An International Peer-reviewed journal which publishes in electronic format
Editorial Team

Editor-in-Chief
Masood Hosainchari,
PhD, Assistant Prof. of Educational Psychology, Dep. Educational Psychology, Shiraz University, IRAN

Managing Editors
Hasan Khezri, PhD student, Educational Psychology, Dep. Teachers Education, Islamic Azad University - Firoozabad Branch, IRAN
S. Abdolwahab Samavi, PhD student, Educational Psychology, Dep. Psychology, Hormozgan University, Bandar Abbas, IRAN

Executive Editor
Moosa Javdan, PhD student, Educational Psychology, Dep. Psychology, Shahid Chamran University, Ahvaz, IRAN

Editorial Board

Educational Psychology: Manijeh Shehni Yailagh,
PhD, Prof. of Educational Psychology, Dep. Educational Psychology, Shahid Chamran University, Ahvaz, IRAN

Philosophy of Education: Ali Akbar Shaikhi Fini,
PhD, Assistant Prof. of Philosophy of Education, Dep. Psychology, Hormozgan University, Bandar Abbas, IRAN

IMMUNOLOGY: Siamk Sandoughchian,
PhD Student, Immunology
Dep. Immunology, Faculty of Medical Sciences, Juntendo University, JAPAN

Medical science: S. Hakimeh Sajjadi,
MD, PhD student, PhD by Research Course, Hormozgan University of Medical Sciences, Bandar Abbas, IRAN

Chemistry: S. Maryam Sajjadi,
PhD, Assistant Prof. of Analytical Chemistry, Department of Analytical Chemistry, Faculty of Chemistry, University of Tabriz, Tabriz, IRAN

Biology: Mozafar Bagherzadeh Homaei,
PhD Student in Plant Physiology, Department Of Biology, Faculty Of Science, University Of Isfahan, Isfahan, IRAN

MICROBIOLOGY: Osman Erganiş,

Geophysics: Abbas Gholamzadeh,
PhD, Assistant Prof. of Geophysics (Seismology), Dep. Physics, Hormozgan University, Bandar Abbas, IRAN

PHYSIOLOGY: Tohid Vahdatpour,
PhD, Assistant Prof. of Physiology
Dep. Animal Sciences, Shabestar Branch, Islamic Azad University, Shabestar, IRAN
Influence of Meteorological Parameters on Suitable Workdays and Timeliness Cost in Sugarcane Harvesting Operation
Omrani, A. Shiekhdavoodi, M. and Shomeili M.


**ABSTRACT:** Accurate information on the days suitable for field operations is important in the design, development, and selection of efficient machinery systems for crop production. The amount of working days in some important relations used in agricultural mechanization and as one of the effective factors needed to calculate for determining the optimum size of machines, the capacity of existing farm machinery and calculating timeliness costs. Most important limiting factor for sugarcane harvesting operation is soil moisture conditions. For his propose obtain 12 years ago metrological data from metrological synoptic station in Amir Kabir sugarcane Agro-Industry which conducted in 45 km south of Khuzestan province Amir kabir Agro-industry (31º03´N 48º14´E). data analyzed by Microsoft Excel version10 and results show December month have minimum but November & March maximum probably field day work is available in total period of harvesting sugarcane operation (from November to March) and The average field work day probably for total period of sugarcane harvesting obtain 0.68 also timeliness costs according to $\lambda O = 2$ is 336 $/ha$.

**Keywords:** Sugarcane harvesting, Suitable field workday, Timeliness cost

The relationship between forgiveness and marital satisfaction
Mirzadeh M and Fallahchay R.


**ABSTRACT:** The study examined the relationship between forgiveness and marital satisfaction in Band-Abbas married women. The sample included 200 persons who were selected through stratified sampling. Data collection tools, including 3 measure of Demographic Questionnaire. The Enright Forgiveness Inventory [EFI], was translated and adopted into Persian by Ghobari et al and the ENRICH Marital Satisfaction scale [EMS], was translated and adopted into Persian by Soleymanian. This type Pearson correlation and multiple regression analysis of data...

**Keywords:** Forgiveness, Marital satisfaction, Married women

Analysis of Personality Traits of Applicants for Cosmetic Surgery
Nikbakht A.


**ABSTRACT:** Performing cosmetic surgery on body members, especially on face and mostly on nose, is globally widespread and thus rhinoplasty is commonly practiced in all societies and nations. Each year ten thousands of individuals undergo cosmetic surgery in order to enhance the appearance of their bodies. The objective of this study was to study the personality traits of people who had applied for cosmetic surgery. The sample included 50 participants: 25 applicants for cosmetic surgery and 25 ordinary individuals. All the individuals were examined by NEO personality inventory. The data were analyzed by employing the independent t-test method. The results obtained from the study indicated that applicants for cosmetic surgery do not differ from normal people in characteristics associated with neurosis, desirability, extraversion, and conscientiousness. The results obtained from this research showed a significant difference between the flexibility of the two groups. That is to say, the flexibility of candidates for cosmetic surgery was higher than that of the ordinary people. In sum, it can be concluded that there is no significant difference between the personality characteristics of these individuals and the ordinary ones.

**Keywords:** Cosmetic surgery, NEO inventory, Personality trait

A Study of the Condition of Emotional Intelligence in Addicts in the TC Center in the City of Shiraz
Nikbakht A.


**ABSTRACT:** The present research was conducted as an effort to study the condition of emotional intelligence in addicts in the Therapeutic Community (TC) Center in the city of Shiraz. In this study, all of the addicts (17 individuals) admitted at the TC Center were tested using the 30-item Trait Emotional Intelligence Questionnaire. For the sake of comparison, a group of 18 self-introduced addicts who had referred to the welfare center in Shiraz were selected based on
The Comparison of marital conflict resolution styles and child rearing practice between satisfied couples and conflicted couples in Bandar Abbas city
Ghaderi F., Haghighi H., Izadi Ajirlo A., and Taybi Sogh M.

ABSTRACT: The purpose of this study was comparison conflict resolution style and child rearing practice among satisfied couples and conflicted couples in Bandar abase city. 100 couples were by random sampling selected as sample of this study. Equally in each group 50 couples attended. Scales were used in this study include Rahim(1983) conflict resolution styles (ROCI-II) and one of them is 30 questionnaire related ways of rearing practice, index of questioner Enrich marital satisfied are used in this research so that they are determining matrimony satisfaction scales To interpret and analyze results. The result showed: that the conflict resolution styles (integrating, compromising, dominating, avoidance, obligating) and child rearing practice (powerfully – nonchalance and liberty) between conflicted couples and satisfied couples have meaningful relationships. Also, the finding show that the satisfied couples more used than conflict resolution styles integrated, compromised, avoidance, obligating and child rearing practice powerfully, nonchalance and liberty. Conflict couples more used than conflict resolution styles dominating and child rearing practice despotically. Findings showed integrating; compromising styles could be predicted powerfully of child rearing practice. Dominating style could be predicting nonchalance of child rearing practice and obligating style could be predicting liberty of child rearing practice.

Keywords: Marital conflict resolution styles, Satisfied couples, Conflicted couples and child rearing practice

Comparison Information Recall from Overt Memory among Generalized Anxiety Patients, Major Depression Patients and Normal Subjects
Hamid N. and Kalantari F.

ABSTRACT: The aim of this study is to compare in formation recall from overt memory among generalized anxiety patients, major depression patients, and normal persons. Statistical universe of the study were generalized anxiety patients (GAP), and major depression disorders (MAD) referring to (Who have referred to) therapeutic, instructional and counseling centers in Ahwaz. These people were chosen through available sampling, and were matched regarding age, socioeconomic status, having one standard deviation higher than Beck's scale of anxiety and depression, and other important scales in the study. Normal persons were chosen from among the workers of the same places. The instruments applied to the study included: Beck Depression inventory, Beck anxiety inventory, and Recall Test. For data analysis, one-way variance analysis, and also Tukey posteriori test were applied. Results showed that regarding free recall and recall , there was a significant difference among the 3 groups of subjects ...

Keywords: Information recall, Overt memory, Generalized anxiety, Major depression, Normal persons

Factors Associated with Wife Abuse among Women Attending Forensic Medicine in Bandar Abbas
Gaharpour Gatabi M., Dadvar R., and Rahimi Sadegh A.

ABSTRACT: Of problems and dangers in which women are encountered with them on any society is wife-tormenting. The object of this research is to determine and explain factors related to wife-tormenting .statistic society of the research includes women tortured from their husband in which referred to Bandar Abbas 's forensic medicine on the year of 2011 and from theses , about 100 oersond has been selected by randomly sampling method. Required information from questionnaire has been analyzed by descriptive and inference statistic method. The result showed, men by lower education level have has more wife-tormenting and the men who have high addiction, they torment their wife more. Unemployed men have has more wife-tormenting than employed one. Using unauthorized drugs by men have has direct relation to their wife tormenting. Abnormal behavior on men like watching rough films, nightly restlessness, vagrancy and street-walking have has direct relation to their wife-tormenting.

Keywords: Wife-tormenting, Addiction, Revenue, Unauthorized drugs, Abnormal behavior.
Comparison of Differentiation among Satisfying Couples & Conflicting Couples in Bandar Abbas City

Aryamanesh S., Fallahchai R., Zarei E and Haghighi H.


**ABSTRACT:** The purpose of this study was comparison of Differentiation among satisfying couples, and conflicting couples. Components of differentiation (Emotional reactivity, Emotional Cutoff, Emotional Fusion and I-position) were investigated. 120 couples were nonrandom selected as sample of this study. Equally in each group 60 couples attended. Scales were used in this study include differentiation of self-Inventory (DSI) and index of Hudsen marital satisfied (IMS). The main results of this study showed: in the differentiation was found significant difference among two groups of participant. There is not among between men and women of participant about differentiation. In the Emotional reactivity and Emotional Fusion was found significant difference among two groups of participant. The results showed that women more than men are suffer Emotional reactivity and Emotional Fusion. There is not any significant difference among two groups participant about Emotional Cutoff and I-position. The multiple regression analysis showed components of differentiation (Emotional reactivity, Emotional Cutoff, Emotional Fusion and I position) could predict %56 variance of marital satisfaction variable. Overall was determined that the satisfying couples had higher level of differentiation in comparison with conflicting couples that improved their marital satisfaction.

**Keywords:** Differentiation, Satisfying Couples, Conflicting Couples
Journal of Life Science and Biomedicine

Publication Data

Editor-in-Chief: Dr. Masood Hosainchari, Iran
ISSN: 2251-9939
Frequency: Bi-Monthly
Current Issue: Vol.2, No. 6 (November 2012)
Publisher: Scienceline Publication

Aims and Scope

Journal of Life Science and Biomedicine (ISSN: 2251-9939) is an international peer-reviewed open access journal, publishes the full text of original scientific researches, reviews, case reports and short communications, bimonthly on the internet... View full aims and scope (www.jlsb.science-line.com)

- JLSB is indexed/covered by NLM catalog-PubMed, RICeST (ISC), Ulrich's™, OCLC, TOCs, TIB, Genamics, Google Scholar, IndexCopernicus... full index information
- Open access full-text articles is available beginning with Volume 1, Issue 1.
- This journal is in full compliance with Budapest Open Access Initiative and International Committee of Medical Journal Editors' Recommendations (ICMJE).
Influence of Meteorological Parameters on Suitable Workdays and Timeliness Cost in Sugarcane Harvesting Operation

Abdollah Omrani1*, Mohamad Javad Shiekhdavoodi1 and Mahmoud Shomeili2

1. Department of Mechanics of Agricultural Machinery and Mechanization, Faculty of Agriculture, Shahid Chamran University of Ahvaz, Golestan Blvd, Ahvaz, Iran
2. Manager of Agronomy Department in Iranian Sugarcane Research and Training Institute, Khuzestan Province, Iran

*Corresponding’s Email: ab.omrani1@gmail.com

ABSTRACT

Accurate information on the days suitable for field operations is important in the design, development, and selection of efficient machinery systems for crop production. The amount of working days in some important relations used in agricultural mechanization and as one of the effective factors needed to calculate for determining the optimum size of machines, the capacity of existing farm machinery and calculating timeliness costs. Most important limiting factor for sugarcane harvesting operation is soil moisture conditions. For his propose obtain 12 years ago metrological data from metrological synoptic station in Amir Kabir sugarcane Agro-Industry which conducted in 45 km south of Khuzestan province Amir Kabir Agro-industry (31º03´N 48º14´E). data analyzed by Microsoft Excel verion10 and results show December month have minimum but November & March maximum probably field day work is available in total period of harvesting sugarcane operation (from November to March) and The average field work day probably for total period of sugarcane harvesting obtain 0.68 also timeliness costs according to $\Delta o=2$ is 336$/ha.

Key words: sugarcane harvesting, suitable field workday, timeliness cost

INTRODUCTION

Probability of a working day (PWD) is the fraction of workable days to all days in a work season, which often is used in management of agricultural mechanization. For example it is used to determine timeliness cost, optimum capacity of a machine and the required machine capacity [1]. Accurate information on the number of suitable days for field operations is important in design, development, and selection of efficient machinery systems for crop production [2]. In order to predict the amount of work that can be accomplished, the time available within the optimal period for the required operation must be known. The time available varies considerably from year to year as weather conditions vary. Selection of the optimal machinery set for long-term production on the farm depends upon accurate assessment of the days available for performing each field operation [3]. The most restrictive factor for sugarcane harvesting operation is the soil moisture.

MATERIAL AND METHODS

This field study was conducted in Amir Kabir Agro-industry (31º03´N, 48º14´E) 45 km south of Khuzestan province; Figure 1 shows the location of the field study. This region has a mean annual rainfall of about 147.1 mm, air temperature is 25 C, soil temperature at 50 cm depth is 21.2o C and Average elevation is 7m above sea level [4]. By collecting meteorological data along 12 years in Amir Kabir agro-industry Synoptic weather stations data calculate restrictive factors as follow:

Restrictive factors

1- Temperature: the optimum range of temperature to doing farm operation is 2-30 C. days were conduct at this range calculated as workday.

2- Relative Humidity: suitable range of humidity for farm operation is between 45-85%. Days were conduct at this range calculated as workday.
3- **Precipitation:** Most important district factor in sugarcane harvesting is rainfall and leads to increase in timeliness cost and soil compaction by agricultural machinery traffic. According to quantity of precipitation calculates suitable workday for days which have ≤2mm precipitation and for increase in each 1mm days after rainfall is unsuitable workday.

4- **Evaporation:** With increasing rainfall and decreasing temperature during the harvest season, we see a reduction in evaporation which leads to delay sugarcane farm soil humidity reach at field capacity for workability.

![Figure 1. Location of the fields study in south of Ahwaz, Khuzestan province, Iran](image)

**Graph 1.** Average daily temperature in 2007-2010 [5]

**Graph 2.** Average RH% in Amir Kabir agroindustry [5]

**Graph 3.** Average Precipitation in Amir Kabir agroindustry [5]

**Graph 4.** Average monthly Evaporation in Amir Kabir agroindustry [5]
Probability of workdays: by review meteorological data and analyse them obtain table 5 and by using Equation (1) [6] calculate (Ppwd) in each month and total harvest season.

<table>
<thead>
<tr>
<th>Situation</th>
<th>November</th>
<th>December</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunny</td>
<td>17.6</td>
<td>14.3</td>
<td>15.1</td>
<td>15.5</td>
<td>16</td>
<td>78.5</td>
</tr>
<tr>
<td>Semi Cloudy</td>
<td>8.2</td>
<td>9.5</td>
<td>8.1</td>
<td>7.7</td>
<td>8.5</td>
<td>42</td>
</tr>
<tr>
<td>Full Cloudy</td>
<td>4.2</td>
<td>6.2</td>
<td>6.8</td>
<td>6.8</td>
<td>5.5</td>
<td>28.5</td>
</tr>
</tbody>
</table>

\[
pwd = \frac{1}{2} \text{full cloudy days} + \frac{1}{2} \text{semi cloudy days} + \text{total sunny days}{\text{Total suitable days for operation}} \quad (1)
\]

**Table 5. The average number of sunny, semi cloudy and full cloudy days [5].**

<table>
<thead>
<tr>
<th>Month</th>
<th>November</th>
<th>December</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>Total Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pwd</td>
<td>0.74</td>
<td>0.66</td>
<td>0.67</td>
<td>0.70</td>
<td>0.71</td>
<td>0.68</td>
</tr>
</tbody>
</table>

**Table 6. Segregate (Ppwd) in each month and average total (Ppwd) into harvest season**

Timeliness cost: by little change in ASAE EP496.2 [7] recommended the annual timeliness cost for an operation can be estimated by Equation (2) [8].

\[
TC = \frac{K_{\alpha}AYV}{\lambda_{\text{f}}TC_{a}P_{\text{wd}}} \quad (2)
\]

\[C_t= \text{timeliness cost ($/ha)}\]

\[K_{\alpha}= \text{timeliness coefficient} \quad (A \text{ factor used to estimate the reduction in crop return (quantity and quality) due to lack of timeliness in performing an activity [9].}}\]

\[A= \text{area (hectare/year)}\]

\[Y= \text{yield per area (ton/ha)}\]

\[V= \text{value per yield ($/ton)}\]

\[\lambda_{\text{f}} = \text{if start and end operation doing in unsuitable time}=2\]

\[\lambda_{\text{f}} = \text{if start and end of operation doing in suitable time}=4\]

\[T= \text{expected time available for field work each day (hr/day)}\]

\[C_{a}= \text{machine capacity (ha/hr)}\]

\[P_{\text{wd}}= \text{probability of a working day (decimal)}\]

**RESULTS AND DISCUSSION**

Average yield of sugarcane per hectare in Amir kabir agro industry is 77.7ton/ha which only 10% of harvested cane produce sugar 7.77 ton and each white sugar world price is 452 $.

