A comparative study of the effectiveness of cognitive-behavioural and common method of family education on the psychological well-being of parents and girl students in secondary programme at western region of Isfahan Province, Iran

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Abstract

This research investigates and compares the effectiveness of cognitive-behavioural method and common method of family education on psychological well-being of parents and girl students in the secondary programme at western region of Isfahan province. The hypothesis was that the effect of cognitive-behavioural method and traditional (common) method on the well-being differs. In this experimental study, 80 girl students and their parents were chosen randomly as the population. Pre-test and post-test were taken for all of the subjects based on Reef’s psychological well-being test. The data of this research were analysed through descriptive statistics and covariance analysis test, and then, by SPSS statistical software. The final results of the research indicate that the cognitive-behavioural family education course compared with traditional (common) method affects the psychological well-being of parents (mothers) and girl students of the secondary programme; the probability of this effect is $p < 0.05$ and it is significant.

Keywords: Common family education course, behaviour-al-cognitive education, psychological well-being

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1. Introduction

Psychological health and well-being affects all of the aspects of life. The notion of health is multidimensional (physical, psychological, social and spiritual health). In fact, well-being means consistency in the existing dimensions of an individual. Sociologically speaking, health and well-being of body and soul are considered as interdependent elements, and maintaining psychological and physical balance is essential for health. Family plays an important role in educating children. Family socialises the members of society and educates the children to play a role in the society. Holding family education courses can help the parents overcome and prevent the problems (Vafdar, 1995). In the common method of family education, a teacher who is trained in this respect would deliver speech on an educational topic (review and publication management of school associations, 2012). Results of the study show that one of the reasons of parents’ reluctance is the pure nature of the content and materials presented in the courses; they are not adjusted to the needs of the participants as well (Ghamari, 1998; Sabeti, 1996; Taghizade, 1996).

Behaviourism was introduced through forming the existing empty creature and was applied to clinical psychology through classical, instrumental and reactive conditioning and other theories. Some of the other theories include: 1) Velpy’s regular desensitisation for anxiety and stress disorders such as post-traumatic anxiety disorder, 2) not paying attention for desertion or withdrawal of drugs, bad habits and aggression, 3) relaxation for anxiety, 4) flooding for treatment of practical obsession and practical-intellectual obsession and 5) aversion for drug and alcohol withdrawal and desertion of habitual disorders (Seif, 1379). Foa and Emmelkamp’s book is on the failure of behaviour therapy. It is crystal clear that one can not attribute the problems such as treatment acceptance to weak motivation and lack of collaboration of patients resulted in the slow rate of recovery (Hatton et al., 2011). Recovery by placebos in physical patients (Santrak, 2009) shows the shortcoming of behaviourism as well. The existence of internal issues even in the treatment of physical patients signifies the importance of thoughts and emotions in assistance to recovery. Behavioural cognitive pattern for every individual has a motivated structure in pursuing the objectives (Cox & Clinger, 2002). One can change the perspective by using 10 basic cognitive and behavioural facts: 1) change: your thought and actions, 2) duty: practice makes perfect—the more you try, the more you get, 3) action: actions speak louder than words, 4) need: define the problem, 5) purposes: move towards the purposes, 6) evidence: proves that cognitive-behavioural can prosper, 7) perspective: seeing the incidents from another point of view, 8) self-assisting approach: I can do it myself, 9) experience: I believe in what I reach to the conclusion that I experience and 10) write: to recall your progress (Paul Blankiron, 2010). Paul (2001) cognitive behavioural education is used in the companion of synthetic methods from the viewpoint of cognitive restructuring and cognition therapy for the correction of mental derangement. Psychological well-being is defined as the growth of the actual talents of every individual (Vescuse et al., 2009).

