Life Lessons in Military Services: Investigating the Influence of a Training Program on the Military Personnel's Life Skills Development

Seyyed-Javad HOSSEINI-SHOKOUH1, Parviz DABAGHI2, Sadegh RAHIMI3

1 Assistant Professor of Infectious Diseases, Infectious Disease Research Center and Department of Infectious & Tropical Diseases, Faculty of Medicine, Aja University of Medical Sciences, Tehran, Iran.

2 Associated Professor of Clinical Psychology, Department of Clinical Psychology, Faculty of Medicine, Aja University of Medical Sciences, Tehran Iran.

3 Doctor of Medicine, Faculty of Medicine, Aja University of Medical Sciences, Tehran Iran. drsadeghrahimi@gmail.com

Abstract: Soldiers experience dramatic challenges and need skills that will prepare them for long periods of separation and other military demands. The primary purpose of present study was to investigate the efficacy of life skill education in two military bases, focusing: effective communication, drug abuse prevention, self-awareness, resilience, problem solving, assertiveness, coping with stress, citizenship skills, marriage preparation, sexual health, critical thinking and decision making. These twelve skills were selected by two professional social psychologists among 52 skills, which are routinely taught in military services all over the world. The Statistical population of this study was all conscripts, professional soldiers and commanders of two military centers, but multistage sampling selected 50 conscripts, 36 professional soldiers and 8 commanders (healthy male subjects, with average age 27 years). To investigate the quality of training, international standard questionnaires, which validity and reliability of their Persian version were previously confirmed, were applied. The findings of the study revealed life skills-based education for military individuals improved effective communication skills 19%, drug abuse prevention 7%, self-awareness 12%, resilience 17%, 5% problem solving, assertiveness 9%, coping with stress 10%, 5% citizenship skills, marriage preparation 10%, sexual health 6%, critical thinking 8% and decision-making 24% in conscripts and professional soldiers significantly. Finally, it is recommended to perform further studies with a similar method, but longer follow up, evaluating the long-term impact of life skill education in military centers.

Keywords: Life skill education; Military; Soldier.

Introduction

Life skills have been defined by the World Health Organization (WHO) as the ‘abilities for adaptive and positive behavior that enable individuals to tackle the difficulties and challenges of everyday life effectively (Organization, 2003). These attributes represent the psycho-social skills that determine valued behavior and contain reflective skills such as critical thinking, as well as personal skills such as self-awareness. Training life skills have the potential to empower, and may lead to qualities such as self-esteem, sociability and tolerance. It empowers young people to take action and make change, to have capabilities to determine what to do and who to be, and to have a better understanding of the context in which they live (Svanemyr, Baig, & Chandra-Mouli, 2015). On the other hand, Staying in military is a challenging situation, not only because of being away from family or detach from the open environment but also due to its' rough regulation, which increases the incidence of mental illness in the soldiers (Noferesti, Akbari, & Karamlu, 2016). For example, the study of 1329 Iranian soldiers shown that 8.5 percent of the subjects suffered from suicidal thoughts (Anisi, Fathiashtiani, Soltaninejad, & Amiri, 2006). As well as the latest researches in Iran estimate that 50 percent of Iranian soldiers have psychological problems (Khedri & Dabaghi, 2014). Military services in other countries face the same difficulty. Scoville et al. found that suicide is now the second leading cause of death in the United States Army, which in 84 percent of the cases were because of the emotional pressures in the military services (Scoville, Gardner, Magill, Potter, & Kark, 2004). These studies revealed an urgent need for life skills programs that teach military personals reflective skills, personal skills and even finances and legal matters, that are not often accessible to them.

Numerous research have revealed positive impact of life skills education to in the military services. The United States of America started a sophisticated training program called Army star from 2008 to empower resilience in the American soldiers (Heeringa et al., 2013; Kessler et al., 2013). Besides, U.S. army conducted the Comprehensive Soldier and Family Fitness (CSF2) program, as part of the U.S. Army Ready and Resilient Campaign Plan, in order to increase the physical and psychological health, resilience and performance of soldiers, families and army civilians (Casey Jr, 2011). Studies demonstrate the significant role of life skill education in strengthen confidence, violence prevention, ascend the stress coping skill, increase effective and positive social relationships and reduce drug abuse in Iranian soldiers (Ahmadi, Karambakhsh, Mehrazma, & Salesi, 2013; Farsi,
Jabari, & Ebadi, 2006; Refahi, Tabanejad, Ebadi, & Sarabandi, 2015). Anisi et al. evaluated the impact of the problem solving training in reducing suicidal thoughts in the soldiers, decreasing suicide thought dramatically (Anisi, Rahmati, Esmaili, & Haghi, 2015). In another study, Asadzandi et al. conducted a research to examine the impact of anger management training based on Pender model on the soldiers and found significant positive influence (Asadzandi, Shekari, Ebadi, Morovati, & Salari, 2014). However, there is no similar study or program to evaluate the impact of life skills education regarding a complete package of life skill in Iranian soldiers, therefore; it is entirely necessary to start a novel sophisticated research to fill this gap.