**Table 7. Result of timeliness cost formula calculate factor for sugarcane agro industry**

<table>
<thead>
<tr>
<th>Factor</th>
<th>T</th>
<th>Pwd</th>
<th>Ce</th>
<th>(\lambda_{f})</th>
<th>K(day)</th>
<th>Value</th>
<th>Y (ton/ha)</th>
<th>A(ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>24</td>
<td>0.68</td>
<td>0.4</td>
<td>2</td>
<td>0.0025</td>
<td>452</td>
<td>77.7</td>
<td>50</td>
</tr>
</tbody>
</table>

*according to [6]

So quantity of timeliness cost during harvest season obtains as follow:

\[
TC = \frac{0.0025 \times 50 \times 77.7 \times 452}{2 \times 24 \times 0.4 \times 0.68} = 336$/ha
\]

Results showed that December month have minimum but November & March maximum probably field day work available in total period of harvesting sugarcane operation (from November to March) and the average field work day probably for total period of sugarcane harvesting obtain 0.68 also timeliness costs according to \(\lambda_{f}=2\) that was 336$/ha.

It is suggested to consider calculate timeliness cost for all area under cultivation and all farm machinery operation, reliability of machinery and repair and maintenance cost of new machinery so will take decision about replacement, buying and adding new machinery for doing operation in optimum time.
REFERENCES


5. Iranian Sugarcane Research and Training Institute, and Amir Kabir sugarcane agro industry Khuzestan Province, Iran. Synoptic weather stations data.


The Relationship between Forgiveness and Marital Satisfaction

Maryam Mirzadeh* and Reza Fallahchai

Department of Psychology, Hormozgan University, P.O. Box3995-Bandar Abbas-Iran

*Corresponding author’s e-mail: pardis_in@yahoo.com

ABSTRACT

The study examined the relationship between forgiveness and marital satisfaction in Band-Abbas married women. The sample included 200 persons who were selected through stratified sampling. Data collection tools, including 3 measure of Demographic Questionnaire, The Enright Forgiveness Inventory [EFI], was translated and adopted into Persian by Ghobari et al and the ENRICH Marital Satisfaction scale [EMS], was translated and adopted into Persian by Soleymanian. This type Pearson correlation and multiple regression analysis of data (P<0.001) saying that a significant positive relationship between marital satisfaction and forgiveness. Results of multiple correlation analysis also suggests the existence of multiple relationships between forgiveness marital satisfaction and forgiveness was the best predictor of marital satisfaction.

Keywords: Forgiveness, Marital satisfaction, Married women

INTRODUCTION

The family is a vital institution in American society, often serving as the principal source of social support for individuals. Strong marriages provide spouses with a sense of meaning in their lives as well as serve as protective factors against life stress [1]. They also provide a stable primary structure for establishing a family relationship and rearing the next generation [2]. Though marriage is a common and highly desirable relationship, statistics indicate that satisfaction within the marital relationship is not easily achieved or maintained.

Couples choose marriage for themselves hoping to build a future with one special person [3], but the young adults of the 21st century are at greater risk for marital failure than previous generations, as many have not had the personal example of a stable marital relationship [4]. High rates of marriage, and subsequent high rates of divorce, may indicate a general psycho-socio-behavioral gap in understanding the knowledge and skills necessary to maintain a satisfying and stable marital relationship [5]. Strong marriages provide spouses with a sense of meaning in their lives [1], as well as providing benefits to the family unit and society [6].

Marital relationship in the life, like other relationships has its own positive and negative dimensions and the most important index and determining factor in marriage is quality and kind of relationship between couple [7]. Generally satisfaction of individual from marital life counts as his satisfaction from family and satisfaction from family counts as satisfaction from life, so this subject will causes facilitation in material and spiritual growth, excellence and development in society [8].

The topic of forgiveness has attracted increased interest in the social sciences in the past 20 years, both as a psychological construct and as a relevant concept for empirical study and qualitative exploration [9]. The most recent and commonly accepted definition of forgiveness suggests that it is two-dimensional, including positive and negative forgiveness dimensions [10, 7]. Positive forgiveness in marital relationships has been defined as lower levels of blame, increased understanding of one’s spouse, decreased levels of anger in regard to the betrayal, behaviors which reflect moving on from the betrayal and a sense of emotional peace experienced by the forgiver [7].

The likelihood of forgiveness in intimate relationships has been found to have an influence on couples’ satisfaction level [11, 12]. Individuals who are in a long-term marriage report that willingness to forgive is an important construct that elongates and maintains marital relationships [11].

Recent research on marital satisfaction has been focused on its relationship to forgiveness within the context of marital relationships. This research has shown a correlation between the ability to forgive and marital satisfaction. McNulty explored the relationship between forgiveness in marriage, marital satisfaction and marital outcomes [13]. This researcher also examined the impact of negative verbal behavior on forgiveness, marital
satisfaction and marital outcomes. Participants in this study were 72 newly married couples who participated in a two year longitudinal study. The Quality Marriage Index was used to assess marital satisfaction with internal consistencies of this measure being high [13]. McNulty found positive correlations between forgiveness, marital outcomes and marital satisfaction, the relationship between these variables was a function of the amount of negative verbal behavior exhibited by each couple [13]. It was shown that while forgiveness can have positive effects on marital satisfaction in couples who rarely engage in negative verbal behavior, lower levels of marital satisfaction were observed in couples who forgave a spouse who frequently engaged in negative verbal behavior. Gordon et al. found a negative relationship between negative forgiveness and marital satisfaction for both husbands and wives such that higher levels of negative forgiveness were associated with lower levels of marital satisfaction [7]. However, higher levels of trust were shown to assist in decreasing the effects of negative forgiveness on marital satisfaction.

The correlation between forgiveness and quality of marital relationship has been greatly researched in the past years; as spouses are more forgiving of each other’s transgressions, it positively impacts their marital relationships [11, 12]. According to Finch am and Beach, couples who are more forgiving report higher marital satisfaction; this satisfaction may be due to the findings that forgiveness leads married couples to a road of reconciliation, closeness, and cooperation [11]. Kachadourian et al. [14] emphasized that forgiveness endorses positive marital adjustment in married couples. Additionally, forgiveness is said to facilitate married couples to communicate effectively without exhibiting psychological aggression toward each other [12]. According to the first forgiveness and marital relationship longitudinal study conducted by Paleari et al. [12] the correlation between forgiveness and the reported positive quality of marital relationship is said to last for more than 6 months. Specifically, a recent study has reported that wives who are forgiving of their husband’s transgressions resolve marital conflicts effectively even 12 months later [1]; however, this finding was only applicable to wives, not husbands. Essentially, it can be said that forgiveness is an important variable in marriage that predicts how marital couples manage future conflicts [15]. Seif and Bahari have examined the relation between pardon and couple mental health and showed that there is a significant relationship between forgiveness and mental health [16]. Khodayarifard et al. [14] have studied the forgiveness therapy method from Islamic perspective and concluded that using forgiveness therapy is effective in the correction of thoughts, feelings and behavior of offended people and improve relations [17].

Hypothesis of Study: First hypothesis: there is relationship between forgiveness with satisfaction among married women.

MATERIALS AND METHODS

Participants and Sampling: Statistical community of this study consists of whole married women who dwelled in Bandar-Abbs in 2011, and the sample of study consists of 200 subjects, and for selecting them we used non-sampling method. Those who were separated or strongly considering separation or divorce were not included in the study, as well as those who indicated moderate to severe violence in their relationship in the past year.

Measures

1. Demographic Questionnaire: This form was drafted by a researcher aiming at gathering information such as age, educational level, marriage duration, etc.

2. Enright Forgiveness Inventory: The Enright Forgiveness Inventory [EFI] was developed by Enright and the Human Development Study Group at the University of Wisconsin–Madison. It is a 60-item self-report measure of interpersonal forgiveness with items equally divided among six subscales:

   Positive and Negative Affect, Positive and Negative Behavior, and Positive and Negative Cognition. Each item were scored on a 1–6 Likert type scale ranging from Strongly Disagree to Strongly Agree, with a range of scores from 60–360 with a high score representing a high level of forgiveness. There is the 1-item forgiveness scale, which is an independent measure of construct validity. In previous studies, internal consistency .90, test–retest reliability of .67 to .91 and validity has been documented [18]. This scale were translated and adopted into Persian by Gholari et al and they found the internal consistency [Cronbach’s a] for EFI to be 0.93 and split-half reliability coefficient as 0.88. Also, we found the internal consistency to be 0.89 and split-half reliability coefficient as 0.85 [19].

3. ENRICH Marital Satisfaction Scale: The ENRICH Marital Satisfaction scale [EMS], according to Fowers and Olson, yields a valid and reliable measure of marital quality or satisfaction, and it consisted of 10 items rated on a five-point Likert scale that included 10 domains of marital quality [i.e. communication, conflict resolution, roles, financial concerns, leisure time, sexual relationship, parenting, family and friends, and religion] with one question per domain [20].

   The content validity of the EMS is expressed by the fact that it measures 10 dimensions of marital satisfaction that were found to be most important by Fournier et al. [20]. The EMS scale provides a 1-item sampling of the 10 dimensions of marital satisfaction [20]. The item-total correlations for the EMS ranged from 0.52 to 0.82 with a mean of .65 for men and 0.68 for women which reflected that the items on the EMS are cohesive [20].
The internal consistency of the EMS Scale indicated by Cronbach’s alpha revealed an internal reliability of 0.86 [20]. The test-retest reliability of the EMS scale using an interval of 4 weeks was 0.86. Concurrent validity of the EMS was expressed by the correlation that it has with the Locke-Wallace Marital Adjustment Scale which was 0.73 when using individual scores and .81 with couple scores [20]. The scale was translated and adopted into Persian by Soleymanian. He found the internal consistency [Cronbach’s a] for EMS to be 0.92 and split-half reliability coefficient as 0.86. Also, we found the internal consistency to be 0.89 and split-half reliability coefficient as 0.83 [21].

RESULTS

Demographic information including that age, level of education, length of marriage and number of children. The majority of participants had diploma and higher with a mean age of the respondents being 33.31 years [S.D. = 7.74]. The respondents reported an average length of marriage of 11.62 years [S.D. = 11.35], an average age of time at marriage of 26.49 years of age [S.D. = 3.75] and the average number of children reported was 1.97 [S.D. = 0.91].

Table 1. Mean, standard deviations, minimum and maximum of score in variables including marital satisfaction, forgiveness, perfection and sincerity of married women

<table>
<thead>
<tr>
<th>Statistical indicators</th>
<th>Variables</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Minimum score</th>
<th>Maximum score</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital satisfaction</td>
<td></td>
<td>171.62</td>
<td>25.63</td>
<td>101</td>
<td>222</td>
<td>200</td>
</tr>
<tr>
<td>Forgiveness</td>
<td></td>
<td>33.124</td>
<td>24.12</td>
<td>85</td>
<td>145</td>
<td>200</td>
</tr>
</tbody>
</table>

Means and standard deviations for the measures utilized in the present study are provided in Table1. Marital satisfaction was measured on a scale with possible scores between 0 and 235, with higher scores indicating higher levels of marital satisfaction. Trait forgiveness was assessed on a scale ranging from 33 to 165, with higher scores indicating a more forgiving personality.

Table 2. Results of correlation between forgiveness, perfection, sincerity and marital satisfaction

<table>
<thead>
<tr>
<th>Criterion variable</th>
<th>Predictive variable</th>
<th>Correlation coefficient [r]</th>
<th>Significant level p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital satisfaction</td>
<td>Forgiveness</td>
<td>0.63</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Pearson correlations were calculated between marital satisfaction and forgiveness. As it is shown in Table 2, there is significant relation between forgiveness and marital satisfaction [r=0.63 and 0= 0.001]. So our hypothesis of research is confirmed.

Table 3. Multiple correlation coefficient of scores of forgiveness with marital satisfaction using method a) concurrent entry b) step-by-step

<table>
<thead>
<tr>
<th>Statistical indicator</th>
<th>Regression coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion variables</td>
<td>Multiple correlation MR</td>
</tr>
<tr>
<td>variable</td>
<td>0.63</td>
</tr>
</tbody>
</table>

According to table 3, multiple correlation for linear combination of forgiveness and marital satisfaction is equal to MR= 0.63 and coefficient of determination is RS= 0.369 that is significant in P= 0.001. So our main hypothesize of research is confirmed. Given to coefficient of determination, it is determined that about 37 percent of marital satisfaction variance is determined by predictive variable, forgiveness.

DISCUSSION

The main findings of this study provided partial support for the role forgiveness influences as predictors of marital satisfaction in married women. Further findings of the present study provided support for the role of trait forgiveness in predicting marital satisfaction. Higher levels of trait forgiveness were found to be significantly associated with higher levels of marital satisfaction.

The finding that trait forgiveness is significantly positively correlated with marital satisfaction is consistent with previous findings from research examining the relationship between these two variables [11, 6, 13, 7, and 22]. Research examining the relationship between forgiveness and marital satisfaction has found that higher levels of forgiveness were significantly associated with higher levels of marital satisfaction [13, 7]. Forgiveness was selected as a variable in the current study because it represents the current trend in marital satisfaction.
Forgiveness has been hypothesized to short circuit the use of ineffective conflict strategies likely to emerge from an unforgiving transgression [15]. Research has found that forgiveness predicts less ineffective arguing in a relationship [12]. In addition, individuals are more willing to forgive partners with whom they feel conflict discussions are typically constructive [24]. Lastly, forgiveness was also found to predict later reports of effective conflict resolution behaviors [1]. Due to it’s prosaically nature, gratitude may also operate in this fashion to encourage more effective, constructive forms of conflict resolution [25]. Also, from a forgiveness perspective, relational changes and challenges can result in inevitable relational hurt and misunderstanding. Without a positive forgiveness dynamic, families may not be able to operate in a mode of second-order change, making the absence of forgiveness a crucial dynamic in a family's ability to adapt and evolve.

Limitations of the Study

While several limitations of the present study exist, the biggest limitation involves external validity and a lack of generalizability. The current sample was very homogenous, with the majority of participants being highly educated and reporting significantly higher levels of marital satisfaction than the normative population. The sample is clearly not representative of the greater population, and this limitation could be rectified in future research by sampling a more representative cross-section of the population. Additionally, future research could offer a monetary incentive in order to obtain data from a wider cross-section of the population.

Clearly, for future research to make any headway into exploring and understanding the forgiveness construct within a family relationship or family systems context, the issue of classification and measurement must be addressed.

REFERENCES

17. Khodayarifard et al. 2003. Application of Forgiveness passed in mental therapist emphasized the Islamic perspective, the first International Conference on the role of religion in mental health.
Analysis of Personality Traits of Applicants for Cosmetic Surgery

Ali Nikbakht

University of Hormozgan, Minab Street, Bandar Abbas, Iran

*Corresponding author’s e-mail: nikbakht472@yahoo.com

ABSTRACT

Performing cosmetic surgery on body members, especially on face and mostly on nose, is globally widespread and thus rhinoplasty is commonly practiced in all societies and nations. Each year ten thousands of individuals undergo cosmetic surgery in order to enhance the appearance of their bodies. The objective of this study was to study the personality traits of people who had applied for cosmetic surgery. The sample included 50 participants: 25 applicants for cosmetic surgery and 25 ordinary individuals. All the individuals were examined by NEO personality inventory. The data were analyzed by employing the independent t-test method. The results obtained from the study indicated that applicants for cosmetic surgery do not differ from normal people in characteristics associated with neurosis, desirability, extraversion, and conscientiousness. The results obtained from this research showed a significant difference between the flexibility of the two groups. That is to say, the flexibility of candidates for cosmetic surgery was higher than that of the ordinary people. In sum, it can be concluded that there is no significant difference between the personality characteristics of these individuals and the ordinary ones.

Keywords: Cosmetic surgery, NEO inventory, Personality trait.

INTRODUCTION

A realistic and accurate mental image is necessary for living a healthy and satisfactory life and coexisting with others. If a person has good feelings about their body, they can more possibly have a positive physical image as well. However, sometimes stress, anxiety, self-critical views, and a low-level of self-worth can change the feeling of a person about their body [1]. This is the reason why many people change their appearance and subject themselves to plastic surgery. People with physical underdevelopment may have an unrealistic image of their bodies and may consider themselves to be inferior to others or think of themselves as poor and incapable creatures. This mental image gradually affects their minds and causes the development of many disorders. This issue is more critical in the adolescence. Adolescents are more concerned with their bodies and pay special attention to their body members. Therefore, physical changes may worry them and they may experience disorders in dealing with such changes [2].

Performing cosmetic surgery on body members, especially on face and mostly on nose, is globally widespread and thus rhinoplasty is commonly practiced in all societies and nations [3]. Each year ten thousands of individuals undergo cosmetic surgery in order to enhance the appearance of their bodies. For instance, in the 1994 report of the American Society for Plastic and Reconstructive Surgery it was stated that the members of this society had undergone more than 390,000 cosmetic operations including liposuction [removal of fat from different parts of the body], breast augmentation, rhinoplasty, and rhytidectomy [3]. In 1997, a study conducted in United States indicated that 56% of women and 43% of men are dissatisfied with their appearance. Moreover, based on the report of the American Society for Aesthetic Plastic Surgery, the rate of cosmetic operations performed during 1997 to 1999 was increased by 119% in 1999 reaching 4.5 million operations [4]. According to statistics for 2010, Iran hosts the highest rate of rhinoplasty in the world. Based on the available statistics, the practice of rhinoplasty is reducing throughout the world while other resurfacing operations are more increasingly performed. Nevertheless, Iran still has the highest level of applicants for rhinoplasty [5].