Pebkeran et al. consider the attributes of character as one of the sources within the perspective of Ryne and Deci (2001). There are two approaches to the definition of well-being: 1) hedonic and 2) eudaimonic. According to eudaimonism, well-being should distance from happiness and flourishing the potential is through the process of understanding oneself, but according to hedonism, well-being includes mental happiness, enjoyment and prevention of pain. Reef and Singer (1995) introduce six factors as the constructive components of psychological well-being: dominance over environment (the ability of an individual in controlling the environment), individual growth (feeling of continuous growth), purposeful life (having purpose in the life and giving meaning to it), autonomy (independence and resistance ability against social pressures), self-acceptance (having positive attitude towards ego) and positive relations with others (cordial relations with others and the ability to sympathize). Psychological well-being treatment is problem-oriented and based on educational patterns in which the main technique used is introspection through the diary and positive and constructive interaction between the healer and patient (Golbar Yazdi et al., 2012).
Among social factors, family relationship is a risk factor for depression that education in family members can be a preventive factor for susceptible to depression (Chen, 2013). During recent years, psychological therapies, particularly mental-social intervention, are gaining popularity (Weightman, Air & Baune, 2014). One such intervention is the ‘mental family education’ and systemic family therapy (Taylor, Chae, Lincoln & Chatters, 2015; Kooistra, 2014). This method is cost-effective procedure in the relapse prevention of depression (Shimodera et al., 2012) and improves the quality of life in MDD (Sharif, Nourian, Ashkani & Zoladl, 2012). Some studies indicate that mental family education results in a significant decrease in ‘feeling pressure’ or ‘family burden’ following the intervention and one year after it in patients with mood disorders (Bernhard et al., 2006). Furthermore, Falloon reported that mental education to caregivers improves the social function of patients with mental disorders (Falloon, 2003). Although family interventions for mood disorders in community settings yet are discussed (Miklowitz, 2012).

Cognitive behavioural approaches are based on the theory that learning processes play a formative role in the development and maintenance of addictive behaviours. These treatments are among the most widely studied. Considering the extensive research that has been conducted in establishing cognitive behavioural therapy as an empirically supported treatment and that few differences are found when comparing cognitive behavioural treatments (see the Mesa Grande study described earlier), researchers have suggested that effective elements across cognitive behavioural approaches be combined. More recently, Sharpe et al. (1996) and Speckens et al. (1995) implemented a series of randomized control trials which utilized between six and 16 sessions of cognitive-behavioural therapy to demonstrate the effectiveness in managing the problems of chronic fatigue and medical patients with unexplained physical symptoms, respectively. As mentioned, there is no need to replicate the efficacy of cognitive-behavioural therapy with this client group, but it is appropriate to elaborate on the main themes and highlight some of the common cognitive distortions. The cognitive-behavioural approach has much to offer in the management of spinal cord injury. There is a common consensus on the efficacy of its application to this client group. Crewe and Krause (1981) and Kennedy (1991) describe the applications of cognitive-behavioural therapy with this population. During therapy, the thoughts and beliefs about the consequences of the injury are explored. The specific periods of emotional distress are examined; they include the antecedent events, thoughts and beliefs, and emotional and behavioural consequences. These are separated and their interrelationships are discussed. Once specific negative thinking patterns and inferences are identified, related core assumptions are made explicit. By focusing on maladaptive and irrational patterns, negative assumptions about the consequences of the injury can be challenged and people are encouraged to respond to their injury in a rational and realistic fashion (Solati, 2016). The results of previous research studies support the conceptual model of research. Depression constitutes one of the most common mental disorders, and medical and psychological therapies are the major therapeutic options for it. Aim of Solati (2016) the present study is to examine the efficacy of group cognitive-behavioural therapy, psycho-educational family and medical therapy in reducing and preventing the recurrence of symptoms in patients with major depressive disorder (MDD). This is a clinical trial on 60 women with the major depressive disorder. Our findings indicate significantly difference between depression scores of the two experimental groups and the control group after the intervention. On follow-up, however, only the second experiment group (family education) indicated a significant difference from the control group and the other groups were not significantly different.