Material and Methods:

The statistical population

The Statistical population of this study was all conscripts and professional soldiers of two military centers (part of Islamic Republic of Iran Army).

Sample and sampling method

The sample size of this study was 94 subjects, containing the commanders, professional soldiers, and conscripts, who selected by multi-stage sampling. For this purpose, among the battalions of each center, a battalion and the companies in this battalion, a company was selected. In this company, 47 subjects were chosen randomly. It is worth mentioning that after matching, subjects were divided into experiment and control groups.

Choosing the life skills

In order to achieve an efficient plan for life skills training in the Islamic Republic of Iran's military, it was first necessary to study resources to find practical methods for teaching life skills. At this stage, the research team focused on life skills education packages approved by the World Health Organization and reviewed the previous life skill training program in armies of four countries (United States of America, Great Britain, Russia and Iran). Fifty-two skills were found and presented to the commanders of four military centers to choose appropriate life skill package for their soldiers. Finally, by two expert social psychologists, 12 essential skills were selected to apply in this study.
Research tools

- **Life skills training package**: This package is made by researchers, according to skills and training resources, which are approved by the World Health Organization and the national competent bodies. For each skill, a separated package was prepared. Packages are written clearly and filled by examples related to the Iranian army daily situation.

- **Communication skills standard questionnaire**: This questionnaire was produced by Barton 1990 and contains 18 items, which are evaluated on Likert scale ranging from one to five; not true at all (1), rarely true (2), sometimes true (3), often true (4), and true nearly all of the time (5); therefore, the result will be between 18 to 90. Reliability and validity of this questionnaire have been confirmed in Persian by Hosseininasab (Hoseininasab & Mostafapur, 2012).

- **Questionnaire on the tendency toward illegal drugs**: This questionnaire was established by Ghorbani in 2000 and contains 30 questions that evaluate tendency to consume the illegal drug. Each item scored 1 to 2. The high score reveals higher tendency toward drug abuse (Ghorbani, Isfahani, & Taghizade, 2007).

- **Self-Consciousness Scale**: The Self-Consciousness Scale was designed to assess both private and public self-consciousness. Scheier and Carver (1985) published a revised Self-Consciousness Scale includes 23 items using 5-point ratings (0 = extremely uncharacteristic to 4 = extremely characteristic). It evaluates three sub-scales contains private self-consciousness, social anxiety and Public self-consciousness. Reliability and validity of this questionnaire have been confirmed in Persian by Latifian et al. (Latifian & Seyf, 2007).

- **Resilience questionnaire by Connor-Davidson (CD-RISK, 2003)**: The CD-RISC consists of 25 items, which are evaluated on a five point Likert scale ranging from 0-4: not true at all (0), rarely true (1), sometimes true (2), often true (3), and true nearly all of the time (4) - these ratings result in a number between 0-100, and higher scores indicate higher resilience. This scale generally evaluates five factors:
  - Personal competence
  - Control
  - Spiritual influences
  - Trust in one's instincts, tolerance of adverse affect, and strengthening effects of stress
  - Positive acceptance of change and secure relationships
Reliability and validity of this questionnaire have been confirmed in Persian by Rezaei and Rasuli (Rezaee & Rasuli, 2015).

- **Problem solving style questionnaire, Cassidy and long (1996):** The scale produces a 24-item six-factor measure. The factors are labeled helplessness, problem-solving control, creative problem-solving style, problem-solving confidence, avoidance style and approach style. Subjects have three options for answering: Yes, No and I do not know. Reliability of this questionnaire has been confirmed in Persian by Mohammadi and Sahebi (Mohamadi & Sahebi, 2001).

