ABSTRACT

Purpose: Females who are heads of households, due to considerable life difficulties, are a vulnerable population that needs more support, including psychological treatment and empowerment programs. The current paper aims at ego strengthening and decreasing negative self-talk as useful strategies to achieve this goal.

Methods: This paper was a quasi-experimental study that aimed to strengthen the ego and reduce the negative self-talk through hypnotherapy in female-headed households. In this study, a sample of 30 Iranian women were selected by purposive Sampling from all female-headed households who had been referred for treatment was randomly divided into two groups (experimental and control), and eight 45-minute sessions of hypnotherapy were performed for them. The ego strength and self-talk of the subjects were measured using Psychosocial Inventory of Ego Strengths and Self-Talk Inventory.

Results: Multiple Analysis of Covariance indicated there was a significant difference between the control and the experimental group in terms of ego strength Wilks’ Lambda = 0.29, F = 25.6, p < .001, and negative self-talk scores, Wilks’ Lambda = 0.49, F = 10.6, p = .001, on the posttest. And ego strength. In other words, after controlling the effect of pre-test or a covariate, ego strength was higher in the experimental group than in the control group, and the experimental group had less negative self-talk after treatment.

Conclusions: The result of this study indicates that ego-strengthening-based hypnotherapy can be effective in reducing negative self-talk.

Keywords: ego, hypnotherapy, self-talk, female

INTRODUCTION

One of the most important criteria for assessing the status of development within a country is the prestige and credibility of its women. Some women, for different reasons, have the householder role which, along with other difficulties, can lead to their vulnerability to social and economic problems (Ozawa, Lee, & Wang, 2011).

The problems and challenges facing female heads of household can lead to the reorganization of mental structure to cope with these challenges. Self-talk, which increases in difficult or stressful situations, can be used in these circumstances (Vygotsky, 1986).

Self-verbalization is also sometimes called self-statement, self-instruction, inner speech, or self-talk.
The term self-talk used in this paper. Self-talk is an internal dialogue that has the role of self-regulation (Vygotsky, 1986) and can influence behavior (Ellis & Maclaren 2005; Meichenbaum, 1977) and emotion (Beck, Steer, & Brown, 1996).

Studies have indicated that using positive self-talk and reducing negative self-talk will lead to beneficial outcomes such as increased self-esteem (Clore & Gaynor, 2006), decreased negative emotions (Calvete et al., 2005), decreased anxiety (Shi, Brinthaupt, & McCree, 2015), increased self-awareness (Morin, 1993), and improved cognitive functions (Alderson-Day & Fernyhough, 2015).

Vygotsky considers self-talk to be a consequence of normal growth (Vygotsky, 1986), Baddeley connects it with working memory (Baddeley, 2013), and ego psychologists regard it as one of the executive function within the ego (Bateman & Holmes, 2001). Shapiro considers speech as a window to the ego organization and to the functions of the central nervous system (Shapiro, 1975).

Ego is the rational, fact-centered, and executive part of personality. A strong and well-developed ego can help individuals employ coping strategies in the face of challenging situations. It can also be useful in the evaluation of existing reality (Freud 2010). The developed and strong ego is linked with strong self-concept, more happiness, and less anxiety (Mishra, 2013).

Erickson states that ego strengths are a consequence of conflict resolution at eight psychosocial stages of development across the life span. Although all ego strengths exist from the beginning, only one of them obviously shows up in each step. The eight ego strengths from Erikson's point of view are: hope, will, goal, competence, fidelity, love, care and wisdom (Erikson, 1963).

The ability to cope with life and potential threats depends on ego strength to contain tensions (Markstrom, Sabino, Turner, & Berman, 1997). When ego is strong, malfunctions like irrational thinking and faulty reality testing are modified (Schmeichel, Vohs, & Baumeister, 2003). Impulsive function, worry, low self-awareness and black-and-white thinking are some of the features of low ego functioning (Loevinger, 1983). Thus ego strengthening is an important factor in improving executive functions, especially modification of negative self-talk.