Aim of Hofmann et al. (2012) study was cognitive behavioural therapy (CBT), which is a popular therapeutic approach that has been applied to a variety of problems. The goal of this review was to provide a comprehensive survey of meta-analyses examining the efficacy of CBT. We identified 269 meta-analytic studies and reviewed of those a representative sample of 106 meta-analyses examining CBT for the following problems: substance use disorder, schizophrenia and other psychotic disorders, depression and dysthymia, bipolar disorder, anxiety disorders, somatoform disorders, eating disorders, insomnia, personality disorders, anger and aggression, criminal behaviours, general stress, distress due to general medical conditions, chronic pain and fatigue, distress related to pregnancy
complications and female hormonal conditions. Additional meta-analytic reviews examined the efficacy of CBT for various problems in children and elderly adults. The strongest support exists for CBT of anxiety disorders, somatoform disorders, bulimia, anger control problems and general stress. Eleven studies compared the response rates between CBT and other treatments or control conditions. CBT showed higher response rates than the comparison conditions in seven of these reviews and only one review reported that CBT had lower response rates than comparison treatments. In general, the evidence base of CBT is very strong. However, additional research is needed to examine the efficacy of CBT for randomized-controlled studies. Moreover, except for children and elderly populations, no meta-analytic studies of CBT have been reported on specific subgroups, such as ethnic minorities and low-income samples. The current study investigates and compares the effectiveness of family education by the cognitive behavioural method and common method on the psychological well-being of parents and girl students in the secondary programme. This research tries to confirm the following hypothesis: there is a significant difference between the effectiveness of family education courses 1) by the cognitive behavioural method and common method on the psychological well-being of parents and 2) by the cognitive behavioural method and common method on the psychological well-being of girl students.

2. Methodology

This study is experimental. There are four groups in the study: two parents group and two students group. Pre-test and post-test are used for all of the groups. Testing the treatment and control groups was done accordingly in eight sessions:


Population and method of sampling: the population of the study is all of parents and girl students of the secondary programme at western region of Isfahan province, Iran. The number accounts to 6048 in 2012–2013 and sample accounts to 80 persons.

Cluster sampling was used and it was used in several phases. At first, one of the regions of education Organisation in the west of Isfahan province was chosen randomly. Then, two high schools were chosen for the study. From among the levels in every high school, one was chosen randomly. The parents chosen were 30–45 years old and the diploma was considered as the lowest level of education. Then, counterparty ing was done by dividing into two halves randomly and students were grouped into control and treatment groups. The pre-test was taken and after the courses, post-test was taken and the results were compared.

2.1. Data collection tools

Psychological well-being Scale was used for data collection in this study. It was designed by Carol Reef in Wisconsin University. The purpose of the questionnaire was to operationalize the six factors extracted and placed in the Reef’s psychological well-being model. This test has 84 questions and six factors (self-acceptance, positive relations with others, autonomy, dominance over the environment,
purposeful life and individual growth). This test was designed by Reef in 1989. The reliability coefficient based on Cronbach’s Scale was determined as follows: self-acceptance = 93, positive relations with others = 90, autonomy = 86, dominance over environment = 90, purposeful life = 90 and individual growth = 87 (Mikaeili, 2010). The validity of the Persian version was reported in studies from 86 to 93 as well (Bayani et al., 2008). Cronbach’s Alpha coefficients were reported as follows: self-acceptance = 78, positive relations with others = 74, independence = 60, dominance over environment = 77, purposeful life = 75 and individual growth = 73 (Shokri et al., 2007).

3. Findings

1. A. Total score of the psychological well-being of mothers: according to Table 1 in which the data of two experiment group and treatment group in pre-test and post-test were inserted, we observed that the total score average of the 20 participants of experiment group in pre-test was 322.3 and the standard deviation was 23.36. This group after passing cognitive behavioural family education course reached to an average of 381.9 and standard deviation of 38.4. The treatment group which had 20 participants had the average of 316.75 and standard deviation of 38.4 in the pre-test. This group attended in the traditional family education course and in the post-test reached the average of 331.75 and standard deviation of 20.77. Other data are shown in the table for further information.