- **Assertiveness questionnaire (ASA):** Assertiveness questionnaire was produced by Lee et al. in 1985, which contains 33 items, was constructed using a multiple-choice format with three response alternatives. One of the options considered as an appropriate response and scored 1; therefore, the final result will be between 0 to 33. Reliability of this questionnaire has been confirmed in Persian by Maktabi et al. (Maktabi, Soltani, Bueshaghi, & Nokariz, 2014).

- **Perceived Stress Scale:** its’ 10 items were designed to assess how unpredictable, uncontrollable, and overloaded respondents find their lives to be. The scale also includes a number of direct queries about current levels of experienced stress. Reliability of this questionnaire has been confirmed in Persian by Behroozi et al. (Behruzi, Shahaniyelaghi, & Purseyedi, 2012).

- **Organizational Citizenship Behavior Checklist (OCB-C):** The original Organizational Citizenship Behavior Checklist (OCB-C) was a 42 item instrument designed to assess the frequency of organizational citizenship behaviors performed by employees. It has since been refined and shortened first to 36 items and then to the final 20 item scale, contains five components. These components include altruism, conscience, chivalry, virtue, and social customs. The OCB-C uses a 5-point frequency scale ranging from 1 = Never to 5 = Every day. Scores are computed by summing responses across items. A total score is the sum of responses to all items. Reliability and validity of this questionnaire have been confirmed in Persian by Asgharizadeh and Saeidinejad (Asgharizade & Saidinejad, 2011).

- **Marital Attitude Scale:** It was designed by Braaton and Rosen (1998). 23 items, which are evaluated on a five point Likert scale ranging from 0-4 and evaluates people's beliefs and attitudes about marriage (Braaten & Rosén, 1998).

- **The sexual knowledge questionnaire:** It was first designed by Anne Hooper (1992) and consists 15 questions, which scored as correct or false; so, its’ result will be ranging from 0 to 15. Reliability and validity of
Life Lessons in Military Services: Investigating the Influence of a Training …
Seyyed-Javad HOSSEINI-SHOKOUH, Parviz DABAGHI, Sadegh RAHIMI

this questionnaire have been confirmed in Persian by Esmaeilvand and Hasanvand (Esmaeilvand & Hasanvand, 2014).

- **The California Critical Thinking Skills Test:** It is an objective measure of the core reasoning skills needed for reflective decision making, consisting 34 questions. There is a time limitation and subjects should answer that in 45-50 minutes. 20 questions have 4 options for answering and remains have 5 options. Asghari and Maleki (Askari & Maleki, 2010) have confirmed questionnaire validity and reliability in Persian version.

- **General decision making style questionnaire:** The questionnaire was initially designed and developed in the USA by Scott and Bruce (1995). It evaluates five components, consists of rational decision making, intuitive decision making, dependent decision making, avoidant decision making and spontaneous decision making. It contains 24 items, which are evaluated on a five point Likert scale ranging from 1-5. Reliability and validity of this questionnaire have been confirmed in Persian by Zareh and Erabsheyni (Zare & Erabsheyni, 2011).

**Training Sessions**

After the preparation of training leaflets, 14 sessions were held for skills. First and the last session is considered for evaluating the subjects by the questioner (pre-and post-test) and the other 12 sessions devoted to the training of skills. For this purpose, independent teachers were employed. Specified teaching package were prepared and they taught according to them. For each skill, one session was considered.

**Data Analysis**

SPSS Statistical software was applied for data analysis. In addition to the descriptive factors (mean and standard deviation), the one-way ANCOVA (analysis of covariance) were evaluated.

**Results:**

50 conscripts, 36 professional soldiers and 8 commanders participated in our project. The highest percentage of the participants obtained a diploma or lower degree with 40.4 percent, while it was followed with bachelor and master degree with 3 and 23.4 percent respectively. Subjects with doctorate degree were the smallest group with only 2.1 percent.

Nearly one-third of participants were in the age group 18 to 25, whereas 27.7 and 22.3 of them were in the age group 26 to 30 and 31 to 35
in the same order. Almost 15 percent of subjects were 36 and higher years old. Table 1 summarized the demographic breakdown of research sample:

**Table 1. Demographic breakdown of subjects**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conscript</td>
<td>50</td>
<td>53.2</td>
</tr>
<tr>
<td>Professional Soldier</td>
<td>36</td>
<td>38.3</td>
</tr>
<tr>
<td>Commander</td>
<td>8</td>
<td>8.5</td>
</tr>
<tr>
<td>Educational Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma or lower</td>
<td>38</td>
<td>40.4</td>
</tr>
<tr>
<td>Bachelor</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>Master degree</td>
<td>22</td>
<td>23.4</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 25</td>
<td>33</td>
<td>35.1</td>
</tr>
<tr>
<td>26 to 30</td>
<td>26</td>
<td>27.7</td>
</tr>
<tr>
<td>31 to 35</td>
<td>21</td>
<td>22.3</td>
</tr>
<tr>
<td>36 or higher</td>
<td>14</td>
<td>14.9</td>
</tr>
</tbody>
</table>

Mean and standard deviation in experiment group for all 12 life skills training packages were change significantly in pretest and posttest, while, changes in these values were negligible. Before evaluating database on Covariance analysis the homogeneity assumptions of the covariance matrix (M box test) and homogeneity of variance of error (Leven test) were evaluated, none of which were significant at the level of p <0.05. The descriptive finding is demonstrated in table 2.

**Table 2. Descriptive analysis of data**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>group</td>
</tr>
<tr>
<td>Pretest- Effective communication</td>
<td>experiment</td>
</tr>
<tr>
<td></td>
<td>control</td>
</tr>
<tr>
<td>Posttest- Effective communication</td>
<td>experiment</td>
</tr>
<tr>
<td></td>
<td>control</td>
</tr>
<tr>
<td>Pretest-Drug abuse prevention</td>
<td>experiment</td>
</tr>
<tr>
<td></td>
<td>control</td>
</tr>
<tr>
<td>Posttest-Drug abuse prevention</td>
<td>experiment</td>
</tr>
<tr>
<td></td>
<td>control</td>
</tr>
<tr>
<td>Pretest- Self awareness</td>
<td>experiment</td>
</tr>
<tr>
<td></td>
<td>control</td>
</tr>
<tr>
<td>Posttest- Self awareness</td>
<td>experiment</td>
</tr>
</tbody>
</table>
The 12 skills training package was effective on the scores of posttests of experiment group, because the results of multivariate covariance analysis
are statistically significant at the level of \( p < 0.01 \). This finding means that changes are in at least one of the variables in the research statistically significant. Table 3 shows the results of multivariate covariance analysis:

**Table 3. Multivariate covariance analysis of data**

<table>
<thead>
<tr>
<th>Multivariate Tests</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillai's trace</td>
<td>.599</td>
<td>8.572*</td>
<td>12.000</td>
<td>69.000</td>
<td>.000</td>
<td>.599</td>
</tr>
<tr>
<td>Wilks' lambda</td>
<td>.401</td>
<td>8.572*</td>
<td>12.000</td>
<td>69.000</td>
<td>.000</td>
<td>.599</td>
</tr>
<tr>
<td>Hotelling's trace</td>
<td>1.491</td>
<td>8.572*</td>
<td>12.000</td>
<td>69.000</td>
<td>.000</td>
<td>.599</td>
</tr>
<tr>
<td>Roy's largest root</td>
<td>1.491</td>
<td>8.572*</td>
<td>12.000</td>
<td>69.000</td>
<td>.000</td>
<td>.599</td>
</tr>
</tbody>
</table>

Effect of our package was meaningful for each group; therefore, it could be interpreted that the mean value for each life skill package was significantly different for conscripts and professional soldiers in pretest and posttest between control and experiment groups. The effect size for each skill is as followed: for effective communication skills 19%, for drug abuse prevention equal to 7%, for the self-awareness 12%, for resilience equal to 17%, 5% for problem solving, assertiveness with 9%, for coping with stress equal to 10%, 5% for citizenship skills, for marriage preparation equal to 10%, for sexual health 6%, for a critical thinking equal to 8% and for decision-making equal to 24% were estimated. Table 4 depicts the results of one-way covariance analysis.

**Table 4. One-way covariance analysis of data**

<table>
<thead>
<tr>
<th>Univariate Tests</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective</td>
<td>Contrast</td>
<td>34.110</td>
<td>.1</td>
<td>34.110</td>
<td>19.675</td>
<td>.000</td>
</tr>
<tr>
<td>communication</td>
<td>Error</td>
<td>138.691</td>
<td>80</td>
<td>1.734</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug abuse</td>
<td>Contrast</td>
<td>20.169</td>
<td>.1</td>
<td>20.169</td>
<td>6.156</td>
<td>.015</td>
</tr>
<tr>
<td>prevention</td>
<td>Error</td>
<td>262.111</td>
<td>80</td>
<td>3.276</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td>Contrast</td>
<td>19.309</td>
<td>.1</td>
<td>19.309</td>
<td>11.047</td>
<td>.001</td>
</tr>
</tbody>
</table>

262
Discussion:

The aim of present study was to evaluate life skill training in the soldiers of two military bases. After the preparation of teaching leaflets, 14 sessions were held. First and the last session were considered for evaluating the subjects by the questioner (pre and post-test) and the other 12 sessions devoted to the training of skills. The findings of the study revealed Life skills-based education for military individuals improved all twelve skills in conscripts and professional soldiers significantly.