One study reported a significant level of mental disorder in such individuals. In this study, people were diagnosed with at least one psychological disorder the most prevalent of which being depression, neurosis, and aggressive-passive personality disorder [6]. Another study carried out by MMPI showed no mental disorder in 50 candidates for rhytidectomy. In addition, clinical profiles (MMPI) of 10 candidates for breast augmentation as well
as the findings of the studies performed on applicants for rhinoplasty were consistent with the aforementioned findings [7]. In an analysis of applicants for rhinoplasty performed by the short form of MMPI test it was indicated that underdeveloped personality, tendency toward isolation and misanthropy, and having difficulties in mutual relations are more common in such individuals [7]. Furthermore, the results obtained from another study carried out by the MMPI-PD test method showed that the narcissistic personality pattern is the most prominent personality trait of candidates for cosmetic surgery [8]. According to Dishman et al. [9], there is a strong and positive relationship between physical image and self-esteem while there is an average inverse relationship between self-esteem and symptoms of depression. Another study indicated that individuals with significant signs of physical image disorder showed a higher level of depression, stress, and anxiety and the rate of suicide was higher among them [10].

Based on the results of the study carried out by Husseini et al. [11] there is no significant difference between the stress of people who experience and people who do not experience cosmetic surgery. Findings of the study conducted by Witacker [12] on the level of depression, anxiety, and physical image of people who had undergone cosmetic surgery showed that they do not significantly differ from ordinary people in these aspects. The results of the research conducted by Alkhader [13] indicated that there is a relation between negative self-assessment, disturbance, general health condition, and especially depression.

Dehghan by the study of the personality traits of patients that had experienced rhinoplasty indicated that these individuals are more extrovert than the others. However, they do not differ from ordinary people in desirability and flexibility [14]. Zojariz et al. [15] studied mental abnormalities in patients seeking rhinoplasty and indicated all patients undergoing rhinoplasty had a personality trait abnormality.

Hypothesis:
First hypothesis: Individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of neurosis.
Second hypotheses: Individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of extraversion.
Third hypothesis: Individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of flexibility.
Forth hypothesis: Individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of desirability.
Fifth hypothesis: Individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of conscientiousness.

MATERIALS AND METHODS

This is a cross sectional casual-comparative research. The statistical population for this research included all the individuals who had visited Shiraz surgeons for cosmetic surgery. The sample included 50 participants: 25 ordinary people and 25 individuals who had experienced cosmetic surgery. The samples were selected from the clients of Dr. Sarikhani and Dr. Khosravinezhad offices and Alavi and Farahmand hospitals using the convenience sampling method. Ordinary people who satisfied the criteria for education, age and sex were also selected from the clients of these centers and companies of the patients. All the samples answered the personality characteristics questionnaire.

The revised version of NEO personality inventory (NEO.PI.R) measures five personality factors and six of the characteristics of each factor. These two aspects of the test, that is its five primary factors and thirty characteristics, provide the means for comprehensive analysis of the personality of the adult [16]. Reliability and sustainability of the test (NEO.PI.R) in various countries including Norway, Canada, Spain and Italy has been examined. Haqshenas [17] and Garousi [16] are the two researchers that have performed this test in Iran. NEO personality inventory provides a very good level of internal consistency and reliability in re-examination. Internal consistency coefficient is 86-92% in the scope scale and 56-81% in dimensional scale. The recent study of clinical standing patients suggested that in a 6-month period the re-examination reliability coefficient for the scope marks was 76-84%. Haqshenas [17] also performed this test and standardization procedures on a group of Iranian residents of Shiraz city. His study showed that alpha coefficients for different scales were between 71 to 76%. The guide to the revised version of NEO personality inventory provides evidence that confirm the validity of this test. The reliability of the test performed in Iran was also confirmed [17].

RESULTS

Demographic characteristics: Fifty participants were analyzed in this research. This population included 25 ordinary people and 25 applicants for cosmetic surgery. 23 of the participants that had applied for cosmetic surgery were female and 2 of them were male. The ordinary group consisted of 21 women and 4 men. The participants fell into the 19 to 34 age range. 64% of all the participants had 19 to 23 years of age, 28% had 24 to 28 years of age, and 8% of them had 29 to 34 years of age. All the participants had academic degrees or were studying in academies. The chief results of the research are presented in this section. Table 1-5 show the results.
of the t-test and a significant level of neurosis, extroversion, flexibility, openness and conscientiousness in the two groups under study.

**Table 1.** Results of the t-test and a significant level of neurosis in the two groups under study

<table>
<thead>
<tr>
<th>Index</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>cosmetic surgery</td>
<td>25</td>
<td>96.98</td>
<td>20.01</td>
<td>48</td>
<td>0.23</td>
<td>0.81</td>
</tr>
<tr>
<td>Ordinary</td>
<td>25</td>
<td>95.76</td>
<td>18.43</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2.** Results of the t-test and a significant level of extroversion in the two groups under study

<table>
<thead>
<tr>
<th>Index</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>cosmetic surgery</td>
<td>25</td>
<td>115.68</td>
<td>17.15</td>
<td>48</td>
<td>-1.12</td>
<td>0.27</td>
</tr>
<tr>
<td>Ordinary</td>
<td>25</td>
<td>110.04</td>
<td>17.85</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3.** Results of the t-test and a significant level of flexibility in the two groups under study

<table>
<thead>
<tr>
<th>Index</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>cosmetic surgery</td>
<td>25</td>
<td>113.52</td>
<td>14.43</td>
<td>48</td>
<td>-2.64</td>
<td>0.013</td>
</tr>
<tr>
<td>Ordinary</td>
<td>25</td>
<td>104.28</td>
<td>11.65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4.** Results of the t-test and a significant level of openness in the two groups under study

<table>
<thead>
<tr>
<th>Index</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>cosmetic surgery</td>
<td>25</td>
<td>113.28</td>
<td>13.76</td>
<td>48</td>
<td>0.31</td>
<td>0.75</td>
</tr>
<tr>
<td>Ordinary</td>
<td>25</td>
<td>111.96</td>
<td>14.95</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 5.** Results of the t-test and a significant level of conscientiousness in the two groups under study

<table>
<thead>
<tr>
<th>Index</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>cosmetic surgery</td>
<td>25</td>
<td>15.58</td>
<td>3.11</td>
<td>48</td>
<td>0.11</td>
<td>0.90</td>
</tr>
<tr>
<td>Ordinary</td>
<td>25</td>
<td>18.58</td>
<td>3.71</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DISCUSSION**

The first hypothesis assumes that individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of neurosis. Based on the data presented in Table 1, no difference was found in the neurosis of applicants for cosmetic surgery and ordinary people. Therefore, this hypothesis was not confirmed. The results obtained for the first hypothesis of this research are consistent with the results of the study carried out by Mac Kenny, Waltier, and Abedini Araki [18], who showed that the personality characteristics of ordinary people and people that undergo cosmetic surgery are not different. The results of this study are also in line with the results of the research performed by Witacker [12], who reported that ordinary people and people that undergo cosmetic surgery do not differ with regard to the signs of depression and anxiety. These results are also consistent with the results of the study conducted by Zojaji et al. [15]. In addition, these results are also consistent with those obtained by Husseini et al [11] who showed that the level of stress in the applicant for cosmetic surgery does not differ from that of ordinary people.

The second hypothesis of this research assumes that individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of extroversion. According to the findings presented in Table 2, no significant difference was seen between the extraversion of the members of these two groups. The findings of the present study are not consistent with the findings of Dehqan [14] who indicated that applicants for cosmetic surgery are extrovert.

The third hypothesis of this study assumes that individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of flexibility. This hypothesis is confirmed by the data presented in Table 3. Hence, it can be said the members of these two groups have varying levels of flexibility. Nevertheless, the mean value of the group consisting of the applicants for cosmetic surgery was higher than that of the ordinary group. This suggests that candidates for cosmetic surgery show more negative and positive feelings, openness, and conservativeness than the ordinary participants. However, the findings of this research regarding this hypothesis are not consistent with the findings of Dehqan [14], who reported that the flexibility of the applicants for cosmetic surgery does not differ from that of ordinary people.

The forth hypothesis of this study, which assumes that individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of desirability, is not confirmed. The results of this study are consistent with the results of the study conducted by Dehqan [14], who indicated that applicants for cosmetic surgery and ordinary people are different in terms of desirability.

The forth hypothesis of this study assumes that individuals who undergo cosmetic surgery and individuals who do not are significantly different in terms of conscientiousness. In this study no significant difference was
seen in the characteristics of these two groups. Therefore, this hypothesis is also rejected. However, this hypothesis is in line with the study of Husseini et al [11].

According to the obtained results it can be said that applicants for cosmetic surgery do not significantly differ from ordinary people except for their level of flexibility. That is to say, these people show more flexibility and conservativeness than ordinary people in everyday life. They also try to experience new things through their lives. In sum, the findings of the present study are only consistent with the results of a few of the researches carried out using the NEO personality inventory. That is to say, all these findings suggest that there is no significant characteristic difference between the applicants for cosmetic surgery and ordinary people and that these individuals do not suffer from any certain psychological disorders.

ACKNOWLEDGEMENT

Hereby we express our gratitude to the authorities of Alavi and Farahmand hospitals and those who contributed to this research.

REFERENCES

A Study of the Condition of Emotional Intelligence in Addicts in the TC Center of Shiraz

Ali Nikbakht

University of Hormozgan, Minab Street, Bandar Abbas, Iran

*Corresponding author’s e-mail: nikbakht472@yahoo.com

ABSTRACT

The present research was conducted as an effort to study the condition of emotional intelligence in addicts in the Therapeutic Community (TC) Center in the city of Shiraz. In this study, all of the addicts (17 individuals) admitted at the TC Center were tested using the 30-item Trait Emotional Intelligence Questionnaire. For the sake of comparison, a group of 18 self-introduced addicts who had referred to the welfare center in Shiraz were selected based on characteristics such as age, gender and education level appropriate to the TC group. The results were analyzed by means of descriptive statistics and multi-way variance analysis methods. Variance analysis results indicated that the two groups had no significant difference in total emotional intelligence scores, despite the fact that the TC group showed higher average scores. Moreover, no significant difference was observed between the two groups in the facets of optimism and perception of emotions (one's own and others'). In facets such as emotional regulation ($P=0.03$) and social skills ($P<0.05$), on the other hand, significant differences were obtained between the two groups. Based on these results, it can be stated that addicts residing at the TC Center are in better conditions when it comes to emotional regulation and social skills, which can be indicative of the impact of the daily, continual training provided at such centers.

Keywords: Emotional intelligence, Addiction, Therapeutic community, Self-introduced

INTRODUCTION

The present research was conducted in order to study the condition of emotional intelligence of drug abusers at the Therapeutic Community (TC) Center in the city of Shiraz and compare the results with those of individuals referring to the self-introduced welfare center in the city of Shiraz.

Research nowadays has shown that mere high education and logical intelligence do not guarantee success; rather, individuals today require emotional intelligence in order to succeed [1].

Man possesses two kinds of reason – one is based upon wisdom and thoughts and the other depends on feelings and emotions. These two distinct and fundamental methods of awareness interact mutually and form our mental life. One of them is intellectual and involves the perception of issues through dependence upon awareness, thoughts and the capability to think, examine and show mutual reactions. The other – emotional reason – is a powerful way to achieve awareness which at times behaves somewhat illogically. Normally, these two kinds of reason function in total harmony and in intimate interaction with each other [2].

Mayer, Salovey, and Caruso [2008] see emotional intelligence as comprising of four correlated abilities: the perception of emotions in oneself and others, using emotions to facilitate decision making, understanding emotions and emotional regulation. On the other hand, Bar-On regards emotional intelligence as a combined series of emotional self-awareness as well as other skills and traits which influence an individual’s success in confronting the environment's pressures and tasks. The studies conducted upon emotional intelligence have shown emotional intelligence to be an effective, determining factor in true life achievements such as success at school and education, success at work and interpersonal relationships and health activities in general [3]. At present, many studies have been conducted on the correlation between emotional intelligence and physical and mental well-being [4]. Emotional intelligence indicates a positive correlation with mental well-being and an inverse correlation with mental disorders. Individuals who are skilled at controlling their own and also others’
emotions are capable of protecting themselves against stress. Such people report fewer cases of depression, despair and contemplations of suicide [5].

Various studies have shown that low emotional intelligence is associated with problematic internalized behaviors, low levels of empathy, incapability to adjust moods [6], dysthymia (Parker et al.) quoted from ibid], depression, neuroticism, body syndromes and stress, externalized problematic behaviors, degrading academic achievements [7], the consumption of alcohol and narcotics [8], sexual deviations [6], vandalism, robbery and also aggression [9].

As researchers have theorized, lower EQ levels lead to incapability to react and control excitement, which contributes to the beginning of drug use [1]. The little research existing indicates drug abuse to be negatively proportional with emotional intelligence. Trinidad and Johnson have found, for instance, that young adults with low emotional intelligences consume more alcohol and tobacco.

Moreover, in a similar study, Schutte et al. concluded that individuals referring for treatment for drug abuse showed lower emotional intelligences than those treating them. Other studies have pointed out higher consumptions of alcohol and medications [10] in individuals suffering from cyclothemia – a condition involving problems in recognizing and expressing emotions which is strongly associated with low emotional intelligence.

In another study, Schutte and Riley found that low emotional intelligence is significantly correlated with both problems mainly concerned with alcohol and problems mainly concerned with medications. Furthermore, they found low emotional intelligence to be strongly related to weaker confrontations. Weaker confrontations are, in turn, related to medication-dependent problems. Trinidad and Johnson also discovered that emotional intelligence is negatively proportional to efforts to smoke cigarettes, smoking during the last 30 days, daily or weekly use, and drinking during the last week.

In fact, the aim of this study was to answer the question whether individuals using programs provided by TC centers differ in various facets of emotional intelligence compared to their peers who do not take part in such programs. To put it more accurately, does the training provided at TC centers have any influence upon individuals' emotional intelligence or not?

MATERIALS AND METHODS

In this research, the causal-comparative method was used in order to make a comparison between the various facets of emotional intelligence among two groups.

The statistical population in this research included all of the drug abusers residing at the TC Center in the city of Shiraz. For the research, all of the statistical population (20 individuals) was selected as the sample; 17 of them were willing to cooperate. For the sake of comparison, a group of 18 self-introduced addicts who had referred to the welfare center in Shiraz were selected based on characteristics such as age, gender and education level appropriate to the TC group.

To measure emotional intelligence, the Trait Emotional Intelligence Questionnaire developed in 2002 by Petrides was used. This questionnaire includes 30 items and a degree from 1 to 7 is given to score each item. Scores range from 30 to 210. A score of 170 or above indicates a high emotional intelligence, and a score of 112 is the basis to identify low emotional intelligence. The internal consistency of this questionnaire in Iran was calculated as 0.86, and its reliability using the Cronbach’s Alpha was reported to be 0.89. The reliability coefficient for this questionnaire in Iran was calculated as 0.81 using Cronbach’s Alpha. Its internal consistency was also reported as 0.86. This questionnaire proves to have positive correlation with the Eysenck Personality Profile, which indicates its simultaneous reliability [11].

RESULTS

Descriptive statistics and variance analysis methods were used for data analysis in this research. The average and standard deviations for various facets of emotional intelligence for the TC group and the self-introduced center group have been displayed in Table 1.

Table 1. Mean and standard deviations for various facets of emotional intelligence for the TC group and the self-introduced center group

<table>
<thead>
<tr>
<th>Total Score</th>
<th>TC</th>
<th>S-Introduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-Introduced</td>
<td>131.88</td>
<td>120.72</td>
</tr>
<tr>
<td>Understand their emotion And others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-Introduced</td>
<td>27.18</td>
<td>16.90</td>
</tr>
<tr>
<td>Emotions Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-Introduced</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Social Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-Introduced</td>
<td>20.5</td>
<td>5.38</td>
</tr>
</tbody>
</table>
Analysis of variance results showed no significant difference (p= 0.15) between the two groups' total emotional intelligence scores; however, as displayed in Table 1, the TC group prove to have higher average scores. In the optimism facet also, the TC group proved to have higher average scores, but the difference is not significant (p< 0.47). There is no significant difference between the two groups in the facet of perception of one's own and others’ emotions, either; however, the facet of emotional regulation shows a significant difference (p< 0.03). Furthermore, there is also a significant difference (p< 0.05) between the two groups in the social skills facet.

**DISCUSSION**

The results of this research indicated a difference between individuals who use TC programs and those who do not. Therefore, according to the results obtained, it can be stated that individuals provided with TC Center programs show more or less higher emotional intelligence. In other words, the programs offered at such centers improve some of the facets of emotional intelligence in individuals; those who refer to ordinary centers, on the other hand, indicate no change in emotional intelligence. What clarifies and proves to be in line with the results of this research is the type of programs provided at TC centers, which is compatible with emotional intelligence facets. TC centers, which provide 24-hour, long-term services, usually offer individuals with intensive programs including various workshops and classes on life skills. These involve training on life skills, training on effective interpersonal relationships, self-awareness and self-knowledge as well as continual therapy groups which focus upon the knowledge and expression of one’s own and others’ emotions, providing feedback, positive interaction with the group and giving opinions.

Thus, this research confirms the positive impact TC centers can have upon drug abusers and the improvement in their emotional intelligence – one of the most significant personality components influential in their addiction and rehabilitation.

One of the limitations of this study was the lack of research on emotional intelligence of addicts residing in TC centers in order to make comparisons with this article. Furthermore, the low number of individuals admitted at the TC centers – and, as a result, low sample size – is regarded as another limitation of this research.