Ego strengthening was suggested by Hartland in order to reply to criticisms centering on disease relapse after hypnotherapy (Hartland, 1971). Hartland introduced a method for ego strengthening with the aim of increasing patient's confidence, raising self-esteem and adaptive ability, and reducing anxiety. Ego strengthening is an essential technique for all patients and can be likened to health and food in that it is useful for everybody (Hammond, 1990).

Since hypnotic trance is regularly associated with relaxation, it can reduce tension and disturbance by itself. Psychotherapists who use hypnosis consider ego strengthening a key factor in their treatment. Most hypnotherapy sessions include enjoyable and desirable situations such as light and floating feelings and deep physical and mental relaxation that result in therapeutic effects of hypnosis. With the help of hypnosis, patient learn that they have more control over their body than they thought (Wehbe & Safar, 2015).

Previous studies have revealed that hypnotherapy can be effective in treatment of anxiety, pain, and sleep disorders as well as in enhancing self-esteem (Lam et al., 2015; Shenefelt, 2013; Stafrace & Evans, 2004; Steel, Frawley, Sibbritt, Broom, & Adams, 2016).

Since hypnosis is a useful technique that can lead to ego strengthening (Hartland, 1971) and valuable cognitive changes (Van Dyck & Spinhoven, 1994), further research is necessary in this regard. Accordingly, the effect of hypnotherapy on ego strengthening and self-talk modification in female-headed households will be pursued in this paper.

METHOD

Participants
The experimental and control groups, each containing 15 subjects, were selected by purposive sampling from 750 female-headed households supported by Imam Khomeini Relief Foundation (A charity organization in Iran to provide support for female-headed households and
poor families). One out of each selected pair of subjects was assigned at random to the experimental group and the other to control group. Participants in this research were 30-45 years old with a mean age of 32±1.1 years. They were head of their families for at least six months and were under Imam Khomeini Relief Foundation coverage. The inclusions criteria were: interest to participate in the study, signed an informed consent form, do not having a medical illness or psychotic disorder, having no hearing impairment.

**MATERIALS**

*Self-talk inventory (STI).* Prepared by Calvete et al. (2005), this inventory is a self-report instrument to assess positive and negative self-talk in adults. It has negative and positive subscales. Reported alpha coefficients for the negative and positive self-talk scales are .90 and .80, respectively. Relationships between the scores of this inventory and depression, anxiety, and stress indicate the convergent validity of the inventory (Calvete et al., 2005). Participants are asked to imagine specific situations, then answer each of the 52 items in the inventory by using a 4-point Likert scale. The validity and reliability of the STI in Iran have been confirmed. Alavi et al. reported that Cronbach's alpha was .89 for the negative self-talk scale and .72 for the positive self-talk scale (Alavi, Amirpour, & Modarres Gharavi, 2013). They also indicated that negative self-talk has a significant positive correlation with depression and anxiety.

*Psychosocial Inventory of Ego Strengths (PIES).* Developed by Markstrom et al. The first version of the inventory consisted of 128 items in a 5-point Likert scale. Some of the items are reverse scored. The current version of the inventory contains 64 items. A 32-item short version of the inventory is used in this paper (Markstrom et al., 1997).

The face and content validity of the inventory were confirmed by Markstrom et al. Internal consistency has been confirmed, and its concurrent validity has been shown by investigating its relationship with self-esteem, goal in life, gender roles, and internal locus of control. Its discriminant validity has been confirmed through a significant negative correlation between the ego and hopelessness, confusion of identity, and distress. Researches demonstrate the internal consistency of the scale. Cronbach’s alpha for the overall scale was .94. Validity and reliability of the 32-item short version have been confirmed (Markstrom et al., 1997). Haghighat et al. reported that Cronbach's alpha for 32-item short version was .86 in Iran (Haghighat, 2013).

