

Evaluation of the Effectiveness of Life Skills Training for Iranian Working Women

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Objective: Working women are predisposed to some psychiatric symptoms or disorders due to their life styles or working conditions; such as long working hours, being away from their children during the day, and having various roles as an employee, a spouse, mother and a housekeeper, which creates daily stress, feelings of guilt, anxiety, dysphoric mood or interpersonal problems, all of which may lead to more serious mental disorders. Therefore, life skills training may help them to cope better with the problems of their life styles, and promote their mental health.

Methods: In a semi-experimental study, 84 female university employees attended 1-2 sessions of life skills training weekly for 10 weeks. The duration of each session was 2 hours. Participants completed a GHQ-28 form, prior to entering the training course, and again, 2 weeks after the completion of the workshops. The statistical test used in this study, was t test for dependent variables.

Results: A number of participants exhibited psychiatric symptoms, such as suffering from depression, anxiety, psychosomatic disorder and social functioning problems. The scores of the means significantly reduced in post-test situations, except for depressive symptoms subscale which was minimal. The subscales of those whose total scores were above the cut off point (23) were reduced to half.

Conclusion: The result of this study shows that life skills training can be an effective method in reducing anxiety, sleep and somatic symptoms, as well as social function disorders, however, contrary to many published studies, LST had no impact on depressive symptoms of our subjects.

Iranian Journal of Psychiatry and Behavioral Sciences (IJPBS), Volume 2, Number 2, Autumn and Winter 2008: 23-29.

Keywords: Education • Iran • Life Skills Training • Working Women

Introduction

In recent years, there has been increasing interests in various aspects of mental health, in particular, those of preventive interventions. While there had been numerous studies conducted in mental health, mostly on the bases of secondary and tertiary prevention strategies, over many years, research projects, with the aim of primary prevention, has been very limited. Since 1980's, enthusiastic behavioral scientists, such as Gilbert Botvin and others, began their studies regarding health education for the promotion of mental health; following Bandura's social learning theory, (which promotes opportunities for

processing life experiences, structuring experiences, and actively gaining experiences) (1,2), mental health promotion, was then supported and popularized by World Health Organization (WHO). Health promotion has been defined; as 'any deliberate intervention which seeks to promote health and prevent disease disability' (3-6). WHO then supported a developed training program, with the aim of primary prevention to promote mental health, called 'life skills' which was defined as "ability for adaptive and positive behavior that enables individuals to deal effectively with the demands and challenges of everyday life" (7).

The main objective of life skills education is to promote healthy lifestyles through health education. The approach has been integrated into curriculum development for schools and has also been implemented through other channels in the community. Every school should enable children and adolescents at all levels to learn critical health and life skills.

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Such education includes: comprehensive integrated life-skills education that can enable young people to make healthy choices and adopt healthy behavior throughout their lives” (8). Life skills approach includes elements that make it easy to adapt to different cultures and is appropriate for implementation in both developing and developed countries (9,10). The Life Skills training is built around creating opportunities for people to acquire skills that enable them to avoid manipulation by outside influences, as well as regaining control over their own behavior while making informed decisions that can lead to positive behaviors and values (11,12).

Through the involvement of the World Health Organization (WHO), life skills programs have come to play an important role with regard to health, particularly mental health in both the developing and developed countries. Over the past twenty years, “life skills” have become part of the vocabulary in health education and the prevention of mental disorders.

The impact and outcomes of life skills education has been debated (13-16). The basic questions to be addressed are how the impact of this (or any other) approach should be measured and what the desired outcomes are. However, there is evidence that life skills education may impact maladapted behavior (17-20), moreover, life skills training creates a positive impact on ones self esteem (21) on self-concept (22), and reducing social anxiety (23). Some general patterns nevertheless, have emerged from evaluations and certain “factors of success” have been identified (24,25).

There were a few reviews and meta-analytic evaluations in the past decade regarding the impact of various aspects of psychosocial interventions and life skills training on mental health promotion, emphasizing the relative effectiveness of these measures (4-6, 25-28).

