The effects of Benson & Jacobson combined relaxation techniques on the elderly’s depression & life quality

Somayeh Barati*1 and Zahra Sarjuei2

1MSc Sport Psychology, Department of Sport Psychology, Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan, Iran
2Assistant Professor, Department of Physical Education, Mobarakeh (Isfahan) Branch, Islamic Azad University, Isfahan, Iran

ABSTRACT

This research is done with the goal of effects of Benson & Jacobson combined relaxation techniques on the elderly’s depression & life quality. Methods: this research is a semi-experienced with three groups & pre-test & post-test planning. Method of surveying: 30 elders who care in nursing house & they were selected by sampling method. Their depression & life quality before & after relaxation were measured by Beck & Lippard Questionnaire. The relaxations exercises did for 6 weeks & each week 3 sessions -44 minutes. Finally, depression & life quality of these three groups are measured before & after relaxation intervention. For analyzing the data was used Student’s t-tests. Findings: the data analysis among score means of depression & life quality showed significant difference before & after intervention among three experienced groups. Also based on these data, there is no significant difference between Benson & Jacobson relaxation groups & combined Benson & Jacobson relaxation group has better results. Conclusion: regarding to the results, combined Benson & Jacobson relaxation has proper effects on the elderly’s depression & life quality & can be used in improvement the depression & life quality in Elderly Care Centers.

Key words: Elderly, Benson & Jacobson Relaxation, depression, life quality

INTRODUCTION

The elderly is a layer of society & they are considered as a growing population with special needs in modern world to keep pace with huge industrial, science & technological development [1]. In incapable persons increasing their ages caused to factors of elderly will be increased [2]. Mental health problems can be seen in the elderly time & affected on the mental, emotional & behavior elderly. Depression is one of the incapable disorders among the elderly; just low number of them can be improved in a correct time. By increasing the age, physical disorders & the negative effect is on disability in independence & increase need help which caused to increase the level of depression & then decrease their life quality. Although science & technology develop but disorders such as depression is considered as century common diseases. Depressive illness is one of the common psychiatric disorders & is considered as a risk factor for suicide in elderly. Having this condition can be caused to common factors such as fatigue, trouble concentrating, sleep problems & physical pain. Also, by increasing the population the elderly, the questions in about the elderly’s depression & life quality made, as the elderly word is a dynamic word in today world. It means that increasing the number of them, caused to paying attention to their life quality [3]. The World Health Organization means the life quality as person’s perceived emotion of his/her life status in terms of value-cultural system. Life quality defines as person’s sense of well-being that derived from his/her satisfaction &
dissatisfaction of important aspects of life & emphasized on factors such as; mental & physical well-being, satisfaction, happiness, expectations & performance [4]. In addition, there are many methods to improve depression & also increasing the elderly’s life quality. According to most of treatment is conventional therapies and traditional medicine, but in recent years a lot of research productivity & effectiveness of non-pharmacological measures have been approved for the treatment of psychological indicators. Relaxation is a relative state of freedom from physical & mental effects of stress. Muscle relaxation is one of the psychological interventions that are widely used in researches & is considered as behavioral intervention that caused to reduce stress & relieve pains. Pipher et al (2015) surveyed on effects of diazepam & Jacobson relaxation techniques to reduce stress & anxiety & result that relaxation is used as anti-stress drug by physical & mental methods to reduce stress of brain activity & also there is not any significant difference between comparing the relaxation & sublingual diazepam methods [5]. Mahdavi (2012) surveyed on effects of Benson relaxation on the level of stress among hemodialysis patients & found that doing Benson low cost & easy exercises with improvement the level of life quality of hemodialysis patients [6]. So regarding to the past researches that just surveyed on a method but didn’t compare other methods & until now never used both method of Jacobson & Benson relaxation that Jacobson included 2 steps; muscles contraction & expansion with deep breath & Benson relaxation included muscles expansion with deep breath that they are effective methods in psychological factors improvement. So this research studies whether two methods; Jacobson & Benson relaxation is effective on the elderly’s depression & life quality or not?

EXPERIMENTAL SECTION

Recent research is semi-experienced & practical research. The population included all elderly in Amin Nursing House in Boroujen (90 persons) & then 30 persons of them selected. This research is same as “three groups pre-test & post-test” after they filled the Back questionnaires Lipard life quality questionnaire (as pre-test) & then they classified in three groups randomly & tested by dependent variable (Benson’s exercises group, Jacobson exercises group & controlled group) & finally again they test by depression & life quality questionnaires. It needs to do these relaxation exercises the place be quiet & persons put on each clothes that be free in it. Jacobson relaxation techniques are done as; classify the parts of body & muscles & then teach participants that how much to contract each part & asked them to relax muscles with special command. This relaxation started with hands & contract fingers of right hand & then expansion it & continue this exercises to shoulders [7].

Benson muscle relaxation recorded for the elderly & then wanted them to do it as recipe, so the elderly do it in best situation & felt calm in the quiet room & closed their eyes & selected one of relaxing words; God, Love, Rain, Rainbow &.. so deep breathe. They were breathing with noise & expiration with mouth & repeat the selection word & relaxed their toes of feet to high parts of body [8]. In this type of relaxation Unlike Jacobson relaxation where muscle contraction takes place, there is no contraction & muscle stiffness. Both relaxation program for 6 weeks & will be conducted three sessions per week for 44 minutes. 22-minute program will be carried out combines just 50% (percent) time of each of the two methods.

After data collection, they describe as following methods; A) for calculating the size of central tendency & dispersion was used descriptive statistics. B) Student t-test was used for inter-dependent group in various stages of research C) Covariance analysis test was used for comparing differences between groups during the study. For analyzing the data was used SPSS version 21 software.