<table>
<thead>
<tr>
<th>Statistical index</th>
<th>Frequency</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Range of the changes</th>
<th>Lowest score</th>
<th>Highest Score</th>
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<tr>
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<td>323.3</td>
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<tr>
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<td>38.4</td>
<td>60</td>
<td>349</td>
</tr>
<tr>
<td>Treatment group</td>
<td>20</td>
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<td>23.2</td>
<td>96</td>
<td>272</td>
<td>368</td>
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<td></td>
<td>20</td>
<td>331.75</td>
<td>20.77</td>
<td>77</td>
<td>289</td>
<td>366</td>
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</table>

1. B. Girls total score on psychological well-being test

According to Table 2 in which the data of two experiment group and treatment group in pre-test and post-test were inserted, we observed that the total score average of the 20 participants of experiment group in pre-test was 298.6 and the standard deviation was 20.48. This group after passing cognitive behavioural family education course reached to an average of 364.8 and standard deviation of 25.54. The treatment group which had 20 participants had the average of 305.3 and standard deviation of 19.47 in the pre-test. This group attended in the traditional family education course and in the post-test reached the average of 316.3 and standard deviation of 23.83. Other data are shown in the table for further information.

<table>
<thead>
<tr>
<th>Statistical index</th>
<th>Frequency</th>
<th>Average</th>
<th>Standard deviation</th>
<th>Range of the changes</th>
<th>Lowest score</th>
<th>Highest Score</th>
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<td>Group and test phase</td>
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<tr>
<td>Treatment group</td>
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<tr>
<td></td>
<td>20</td>
<td>316.3</td>
<td>23.83</td>
<td>82</td>
<td>268</td>
<td>350</td>
</tr>
</tbody>
</table>

First hypothesis of the study
There is a significant difference between the effectiveness of family education courses by the cognitive behavioural method and common method on the psychological well-being of parents. In investigating the total component of psychological well-being in the parent group, we controlled the effect of pre-test as intervening effect at a significance level of $p < 0.05$ and intergroup freedom degree of 1 and intragroup freedom degree of 38; the value of F is equal to 8.627 that is more than F in Table 4.8. This result is identical with the results before the covariance analysis at a significance level of $p < 0.05$ and degree of freedom $(df)$ of 38. The more accurate calculation showed 0.004 that is smaller than the probability level of the table. Therefore, we can conclude that the two control and treatment groups had been homogeneous in such a way that by deleting pre-test scores as an intervening effect, no change is observed in the results of the study and the previous result of the study, i.e., null hypothesis was rejected and the hypothesis of the study was confirmed. This means that cognitive behavioural family education courses have a positive effect on the total score of the personal health of parents.

Second hypothesis of the study

2. There is a significant difference between the effectiveness of family education courses by the cognitive behavioural method and common method on the psychological well-being of girl students. In investigating the total component of psychological well-being in girls group, we controlled the effect of pre-test as intervening effect at a significance level of $p < 0.05$ and intergroup freedom degree of 1 and intragroup freedom degree of 38; the value of F is equal to 9.818 that is more than F in Table 4.8. This result is identical with the results before the covariance analysis at a significance level of $p < 0.05$ and degree of freedom $(df)$ of 38. The more accurate calculation showed 0.01 that is smaller than the probability level of the table. Therefore, we can conclude that the two control and treatment groups had been homogeneous in such a way that by deleting pre-test scores as an intervening effect, no change is observed in the results of the study and the previous result of the study, i.e., null hypothesis was rejected and the hypothesis of the study was confirmed. This means that cognitive behavioural family education courses have a positive effect on the total score of the personal health of girls.

4. Discussion and conclusion

The final results of the study indicate that cognitive behavioural family education courses compared with traditional (common) method have a positive effect on the psychological well-being of parents and girl students in the secondary programme and probability level is $p < 0.05$. Therefore, it is positive and significant.

This study confirms and is congruent with the following studies: Miller and Smith (1997); Khantazian (1990); Mccrady Rapshnin (1992) are group studies done as a workshop and are similar to the current study in this regards. The findings of the studies of Smizky et al. (2000), Mcnikton (2000), Shiling et al. (2000), Shiba et al. (1996) and Domer et al. (1996) also indicate the effect of cognitive behavioural educations on the reduction of depression and feeling of sin through the correction of irrational beliefs and perception errors.

The studies of Rafanelli et al. (1999) and Fao (2003) indicate that the cognitive behavioural method accentuates the negative emotions of individuals. These studies are opposite to the finding of the current study.
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