In developing countries where means and resources are often scarce, evaluation is difficult. For example, following up on a group of children in primary school to assess how they have developed, can prove difficult due to high attrition rates. Following WHO’s recommendations regarding life skills training

for school children, or prevention of alcohol and drug abuse, aggressive behavior, and other mental health disorders, a number of mental health workers in Iran have become interested with this psychological education approach. Therefore, the need for primary prevention studies in mental health has been strongly felt during the past few years in Iran. Various organizations, such as Ministry of Health and Medical Education, as well as a few medical schools, institutes and research centers, began to encourage research projects in this area. The present study aims to evaluate the effects of life skills training regarding mental health promotion from a group of Iranian working women.

We thought that this group of women, are predisposed to some psychiatric symptoms or disorders, due to their life styles or conditions of their occupations; such as long working hours, being away from their children during the day, and having various roles as an employee, a spouse, a mother and a housekeeper, creating stress, guilt feelings, anxiety, dysphoric mood or interpersonal problems, which may lead to serious mental disorders. Therefore, life skills training may help them to cope better with problems from their life styles, and also promote their mental health.

Materials and Methods

There were 84 working women who were selected by convenient sampling for this research project. They were university employees who consented to participate in the life skills training workshop as university counselors voluntarily. They were asked not to participate in the workshops, if they were taking any medicine for a psychiatric disorder, even though mild.

These participants completed a GHQ-28 (General Health Questionnaire, a version with 28 questions) form, just before entering the training course, and again, 2 weeks after the completion of training workshops.

The GHQ-28 was developed by Goldberg DP (29) and its reliability and validity were assessed (30,31) and it has been standardized for screening in Persian language, in Iran

(32,33). GHQ elicits psychiatric symptoms and abnormal behaviors experienced by patients within a previous month. Therefore, it is based on 'here and now' questions. This questioner has four subscales, such as; psychosomatic symptoms (A), anxiety and sleeping disorders (B), social functioning(C) and depression (D).

Participants were divided into 3 groups. Each group had 1-2 sessions a week for a total of 10 weeks. The duration of each session was 2 hours and was facilitated in Imam Khomeini's conference room. The following life skills (recommended by WHO) (34) were taught by trained and qualified therapists during these workshops:

1-The ability to make decisions helps people assess their options and carefully consider the different consequences that can result from their choices.

2-The ability to solve problems helps people find constructive solutions to their problems. This skill can significantly reduce anxiety.

3-The capacity to think creatively is essential to decision making and problem solving. It enables people to explore all possible alternatives together with their consequences. It helps people look beyond their personal experience

4-The capacity to think critically helps people objectively analyze available information along with their own experiences. It is this ability that helps people recognize the factors that influence their behaviors, such as societal values, peer influence, and the influence of the mass media.

5-The ability to communicate effectively helps people to express their feelings, needs, and ideas to others, verbally or otherwise.

6-The ability to establish and maintain interpersonal relations helps people to interact positively with people whom they encounter daily, especially family members.

7-Knowledge of self is the capacity of people to know who they are, what they want and do not want, and what does and does not please them. It also helps people recognize stressful situations.

8-The capacity to feel empathy is the ability to imagine what life is like for another person in a very different situation. It helps people to understand and accept diversity, and it also improves interpersonal relations between diverse individuals.

9-The ability to handle emotions enables students to recognize their emotions and how they influence their behaviors. It is especially important to learn how to handle difficult emotions such as violence and anger, which can negatively influence health.

10-The ability to handle tension and stress is a simple recognition by people regarding events in their life causing them stress.

The design of this study was semi-experimental. It had a pre/post test which was completed by participants, just before the workshops began, and 2 weeks after they were completed. The statistical test used in this study was paired t test for dependent variables.

Results

Table 1 shows GHQ-28 scores, before and 2 weeks after life skills training workshop for 84 university women employees. There are differences between the means, studied in 2 stages of these workshops. The mean scores are significantly reduced in post-test situations, except for depressive symptoms subscale which was minimal, i.e. 1.32 and 1.11 in pre-test and post-test, respectively, with a P value of 0.41. The P value for psychosomatic symptoms, anxiety and sleep disorders was 0.001, and the P value for social function disorder was 0.05.

The analysis of data shows there are significant differences between mean scores of three GHQ-28 subscales; the p value for psychosomatic symptoms, anxiety and sleep disorders was 0.001, and the p value for social functioning disorder was 0.05. The subscales of those whose total scores were above 23 (the cut-off point) (33) have been reduced to half.