**REFERENCES**

11. Marani, M. 2003. Normalization of the Trait Emotional Intelligence Questionnaire developed by Petrides (Master’s Degree Dissertation], the Faculty of Education and Psychology, Isfahan University.
The Comparison of Marital Conflict Resolution Styles and Child Rearing Practice between Satisfied Couples and Conflicted Couples in Bandar Abbas city

Foad Ghaderi1*, Hamid Haghighi2, Ahmad Izadi Ajirlo3 and Mehdi Taybi Sogh4

1. M.A in Family Counseling
2. Family Counselor in Center of Counseling and Psychological Service of Hormozgan Education
3. M.A in Family Counseling
4. M.A in Educational Research and School Counselor in Dehdasht City

*Corresponding author's e-mail: fghaderi1@gmail.com

ABSTRACT

The purpose of this study was comparison conflict resolution style and child rearing practice among satisfied couples and conflicted couples in Bandar abase city. 100 couples were by random sampling selected as sample of this study. Equally in each group 50 couples attended. Scales were used in this study include Rahim(1983) conflict resolution styles (ROCI-II) and one of them is 30 questionnaire related ways of rearing practice, index of questioner Enrich marital satisfied are used in this research so that they are determining matrimony satisfaction scales To interpret and analyze results. The result showed: that the conflict resolution styles (integrating, compromising, dominating, avoidance, obligating) and child rearing practice (powerfully - nonchalance and liberty, despotically) between conflicted couples and satisfied couples have meaningful relationships. Also, the finding show that the satisfied couples more used than conflict resolution styles integrated, compromised, avoidance, obligating and child rearing practice powerfully, nonchalance and liberty. Conflict couples more used than conflict resolution styles dominating and child rearing practice despotically. Findings showed integrating; compromising styles could be predicted powerfully of child rearing practice. Dominating style could be predicting nonchalance of child rearing practice and obligating style could be predicting liberty of child rearing practice.

Keywords: marital conflict resolution styles, satisfied couples, conflicted couples and child rearing practice

INTRODUCTION

The family system is among the most important social system that is formed based on the marriage of opposite sexes. The family as a social units the focus of development, healing, changing, damage evolution and complications which can lead to boom or breakdown of the relationship of the members. The healthy family is important because not only they can share their thought but also they can make decision considering their capabilities and efficiencies [1].

Studies and evaluation about the role of family in formation of behavior and characteristic of children have indicated that family is of the most important factor in growth of child. A child that is born healthy has the highest capability to develop and has the capacity to be educated in the best way only in a condition that he/she has a good family and appropriate environment to groups [2].

Child rearing practice means the stable methods and patterns of parent’s for relationship of family member which provides the mutual impact and effectiveness [3]. Research activities about the child rearing are affected strongly by researches of Bamrind [4] which proposes 3 dominant patterns on relationship of parents and children:

1-Authoritative Parents: who are described as intimate parents and still have control over what their children are doing.
2-Permissive Parents: are described as parents that are trying to create warm and calm environment for their children and have no control and supervision on what their children are doing

3-Authoritarian Parents: are described as parents that there is no intimation in their relationship with their children and children are not allowed to express their ideas.

Therefore, it can be stated that child rearing practice is an affective factor and plays a significance role in psychopathology and growth of children [5].

Marital conflict has a negative impact on family functioning which one of them is child rearing practices. Based on the hypothesis, when the quality of marital life is low, these problems can affect on relationship of parents and children. Agreement on how to educate the child is a common problem of marital conflict in most marriages. Each of parents behaves differently with their children and they are willing to behave in their special method with the child [6].

Occurring disagreement and conflict between husband and wife is natural. The basic fact is that all married couples face problems but some of them are more capable than others in solving their problems [7]. So, it can be said that method of dealing with problem is often more problematic than the problem itself. In fact, if conflict evaluates and solves by correct methods, it can be useful for couples [8].

According to Rahim [11] conflict resolution is defined as variety of management strategies that a person is intended to apply in conflict situation. Rahim believes that two fundamental dimension are affective in conflict resolution which are “concern for self” and “concern for other”. The first dimension which is “concern for self” explains the amount that a person attempts to remove his/her concerns. The second dimension which is “concern for other” explains the amount that a person tries to remove others concerns. There are five styles of conflict resolution based on the aforementioned dimensions:

1-Integrating Style: Requires a lot of respect for self and others. This style requires mutual collaboration between parties. Openness, exchange of information, investigates the differences and finds acceptable solutions to both sides are the features of this style.

2-Obligating Style: Requires a lot of respect for others and low respect for self. Attempts to decrease the differences and emphasize on commons to satisfy the others are considered as features of this style.

3-Dominating Style: It is the high respect for self and low respect for others. It is known as a competitive style and people are imposing in this style.

4-Avoiding Style: Person has low respect for self and other. It is usually associated with withdrawal. In this style, the responsibility is assigned to another person. Staying away from conflict, ignoring disharmony and remain neutral are other features of this style.

5-Compromising Style: In this style, person has an average respect for self and others. It is based on business strategies and mutually acceptable decision and when two people have equal points, they can use this style.

About the ties between marital conflict resolution styles and child rearing practice, it can be noted that satisfied couples have more agreement about child rearing practice with each other than conflicted couples [6]. It was determined in researches that satisfied couples mainly use constructive methods of conflict resolution (integrating & compromising), and that is the reason of their satisfaction and cooperation in various issues of family [10]. Salari [11] found out in his researches that similarity of couples in child rearing practices has negative relationship with increase of marital conflicts. It means whatever similarity in child rearing practices increases; the marital conflicts will decrease.

Webster and Hamoond [12] have found in their researches that negative methods of marital conflict management have a direct relationship with behavioral problem of children. It is assumed that management method of marital conflict has a direct impact on behavioral problem of children. This assumption is based on social learning model which proposes that parents' hostility and skills of ineffective management of marital conflict affects on kids in numerous way.

Johari, Mohammad and Mamat [13] have investigated the impact of child rearing practice on growth of children in Malaysian families. The results have indicated authoritative child rearing practice of parents has positive effect on behavior and educational progress of children. In contrary, authoritarian and permissive practices have negative effect on behavior and progress of children.

Lavasani, Borhanzadeh, Afzali and Hejazi [14] have investigated the ties between cognitive child rearing practice and social support and psychological health in 398 high school students of Tehran. The results have indicated that authoritarian and permissive practices have negative effect on psychological health. Furthermore, there is a positive relationship between social support and psychological health.

Esfandiar, Baharudin and Nozari [15] have meta-analyzed the ties between parent’s conflicts and externalizing problem behavior between adolescents. The results have shown that problems of adolescents that occur out of house are severely affected by conflict of parents with each other. They have found that there is a strong relationship between positive ties of family members with each other and decrease of problematic externalizing behaviors (such as social violence between adolescents). Results of many studies have shown that children, who are grown in an unfriendly and aggressive environment, are more expose to Trauma. Additionally, witnessing conflict between parents will be associated with problematic behaviors such as violence, delinquency and drug use. Berook, Zheng, Whiterian & Brook [16] have found in their researches that children their parents


Journal homepage: http://jlsb.science-line.com/
have marital conflicts, have more behavioral and emotional behavior and show a tendency toward violent behavior and delinquency.

Influence of family environment on child development has been often studied as a means of interaction between child and parent or impact of child rearing practices on behavior of children. They were less concern about methods of marital conflicts resolution and their relationship with child rearing practices. Since research of researchers has not sound the research that is in the scope of this subject, thus it is important to investigate the mentioned subject. Generally, the main questions that researcher is attempting to find appropriate responses for them are as follows:

1-Is there any difference between marital conflict resolution styles (integrating, dominating, avoiding, compromising and obligating) of satisfied and conflicted couples?

2-Is there any difference between child rearing practice methods of satisfied and conflicted couples?

3-Is there any significant multiple relation between styles of marital conflict resolution and child rearing practices among the satisfied couples?

**MATERIALS AND METHODS**

The current research is a casual comparative research and the researcher is studying the probable factors of dependant variable. Because both dependent and independent variables are occurred at past, thus this non-experimental research is known as exposit facto [17].

Statistical Population, Sample & Sampling Method: The statistical population of the current research includes all the satisfied and conflicted couples of the year 2009 and 2010 in Bandar Abbas City which at least 2 years is passed form their marriage and have child.

In this research, sampling is done through available samples and 50 satisfied couples and 50 conflicted ones were selected. Totally, 100 couples formed the sample of the current research.

To select satisfied couples and conflicted ones, among the employee of Education Department that were participated in child rearing or mental health promoting classes, 130 couples were chosen as sample of research. 30 extra couples were selected because there was possibility of not returning the questionnaire, uncompleted ones or in a condition that one of the couples be satisfied and the other one conflicted. 130 couples were taken 3 questionnaires of conflicted resolution styles and child rearing practices and marital satisfaction questionnaire (Enrich). After calculation of their satisfaction score, 50 couple that their score was higher than T=40 was determined as satisfied couples and 50 couples that their score was below T=40 was determined as conflicted ones. 20 couples that score of one of them was higher than 40 and the other lower than 40, one of them is satisfied and the other is conflicted, were removed from the analysis. And 10 other couples were eliminated due to uncompleted questionnaire.

**Tools of Research:**

A: Rahim Organizational Conflict Inventory (ROCI-II):

This questionnaire encompasses 5 conflict resolution styles which are: 1- Integration Style 2-Compromising Style 3-Avoiding Style 4- Dominating Style 5- Obligating Style. This questionnaire has 28 questions and is designed in 5 item Likert scale which includes the answers of “Disagree, Totally Disagree, No Idea, Agree, and Totally Agree”. Blake & Mouton classified the concept of interpersonal conflict resolution styles for the first time. They categorized the methods of dealing with conflict to 5 styles which are: Problem-solving, smoothing, forcing, withdrawal and sharing [9]. And their model was re-interpreted by Thomas [9].

Hatfield has reached to strong evidence about the structure, simultaneous and predictive validity. Friedman et al have reached to the strong correlation between this scale and Cox conflict resolution style. Bowles has evaluated the structure of ROCI-II and confirmed the result of the five main factors. Hong Lim has used the ROCI-II on 381 Chinese and Malaysian couple. Coefficients of re-test were obtained in one week and in compromising style it was 0.60, integrating 0.83, obligating 0.72, dominating 0.68 and avoiding was 0.71. The results were confirmed by Varimax Rotation. The obtained loads are between 34 to 84 that confirms the result of Manger, & Rahim and many studies have confirmed the discriminate validity of this scale [22].

B: Questionnaire of Child Rearing Practice of Diana Baumrind:

This tool is an adaptation of the theory of parental authority which is made based on the theory of "Baumrind" from three patterns of permissive, authoritarian and rational authority, of parents to review the methods of child rearing. This questionnaire is designed by Baumrind, and encompasses 30 articles that 10 articles is related to the permissive method, 10 to authoritarian method and the other 10 to the rational authority in child rearing. Baumrind questionnaire has been applied in various researches and its validity and reliability was obtained. Bori1991 has reported the reliability of the mentioned questionnaire by using retest in mothers group respectively 0.81 for permissive method, 0.86 for authoritarian method and 0.78 for dominant method and in fathers group respectively 0.77 for permissive method, 0.85 for authoritarian method and 0.88 for dominant method [23].

C: Marital Satisfaction Questionnaire of Enrich:

Marital Satisfaction Questionnaire of Enrich that its 47-questions form is prepared by Olson encompasses 12 scales of contractual response, marital satisfaction, personal issues, marital relationship, conflict resolution, financial supervision, activities related to free time, sexual relationship, marriage and children, relatives and
friends, egalitarian roles and ideological orientation. Reliability of questionnaire was calculated by Soleimanian in a group including 11 people through Alpha coefficient and validity coefficient was obtained 0.95%. Also, validity coefficient of questionnaire was obtained 0.92 through retest in duration of one week from the first calculation by Rasouli. 47-questions form was applied in this research. Olson et al. have reported the validity of the previous form 0.92 by using Alpha coefficient method. For the first time in our country, Soleimanian has calculated and reported the internal consistency of test 0.93 for long form and 0.95 for short ones [23].

RESULTS

1-Is there any difference between marital conflict resolution styles (integrating, dominating, avoiding, compromising and obligating) of satisfied and conflicted couples?

To analyze the first question of this research, t-test of independent variable was applied. The results have indicated that there is a significance difference in significance level of P<0.001 between mean of conflict resolution style (integrating, dominating, avoiding, compromising and obligating) in two groups of satisfied and conflicted couples.

2-Is there any difference between child rearing practice methods (authoritarian, authoritative and permissive) of satisfied and conflicted couples?

To analyze the second question of this research, t-test of independent variable was applied. The results have indicated that there is a significance difference in significance level of P<0.001 between mean of child rearing practice (authoritarian, authoritative and permissive) in two groups of satisfied and conflicted couples.

3-Is there any significant multiple relation between styles of marital conflict resolution and child rearing practices among the satisfied couples?

To analyze the third question of research, simultaneous multivariable linear regression test was applied. According to this, marital conflict resolution styles as predictor variables and child rearing practices as criterion variable were used. Regression models presented below that in any stage, child rearing practice is predicted separately by marital conflict resolution styles.

Table 1. Demographic characteristics of Participants in this research

<table>
<thead>
<tr>
<th>Age Variable</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Marital Variable (Year)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 to 28</td>
<td>64</td>
<td>32</td>
<td>1 to 5</td>
<td>91</td>
<td>45.5</td>
</tr>
<tr>
<td>29 to 38</td>
<td>100</td>
<td>50</td>
<td>6 to 10</td>
<td>71</td>
<td>35.5</td>
</tr>
<tr>
<td>39 to 48</td>
<td>32</td>
<td>16</td>
<td>11 to 15</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>46 to 58</td>
<td>4</td>
<td>2</td>
<td>16 to 20</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>59 to 68</td>
<td>0</td>
<td>0</td>
<td>21 to 25</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2. Summary of the result of t-test of independent group in marital conflict resolution styles (integrating, dominating, avoiding, compromising and obligating) between satisfied and conflicted couples

<table>
<thead>
<tr>
<th>Conflict Resolution Style</th>
<th>Groups</th>
<th>No.</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>T</th>
<th>df</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrating</td>
<td>Satisfied</td>
<td>100</td>
<td>4.37</td>
<td>0.5321</td>
<td>10.31</td>
<td>198</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Conflicted</td>
<td>100</td>
<td>3.03</td>
<td>10.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominating</td>
<td>Satisfied</td>
<td>100</td>
<td>2.65</td>
<td>0.8112</td>
<td>2.98</td>
<td>198</td>
<td>P&lt;0.003</td>
</tr>
<tr>
<td></td>
<td>Conflicted</td>
<td>100</td>
<td>3.1</td>
<td>0.8512</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compromising</td>
<td>Satisfied</td>
<td>100</td>
<td>3.94</td>
<td>0.4811</td>
<td>8.80</td>
<td>198</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Conflicted</td>
<td>100</td>
<td>2.85</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoiding</td>
<td>Satisfied</td>
<td>100</td>
<td>3.58</td>
<td>0.7143</td>
<td>7.44</td>
<td>198</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Conflicted</td>
<td>100</td>
<td>2.83</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obligating</td>
<td>Satisfied</td>
<td>100</td>
<td>3.82</td>
<td>0.6211</td>
<td>12.76</td>
<td>198</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Conflicted</td>
<td>100</td>
<td>2.46</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Summary of result of t-test of independent groups in child rearing practices (authoritarian, authoritative & permissive) between satisfied and conflicted couples

<table>
<thead>
<tr>
<th>Child rearing practices</th>
<th>Groups</th>
<th>No.</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>T</th>
<th>df</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authoritarian</td>
<td>Satisfied</td>
<td>100</td>
<td>16.17</td>
<td>6.28</td>
<td>-4.38</td>
<td>198</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Conflicted</td>
<td>100</td>
<td>20.55</td>
<td>7.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritative</td>
<td>Satisfied</td>
<td>100</td>
<td>31.56</td>
<td>4.51</td>
<td>6.34</td>
<td>198</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Conflicted</td>
<td>100</td>
<td>25.02</td>
<td>9.26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permissive</td>
<td>Satisfied</td>
<td>100</td>
<td>19.53</td>
<td>6.86</td>
<td>3.92</td>
<td>198</td>
<td>P&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Conflicted</td>
<td>100</td>
<td>16.31</td>
<td>5.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of table 4 show that there is significant multiple relation between marital conflict resolution styles (integrating, dominating, avoiding, compromising and obligating) and authoritative child rearing practice between the satisfied couples. Multiple correlations between the criterion variable and predictor variable were obtained 0.44. Also, R²=0.20 indicated that marital conflict resolution styles generally explain 20% of variance of criterion variable of authoritative child rearing practice.

The table of regression coefficient (Table 5) shows the share of each predictor variables in changes of criterion variable. As it is seen in table 5, only two predictive variables are significant in marital satisfaction. Among these 5 styles of conflict resolution, integrating style has the most shares in predicting the variance of dependent variable of authoritative child rearing practice. It is significant with Beta 0.32, t=3.16 and in alpha level of P<0.002. It means that in return for one credit change in standard deviation of integrating style, 0.33 change will be created in standard deviation of authoritative child rearing practice. Another variable of conflict resolution is compromising style that is significant with Beta 0.25, t=2.5 and in alpha level of P<0.01. It means that in return for one credit change in standard deviation of compromising style, 0.25 change will be created in standard deviation of authoritative child rearing practice.