**Procedure**

The process of selection of participants for this study was as follows: having been referred to a private counseling and psychotherapy center from Imam Khomeini Relief Foundation, Malayer branch, those in need of psychological services first attended two preparatory sessions, where their histories were taken, research questionnaires were distributed, and initial clinical interview were conducted. Then the experimental group received eight 45-minute sessions of hypnotherapy (see Appendix). Psychotherapy sessions were also conducted with the members of the control group after the end of the study. After the end of the psychotherapy sessions, the same inventories were completed again by the participants (Experimental and Control).

**RESULTS**

Multiple Analysis of Covariance (MANCOVA) was done with Group (Experimental and Control) as IV, post-test NST and ES as DVs, and pre-test NST and ES as covariates. Because initial screening showed that there were four outliers, four cases were excluded. After we evaluated assumptions of MANCOVA, the normality of data distribution for each group was performed with Kolmogorov–Smirnov test. As illustrated in table 1, data distribution within groups was normal, ps > .05.

The results of Levene's test indicates the homogeneity of error variance. Levene's test is not significant, hence the error variances is equal across groups, for negative self-talk, F (1, 24) = 2.6, p = .11 and for ego strength, F (1, 24) = 1.15, p = .29.

Box's Test of Equality of Covariance Matrices indicates
that the observed covariance of the dependent variables is equal across groups, \( F(3, 103680) = 2.21, p = .085 \).

MANCOVA results indicate that there is a significant difference between the control and the experiment groups, in terms of their scores on the DVs (Wilks’ Lambda = 0.072, \( F = 135.7, p < .001 \)). As seen in Table 3, there are considerable differences between the groups in terms of negative self-talk and ego strength, \( ps < .001 \).

Given that there are two groups, we use an average of DVs to demonstrate the difference between the control

**Table 1: Kolmogorov-Smirnov Test For normality of data distribution**

<table>
<thead>
<tr>
<th>Group</th>
<th>Statistic</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ego strength pretest</td>
<td>Experimental</td>
<td>.19</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.12</td>
<td>15</td>
</tr>
<tr>
<td>Ego strength posttest</td>
<td>Experimental</td>
<td>.097</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.17</td>
<td>15</td>
</tr>
<tr>
<td>Negative self-talk posttest</td>
<td>Experimental</td>
<td>.11</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.16</td>
<td>15</td>
</tr>
<tr>
<td>Negative self-talk posttest</td>
<td>Experimental</td>
<td>.17</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>.14</td>
<td>15</td>
</tr>
</tbody>
</table>

**Table 2: Descriptive Statistics for Negative self-talk and Ego strength**

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative self-talk</td>
<td>Experiment</td>
<td>44.4</td>
<td>8.33</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>70.3</td>
<td>6.69</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>57.4</td>
<td>15.1</td>
</tr>
<tr>
<td>Ego strength</td>
<td>Experiment</td>
<td>106.1</td>
<td>7.25</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>81.7</td>
<td>9.67</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>94</td>
<td>15</td>
</tr>
</tbody>
</table>

**Table 3: Multivariate Tests**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>Partial Eta Squared</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>Wilks’ Lambda</td>
<td>.51</td>
<td>10***</td>
<td>2</td>
<td>.49</td>
</tr>
<tr>
<td>NST</td>
<td>Wilks’ Lambda</td>
<td>.49</td>
<td>10.6***</td>
<td>2</td>
<td>.50</td>
</tr>
<tr>
<td>ES</td>
<td>Wilks’ Lambda</td>
<td>.29</td>
<td>25.6***</td>
<td>2</td>
<td>.71</td>
</tr>
<tr>
<td>group</td>
<td>Wilks’ Lambda</td>
<td>.072</td>
<td>135.7***</td>
<td>2</td>
<td>.92</td>
</tr>
</tbody>
</table>

Note. NST = Negative self-talk, ES= Ego strength, ***\(p < .001\).

