and the factors that contribute to their stress. Stress involves environmental and major life changes that exist among many mothers who are single. As mentioned previously, Lazarus referred stress to a particular kind of relationship between a person and environment, in turn relates to the purpose of this study. Coping theories were chosen in this study to address the minor and major events of an individual problem or situation. This theory will help identify the occurrences and circumstances of single mothers and how they manage their responses to stressors. The consistency of coping strategies will be used to support this study (Williams, 2016).

Signs of stress include insomnia, overeating or not eating enough, irritability, depression, lack of focus and chronic exhaustion. If you or your partner is struggling with emotional or physical health concerns because of the stress in your relationship, talk to a doctor. Don’t keep ignoring the signs of stress, or you’ll find yourself facing bigger problems. Do you pull away from your partner when you’re stressed at home or work, like I do? Maybe you tend to explode in anger, or turn to addictive behaviour (overeating, gambling, drinking and drugging it up). The results of previous research studies support the conceptual model of research.
Aim of Williams (2016) study was to focus on understanding the relationships between stress, coping and social support among single mothers versus mothers who are not single. Knowledge regarding how single mothers’ lives are affected by stress, social support and coping is important, and such information can help readers better understand how effectively single mothers raise children compared with mothers who are not single. A convenience sample of 173 mothers completed this study. Participants in this study consisted of mothers who were (a) raising at least one child ages 18 and under who lives in the home and (b) who were between the ages 20 and 55 years old with a 12th-grade education or greater. Participants were classified into single mothers (those who reported their status as single, to include never married, separated, divorced, in a committed relationship, and widowed; n = 75) and those who were not single (those who reported their status as married, n = 98).

Data were scored based on three measurement scales: (a) the perceived stress scale, (b) the ways of coping questionnaire (c) and the social support scale. An independent samples t test determined that mothers who were not single had higher social support than did single mothers, whereas single mothers had higher perceived stress than mothers who were not single. There were no significant differences on measures of coping. An analysis of covariance revealed no significant difference between stress and coping strategies among the mothers when social support was held constant. This study contributes to social change by providing awareness of the importance of social support to professionals and for single mothers. The findings of this quantitative study can thus guide single parenting research and interventions.

Although prominent models of alcohol use and abuse implicate stress as an important motivator of alcohol consumption, research has not consistently identified a relationship between stress and drinking outcomes. Presumably stress leads to heavier alcohol consumption and related problems primarily for individuals who lack other adaptive methods for coping effectively with stressful experiences. To test this hypothesis, we examined four adaptive coping approaches (active coping, planning, suppression of competing activities and restraint), as predictors of alcohol use and related problems as well as moderators of relations between stress and drinking outcomes in an undergraduate population (N = 225). Furthermore, we examined coping motives for drinking as potential mediators of the effects of coping strategies as well as stress by coping strategy interactions. Analyses supported both restraint and suppression of competing activities as moderators of the influence of stress on alcohol use but not problems. The stress by restraint interaction was also evident in the prediction of coping motives, and coping motives were related to higher levels of both weekly drinking and alcohol-related problems. Finally, coping motives for drinking served to mediate the stress by restraint interaction on weekly drinking. Overall, these results suggest that efforts to suppress competing activities and restrain impulsive responses in the face of stress may reduce the risk for heavy drinking during the transition from high school to college (Corbin, 2013).

2. Method

The research design is quasi-experimental with pre-test and post-test steps. The statistical population in this study, all male students in Arak University, the Faculty of Letters and Human Sciences were in the 2012–2013 school year. All students were selected in the school community, including courses in English language and literature, Arab, Persian language and literature, psychology and educational sciences, theology, history and physical education. From the above statistical population, the 30 male students were randomly selected from the available all academic disciplines at the selected schools. And the dependent variable was measured, namely, the tendency to addiction, in all the participants through questionnaires, the pre-test. Subjects were then randomly divided into two groups. One group received traditional teaching skills and other skills were trained in a workshop. Learning these skills over a period of 4 weeks, two sessions were held for 90 minutes in each week. In the first 2 weeks of classes, training and education were done traditionally. Researcher provided the content in all four sessions of the traditional lecture method. While speaking on the topic of tools, such as PowerPoint, educational brochures and pamphlets were used. Training workshop on
coping skills and problem solving was conducted in the third and fourth weeks. After performing a training process, the performance of the test was measured to compare their tendency to addiction. And finally, by compiling the data from the pre-test and post-test, the results were analysed.