Table 4. Summary of regression model and analysis for predicting variable of authoritative child rearing practice based on conflict resolution styles

<table>
<thead>
<tr>
<th>Indicator of Enter Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
<th>R</th>
<th>R²</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>403.76</td>
<td>5</td>
<td>80.75</td>
<td>28.94</td>
<td>0.000</td>
<td>0.44</td>
<td>0.20</td>
<td>4.14</td>
</tr>
<tr>
<td>Balance</td>
<td>1614.87</td>
<td>94</td>
<td>17.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2018.64</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Regression statistical specifications for predicting variable of authoritative child rearing practice based on conflicted resolution styles

<table>
<thead>
<tr>
<th>Indicator Variable</th>
<th>Non-standard Coefficients</th>
<th>β</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard Error</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrating</td>
<td>2.44</td>
<td>0.77</td>
<td>0.33</td>
<td>3.16</td>
</tr>
<tr>
<td>Oblligating</td>
<td>0.07</td>
<td>0.99</td>
<td>-0.007</td>
<td>-0.07</td>
</tr>
<tr>
<td>Dominating</td>
<td>-0.35</td>
<td>0.52</td>
<td>0.06</td>
<td>-0.66</td>
</tr>
<tr>
<td>Avoiding</td>
<td>-0.28</td>
<td>0.64</td>
<td>-0.04</td>
<td>-0.43</td>
</tr>
<tr>
<td>Compromising</td>
<td>2.17</td>
<td>0.87</td>
<td>0.25</td>
<td>2.50</td>
</tr>
</tbody>
</table>

Table 6. Summary of regression model and variance analysis for predicting variable of permissive child rearing practice based on conflict resolutions style

<table>
<thead>
<tr>
<th>Indicator of Enter Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
<th>R</th>
<th>R²</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1437.56</td>
<td>5</td>
<td>287.51</td>
<td>12.12</td>
<td>0.000</td>
<td>0.62</td>
<td>0.39</td>
<td>4.86</td>
</tr>
<tr>
<td>Balance</td>
<td>2229.34</td>
<td>94</td>
<td>23.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3666.91</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of table 6 show that there is significant multiple relation between marital conflict resolution styles (integrating, dominating, avoiding, compromising and obligating) and permissive child rearing practice between the satisfied couples. Multiple correlations between the criterion variable and predictor variable were obtained 0.62. Also, R²=0.39 indicated that marital conflict resolution styles generally explain 39% of variance of criterion variable of permissive child rearing practice.

As it is seen in table 7, only one predictive variable is significant in marital satisfaction. Among these 5 styles of conflict resolution, avoiding style has the most shares in predicting the variance of dependent variable of permissive child rearing practice. It is significant with Beta 0.56, t=63.85 and in alpha level of P<0.001. It means that in return for one credit change in standard deviation of avoiding style, 0.56 change will be created in standard deviation of permissive child rearing practice.

Table 7. Summary of regression statistical specification for predicting permissive child rearing practice variable based on conflict resolution style

<table>
<thead>
<tr>
<th>Indicator Variable</th>
<th>Non-standard Coefficients</th>
<th>β</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard Error</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrating</td>
<td>1.40</td>
<td>1.02</td>
<td>0.12</td>
<td>1.37</td>
</tr>
<tr>
<td>Oblligating</td>
<td>0.07</td>
<td>0.99</td>
<td>-0.007</td>
<td>-0.07</td>
</tr>
<tr>
<td>Dominating</td>
<td>1.37</td>
<td>0.75</td>
<td>0.15</td>
<td>1.81</td>
</tr>
<tr>
<td>Avoiding</td>
<td>4.25</td>
<td>0.62</td>
<td>0.56</td>
<td>6.85</td>
</tr>
<tr>
<td>Compromising</td>
<td>-0.13</td>
<td>0.90</td>
<td>-0.01</td>
<td>-0.14</td>
</tr>
</tbody>
</table>
The results of table 8 show that there is significant multiple relation between marital conflict resolution styles (integrating, dominating, avoiding, compromising and obligating) and authoritarian child rearing practice between the satisfied couples. Multiple correlations between the criterion variable and predictor variable were obtained 0.35. Also, R²=0.12 indicated that marital conflict resolution styles generally explain 12% of variance of criterion variable of authoritative child rearing practice.

Table 9. Summary of regression statistical specification for predicting authoritarian child rearing practice based on conflict resolution style

As it is seen in table 9, only one predictive variable is significant in marital satisfaction. Among these 5 styles of conflict resolution, dominating style has the most shares in predicting the variance of dependent variable of authoritarian child rearing practice. It is significant with Beta 0.32, t=3.33 and in alpha level of P<0.001. It means that in return for one credit change in standard deviation of avoiding style, 0.33 change will be created in standard deviation of authoritarian child rearing practice.

DISCUSSION

The objective of the current research is comparison of marital conflict resolution style and child rearing practice between two groups of satisfied and conflicted couples of Bandar Abbas.

The results of analysis of 1st question have indicated that there is a significance difference between two satisfied and conflicted couples in applying the integrating and compromising conflict resolution styles. In the other word, it can be said that satisfied couples have used integrating and compromising conflict resolution styles more than the conflicted ones. One explanation for this result is that the difference between satisfied and conflicted couples and their satisfaction from their marital life is resultant from applying the aforementioned styles in marital conflict resolution. Because using these styles requires the openness, coordination, removing the negative feeling, transformation of information and investigation of available differences between two sides and also there is no destructive factor of marital satisfaction such as criticism, humiliation, having defensive mode and breaking down. Furthermore, lack of applying such constructive approaches in conflicted couples lead to decrease of marital satisfaction and increase of marital conflicts [10]. The results of this research are the same as the results of Rahim, Kafman & Pensika [25]. In the mentioned researches, usage of constructive approaches of conflict resolution is emphasized and it is known as reinforcing components of marital satisfaction.

There was significance difference in using the dominating conflict resolution style between two participant groups (satisfied & conflicted). In the other word, conflict couples have used dominating conflict resolution style more than the satisfied ones. This style is known as a destructive style in conflict resolution and it is a competitive style. Lack of marital satisfaction in conflict couples can be due to this style. In this style, because the person is trying to reach to his demands through imperative acts and using his power, without paying attention to others, will certainly lead to the worsening the conflict. The results of this research are the same as the results of Olson et al. [26]. It was determined in this research that one of the used strategies of conflicted couples is distributive strategies (hostile orders, criticism and rude comments) that make the marital problems of couples severe.

There was a significance difference in using the avoiding conflict resolution style between two groups of satisfied and conflicted participants. The results of the 1st question have indicated there is a significance difference between mean of avoiding group in two groups of satisfied and conflicted. Although, conflicted couples...
has higher mean in using the avoiding conflict resolution style. These results are not the same as the results of Rahim, Kafman & Pensika [25]. Because in the mentioned research, applying this style is more fashionable between the conflicted couples which has negative effect of marital satisfaction. Explaining the lack of consistency of this research with the mentioned results, it can be mentioned to two factors of culture and gender. Culture and gender are considered as determining factor of conflict resolution method and are affective in selection of conflict resolution strategy [27 and 10].

There is a significance difference between two participants group (satisfied & conflicted) in using the obligating conflict resolution style. In the other word it can be stated that satisfied couples have used the obligating style more than the conflicted ones. Those who use this style are seeking for intimacy in relationship. They tried to reduce the differences and emphasize on the commons, so it leads to reduction of interpersonal conflicts.

The results of the 2nd question have indicated that there is a significant difference between satisfied and conflicted couples in using authoritarian child rearing practices. In the other word, it can be said that conflicted couples have used the authoritarian child rearing practice, which is in high level in terms of ordering and requesting, than the satisfied ones and it is due to the special disciplinary style of authoritarian parents that teaches the children that obeying is the best way of dealing with interpersonal differences and solving the problems. However, satisfied couples are more receptive and responsive. The obtained results are the same with results of Patterson, DeBaryshe & Ramsy [28] that in his researches figured out that conflicted parent will pass negative and more obscure commands to their children, they used the authoritarian style and usually blame, threat and punish their children. The obtained result is also the same as the research of Maccobi & Martin [29].

There is a significant difference between two participants group in using the authoritative child rearing practice. It can be stated that satisfied couples have used the authoritative method more than conflicted ones. These disciplinary methods more supportive than the punished ones. However, conflicted couples are more requester than receptor [4].

There is a significant relationship between two groups of satisfied and conflicted couples in using the permissive child rearing practice and in the other word, satisfied couples have used the permissive method more than conflicted ones that in this style children are more receptive than asker. The obtained results with the findings of the Maccobi & Martin [29] are not the same. Maccobi & Martin have found that conflicted parents have used the permissive and authoritarian child rearing styles and their children usually suffers from felling of innovation, guidance & low self-confidence.

The results of the 3rd question have indicated that among the criterion variables of marital conflict resolution styles (integrating, compromising, avoiding, dominating and obligating), only two styles of integrating and compromising are considered the significance predictor for authoritative child rearing practice. About positive ties between integrating and compromising conflict resolution styles with authoritative child rearing practice can be said that integrating and compromising conflict resolution styles are considered as constructive method of conflict resolution. Applying these styles leads to continuation of marital satisfaction. For instance, specifications of integrating marital conflict resolution style are transformation of information, evaluation of differences and finding the acceptable solution for both parties which create a calm and intimate environment in family. The results have also shown that only avoiding style is considered as significance predictive for variable of permissive child rearing practice. Being indifference and withdraw from the problem are obvious specification of avoiding style. It seems that couples that use this style are indifferent to the issues of children [29]. Among the styles of conflict resolution, only dominant style is considered a significant predictive for authoritarian child rearing practice. Parent who follows this style has no intimate relationship with their children. Children are not allowed to comment. Generally, the results of this research are the same as the results of research of Salari [11]. Salary has found in his research that similarity of parents in child rearing practices has negative relationship with increase of marital conflicts. It means whatever the similarity in child rearing practice is high, the marital conflict is low. Furthermore, the result of this research is the same as the result of researches of Johari, Mohammad & Mamat [11], Lavasani, Borhanzadeh, and Afzali & Hejazi [14], Brook, Zheng, Whiterian and Brook [16], and Esfandiari, Baharudin and Nozari [15].

The results of this research have shown the importance of the ties between marital conflict resolution styles with child rearing practices. Generally, the results of this research have shown that the satisfied couples have used the constructive styles of conflict resolution to solve their problems. Also, there is a positive relationship between constructive conflict resolution style (integrating & compromising) and desirable practice of child rearing. Generally it can be stated that those couples who use destructive methods of conflict resolution in marital conflict resolution, have also use the permissive and authoritarian methods in child rearing that consequently, not only marital satisfaction will decrease, but also children will expose to the behavioral and emotional problems. Additionally, the results of this research have shown the necessity of education of marital conflict resolution style to the couples before marriage and those have children.

Limitation:
- Because of non-random sampling of research, the results can be generalized only to the sample group.
- Because of using the questionnaire for collecting information, there is possibility of expending the most favorite method of couples as the favorite method of whole society.
- In this research, the impact of conflict resolution style on child rearing practice has only been investigated from the point of view of couples not the children.

REFERENCES

Comparison Information Recall from Overt Memory among Generalized Anxiety Patients, Major Depression Patients and Normal Individuals

Najmeh Hamid, (PhD)\textsuperscript{1*} and Fariba Kalantari\textsuperscript{2}

\textsuperscript{1}Associate Professor, Educational Sciences and Psychology College, Shahid Chamran University of Ahwaz
\textsuperscript{2}PhD Student, Educational Sciences and Psychology College, Shahid Chamran University of Ahwaz

*Corresponding author’s e-mail: dr_najmehhamid@yahoo.com

ABSTRACT

The aim of this study is to compare in formation recall from overt memory among generalized anxiety patients, major depression patients, and normal persons. Statistical universe of the study were generalized anxiety patients (GAP), and major depression disorders (MAD) referring to therapeutic, instructional and counseling centers in Ahwaz. These people were chosen through available sampling, and were matched regarding age, socioeconomic status, having one standard deviation higher than Beck’s scale of anxiety and depression, and other important scales in the study. Normal persons were chosen from among the workers of the same places. The instruments applied to the study included: Beck Depression inventory, Beck anxiety inventory, and Recall Test. For data analysis, one-way variance analysis, and also Tukey posteriori test were applied. Results showed that regarding free recall and recall , there was a significant difference among the 3 groups of subjects (P<0.05); normal persons recorded the highest free and recall, but those suffering from major depression showed the lowest free and recall. But in relation to recognition, there was no significant difference between those suffering from generalized anxiety and major depression.

Keywords: in formation recall, overt memory, generalized anxiety, major depression, normal persons

INTRODUCTION

The concept of memory has become one of the major fields of study in behavioral sciences, at the beginning of twenty-first century. Memory is the process of saving information and experiences and the probability of retrieving them in future. Such ability, representing and retrieving information is of great importance for all cognitive processes including perception and problem solving. There is a fundamental interest in the study of human memory to know how this simple system can do (perform) such various phenomena as preparation, familiarity, and recall, skills and knowledge acquisition. Cognitive psychologists have classified these behaviors according to special characteristics and limits; the most prominent classification is overt memory and covert memory. Covert memory refers to the retrieval and representation of saved information, without conscious awareness or intention. Overt memory is the result of conscious reflection of previous knowledge or experiences [1].

In the covert memory, processing is perceptual, while in overt memory it is conceptual. Perceptual processing is shallow and superficial, but conceptual processing is deep. The most important proponents of this viewpoint are Jacoby and Reydeger [2]. Depressed persons deviate environmental inputs in a way, so that they agree with their negative interior conclusion; to do so, they delete or deviate any information that is discordant with their cognitive organization. Thus, these persons’ biased memory results from negative cognitive patterns and a kind of deficits in the process of information processing. Comparative analysis of depressed and non-depressed persons indicates the existence of malfunction and deficits in the cognitive performance of depressed
persons, in relation to data processing and data processing speed [3], in overt memory [4], though some studies show no special deficit in the cognitive interests of depressed person compared to the normal group [5].

In their study, Sarra Hayes and Hirsch [6] investigated the deviations of data processing in generalized anxiety disorder. A recent study has shown that it is possible to train very anxious people and have they accepted interpretative and benign deviations; this, in turn can lower the level of anxiety. There is little evidence that anxious persons have a better memory when facing information.

Mitt [7], studied memory deviation when facing information recall in anxiety and anxiety disorder in a meta-analysis: Results showed that there is no difference in the quality of data processing between anxious and very anxious patients. But, there was a big difference between the effects of studying, in recall and recognition. The pointed out that more researches are necessary in order to identify and explain mediator variables for preference and avoidant recall.

In a study, Gunther, Holtkamp and Jolles [8], dealt with oral memory and the aspects of attention control in children and teenagers suffering from anxiety disorders or depression disorders, which revealed s significant effect, regarding the relationship between the results of the oral memory. It was also found out that dysmnesia, accompanies child depression in a special way.

Maly studied fore head lobe of depressed patients while performing an active memory task; their performance was lower than the control group in all active memory part. Based on their observations, they concluded that depression brings about almost specific damages to active memory, particularly the (central performer). Bruce and Friedman [9] investigated the overt memory deviation for dangerous words in anxiety disorder. Although their findings showed in generalized anxiety disorder (GAD), in this field contradictory related to the study of attention process in generalized anxiety disorder, results made that memory deviation is seen almost in all anxiety disorder.

In recent years, extensive attention has been paid to the assessment of memory functions, since they accompanied the hippocampus analysis. The results of two meta-analyses proved less hippocampus in very depressed patients, especially with sequential repetition [10]. In recent years, functional magnetic Resonance imaging (FMRI) has explained some parts of the brain that includes motor memory in depression and shows abnormal processing during emotional and shows abnormal processing during emotional coding in memory in amygdale, hippocampus and parietal areas. [10]. Toozande Jani and KamalPour [11] cited the effects of mood-adapted memory bias on overt and implicit memory; results showed that in depressed patients, disorder happens only in overt memory. In relation to retrieving emotional words, these patients showed significant difference compared to other groups. One hypothesis was also approved that (induced) mood, makes recalling those information, harmonious with it, easy.

Sauffi et al. [12], conducted a study named recalling and judging, about the frequency of emotional and neutral words in patients suffering from major depression, generalized anxiety and control group; they indicated that although both clinical groups, compared to the normal witness group, in the task of judging the frequency of emotional words showed mood- adapted bias, only depressed patients showed this bias in recalling mood-adapted words. Research findings suggest that no similar processing principles are dominant in two groups, and as salaried in previous viewpoints, those suffering from anxiety and depression, do not follow the same biases in all levels of information processing.

In the study of overt and implicit memory bias (positive and negative), in difficult and in difficult conditions, and perception the risky consequence in depressed, anxious, combinational and healthy college-students, Nosrati et al. [13], showed that subjects in depressed and healthy group regarding implicit memory, in both conditions (difficult & in difficult) showed significant difference in recalling positive emotional words. Depressed subjects recalled negative emotional words from implicit memory, in both condition, more than anxious and combinational disorder subjects.

**Significance of subject:** One important subject in the literature of psychology, particularly clinical psychology is the way emotional disorders affect person’s cognitive functions. Wallims and associates believe that emotional disorders affect cognitive processes, including attention and memory in several ways. Emotional disorders can increase people’s attention to events that cause tenseness, or increase the number of retrieving these events [14]. This the study of memory is of great importance, since thinking (including perception, problemsolving, and recall) rely on memory, and any bias in memory can cause bias in thinking and cognition. In addition, emotions can affect memory in encoding, saving, and retrieval [15]. Finally, this subject can serve cognition therapy, which is wide spread these days. Besides, since these two disorders, namely, anxiety and depression. Overlap, they are studied and compared in one united study.

**Hypothesis:**

1. Regarding free recall, there exists difference among those who suffer from generalized anxiety, major depression, and normal persons.

2. Regarding signing recall, there is difference among those who suffer from generalized anxiety, major depression, and normal persons.

3. Regarding recognition, there is difference among those who suffer from generalized anxiety major depression, and normal persons.
MATERIALS AND METHODS

The statistical universe of this study includes outpatients diagnosed as having generalized anxiety disorder (GAP) and major depression disorder (MAD), who have reference to governmental and non-governmental psychiatric centers and consulting & psychotherapy centers in Ahvaz. These patients were (matched) according to clinical interview, and considering such variables important to the study. According to clinical interview and psychiatrist diagnosis, those who every one standard deviation higher than the average, according to Beck scales of anxiety and depression were elected as patient group. Other group of people was selected as the statistical universe of normal group. Available sampling was the sampling method of this study; thus groups of subjects were chosen accordingly:

1. The two groups of patients generalized anxiety (GAD) and major depression disorder were chosen according to the psychiatrist diagnosis and a clinical interview based on DSM- TV variables, led by a clinical psychologist.