Table 1. Significance of mean differences in GHQ-28 scores, before and 2 weeks after life skills training for 84 university women employees

GHQ-28 Subscales	Pre-test		Post-test		Analysis	
	Mean	SD	Mean	SD	t	p
Psychosomatic symptoms	4.90	3.89	3.48	3.35	3.37	0.001
Anxiety symptoms & sleep disorder	4.86	3.88	3.64	3.48	2.90	0.005
Disorders of social functioning	6.01	3.47	4.63	2.88	3.64	0.00
Depressive symptoms	1.32	2.35	1.11	2	0.83	0.41
Total scores	17.06	4.08	12.98	9.98	3.67	0.001

Discussion

Although, there have been many efforts regarding prevention of psychiatric disorders for decades, and theoretically, clinical and social studies have been done in various areas of psychiatry, aiming at primary and secondary preventive strategies. Since 1980's, scientists and health workers began their research projects on 'health education' for 'mental health promotion' (2). Extensive research and evaluations of the primary and secondary prevention activities in different countries, aimed at different segments of population and also the effectiveness of prevention measures, have led to surprisingly concordant range of findings. There have also been studies on mild, moderate and severe psychiatric disorders such as anxiety disorder, phobias, depression, substance abuse, and social, interpersonal, educational and occupational problems (26,27,35,41). Most of these studies, included school based prevention programs for substance abuse, Aids, violence, and also for suicide prevention (42,43). There are studies on the elderly, and a few on adult subjects suffering from cardiovascular conditions, diabetes, obesity, and hypertension, as well as those suffering from depression, anxiety, adjustment disorders, even psychotic disorders, mostly, schizophrenia. Although, there were research programs studying the effect of life skills training on middle-aged subjects suffering from depression, anxiety, BMD, and adjustment disorder (28,35,37,44,45), we found no study matching the present one. Research studies on all female subjects were usually on pregnant women or those with postpartum problems, unemployed, homeless or women with traumatic experiences (PTSD or grief) and marital problems. There was one study on

'Managing Job Strain' a clinical intervention focused on alleviating job strain that was conducted by mail and/or telephone with a total of 136 US bank employees (46). Both the mail and telephone interventions indicated positive results. However, this was different from our study.

Our samples were university employees who apparently were unaware of any serious psychiatric disorders, but many had psychiatric symptoms such as, suffering from depression, anxiety, psychosomatic disorder and social functioning problems. Their results of pre/post test of GHQ-28 were positive in three subscales; similar to other studies. There were significant differences between the mean scores of three GHQ-28 subscales; the P value for psychosomatic symptoms, anxiety and sleep disorders was 0.001, and the P value for social functioning disorder was 0.05. The results of many studies had shown that life skills training had a positive impact on anxiety and phobic disorders, as well as being effective in reducing depressive symptoms. Jane- Jané-Llopis's meta- analysis of 69 life skill programs showed 11% improvement in depressive symptoms (28), but in present study the differences between the mean scores of the GHQ subscale for depression was not significant ($p > 0.05$). We can not explain why this life skills training course did not have any impact on depressive symptoms of our subjects. Perhaps the intensity of training was not enough, or as Jané-Llopis's meta-analysis suggested; cognitive and competence methods are more effective than behavioral techniques.

This study concludes that WHO's ten life skills training technique are effective for reducing anxiety and phobic disorders, as well as psychosomatic symptoms and social functioning problems, and thus, should be

used more extensively in various community settings. In future studies, one should include competence methods into this program to make it more effective for depressive symptoms, as depression is one of the most common psychiatric disorders.