3. Data collection instruments: Questionnaires tendency to addiction

Addiction susceptibility scale (APS) was built by using a set MMPI Articles by Wade et al. (1992). The questionnaire contains 39 matters. Participants answered this questionnaire by marking the Yes or No options. For each response of Yes, a good rating to each answer, zero points are awarded. Reverse grading is done on the reverse action. People who had high scores on each of these scales have the higher tendency towards addiction. Disposition Inventory subscales trends of drug addiction ( or is the same (APS). Using Cronbach’s alpha reliability of this scale in Iran 0/53, the split method is also calculated 0/53 (Quoting Aderm & Nikmanesh, 2011). In the present study, Cronbach's alpha coefficient of reliability statistics using a sample of 30 subjects is calculated 0/82.

4. Findings

Hypothesis 1: the traditional method of teaching problem solving and coping is effective in reducing the tendency to addiction.

| Table 1. Calculate the t-test between the scores of groups associated with the traditional approach to addiction trend in the pre-test and post-test |
|---------------------------------------------------------------|
| Average | $F$ | $T$ | Freedom degree | Significant level |
|--------|-----|----|----------------|------------------|
| Pre-test | 19.66 | 1 | -3.56 | 14 | 0.003 |
| Post-test | 17/80 | | | |

Table 2. Calculate the t-test scores, reducing the tendency to addiction-related groups between the pre-test and post-test workshop

| Table 2. Calculate the t-test scores, reducing the tendency to addiction-related groups between the pre-test and post-test workshop |
|---------------------------------------------------------------|
| Average | $T$ | Freedom degree | Significant level |
|--------|-----|----------------|------------------|
| Pre-test | 21.73 | -6.73 | 14 | 0.000 |
| Post-test | 16/86 | | |

In Table 2, reducing the tendency to addiction by means of student problem solving and coping skills training workshops was shown. This number in pre-test was 21/73, and after exercise teaching and workshops declined to the average 16/86. Also correlated t-test to compare pre-test and post-test shows that the $T = -6/73$. With 14 degrees of freedom in the $p < 0.05$, there are significant differences between pre-test and post-test. This indicates that the tendency to addiction scores of workshops has been significantly reduced. Therefore, problem-solving and coping skills training workshop method is effective in reducing the tendency to addiction.

Hypothesis 2: problem solving and coping skills training workshop method is more effective in reducing the tendency to addiction compared with the traditional method.

| Table 3. Comparison of the mean of standard deviation of both traditional and workshops methods in the pre-test |
|---------------------------------------------------------------|
| Teaching methods | The sample | Mean | Standard deviation | Standard error |
|------------------|-------------|------|--------------------|---------------|
| Traditional     | 15          | 17.80| 0.74               | 0.967         |
| Workshop        | 15          | 16.86| 3.02               | 0.779         |
As you can see in Table 3, the mean of the tendency to addiction in the traditional post-test is 17/80. The mean of these scores for the pre-test group that were trained in a workshop is 16/86. The results of the independent t-test for compare the post-test scores tend to be addictive in traditional and workshop groups according to Table 4 which shows that number of $t = 0/751$ in the $p < 0/05$ does not show significant difference between mean scores of the two traditional groups and workshops in the post-test. Thus, it can be concluded that the tendency to addiction scores in both groups showed any significant difference between traditional and after teaching workshop, and both traditional and workshop methods have been able to decrease the tendency to be addictive.

| Teaching methods | Mean | Standard deviation | Standard error | $F$ | Significance level | $T$ | Degree of freedom | $E$ |
|------------------|------|--------------------|----------------|-----|---------------------|-----|------------------|-----|
| Traditional      | 17/80| 0/74               | 0/967          | 0/035| 0/854               | 0/751| 28               | 0/459|
| Workshop         | 16/86| 3/02               | 0/779          |      |                     |      |                  |      |

It should be noted that, due to the difference between the mean scores of both groups tended to abuse in traditional and post-test workshop, we can say that scores tended to addiction in those who had received skills training workshop has been reduced to a greater extent. Thus, the workshop method has been a bit more effective, but this difference is not significant.