2. Normal group included shahid Chamran University students; this group had never been diagnosed as having any mental disorders. Subjects of all groups were matched according to such variable as age, education, and socio cultural status.

Instrument:

Beck depression inventory (BDI) Contains 21 questions are about psychological signal, and 6 questions over about body symptoms. All questions have 4 options (0-3) that evaluate the intensity of the symptoms. Total score is obtained through adding all the scores of the questions; the range is between 0-63. Higher scores indicate higher depression.

Beck anxiety inventory (BAI) contains 21 questions that emphasize particularly on physiologic aspects of anxiety. 13 questions of BAI are about anxiety mood, 3 questions about specific fears, and 5 questions are related to hyperactivity and motor tension in anxiety.

Recall indication: this test includes 30 associative pairs (e.g.: gifted, holiday) that are taken from a list made by are [1]. It should be mentioned that these words are matched regarding level of affection, frequency, word length (4-5 letters). Minimum score is 0, and maximum score is 30.

Free recall test: this test contained 2 short passages (each containing 10 lines) elected from among Nahravainan [1] and were matched regarding level of affection these passages were elected from the 20 passages given to university students, which were matched mostly according to level of affection min. score =0 max. score:30

Recognition test: this test contained 2 lists of words, the first having 30 words and the second, 68 words(a combination of words in list 1+ new words) for recognizing words in list 1. As an example such words as: old, hat, tree were taken from word lists made by zare[1] which were matched regarding level of affection, frequency, and word length. Min. score: 0 max. Score: 30.

Giving memory tests:

These tests were given to the subjects, one by one, as follows:

1. At first indication recall test was given to the subjects in a written from to memorize in 2 minutes. To avoid the interference of the effects of cognitive tasks, after the learning step, subjects were given a cognitive activity requiring writing1-100 conversely. Then in the test step, they were given pair words. They were told one word, then were required to recall the other (2 minutes was the allocated time). (2)

2. The second test .i.e. free recall was taken after 5 minutes. 2 passages were given to the subjects to memorize in 4 minutes. To avoid the interference of the effects of the cognitive task, subjects were given a cognitive activity including Raven intelligence test for adults.

They were given 40 minutes, then in the test level, they were asked to recall the previous text in a written from, in 5 minutes.

3. The third test, i.e. recognition, was given 5 minutes after free recall test. At first, the first list of words was given to the subjects in a written from; they were to memorize them in 2 minutes. In order to avoid the interference of the effects of cognitive task, subjects were asked to memorize the shapes of test and then draw them. 10 minutes was the allocated time. After doing the cognitive activity, subjects were given the second list; they ought to recognize previous word from among the words of the new list in 2 minutes, and mark them in the special from, made for this purpose.

RESULTS

Table 1 illustrates the summery of data related to the average and standard deviation of generalized anxiety, major depression, and normal group scores.

In order to study the difference among the three groups, regarding free recall, one – way variance was applied; the results are presented in table 2.
patients and normal subjects. To cite this paper:

This study was conducted to investigate the role of the media in the relationship between boys and girls. The results of this study indicated that most explanations and the greatest role in explaining the relationship between boys and girls contributed to the satellite. According to some experts, communication media including television can influence thoughts, attitudes and actions of people through providing different subjects in different video formats (movies, series etc.). They show positive or negative exaggerated videos or represent a moving mirror like picture of everyday social realities, either good or bad ones. They make films based on cultural

<table>
<thead>
<tr>
<th>Table 1. Average and deviation scores of subjects in variable as free recall, indication recall, and recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>Free recall</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Recall</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Recognition</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2. The results of one-way variance; comparing free recall in the 3 groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Change Sources</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Between-Group</td>
</tr>
<tr>
<td>Within-Group</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

According to calculated F in table 2 (F=4.84), there has been a significant difference among the 3 groups of subjects, regarding free recall (P<0.05). The results of (posteriori) test revealed great difference between the 2 groups of generalized anxiety and major depression, regarding free recall (P<0.05). Also between the groups of generalized anxiety and normal persons there is a big difference (P<0.05). One the other hand there is great difference between the groups if generalized anxiety and major depression (P<0.01).

Results of one-way variance analysis are reflected in table 3, in order to study the difference among the three groups, regarding indication recall.

<table>
<thead>
<tr>
<th>Table 3. Results of one-way variance analysis to compare the averages of indication recall among the three groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Change Sources</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Between group</td>
</tr>
<tr>
<td>Within group</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Regarding calculated F in table 3 (F= 8.71) there was a big difference among the three groups, namely, generalized anxiety, major depression, and normal persons, regarding indication test (P<0.05). The results of test also indicates a significant difference between generalized anxiety and normal group (P, 0.05), also the results of Tukey test show a great difference between major depression disorder and normal group (P< 0.01).

But there is no significant difference between anxiety disorder and major depression group, regarding recognition. The results of one-way variance analysis, in order to study the difference among the three groups, regarding recognition is given in Table 4.

<table>
<thead>
<tr>
<th>Table 4. Results of one-way variance analysis for comparing recognition mean of the three groups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Change source</strong></td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Between-group</td>
</tr>
<tr>
<td>Within-group</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The results in table 4 are indicative of significant difference among the subjects of groups, in relation to recognition (P< 0.05). The results of Tukey test were also indicative of a big difference among the three groups of generalized anxiety disorder, depression disorder, and normal group (p< 0.05). But there was no specific difference between the generalized anxiety and the major depression group.

**DISCUSSION**


Journal homepage: http://jlsb.science-line.com/
conditions and atmosphere of the community, different issues including those related to the relationship of young boys and girls. This mutual impact can be seen in other images as well. Because of much higher superiority of the satellite in terms of luxury and modern appearance design and quality in comparison with broadcast networks or the Internet, it seems that it has Girls tend a significant role in tendency of girls for having an unallowable relationship with the opposite sex. On the other hand, the Internet has the lowest representation in the relationship between boys and girls. Virtual community on the Internet has not been successful in creation of boys and girls tendency to have relationship with the opposite sex due to the lack of proper transfer of real emotions. Jencitzr, in his study [10] found that main reasons of changing the identities of young people and their relationships are as follows: The lack of attention to the emotional and passionate needs and demands of the youth, lack of attention to their vitality, lack of attention to local culture, lack of availability of the mass media especially Internet and familiarity with various cultures. Results of this study may create necessary insight for university managers in planning for leisure time of students.

REFERENCES

1. Zare, Hossain & nahravanian, parvane. 2009. The effect of emotional content on overt and covert memory, with sex differentiation, cognitive sciences news
12. Sayfi, mohammad yasin. 2005. Recall and judging the frequency of emotional and neutral words among major depression, generalized anxiety and witness group, medical research magazine, research magazine, 3, 4.
13. Nosrati, Kobra & associates. 2009. The study of overt and implicit memory bias in difficult and in difficult situations, and perception of risky consequences in depressed, combinatorial and healthy college students. Cognitive studies in the faculty of educational sciences & psychology; alzahra University, 6, 2.
15. Rasti, Ali & Tagavi, mohammad Reza. 2006. Bias of explicit memory towed negative emotional information processing in generalized anxiety disorder, major depression disorder patients and normal persons, cognitive sciences news, year, 8, 3.
Factors Associated with Wife Abuse among Women Attending Forensic Medicine in Bandar Abbas

Maryam Gaharpour Gatabi*, Rahmatolah Dadvar, and Ali Rahimi Sadegh

Department of Women Studies, Islamic Azad University, Baft Branch, Iran

*Corresponding author’s email: www.m_eilia@yahoo.com

ABSTRACT

Of problems and dangers in which women are encountered with them on any society is wife-tormenting. The object of this research is to determine and explain factors related to wife-tormenting. Statistic society of the research includes women tormented from their husband in which referred to Bandar Abbas’s forensic medicine on the year of 2011 and from theses, about 100 persons has been selected by randomly sampling method. Required information from questionnaire has been analyzed by descriptive and inference statistic method. The result showed, men by lower education level have has more wife-tormenting and the men who have high addiction, they torment their wife more. Unemployed men have has more wife-tormenting than employed one. Using unauthorized drugs by men have has direct relation to their wife tormenting. Abnormal behavior on men like watching rough films, nightly restlessness, vagrancy and street-walking have has direct relation to their wife-tormenting.

Keywords: Wife-Tormenting, Addiction, Revenue, Unauthorized Drugs, Abnormal Behavior.

INTRODUCTION

Nowadays spousal abuse has turned to a major issue in public health and upsets the personal health and welfare of millions of females every year. According to World Bank Group reports, spousal abuse impairs the health of females between 15 and 44 more than any other females' diseases. Based on the definition of World Health Organization Consultation Workshop, spousal abuse is defined as the deliberate use of physical strength accompanied with threatening directed at oneself, others, a group or a population that could exclude physical damages or include the possibility of injury, death, mental damages, growth disorders, or different deprivations [1].

The current research seeks to find the most important factors behind spousal abuse in the life of females who were referred to Legal Medicine Department in Bandar-Abbas. The painful phenomenon of spousal abuse that in its physical, mental, and sexual aspects threatens the physical and mental health of females across the globe and violates their human rights has emerged most widely as domestic violence. At least 1 out of 5 in the world’s female population has been subject to physical or sexual violence from a male or a group of males in their lifespan.

The Theory of Social Learning stresses the effects of social and environmental situations on individuals’ aggressive behavior. In this theory, violence and aggression are not considered as inevitable behaviors, but it is behaviors that are known and acquired through punishment and reward. Meanwhile, besides rewards or punishments that individuals experience directly, the rewards and punishments they receive because of their aggressive behavior acquired from role patterns - individuals whose behavior is eyed as a pattern - are also considered here. Based on what we said above, people observe and reflect upon the behavior of patterns and its consequences. If these consequences are positive, the aforementioned behavior will be seen from the observer in similar situations [2, 3].

According to the classic psychodynamic viewpoint which has been derived from Freud’s psychoanalysis pattern, marital problems are the consequence of intrapsychic problems of spouses [4]. Based on Behavioral Exchange Model, marital conflicts are largely considered as the outcome of reinforcements or punishments used by any of the spouses against each other or any relation concerning the same [reinforcement and punishment] that spouses exhibit [5].
According to Rational-Emotive Behavioral Theory of Ellis, a couple's dysphoria is not directly related to the actions of a partner or harsh failures in life, but it is mostly because of the confidence and belief the couple have about such actions and failures. Ellis claims that irrational thoughts known through excessive exaggeration, irrational and irrational inflexibility, and especially absolutism in many cases will jointly lead to personal neurosis and relational disorder. Therefore, irrational beliefs lead to personal disorders and cause unfounded dissatisfaction in marriage [6].

In Intergenerational Theory, Bowen imagined that in many problematic families, family members often lacked an independent and distinct identity and many family problems emerged because they had not separated themselves psychologically from their parent's family [4]. According to this theory, tension in relations is related to the lack of attachment security; when the attachment security is threatened, anger is the first response [7]. In her research, Shahnaz Yeylaq studied the relationship between demographic factors and males' violence toward their spouses in Ahvaz and found out that the more educated males and females were and also the more females were satisfied with their marital life, the less their spouses' violence toward them would have been.

In order to do a descriptive study of domestic violence against females in Oroumieh, Arefi [9] showed in his research that females between 17 and 32 had experienced the most violence; also, 50 to 60% of females who were subject to their spouses' violence had only elementary education and 25% of them were illiterate. Moreover, 50%, 25.7%, and 23.2% of females were subject to physical, mental, and financial abuse, respectively.

Taheri's findings [10] about the rate of physical violence against females referred to Legal Medicine Department or other healthcare centers in Zanjan Province showed that most of such females, being housewives or carpet weavers, were villagers and illiterate or had only elementary education or lower; their husbands were born in a village, too, and being illiterate or having only elementary education or lower, often worked in the agriculture sector or were just retailers.

The findings of Eftekhar et al. [11] about the personal traits of spousal abuse victims referred to legal medicine centers showed that females' marriage in younger ages, low education, and unemployment were among the effective factors of spousal abuse by their husbands. In his research on factors contributing to spousal abuse by males in Tehran, Hemmati [12] showed that variables such as age, number of children, education, social satisfaction, negative addiction, self-esteem, and economic and social position are directly related to violence in general [physical and emotional], while other variables like the ideology of patriarchy, tendency to accept spousal abuse, viewpoints on females social role, and violence socialization are indirectly related to general violence.

According to the studies implemented in Iran, the rate of physical and mental spousal abuse was high in the Iranian society, and varied in different provinces [13]. The results of the above-mentioned research on spousal abuse and its contributing factors were: most of spousal abuses were reported to be in mental form and not physical or battering; also the research findings showed that mental abuse was more than physical violence in Iranian families [14].

Despite scientific and cultural advances, spousal abuse is one of the most popular types of domestic violence that sometimes could cause irredeemable damages to children and families. Physical and verbal violence are among the highly popular social plights females suffer from. Based on this, the current research was carried out on females referred to Legal Medicine Department in Bandar-Abbas with the aim of identifying the factors related or contributing to males' tendency toward spousal abuse.

**MATERIALS AND METHODS**

Taking the current research subject into account, Descriptive Survey Method was used as the appropriate method, considering the type of the research whose goal is to describe the properties of a situation or a subject in a realistic, systematic, and objective manner. The statistical population of the research includes all females who were referred to Legal Medicine Department in Bandar-Abbas in 2011. According to Bandar-Abbas Legal Medicine Department experts, 148 individuals were referred to the department as being subjected to spousal abuse. Based on the Morgan Table, 100 of females referred to Bandar-Abbas Legal Medicine Department in 2011 were selected as the research statistical sample. The sample size was determined through reference to Morgan Table and sample size determination methods used in descriptive surveys, and the (statistical) sample itself was selected through Simple Random Sampling Method. The research was implemented through library and field study and the studied population included females, who were subject to spousal abuse and referred to the General Department of Legal Medicine in Bandar-Abbas in 2011, from which 100 were randomly chosen. Data was collected through single or multiple choice questionnaires of 34 questions and reference to library card-indexes. Based on the studies concerning the research hypothetical sources and interview with some individuals from the statistical sample, a list of factors contributing to spousal abuse instances in the case of females referred to Bandar-Abbas Legal Medicine Department in 2011 was prepared. The above-mentioned list was submitted to the supervising professor and some of the experts whom were asked to comment on each of the factors mentioned both in general and detail. This way, the face validity of research tools was determined, and then, to determine the content validity, 100 questionnaires were distributed among the sample individuals. After all the questionnaires were filled out, some of their questions were checked and revised, and the questionnaires (research tool) were rewritten with 24 questions. Cronbach’s Alpha Calculation Method was used to determine the reliability of questionnaires. Results showed that the reliability of 24-question questionnaires for 100...
individuals equals 0.91 which is quite a high reliability for this research tool (questionnaire). The data gained through the research was analyzed using descriptive and inference statistical methods such as average, standard deviation, t-test, and correlation coefficient.

RESULTS

The table below show the age of females abused by their spouses. Based on this table and graph, from a total of 100 abused females, 5 or 5% were under 20, 61 or 61% were between 21 and 30, 31 or 31% are between 31 and 40, and only 3 or 3% are 41 or older.

The table below shows the factors related to spousal abuse of (the studied) females by their spouses. Spearman Correlation Test was used to determine the relation between the aforementioned factors and spousal abuse of females.

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequencies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20 years</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>21 to 30 years</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>31 to 40 years</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>41 years and older</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1. Table 1. Statistical distribution of age of females abused by their spouses

<table>
<thead>
<tr>
<th>Variables</th>
<th>Spousal Abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
</tr>
<tr>
<td>Watching violent movies</td>
<td>0.56</td>
</tr>
<tr>
<td>Nightly insomnia</td>
<td>0.58</td>
</tr>
<tr>
<td>Wandering</td>
<td>0.54</td>
</tr>
<tr>
<td>Nightly gatherings of friends</td>
<td>0.29</td>
</tr>
<tr>
<td>Education level</td>
<td>-0.20</td>
</tr>
<tr>
<td>Drug addiction</td>
<td>0.43</td>
</tr>
<tr>
<td>Economic status</td>
<td>-0.24</td>
</tr>
<tr>
<td>Employment status</td>
<td>-0.25</td>
</tr>
<tr>
<td>Alcoholism</td>
<td>0.15</td>
</tr>
<tr>
<td>Using illegal drugs</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Table 2. Correlation matrix factors related to spousal abuse

The table above shows that factors such as destructive behavior (watching violent movies, nightly insomnia, wandering, street wandering, nightly gatherings of friends), education level, drug addiction, economic status, employment status, and using illegal drugs are positively correlated to spousal abuse with a confidence level of 95%.

DISCUSSION

The goal of current research was to identify the factors related to spousal abuse of females. The research findings showed that all the factors studied excluding alcoholic beverage consumption, relate to spousal abuse. The results also showed that males’ level of education is correlated with spousal abuse of females. Low level of males’ education is an important factor contributing to relations based on misbehavior. Such findings correspond to the results achieved by Eftekhar et al. (11), Seyf Rabiei et al. (14) and Hemmati (12). Researches have shown that education level could be a cause of decrease in sternness and misbehavior toward females. The males who have a low education are not aware of females’ rights and proper conduct toward them, and this leads them to misbehavior toward females.