The result of our study is compatible with plenty of research, dealing life skill education in military services. Our research revealed effective communication training package is useful in the conscripts and professional soldiers, which is well matched with studies of Ford (Ford, 2015) and Ebrahimi et al. (Ebrahimi, Hashemian, & Dokanei, 2012), finding a positive effect of effective communication education in the military centers. Esmaili
et al. (Esmaili, Tavakoli, Ghiasi, Hekmatpur, & Farhadi, 2011) found enlightening the soldiers against narcotic abuse, could dramatically descend the chance of drug addiction in the soldiers. Ghadami et al. (Ghadami, Piri, & Vahabi, 2017) also suggest that emotional intelligence, self-awareness skills, self-regulation skills and self-motivation positively correlate with the psychological empowerment of employees in military environments.

Generally, the entry into military centers leads to major changes in the personal and social lifestyle. Resilience not only improves the power of the compatibility, but also maintains mental health and even promotes it (Yusefi & Toghiani, 2016). In addition, Newman (Newman, 2003) found resilience training as an appropriate strategy to decrease suicide in the army. The result of our study was also compatible with Crabtree-Nelson and DeYoung (Crabtree-Nelson & DeYoung, 2017) as well as Karkhane et al. (Karkhane, Mohamadzade, Raeisi, & Zademohamadi, 2017), finding a positive impact of resilience training in military services al around the world. The result of our study, regarding problem solving, is compatible with Easom et al. (Easom, Wang, Moore, Wang, & Bauer, 2017) and Ahmadianzadeh et al. (Ahmadianzade, Ahmadi, & Anisi, 2012) Eosam et al. (2017) examined the impact of the problem solving training for families of military forces and evaluated it as an effective intervention. Ahmadianzadeh et al. (2012) also showed that cognitive-behavioral therapy includes problem solving ascends the compatibility of veterans, suffering from posttraumatic stress disorder. Our study additionally revealed that assertiveness training was effective in conscripts and professional soldiers. These findings is well matched with the study of Shirazi et al. (Shirazi, Noori, Fardin, Sanagu, & Hoseinian, 2015), who taught stress coping and assertiveness in the students, who camping in a military center and found it dramatically effective.

On the other hand, some research find no positive impact on life skill education in military services. Cigrang et al. (Cigrang, Todd, & Carbone, 2000) evaluated 178 trainees referred for a psychological assessment from basic training. Participants were randomly assigned to a two-session stress management group or a usual-care control condition, but compared with past studies, this study did not find that exposure to stress management information ascended the probability of graduating basic military training. One factor that may cause this opposite result was the short length of treatment. One to two sessions would be considered a very limited exposure to treatment in the psychotherapy literature, which called dose-related effect (Howard, Kopta, Krause, & Orlinsky, 1986). Regardless of the potential advantage of a greater number of sessions, it is worth considering that teaching different life skills at the same time maybe caused synergic
effect on each life skill. In another study, Mohammadpour and Falahati found no significant decrease in depression symptoms in veteran's spouse after ten sessions of 120 minutes life skill training (Mohamadipoor & Falahati, 2016). It was probably because of the concurrent difficulties, which veteran's family should try to tackle in everyday life and make their treatment complicated.

The most important limitation of this study was the lack of follow up period for 3 to 6 months. So it is recommended to perform further studies with a similar method, but longer follow up, evaluating the long-term impact of life skill education in military centers. Another limitation of this study was the poor control of inventory factor, like the environmental situation or personality traits of the soldiers. So it is also recommended to evaluate the emotional states of the subjects, before conducting a study and teaching life skill package.

With regard to mandatory duty service in Iran and its' high pressures condition, it is necessary to empower the armed forces by life skill education.

Acknowledgment

I would like to express my special thanks of gratitude to Seyed Hasan Tabatabaeizade, our colleague from Faculty of Education and Psychology, University of Tabriz, who provided insight and expertise that greatly assisted the research.

References