References

1. Bandura A. Social learning theory. Englewood Cliffs NJ: Prentice-Hall Inc.; 1977.
2. Botvin GJ. Substance Abuse Prevention Research: recent developments and future directions. *Journal of School Health* 1986; 56: 369-74.
3. Tone BK. Health education and the ideology of health promotion: a review of alternative approaches. *Health Education Research* 1986; 1(1): 3-12.
4. Hoffman K, Jackson S. A review of the evidence for the effectiveness and costs of interventions preventing the burden of non-communicable diseases: how can health systems respond? Unpublished: Prepared for World Bank Latin America and the Caribbean Regional Office; 2003.
5. Jackson SF, Perkins F, Khandor E, Cordwell L, Hamann S, Buasai S. Integrated health promotion strategies: a contribution to tackling current and future health challenges. *Health Promotion International* 2007; 21(S1): 75-83.
6. Hosman C, Lopis EJ. Mental Health: The work of health promotion in meeting a growing crisis- an epidemic- of mental illness, in International Union for Health Promotion and Education, *The Evidence of Health Promotion Effectiveness: Shaping Public Health in a New Europe*, IUHPE and EC, Brussels: The Institute; 2000.
7. World Health Organization (WHO). Life skills education for children and adolescents in schools: Introduction and guidelines to facilitate the development and implementation of life skills programs. Geneva, Switzerland: The Institute; 1997a.
8. World Health Organization (WHO). Promoting health through schools. Report of a WHO Expert Committee on Comprehensive School Health Education and Promotion. WHO Technical Report No. 870. Geneva, Switzerland: The Institute; 1997b.
9. Bils L. Primary prevention in French-speaking Belgium. *Alcoologie* 1999; 21(HS), 187-92. [cited in 'life skills' Module 2]. Available from: URL: <http://www.icap.org>
10. Godfrey C, Toumbourou JW, Rowland B, Hemphill S, Munro, G. Drug education approaches in primary schools. Melbourne, Australia: Drug Info Clearinghouse; 2002.
11. Peace Corps. Life skills Manual. Washington, DC: The Institute 1991; Information Collection and Exchange Publication No. M0063.
12. UNESCO. WHO Information Series on School Health - Document 3 - Violence Prevention: An Important Element of a Health-promoting School. Geneva. The Institute; 1999.
13. Foxcroft DR, Ireland D, Lister-Sharp DJ, Lowe G, Breen R. Longer-term primary prevention for alcohol misuse in young people: A systematic review. *Addiction* 2003; 98: 397-411.
14. Gorman DM. "Science" of drug and alcohol prevention: The case of the randomized trial of the Life Skills Training program. *International Journal of Drug Policy* 2002; 13(1): 21-6.
15. Palinkas LA, Atkins CJ, Miller C, Ferreira D. Social skills training for drug prevention in high-risk female adolescents. *Preventive Medicine* 1996; 25(6): 692-701.
16. Plant E, Plant M. Primary prevention for young children: A comment on the U.K. government's 10-year drug strategy. *International Journal of Drug Policy* 1999; 10: 385-401.
17. Botvin GJ, Baker E, Dusenbury L, Botvin EM, Diaz T. Long-term follow-up results of a randomized drug abuse prevention trial in a white middle-class population. *Journal of the American Medical Association* 1995; 273(14): 1106-12.