Findings on factors related to spousal abuse of females referred to Legal Medicine Department showed that drug consumption, or actually males’ addiction, causes males to misbehave their spouses or in other words, the females whose spouses use drugs are exposed to physical and mental misbehavior. The current research results concerning the aforementioned fact correspond to the findings of Sey Rabei’i et al. (14). Since drug addiction causes aggression, and decreases individuals’ ability to control their anger and refrain from dangerous behaviors, it is significantly related to spousal abuse, and is considered an important factor of such abuse.

On the other hand, the research findings showed that males’ low economic status or in fact their (low) economic power correlates with spousal abuse: males with lower economic power abuse their spouses more. Economic pressure causes depression and isolation and makes individuals assume a violent and aggressive manner and react even with the slightest stimulation. These results correspond to Nazparvar’s results (15).

Results showed that males’ unemployment also contributes to spousal abuse. In fact, these results showed that females with unemployed spouses are subject to more spousal abuse. Unemployed males spend most of their...
time in home and have more conflict with their spouses. Being under mental pressure caused by their unemployment, they have a potential for conflict.

According to the current research, destructive traits are among the factors that are significantly related to spousal abuse. Destructive behaviors such as nightly gatherings with friends, wandering, nightly wandering and watching violent movies could cause spousal abuse. Males behaving destructively and out of family virtues abuse their spouses more. This group of males' dependence on friends, and entertainment is more than family, and they react negatively when faced with their families' demands. These results correspond to the research results of Nazparvar (15) and Eftekhar et al. (11). Commitment to family, and relation and attachment to family members are among the factors stressed by experts as being behind families' peace and reinforcement.

Founding special centers with experienced lawyers in family issues could help females get acquainted with their rights and use them and the help of these lawyers when necessary. It is necessary that these centers be governmental and their expenses are covered by governments.

Also, females exposed to severe mistreatment must have a secure place to take shelter in, and such facilities shall correspond to their society's cultural conditions.

REFERENCES

ABSTRACT

The purpose of this study was comparison of Differentiation among satisfying couples, and conflicting couples. Components of differentiation (Emotional reactivity, Emotional Cutoff, Emotional Fusion and I-position) were investigated. 120 couples were nonrandom selected as sample of this study. Equally in each group 60 couples attended. Scales were used in this study include differentiation of self-inventory (DSI) and index of Hudsen marital satisfied (IMS). The main results of this study showed: in the differentiation was found significant difference among two groups of participant. There is not among between men and women of participant about differentiation. In the Emotional reactivity and Emotional Fusion was found significant difference among two groups of participant. The results showed that women more than men are suffer Emotional reactivity and Emotional Fusion. There is not any significant difference among two groups participant about Emotional Cutoff and I-position. The multiple regression analysis showed components of differentiation (Emotional reactivity, Emotional Cutoff, Emotional Fusion and I position) could predict %56 variance of marital satisfaction variable. Overall was determined that the satisfying couples had higher level of differentiation in comparison with conflicting couples that improved their marital satisfaction.

Keywords: Differentiation, Satisfying Couples, Conflicting Couples

INTRODUCTION

Marital relationship is considered as the most important relationship of a man and an introduction to educate the next generation [1]. Marriage is a relationship that is started by selection of person and stay in that almost half a century. A man and woman that marry should adapt themselves toward half a century social evolution, development and reciprocal changes. If they couldn’t cope with, they will more likely suffer from their marital relationship [2].

Marital satisfied is of the most important and complicated aspect of a marital relationship. Its definition may be so simple; however, considering the affective factors on marital satisfied indicates the difficulty of its definition and description. Marital satisfied is an emotional-cognitive assessment of person from the partial’s close relationship [3]. The term, marital satisfied, indicates the joy of a person and his/her satisfaction from the marital close relationship [4]. The definition of compatibility and marital satisfied stated that the compatible couples are spouses that have a lot of agreement with each other. They are satisfied from the type and level of their relationship, the quality of spending the leisure time. They have a good management in the field of financial issues. Epstein & Bacom [5] have proposed that theoretical & experimental developments lead to more understandings of affective recognitions in marital ties. The results of various studies have indicated that success and satisfaction of marital tie depends on the awareness of couples from the affective factors in the successful marital ties.

Occurring conflict is inevitable in any close relationship. Some couples show their conflict directly and others deny and suppressed and show it indirectly. Almost any couples that refer for resolutions are in conflict situation. The subject of their conflicts might be expectations, needs, wants, money, sexual relationship, children
and relatives [6]. Many researchers have been performed in the subject of destructive impacts of conflicts and the results indicated that marital conflict is effective in the mental, physical and family health. Other researchers have approved the ties of marital conflicts with depression, eating disorders and special disease such as cancer and heart disease. In fact, aggressive behaviors are associated with the changes of immune system [7]. Mentally, many people have experienced the conflict in the marital relationship extremely stressful [8]. Marital conflict is associated with phenomena such as violence and divorce. It can be stated that divorce is of the consequences of marital discord and the most distressing life events which is associated with mental and physical disorders [9].

Theories and researches have shown that family experience have a critical role in emotional-social development and compatibility in adult. On the other word, it was figured out that success of adult in achieving the emotional development and the adequacy of their interpersonal ties is associated with their emotional experience in family [10]. Bowen [11] in an attempt to explain the patterns of intimate relationships used the concept of differentiation to link the family experiences to separated relationships. Differentiated ones can separate the feeling and thinking from the intimate interactions. They experienced their emotions fully but they don’t react to their emotions passively [12, 13 & 14].

Differentiation is the most fundamental theory of Bowen that pointed to the ability to experience intimacy with others and remain in the emotional atmosphere and at the same time independency from them [15&16]. In theory of Bowen, all the symptoms of mental & physical disease, social problems especially marital discord is associated with the differentiation level [17, 18 and 19]. Differentiation shows the interpersonal performance, ability to separate the emotional processes from logic ones and considering the interpersonal performance, ability to experience the intimacy along with the independency and appropriate balance between them [20, 21]. Differentiation is both applied in interpersonal; level and system structure level. Differentiation in interpersonal level is the ability of person to control his/her reaction toward the act of others [15].

Differentiation is defined as a process to achieve the objective. Differentiation is a direction in life and is of more than an existential mode. Furthermore, demonstrate it in situations such as: to say “Me” while others want “Us”, to maintain the “Non anxious presence” against the anxious of others, to clarify the personal values and goals, acceptance of the maximum responsibility in return for emotional comfort, blaming it instead of others. Differentiation is systematic level is applied as the ability of a system/family in ordering itself. It has the higher level of compatible differentiation in family and system and in an emergency; create a balance between being separated and fusion [22, 17].

Two common responses of non-differentiated people to the situations is emotional fusion and emotional cutoff. Emotional fusion is a disability in keeping the personal belief of a divergent person toward others. These people prove themselves in being concordant with others. Emotional cutoff is one way to disagree with others due to the physical and psychological distance from them. The amount of revealing the emotional fusion and cutoff is totally depends on the level of their differentiation [14]. When there is no balance, the system is ready to explode and without feeling of separation, people became severely involved with emotional fusion with others and without feeling of belonging faced the emotional cutoff. Establishing balance between these two allowed people to have a feeling of belonging and individual identity along with the support from the system of family. A high level of differentiation allows the family to adjust themselves with necessary changes and sense of coherence and this leads to higher satisfaction in family communication [23, 17]. Differentiation acts as both process and personal feature. As a process, it describes the impact that system of family generation has in person and also is considered as predictor of anxiety [24]. As a personality trait differentiate will appear in various levels of inter psychic traits and extra psychic traits. In Inter psychic level, differentiation is divided into two level of functional and basic. Its functional level changes the method of adaptation with situations and its basic level lead to have stability in relations and situations. In Extra psychic level, it is formation of relationship of individual with others and personal boundaries about these ties [12, 25]. Many researches proposed the differentiation as predictive of marital satisfied, quality of marital satisfied and marital intimacy [17, 18, 22, 26, 27, 28 and 29]. And the other side of results proposed some differentiation researches as a fundamental structure in development of puberty and achieving to the mental health [30, 31 and 32].

Clinical experience of family therapist and approaches of therapy family indicated that family has an important role in incidence of many marital conflicts and issues [2]. In another word, considering the above said researches in the field of differentiation and its components, it can be anticipated that differentiation is affective in marital satisfaction and confliction and consequently the incidence of divorce. Additionally, considering the current situation of society and warning statistics about divorce and its negative personal and social consequences, the objective of the current research is comparison of differentiation between satisfying and conflicting couples and also determining role of differentiation in predicting the marital satisfying.

MATERIALS AND METHODS

Considering the objective of research, two groups of satisfying couples and conflicting couples were compared in terms of differentiation variables and components of differentiation. Components of differentiation and marital satisfied were respectively considered as predicting variable and criterion variable. To analyze the results of research, multiple regression analysis tests and multivariate analysis of variance have been used.
**Differentiation of Self Inventory (DSI-R):** This self-inventory questionnaire has been prepared by Skowron & Fridlander [13] and revised by Skowron & Smith [23]. This questionnaire has 46 questions. The questions were categorized in Likert 6 part spectrum from 1 (Totally Disagree) to 6 (Totally Agree) and has four sub scales of Emotional Reactivity (ER), I-p position (IP), Emotional Cutoff (EC) and Emotional Fusion (FO) [33]. Skowron and Smith [23] have reported the total reliability of research of Cronbach’s alpha Coefficient an amount of 0.92 and its subscales reliability, a range of 0.81 to 0.86. Kener [18] has reported the total reliability of research of Cronbach’s alpha Coefficient an amount of 0.90 and its subscales reliability, a range of 0.76 to 0.86 and Lal, 2006 have reported the Cronbach’s alpha Coefficient an amount of 0.81 and its subscales reliability, a range of 0.60 to 0.81. Yonesi [29] standardized the mentioned questionnaire among the people between 25 to 50 years old in Tehran by applying retest methods on 500 people. He reported the total reliability of questionnaire with Cronbach’s alpha an amount of 0.85 and for its subscales a range of 0.60 to 0.77. The reliability of this questionnaire by primary implementation on 20 couples and analysis through Cronbach’s alpha Coefficient was equal to 0.85.

**Questionnaire of Index of Marital Satisfied:** Hudson Index of Marital Satisfied is a 25 questions questionnaire that is prepared for assessment of severity or range of discards of wife or husbands. This indicator has two cutting scores. The first cutting score is 30 (±5) that scores lower than it indicates no major clinical problems of a relation. The score higher than 30 indicates the remarkable clinical problems. The second cutting score is 70. The Scores those are higher than 70almost indicate the severe stress and likely require the use of violence to solve problems [34]. The reliability of this questionnaire is 0.96 [34]. Ebrahimnejad [34] has found its reliability an amount of 0.96 in women and 0.94 in men through Cronbach’s alpha. In this research, reliability of questionnaire was equal to 0.91 by primary implementation on 20 couples and analysis through Cronbach’s alpha which is considered a good reliability for the questionnaire.

Hudson Indicator of Marital Satisfied has a high validity and a significance relationship with Lock–Wallace Marital Adjustment Test and Test of Enrich Marital Satisfied. Also, this indicator has a good and significance validity for differentiation of conflicting couples and apparently satisfied couples. Additionally, indicator of marital satisfied has a good validity [34].

**RESULTS**

**First Hypothesis:** By sex (male and female), there is a difference between satisfying couples and conflicting ones about differentiation level. To analyze this hypothesis, MANOVA statistical test has been used. As it is seen in table 1, considering the independent variable, type of couples (satisfying & conflicting) with $F=108.74$ in alpha level $P=0.01$ has a significance difference in differentiation. There was no differentiation in independent variable of sex with $F=1.15$. Interactive impact of sex and type (satisfying and conflicting) with $F=0.588$ has no significance difference in differentiation. Generally, among the two main impacts, only main impact of type of couples (satisfying & conflicting) has significance difference in differentiation. However, sex interactive impact has no significance difference on type of (satisfying and conflicting group).

**Second Hypothesis:** By sex (female and male), there is a significance difference between satisfying couples and conflicting couples about components of differentiation. To analyze this hypothesis, MANOVA statistical test has been used. As it is seen in table 2, considering the independent variable, type of couples (satisfying & conflicting) with $F=133.962$ in alpha level $P=0.001$ has a significance difference in emotional reactivity. Considering the independent variable of sex (male and female) in emotional reactivity, there is a significant difference between two groups of male and female with $F=6.972$ in alpha level of $P=0.009$. Interactive impact of sex (male and female) and type (satisfying and conflicting) in emotional reactivity level with $F=6.675$ in alpha level $P=0.011$s significant. Generally, both two main impacts and one interactive impact of type of couples (satisfying & conflicting) and sex (male and female) has significance difference in emotional reactivity. Additionally, table 2 shows that, given to the independent variable of type of couples (satisfying and conflicting) with $F=62.422$ in alpha level $P=0.001$, there is a significance difference in variable of emotional fusion. Considering the independent variable of sex (male and female) in variable of emotional fusion, there is no significance relationship between two groups of male and female with $F=0.91$. Interactive impact between sex (male and female) and type (satisfying and conflicting) about emotional fusion with $F=3.448$ in alpha level $F=0.065$ is close to be significance. However, between two groups of (satisfying and conflicting couples) and male and female of the current research about two variables of emotional cutoff and I-position, there is no significance relationship.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>Freedom Degree</th>
<th>Mean of Squares</th>
<th>Amount of $F$</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type (Satisfying &amp; Conflicting)</td>
<td>4368.60.02</td>
<td>3</td>
<td>4368.60.02</td>
<td>108.74</td>
<td>0.01</td>
</tr>
<tr>
<td>Sex (Male &amp; Female)</td>
<td>464.82</td>
<td>1</td>
<td>464.82</td>
<td>1.15</td>
<td>0.23</td>
</tr>
<tr>
<td>Interactive Effects (Type &amp; Sex)</td>
<td>236.02</td>
<td>1</td>
<td>236.02</td>
<td>0.588</td>
<td>0.44</td>
</tr>
<tr>
<td>Error</td>
<td>94800.33</td>
<td>236</td>
<td>401.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>505439.4</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


JOURNAL homepage: http://jlsb.science-line.com/
Table 2. Two-way ANOVA of Type of (Conflicting & Satisfying) Group and Sex on differentiation components between satisfying and conflicting couples

<table>
<thead>
<tr>
<th>Differentiation Components</th>
<th>Source</th>
<th>Sum of Squares</th>
<th>Freedom Degree</th>
<th>Mean of Squares</th>
<th>Amount of F</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional Reactivity</strong></td>
<td>Type (Satisfying &amp; Conflicting)</td>
<td>6232.204</td>
<td>3</td>
<td>6232.204</td>
<td>133.962</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Sex (Male &amp; Female)</td>
<td>324.338</td>
<td>1</td>
<td>324.338</td>
<td>6.972</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>Interactive Impact (Sex &amp; Type)</td>
<td>310.538</td>
<td>1</td>
<td>310.538</td>
<td>6.675</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>10979.217</td>
<td>236</td>
<td>46.522</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>280065</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Emotional Cutoff</strong></td>
<td>Type (Satisfying &amp; Conflicting)</td>
<td>11.267</td>
<td>3</td>
<td>11.267</td>
<td>0.445</td>
<td>0.505</td>
</tr>
<tr>
<td></td>
<td>Sex (Male &amp; Female)</td>
<td>60</td>
<td>1</td>
<td>60</td>
<td>2.372</td>
<td>0.125</td>
</tr>
<tr>
<td></td>
<td>Interactive Impact (Sex &amp; Type)</td>
<td>1.667</td>
<td>1</td>
<td>1.667</td>
<td>0.066</td>
<td>0.798</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>5969</td>
<td>236</td>
<td>25.292</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>435810</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Emotional Fusion</strong></td>
<td>Type (Satisfying &amp; Conflicting)</td>
<td>3872.067</td>
<td>3</td>
<td>3872.067</td>
<td>67.422</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Sex (Male &amp; Female)</td>
<td>52.267</td>
<td>1</td>
<td>52.267</td>
<td>0.910</td>
<td>0.341</td>
</tr>
<tr>
<td></td>
<td>Interactive Impact (Sex &amp; Type)</td>
<td>198.017</td>
<td>1</td>
<td>198.017</td>
<td>3.448</td>
<td>0.065</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>13553.633</td>
<td>236</td>
<td>57.431</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>327134</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I-position</strong></td>
<td>Type (Satisfying &amp; Conflicting)</td>
<td>22.817</td>
<td>3</td>
<td>22.817</td>
<td>1.073</td>
<td>0.301</td>
</tr>
<tr>
<td></td>
<td>Sex (Male &amp; Female)</td>
<td>38.400</td>
<td>1</td>
<td>38.400</td>
<td>1.806</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td>Interactive Impact (Sex &amp; Type)</td>
<td>4.817</td>
<td>1</td>
<td>4.817</td>
<td>0.227</td>
<td>0.635</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>5017.90</td>
<td>236</td>
<td>21.262</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>336908</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Third Hypothesis: There is a multiple relationship between differentiation components with marital satisfied in satisfying couples.

As it can be seen in table 3, multiple correlation coefficients between differentiation components and marital satisfied should be equal to 0.756 and components of differentiation (emotional cutoff, emotional reactivity, emotional fusion and I-position) can almost determine the 56% of variance of dependent variable of marital satisfied as adjusted.

As it was seen in table 5, among four components of differentiation, emotional cutoff has the most shares in predicting variance of dependent variable of marital satisfied and can significantly predict the marital satisfied so that with $\beta=0.460$ and t=7.42 in $P=0.001$ can positively predict satisfaction of marital. Another components of differentiation is I-position which with $\beta=0.437$ and t=7.092 in $P=0.001$ can significantly predict the marital satisfied. Emotional cutoff is the other components of differentiation that with $\beta=0.275$ and t=-4.44 in $P=0.001$ can significantly predict the marital satisfied. As it is seen in table 5, only differentiation component that significantly don’t predict the marital satisfied is emotional fusion. Generally, mentioned components as it was mentioned in table 3, can determined almost 56% of variance of marital satisfied.