RESULTS

Combined exercises (Benson Relaxation+ Jacobson Relaxation) have significant effects on mean of elderly’s depression.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stage</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>T</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>Pre-test</td>
<td>24.00</td>
<td>3.859</td>
<td>9</td>
<td>7.062</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>14.70</td>
<td>1.82</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The amount of estimating of dependent t-test of table (1) showed that the mean of depression in combined group is significant difference between pre-test & post-test (Sig≤0.05). So the zero hypotheses is declined based on depression difference between combined group in pre-test & post-test & the research hypothesis is acceptable based
on depression difference in pre-test & post-test. In the other words, the mean of depression in pre-test is significantly lower than post-test among combined group.

Combined exercises (Benson Relaxation+ Benson Relaxation) have significant effect on the elderly’s life quality.

The amount of estimating of dependent t-test of table (2) showed that the mean of life quality in combined group is significant difference between pre-test & post-test (Sig $\leq 0.05$). So the zero hypotheses is declined based on depression difference between combined group in pre-test & post-test & the research hypothesis is acceptable based on depression difference in pre-test & post-test. In the other words, the mean of depression in pre-test is significantly higher than post-test among combined group.

### DISCUSSION AND CONCLUSION

The obtained results of this research showed that relaxation exercises cause to improve the level of the elderly’s depression & life quality that it is same as Ilali (2012), Dixhoorn (1998), Zakeri Moghadam (2010), Nasr abadi et al (2005), Torabi (2012), Mohammadi (2004), Soleiman(2011), Dehghan Nayeri &Adib Haj Baghrti (2011) [9, 10, 11, 12, 13, 14, 15].

Ghafari (2008) studied on the effects of progressive muscle relaxation techniques on depression, anxiety & stress among patients who suffer from multiple sclerosis& resulted that since progressive muscle relaxation techniques are effective on MS patients so these techniques can be caused to decrease depression, anxiety & stress as three common & disarranging sings in MS patients & are same as recent research. So doing these techniques is commended as one of the effective, affordable in costs & time to improve depression & increase the level of life quality [7]. Group of relaxation, stretching & muscle contraction & the use of breathing, increase blood flow to the brain to trigger significant which caused to increase achieving better oxygen & nutrition to brain neurons & mental abilities among the elderly [16].

Elderly is general process that begins during different periods &cannot be stopped or reversed it. The elderly often suffer from the inconvenience of losing friends &loved ones, cut ties with others, decreased cognitive abilities & their performance& leads to fragmentation of personal identity and separation from the world. On the other hand, their memory impairment can disrupt social & interpersonal interactions. All of this causes isolation & depression of the elderly. However, done researches suggested that by using proper innervation method try to improve the life quality in society. Dixhoorn (1998) studied on the effects of learning & deep breathing during three months after myocardial infarction& showed that learning more relaxed breathing patterns has better impacts on heart rate & respiratory sinus arrhythmia salutary on the rest position which this relaxation response by decreased metabolic energy requirements caused to balance the autonomic nervous system, decreasing the activity of the sympathetic & increasing the parasympathetic activities & finally caused to improve the psychological factors such as; depression, anxiety & life quality. The results of past research showed that relaxation can br improve & enhance the level of persons’ life quality [17].

Pifarré et al (2015) studied on the effects of Diazepam &Jacobson progressing relaxation on short term decreasing stress & anxiety & found that relaxation as physical & mental methods can be used as anti-depression drug to decrease the stress of brain activities & also there is no significant difference between relaxation & sublingual diazepam [5]. Pinheiro et al (2015) surveyed on effects of relaxation methods & autogenic method on sleep quality of patients suffering from anxiety, depression & insomnia & result those relaxation techniques such as relaxation and training programs can help to improve sleep quality in these patients and be useful to them [18].

Ilali (2012) studied on the effect of Benson relaxation on stress in hemodialysis patients & found that doing Benson low-cost & simple exercises cause to improve the quality of life among hemodialysis patients& can by using these exercises can help & improve the psychological problems that these results were same as recent research results [9].

#### Table (2): Estimating t-test for the comparison of life quality among the combined group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stage</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>T</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>Pre-test</td>
<td>57.20</td>
<td>6.663</td>
<td>9</td>
<td>-6.092</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>71.90</td>
<td>5.834</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the other words, the mean of depression in pre-test is significantly lower than post-test among combined group.
On the other hand, the effectiveness of this technique in other diseases also certified the claim that the program is effective and efficient.

Chen & Shang (2008) showed that making different situations for achieving relaxation by muscles progressing relaxation plans in elderly cause to increasing the bear of life problems, increasing mobility & physical abilities [19]. Also Galvin & al (2006) studied on the relaxation effects on decreasing stress & improve recognition in the healthy elderly & showed that the five-week program of relaxation significantly decreased anxiety & improved their performance in elderly people have been using their senses [20].

Recent research showed that there is significant difference between three groups in observed depression, as combined group (Benson & Jacobson) caused to decrease the level of the elderly’s depression. So can be suggested combined relaxation method to persons who suffer from psychological factors.

This study showed that various relaxation programs regularly have effect on decreasing the elderly’s depression. So it expected that various relaxation techniques such as Benson & Jacobson is used as effective practices & safe supplement & also as a non-medical treatment alongside other common treatments to reduce depression. According to the recent research findings & previous researches can be resulted that effectiveness of regular relaxation schedule is irrefutable to improve the elderly depression with using treatment methods. It is recommended that regular relaxation programs & appropriate care for the elderly should be considered alongside other plans.

REFERENCES