18. Botvin GJ, Griffin KW, Diaz T, Ifill-Williams M. Preventing binge drinking during early adolescence: One- and two-year follow-up of a school-based preventive intervention. *Psychology of Addictive Behaviors* 2001; 15: 360-5.
19. International Center for Alcohol Policies (ICAP). Life skills education in South Africa and Botswana. Washington, DC: The Institute 2000. Available from: URL: <http://www.icap.org>
20. Smith EA, Swisher JD, Vicary JR, Bechtel LJ, Minner D, Henry KL, et al. Evaluation of life skills training and infused-life skills training in a rural setting: Outcomes at two years. *Journal of Alcohol and Drug Education* 2004; 48: 51-70.
21. Ennett ST, Bauman K E. The contribution of influence and selection to adolescent peer group homogeneity: The case of adolescent cigarette smoking. *Journal of Personality and Social Psychology* 1994; 67: 653-63.
22. Kreuter KJ, Gewritz H, Davenny JE, Love C. Alcohol prevention project for sixth graders: first year findings. *Adolescence* 1993; 26(102): 287-93.
23. Botvin GJ, Eng A. The efficacy of a multi-component approach to prevention of cigarette smoking. *Preventive Medicine* 1982; 11: 199-211.
24. World Health Organization, Regional Office for the Western Pacific (WHO/WPRO). Value adolescents, invest in future: Educational package. Facilitator's manual. Manila, Philippines: The Institute; 2003.
25. Garrard J, Lewis B, Keleher H, Tunny N, Burke L, Harper S, et al. (2004) Planning for healthy communities: reducing the risk of cardiovascular disease and type 2 diabetes through healthier environments and lifestyles. *Psycho Med* 1997; 27(1): 191-7.
26. Hosman C, Jané-Llopis E. (1999) Mental health promotion. Chapter 3. In: Hosman C, Jané-Llopis E. Saxena S, editors. The evidence of health promotion effectiveness: shaping public health in a new Europe. (A report for the European commission by the international union for health promotion and education). ECSC-EC-EAEC: Brussels-Luxemburg: Prevention of Mental Disorders: Effective Interventions and Policy Options. Oxford: Oxford University Press; (In press).
27. Bond GR. Meta-analytic evaluation of skills training research for individuals with severe mental illness. *Journal of Consulting and Clinical Psychology* 1996; 64: 1337-46.
28. Jané-Llopis E, Barry MM. What makes mental health promotion effective? *Promotion and Education* 2005; 12(2) suppl: 47-54.
29. Goldberg DP. The detection of psychiatric illness by questionnaire (GHQ-28). London: Oxford University Press; 1972.
30. Goldberg DP, Allison DB. Handbook of assessment methods for eating behaviors and weight related problems: measures, theory, and research. Thousand Oaks, CA: Sage Pub; 1995.
31. Goldberg D P, Gater R, Sartorius N, Ustun TB, Piccinelli O, Rutter C. The validity of two versions of the GHQ in the study of mental illness in general health care. *Psychol Med.* 1997; 27(1): 191-7.
32. Palahang H, Nasr M, Barahani MT, Shahmohammadi D. Epidemiology of psychiatric disorders in Kashan. *Andisheh van Raftar* 2006; 2(4): 19-27.
33. Yaghubi N, Nasr M, Shahmohammadi D. Epidemiology of mood disorders in urban and rural areas of Sowmaesara-Gillan. *Andisheh van Raftar* 1995; 1(4): 55-65.
34. WHO. Skills for Life. Newsletter 1993; 2: WHO/MNH/NLSL/93.1.
35. Schimmel-spreeuw A, Linssen ACG, Heeren TJ. Coping with depression and anxiety: preliminary results of a standardized course for elderly depressed women. *International psycho geriatrics* 2000; 12: 77-86.
36. Bellack AS, Turner SM, Hersen M, Luber RF. An examination of the efficacy of social skills training for chronic schizophrenic patients. *Hospital and Community Psychiatry* 198; 35: 1023-8.
37. Brady JP. Social skills training for psychiatric patients. I: Concepts, methods, and clinical results. *American Journal of Psychiatry* 1984a; 141: 333-40.

38. Brady JP. Social skills training for psychiatric patients. II: Clinical outcome studies. *American Journal of Psychiatry* 1984b; 141: 491-8.
39. Curran JP. Social skills therapy: A model and a treatment. In: Turner RM, L. M. Ascher LM editors. *Evaluating behavior therapy outcome*. New York: Springer; 1985. P.122-45.
40. Dion GL, Anthony WA. Research in psychiatric rehabilitation: a review of experimental and quasi-experimental studies. *Rehabilitation Counseling Bulletin* 1987, 30: 177-82.
41. Hayes R. Occupational therapy in the treatment of schizophrenia. *Occupational Therapy in Mental Health* 1989; 9: 51-68.
42. St Leger. L.H. The opportunities and effectiveness of the health promoting primary school in improving child health: a review of the claims and evidence. *Health Education Research* 1999; 14(1): 51-69.
43. Cross W, Matthieu MM, Cerel J, Knox KL. Proximate outcomes of gatekeeper training for suicide prevention in the workplace. *Suicide and Life-Threatening Behavior* 2007; 37(6): 569-70.
44. Depp CA, Lebowitz BD, Patterson TL, Lacro JP, Jeste DV. Medication adherence skills training for middle-aged and elderly adults with bipolar disorder: development and pilot study. *Bipolar Disorders* 2007; 9(6): 636-45.
45. Halford WK, Hayes R. Psychological rehabilitation of chronic schizophrenic patients: recent findings of social skills training and family psycho education. *Clinical Psychology Review* 1991; 11: 23-44.
46. Pelletier KR, Rodenburg A, Vinther A, Chikamoto Y, King AC, Farquhar JW. Managing job strain: a randomized, controlled trial of an intervention conducted by mail and telephone. *Journal of Occupational and Environmental Medicine* 1999; 41(4): 216-23.