5. Discussion and conclusion

As the findings show, due to lack of skills and abilities in dealing with the problems, people are vulnerable to a variety of mental, behavioural and social disorders. This study showed that people, who are trained in life skills, significantly increase the strength of their defence against the problems and it prevents their tendency towards addiction. In the other words, skills training to empower is a factor against the tendency to addiction. Also, according to research by Fini, Kavoosian and Ramezani (2010) people with low social competence and skills have the worst prognosis and the highest rate of drug use. Based on the findings of Taremian (2012), in situations where the individual's problem-solving ability is weak or does not have sufficient ability to deal with the issues, as a result, the incidence of disturbing psychological states such as anger, sadness and frustration is inevitable. Therefore, in such situations, increase and enhance the capacity of individual and social adaptation is one of the methods suitable for the lost regain consistency. According to Mohammadi, Shagahgi and Zare (2008), teaching life skills to prevent drug abuse is based on the following assumptions: people who take drugs are faced a series of defects in the internal workings of personal and interpersonal; interpersonal defects include lack of critical thinking skills, problem solving and decision making and interpersonal defects include lack of social skills. Therefore, the purpose of life skills in this field is increases the personal and interpersonal functions for handling and more constructively solving of problems in life through education. Buohler, Schroder and Silbereisen (2008) examined the role of life skills promotion in the prevention of substance abuse. Based on this research, the researchers concluded that fostering the critical attitude towards drug abuse and enhancing knowledge through teaching of life skills lead to reduced nicotine and drug use. Shedler and Block (1990) have done research on this issue and concluded that not unlikely adolescents and young people use drugs as a way of dealing with problems, negative emotions and stressful situations. Therefore, the aim of promoting personal and social skills in the form of life skills is overcome the weaknesses that are believed to increase the risk of drug abuse.
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**References**

Abdolahpoor, M. (2008). *Effectiveness of life skills to high school students Sirjan attitudes towards drugs* (M.Sc. thesis). University of Allameh, Tabatabai.

Aderm, M. & Nikmanesh, Z. (2011). Trends in youth drug use based on personality characteristics. *Journal of Medical Sciences Research, Scientific Report*, 2, 14.

Botvin, G. J. (2000). Preventing drug abuse in schools: social and competence enhancement approaches targeting individual-level etiological factors. *Addictive Behaviors*, 25, 887–897.

Botvin, G. J. & Griffin, K. W. (2004, October). Life skills training: empirical findings and future directions. *Journal of Primary Prevention*, 25(2), 212.

Buohler, A., Schroder, E. & Silbereisen, R. K. (2008). The role of life skills promotion in substance abuse prevention: a mediation analysis. *Health Education Research, 23*(4).

Corbin, W (2013, April). Relations among stress, coping strategies, coping motives, alcohol consumption and related problems: a mediated moderation model. *Addictive Behaviors, 38*(4), 1912–1919.

Fini, A. A. S., Kavoosian, J. & Ramezani, V. (2010). Risk and protective factors for substance use in students' attitudes. *Quarterly—Research on Mental Health, 3*, 3.

Holmes, T. & Rahe, R. (1967). Social readjustment rating scale. *Journal of Psychosomatic Research, 11*, 213–218.

Lazarus, R. S. (1990). Theory-based stress measurement. *Psychological Inquiry, 1*(1), 3–11. doi:10.1207/s15327965pli0101_1

Lazarus, R. S. (1993). Coping theory and research: past, present, and future. *Psychosomatic Medicine, 55*, 234–247.

Lazarus, R. S. & Folkman, S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*(3), 219–239.

Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.

Mohammadi, M., Shaghaghi, F. & Zare, H. (2008). Teaching life skills knowledge and attitudes towards drug use and self-esteem of students. Computer Research Center of Islamic Sciences, Peike noor, No. 1.

Nomaguchi, K. M. & Brown, S. L. (2011). Parental strains and rewards among mothers: the role of education. *Journal of Marriage & Family, 73*(3), 221–236. doi:10.1111/j.1741-3737.2011.00835.x

Robab, R. (2012). Evaluation of educational effectiveness in prevention of teens' tendency towards drug abuse. *Journal of Basic and Applied Scientific Research, 1–3*.

Shedler, J. & Block, J. (1990). Adolescent drug use and psychological health. *American Psychologist, 45*, 612–630.

Taremian, F. (2012). *Facts about healthy life and free from substances (action points)* (5th ed.). Tehran, Iran: Student Counseling Center.

Thoits, P. A. (1995). Stress, coping, and social support processes: where are we? What next? *Journal of Health & Social Behavior, 36*, 53–79.

Thoits, P. A. (2010). Stress and health: major finding and policy implications. *Journal of Health and Social Behavior, 51*(1), 41–53. doi:10.1177/0022146510383499

Williams, N. (2016). *The relationship between stress, coping strategies, and social support among single mothers*. Walden University Scholar Works.

World Health Organization (WHO). (1994). *Life skills education in schools*. Geneva, Switzerland: WHO.

Yarmohamadi, V., Arjmand, A. A. & Ghanadi, F. (2009). *Substance abuse and dependence (to inhibit the spread of the students)*. Tehran, Iran: Office of Community Planning and Cultural Studies Ministry of Science, Technology and Research [The first Print].