**Table 4: Tests of Between-Subjects Effects**

<table>
<thead>
<tr>
<th>Source</th>
<th>DV</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>PES</th>
<th>OP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>Negative self-talk</td>
<td>5020.1</td>
<td>3</td>
<td>1673.3</td>
<td>51.2***</td>
<td>.87</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ego strength</td>
<td>5115.8</td>
<td>3</td>
<td>1705.2</td>
<td>74.2***</td>
<td>.91</td>
<td>1</td>
</tr>
<tr>
<td>Negative self-talk</td>
<td>Negative self-talk</td>
<td>651.9</td>
<td>1</td>
<td>651.9</td>
<td>20***</td>
<td>.47</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Ego strength</td>
<td>1221.8</td>
<td>1</td>
<td>1221.8</td>
<td>53.2***</td>
<td>.70</td>
<td>1</td>
</tr>
<tr>
<td>Group</td>
<td>Negative self-talk</td>
<td>4408.7</td>
<td>1</td>
<td>4408.7</td>
<td>135***</td>
<td>.86</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ego strength</td>
<td>2794.7</td>
<td>1</td>
<td>2794.7</td>
<td>121.7***</td>
<td>.84</td>
<td>1</td>
</tr>
<tr>
<td>Error</td>
<td>Negative self-talk</td>
<td>718.2</td>
<td>22</td>
<td>32.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ego strength</td>
<td>505</td>
<td>22</td>
<td>22.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Negative self-talk</td>
<td>91471</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ego strength</td>
<td>235169</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. DV= Dependent Variable (posttest), ***\(p < .001\).

PES = Partial Eta Squared, OP = Observed Power
and experiment groups in terms of ego strength and negative self-talk. As seen in table 2, subjects in the experimental group had significantly higher ego strength scores and significantly lower negative self-talk scores than those in the control group.

Results in Table 4 indicate the correlation between the covariate and the dependent variable for negative self-talk and for ego strength (ps < .001). Also after controlling for the pretest effect, there is a significant difference between the scores of the experimental and control groups, F = (1, 22) = 135, p < .001 for negative self-talk and F = (1, 22) = 121.7, p < .001 for ego strength. Therefore, we can conclude that hypnotherapy has a significant effect on ego strength and negative self-talk.

**DISCUSSION**

The aim of this paper was to recognize the effects of ego strengthening hypnotherapy on negative self-talk and ego strength in Iranian female-headed households. MANCOVA results comparing ego strength and negative self-talk in before and after a hypnotherapy intervention indicate a significant effect (p < .01).

This research shows that hypnotherapy can increase ego strength and reduce negative self-talk.

In the research literature on the efficacy of hypnosis, this paper is the first to explore the efficacy of hypnosis for self-talk modification.

Two basic mechanisms can be mentioned for hypnosis efficacy in changing ego strength and self-talk: (1) verbal suggestion and (2) imagery.

Other people's speech or dialogue play a great role both in the process of formation and development of cognitive processes (Luria, 1961) and in the establishment of the ego (St.Clair, 2000). The other people's speech or individuals' self-talk can increase internal capabilities (Luria, 1961; Meichenbaum, 1977; Vygotsky, 1986). Hypnosis enters from the same window, but more efficiently due to use of dissociation. During hypnosis and dissociative states, lower-level units of the control system, or the cognitive system related to the hidden observer, are directly activated by suggestion. However, the executive control and the critical factor of mind reach the lowest rate or are bypassed. Therefore, hypnotic suggestions engender responses with minimal effort or conscious control (Lynn & Green, 2011). However, a feature of hypnotic suggestion is repetition that is repeated suggestions in different sessions or at intervals in a meeting. The Repetition of self-talk or other-talk can change the system of individual beliefs (Ellis & Maclaren, 2005).

The hypnotherapist, by saying sentences directly or metaphorically, focuses on increasing self-confidence, self-esteem, hope, and purposefulness in the subject as the ego strength components (Erikson, 1963; Jacobs, Pugatch, & Spilken, 1968). Once components of a concept has strengthened, the concept will be strengthened too. For example, In Garver ego strengthening suggestions, a sense of security and self-confidence and having positive feeling and experiences are instilled into the subject by saying that "everything you remember makes you feel good about yourself, security and confidence" (Hammond, 1990).

In the tree metaphor, the statement "You have more ability in comparison to the tree," can lead to improved self-esteem and ego strength: "Well, think about it; you’re better than that tree; you can think; move, cautious, and decide; you can love others: others can love you; you can do many things the tree cannot do; feel your power and ability; think about anything you are."

Having a sense of greater strength, more energy, elevated motivation, and further concentration is targeted in Heartland's ego strengthening suggestions: "In this comfortable state, you feel more power and ability in any field; you are feeling more energetic; every moment you are happier, stronger, more urged to progress and remedy; every moment you are more determined and more efficient, happier and healthier, day by day, becoming more interested and motivated in any field of work and communication, further focused, and more efficient" (Hartland, 1971).

This study revealed that hypnosis is effective in strengthening the ego and decreasing negative self-talk of female-headed households. Therefore, this method can be used for empowerment programs and therapeutic
interventions in this group of society, especially since the intervention was short term. The paper might be of interest to feminist mental health professionals, as the sample is female heads of households. This is a group that has not been researched much by psychologists, so this is a very useful aspect of the research. One of the main limitations of this study, are the lack of comparing the hypnotherapy and other psychological interventions in increasing ego strength. Therefore, it is suggested that another researcher makes these comparisons. Another limitation of this study that may reduce the generalizability of study is the lack of random sampling. Therefore, it is recommended that the complete experiment design, to be applied in future researches.

References


Appendix

Therapy protocol.
First session.
Take the patient’s history and performing questionnaires.
Second session.
Perform the initial interview and familiarity with therapy method and its rationale.
Third session. (First session of hypnosis)
The hand levitation suggestion and hypnosis facilitation in the next meetings: suggestions are given to the patient based on this fact that her hand is going to light. This perceived lightness smooth and flat path for the acceptance of therapist verbal suggestions. In other words, it increases the suggestibility.
Fourth session.
The imagery related to the sea and cottage metaphor (a metaphor for the unconscious and a method to identify the Disturbing factors) (Hammond, 1990).
In this session, the patient is asked to imagine herself at the beach and walk slow and take a deep breath and then with the help of imagination inter to a cottage that has two rooms. They called good and bad or dreadful and beautiful rooms and asked her to say anything she sees.
Fifth Session.
Imagination of climbing and Garver (Hammond, 1990) ego strengthening suggestions: In this session, the patient is asked to imagine herself climbing a mountain that after a hard distance (a metaphor for the challenges of life), and reaching the mountaintop, to be calm. Then offered suggestions to have positive feelings and experiences, a sense of security and confidence.
Sixth Session.
Imagination of forest and tree metaphor for raising self-esteem and ego strength (Hammond, 1990): In this session, the patient is asked to imagine herself walking on a forest path, after reaching a stout tree her similarities and distinctions with that tree are said so that she would be able to use the internal strengths.
Seventh session.
Progressive muscle relaxation and Heap (Heap and Aravind, 2002) ego strengthening suggestions: At the meeting after the patient muscle relaxation, presented suggestions that indicative comfort, ability to control thoughts and feelings.
Eighth Session.
Imagination of throwing stones in the lake and Hartland (Hartland, 1971) ego strengthening suggestions: At this meeting the concerns and difficulties of life to be as small and large rocks that she could throw them away in the water. Furthermore, we give her the suggestions to feel greater strength, further energy, better motivated and more focus.
Ninth session.
Sensory awareness and central core metaphor to increase self-confidence and ego strength (Hammond, 1990): In this session, patient focus to her body senses and receive suggestions about having the power, aware and wise inner core.
Tenth Session.
Self-hypnosis training to prevent relapse.