Table 3. Summary of regression model and analysis of differentiation and marital satisfied variance

<table>
<thead>
<tr>
<th>Indicator of Enter Model</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2283.83</td>
<td>4</td>
<td>570.96</td>
<td>6.62</td>
<td>0.001</td>
<td>0.75</td>
<td>0.57</td>
</tr>
<tr>
<td>Balance</td>
<td>1712.72</td>
<td>115</td>
<td>14.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3996.55</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Regression coefficient of differentiation components for predicting marital satisfied in current research

<table>
<thead>
<tr>
<th>Model</th>
<th>Non-standard Coefficients</th>
<th>Standard Error</th>
<th>Standard Amount of $\beta$</th>
<th>Amount of t</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Reactivity</td>
<td>-0.314</td>
<td>0.042</td>
<td>-0.460</td>
<td>-7.42</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotional Cutoff</td>
<td>-0.239</td>
<td>0.054</td>
<td>-0.275</td>
<td>-4.44</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotional Fusion</td>
<td>-0.013</td>
<td>0.050</td>
<td>-0.016</td>
<td>-0.265</td>
<td>0.792</td>
</tr>
<tr>
<td>I-position</td>
<td>-0.437</td>
<td>0.049</td>
<td>-0.437</td>
<td>-7.092</td>
<td>0.001</td>
</tr>
</tbody>
</table>

DISCUSSION

1st Hypothesis: The results of analysis of 1st hypothesis have indicated that there is a significant difference between satisfying couples and conflicting ones about amount of differentiation. It means satisfying couples that have higher differentiation than conflicting couples; however, between male and females about differentiation has no significant difference. Additionally, interactive impact of satisfying and conflicting couples and sex (male and female) was not significant. Considering the results, the first hypothesis of research is confirmed. This result is the same as the results of research of Knerr [18], Skowron, & Dandy [22], Lal [17], Amato, Johnson, Booth & Rogers [26], Murdock & Gore [27], Gross, & Simmons, [28], that considers the differentiation as effective factor in increase of marital satisfied. In describing these results, it can be said that low level of differentiation according to Bowen leads to interpersonal and mental problems. Bowen believed that main reason of mental and marital satisfied signs is lack of differentiation in family. Not having differentiation means not having specified border for maintaining individual identity and main intimacy, while differentiated people have the ability to control their interpersonal relations. People with high differentiation are aware of their emotions and can evaluate their position. These people have the capability to develop in intimate ties and can keep their calmness and comfort in deep relationships. Therefore, they avoid from emotional cutoff or fusion for adjustment of their internal tensions while, people who are less differentiated or inclined to emotional fusion, will be soon disappointed by separation from important people of their life, or involved with emotional cutoff and therefore in facing with emotional intimacy will show anxious reaction [27].

2nd Hypothesis: Analysis of second hypothesis has indicated that there is a significant difference between two groups of satisfying couples and conflicting ones in emotional reactivity and emotional fusion. It means mean of satisfying couples is more than conflicting ones and it indicates that satisfying couples has less conflict and emotional reactivity and fusion with others. These results have shown that conflicting couples have higher emotional reactivity and in fewer situations, they intellectually decide. However, satisfying couples wisely decide in tension situations. Additionally, there is a significant difference between male and female in emotional reactivity; it means that women are emotionally reactive more than men. Given to these findings, 2nd hypothesis of research is confirmed. These results are the same as results of researches of Knerr, [18], Lal, [17], and Barahmand, [30] that were evaluated the impact of differentiation on mental discords and marital satisfied.

Generally, in describing these findings, it can be stated that correct estimation of situation which its requirement is application of cognitive factors, leads to controlling the situation by people and considering the right decisions. Thus, couples that have better cognitive skills and don’t react emotionally have more power in controlling their relationships and enjoys from their relations. Given to the fact that emotional reactivity is a state that a person's logic overcomes his sense, and in different situations, he/she only decides based on emotional situation of environment and without considering the possible logical solution, therefore, he/she emotionally deal with life’s and marital problems and leads family to the emotional functioning and reduce his/her self-actualization. As a result of self-actualization, a person will suffer from chronic anxiety which this causes new problems. Also, it can be stated that since the couples that have higher emotional reactivity, don’t use their cognitive performances in dealing with situations and life problems, they will face problems and this fact will cause disagreements and reduction of marital satisfied. In emotional reactivity, it seems that considering the gender and personal features, women are more emotional reactive than men.

3rd Hypothesis: The analysis of third hypothesis has indicated that differentiation is a good predictor of marital satisfied. This result is the same as results of, Skowron and Dandy [22] and Herass [19] about relationship of differentiation with marital satisfied. Therefore it can be stated that differentiation has a direct relation with performance and family construction and improvement in differentiation level can cause progress and increase of marital satisfied. On the other word, marital satisfied is effected by characteristic traits of couples. Differentiation as the major factor of development of individual’s trait according to Bowen can be one of the factor of development of marital relation.

Generally, the results of the current research have indicated that differentiation is an affective factor in marital satisfied. Differentiation level in satisfying couples is more than conflicting ones which is consistent with theory of Bowen. According to Bowen, firstly, differentiated people rationally deal with problems of life and solve them. Secondly, differentiation from main family causes separation of systems construction (families) from each other, prevention from creation of problems in life of couples and facilitation of process of conflict resolution. Another result of this research is not significance of difference between satisfied and conflicted couples in two variable of emotional cutoff and I-position. Therefore, cultural issues should be considered in association with these two components. The results of this research can be applied for consulting issues such as pre-marriage counseling that by determining the rate of couple’s differentiation, aware each of them from the level of their differentiation. This awareness can have a great impact on adjustment and marital satisfied. These findings also can be used to educate couples on differentiation and enhancement of marital satisfied

Limitation
1. Due to random sampling, the results of the current research can only be generalized to the sample group.
2. Because of using the questionnaire for collecting information, there is possibility of exceeding the most favorite method of couples as the favorite method of whole society.
REFERENCES


Instructions for Authors

Manuscript as Original Research Paper, Review and Case Reports are invited for rapid peer-review publishing in the Journal of Life Science and Biomedicine. Considered subject areas include: biology, physiology, biochemistry, zoology, pathology... view full aims and scope

Types of contributions

Research Paper: Please provide full author information, a set of keywords and an abstract in the title page. Supplementary materials can be published if necessary. Authors are encouraged to be concise although currently there is no length limit on research paper. Short Research Communication presents a concise study, or sometimes preliminary but innovative research findings that might be less substantial than a full research paper.

Review or mini-review should be authoritative and of high interest. A minimum of two figures/illustrations should be included in the review or mini-review that should be some 3000 or 5000 words long (excluding references and figure legends). High quality reviews from leading researchers in their fields are particularly welcome.

Short Research Communication is limited to 2500 words. It should have a set of keywords and an abstract summarizing background of the work, the results and their implications. Results and Discussion Section should be combined and followed by Conclusion. Materials and Methods will remain as a separate section. The number of references is limited to 30 and the number of figures and/or tables combined is limited to 5.

Letter: Description of novel findings that might not be suitable for a regular research paper or short research communication may be published as letter. Letter is limited to be under 500 words and 5 references. There should be not more than two figures or tables combined, and no supplementary material.

Submission

The manuscript and other correspondence should preferably be submit online. Please embed all figures and tables in the manuscript to become one single file for submission. Once submission is complete, the system will generate a manuscript ID and password sent to author's contact emails: editors [at] jlsb.science-line.com ; jlsb.editors [at] gmail.com. All manuscripts must be checked (by English native speaker) and submitted in English for evaluation (in totally confidential and impartial way).

Supplementary information:

The online submission form allows supplementary information to be submitted together with the main manuscript file and covering letter. If you have more than one supplementary files, you can submit the extra ones by email after the initial submission. Author guidelines are specific for each journal. Our Word template can assist you by modifying your page layout, text formatting, headings, title page, image placement, and citations/references such that they agree with the guidelines of journal. If you believe your article is fully edited per journal style, please use our MS Word template before submission.

Supplementary materials may include figures, tables, methods, videos, and other materials. They are available online linked to the original published article. Supplementary tables and figures should be labeled with a "S", e.g. "Table S1" and "Figure S1". The maximum file size for supplementary materials is 10MB each. Please keep the files as small possible to avoid the frustrations experienced by readers with downloading large files.

Submission to the Journal is on the understanding that:

1. The article has not been previously published in any other form and is not under consideration for publication elsewhere;
2. All authors have approved the submission and have obtained permission for publication;
3. Researchers have proper regard for conservation and animal welfare considerations. Attention is drawn to the 'Guidelines for the Treatment of Animals in Research and Teaching'. Any possible adverse consequences of the work for populations or individual organisms must be weighed against the possible gains in knowledge and its practical applications. If the approval of an ethics committee is required, please provide the name of the committee and the approval number obtained.

Ethics Committee Approval

Experimental research involving human or animals should have been approved by author's institutional review board or ethics committee. This information can be mentioned in the manuscript including the name of the board/committee that gave the approval. Investigations involving humans will have been performed in accordance with the principles of Declaration of Helsinki. And the use of animals in experiments will have observed the Interdisciplinary Principles and Guidelines for the Use of Animals in Research, Testing, and Education by the New York Academy of Sciences, Ad Hoc Animal Research Committee. If the manuscript contains photos or parts of photos of patients, informed consent from each patient should be obtained. Patient's identities and privacy should be carefully protected in the manuscript.

Graphical Abstract

Authors should provide a graphical abstract (a beautifully designed feature figure) to represent the paper aiming to catch the attention and interest of readers. Graphical abstract will be published online in the table of content. The graphical abstract should be colored, and kept within an area of 12 cm (width) x 6 cm (height) or with similar format. Image should have a minimum resolution of 300 dpi and line art 1200dpi.

Note: Height of the image should be no more than the width. Please avoid putting too much information into the graphical abstract as it occupies only a small space. Authors can provide the graphical abstract in the format of PDF, Word, PowerPoint, jpg, or png, after a manuscript is accepted for publication.

If you have decided to provide a Professional Graphical Abstract, please click here.
Presentation of the article

Main Format:
First page must be properly identified by the title, authors' names and affiliations with one author clarified as the corresponding author. The full contact information (phone number and e-mail address) should be provided for this person. Tables and figures (at highest resolution) should be provided in the document in their appropriate place. For manuscript edited per journal Microsoft Word templates (.doc), Please include Tables and figures at the end of manuscript.

'Times New Roman' font 11 point size
Double spaced
A4 format with 2.5 cm margins
Automatic page numbering
Automatic line numbering: On the Page Layout tab, in the Page Setup group, click on 'Line Numbers'. then click on "Add line numbering" and also "Continuous" Options, and OK.

Title page:
TITLE should be brief, attractive and targeted.
Names and Affiliations of authors including post code and Email. Please provide full names. Please write first name and middle name then last name, e.g., "Mike Johnson" not "Johnson, Mike"; not "Johnson M."; not "M. Johnson".
ABSTRACT should be 150 to 350 words in length. It should be informative and completely self-explanatory, briefly present the topic, state the scope of the experiments, indicate significant data, and point out major findings and conclusions. Standard nomenclature should be used and abbreviations should be avoided. No literature should be cited.
Key words should be about 3-6, separated by or comma.
Abbreviations (those used throughout the manuscript)

Main Text (please do not add number before subtitles):
INTRODUCTION should provide the relevant literature on the subject, and the proposed approach or solution in this regard, and clear statement of the problem directed to a brief aim of the study.
MATERIALS AND METHODS should be complete enough to allow experiments to be reproduced. Methodology includes description of the equipment and the techniques used for gathering the data of the research. The ethical approval for using human and animals in the researches should be indicated in this section with a separated title.
RESULTS should be presented with clarity and precision. In case of the effectiveness of a particular drug or other substances as inhibitor in biological or biochemical processes, the results should be provided as IC50 (half maximal inhibitory concentration) or similar appropriate manner.
DISCUSSION should interpret the findings in view of the results obtained in this and in past studies on this topic.
CONCLUSION should be brief and tight about the importance of the work or suggest the potential applications and extensions. This section should not be similar to the Abstract content.
Both 'Results and Discussion' and 'Discussion and Conclusion' can be presented jointly.
Tables should be simply designed as possible. Double-spaced including headings and footnotes, numbered consecutively in Arabic numerals. The same data should not be presented in both table and graph forms or repeated in the text.
Figures should be numbered consecutively in Arabic numerals (Figure 1) and their parts can be identified by upper case letters (A, B, C, ...). Graphs should be prepared using applications capable of generating high resolution GIF, TIFF, JPEG or PowerPoint before pasting in the Microsoft Word manuscript file. Information given in legends should not be repeated in the text. Insert both figures and tables as list at the end of the document. Place caption below the figure and above the table.
Appendix (if needed)
Declarations including Ethics, Consent to publish, Competing interests, Authors’ contributions, and Availability of data and materials should be included at the end of your manuscript in a Declarations section.
Consent to Publish: Please include a ‘Consent for publication’ section in your manuscript. If your manuscript contains any individual person’s data in any form (including individual details, images or videos), consent to publish must be obtained from that person, or in the case of children, their parent or legal guardian. All presentations of case reports must have consent to publish. You can use your institutional consent form or our consent form if you prefer. You should not send the form to us on submission, as we may request to see a copy at any stage (including after publication). If your manuscript does not contain any individual persons data, please state “Not applicable” in this section.
Authors’ Contributions: For manuscripts with more than one author, JLSB require an Authors’ Contributions section to be placed after the Competing Interests section. An 'author' is generally considered to be someone who has made substantive intellectual contributions to a published study. To qualify as an author one should 1) have made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; 2) have been involved in drafting the manuscript or revising it critically for important intellectual content; and 3) have given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. Acquisition of funding, collection of data, or general supervision of the research group, alone, does not justify authorship. We suggest the following format (please use initials to refer to each author’s contribution): AB carried out the molecular genetic studies, participated in the sequence alignment and drafted the manuscript. JY carried out the immunoassays. MT participated in the sequence alignment. ES participated in the design of the study and performed the statistical analysis. FG conceived of the study, and participated in its design and coordination and helped to draft the manuscript. All authors read and approved the final manuscript.
For authors that equally participated in a study please write 'All/Both authors contributed equally to this work.' Contributors who do not meet the criteria for authorship should be listed in an acknowledgements section.
Competing interests: Competing interests that might interfere with the objective presentation of the research findings contained in the manuscript should be declared in a paragraph heading "Competing interests" (after Acknowledgment section and before References). Examples of competing interests are ownership of stock in a company, commercial grants, board membership, etc. If there is no competing interest, please use the statement "The authors declare that they have no competing interests.”.
Journal of Life Science and Biomedicine adheres to the definition of authorship set up by The International Committee of Medical Journal Editors (ICMJE). According to the ICMJE authorship criteria should be based on 1) substantial contributions to conception and design of, or acquisition of data or analysis and interpretation of data, 2) drafting the article or revising it critically for important intellectual content and 3) final approval of the version to be published. Authors should meet conditions 1, 2 and 3. It is a requirement that all authors have been accredited as appropriate upon submission of the manuscript. Contributors who do not qualify as authors should be mentioned under Acknowledgements.
Change in authorship: We do not allow any change in authorship after provisional acceptance. We cannot allow any addition, deletion or change in sequence of author name. We have this policy to prevent the fraud.
Acknowledgements: We strongly encourage you to include an Acknowledgements section between the Authors’ contributions section and Reference list. Please acknowledge anyone who contributed towards the study by making substantial contributions to conception, design, acquisition of data, or analysis and interpretation of data, or who was involved in drafting the manuscript or revising it critically for important intellectual content, but who does not meet the criteria for authorship. Please also include their source(s) of funding. Please also acknowledge anyone who contributed materials essential for the study. Authors should obtain permission to acknowledge from all those mentioned in the Acknowledgements. Please list the source(s) of funding for the study, for each author, and for the manuscript preparation in the acknowledgements section. Authors must describe the role of the funding body, if any, in study design; in the collection, analysis, and interpretation of data; in the writing of the manuscript; and in the decision to submit the manuscript for publication.

Data Deposition: Nucleic acid sequences, protein sequences, and atomic coordinates should be deposited in an appropriate database in time for the accession number to be included in the published article. In computational studies where the sequence information is unacceptable for inclusion in databases because of lack of experimental validation, the sequences must be published as an additional file with the article.

References
A reference style for EndNote may be found here. References should be numbered consecutively and cited in the text by number in square brackets [1, 2] (not by author and date). References should not be formatted as footnotes. Avoid putting personal communications and unpublished observations as references. All the cited papers in the text must be listed in References. All the papers in References must be cited in the text. Where available, URLs for the references should be provided.

Examples (at the text):
Smit [1] .; Smit and Janak [2] .; Nurai et al. [3] reported that ; ... [1], --- [2, 3], --- [3-7].
The references at the end of this document are in the preferred referencing style. Give all authors’ names; do not use “et al.” unless there are six authors or more. Use a space after authors’ initials. Papers that have not been published should be cited as “unpublished”. Papers that have been accepted for publication, but not yet specified for an issue should be cited as “to be published”. Papers that have been submitted for publication should be cited as “submitted for publication”. Capitalize only the first word in a paper title, except for proper nouns and element symbols. For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation.

Examples (at References section):

For Journals:

For In press manuscripts (maximum 2):

For symposia reports and abstracts:

For Conference:

For Book:

For Web Site:

Nomenclature and Abbreviations:
Nomenclature should follow that given in NCBI web page and Chemical Abstracts. Standard abbreviations are preferable. If a new abbreviation is used, it should be defined at its first usage. Abbreviations should be presented in one paragraph, in the format: “term: definition”. Please separate the items by “;”.
E.g. ANN: artificial neural network; CFS: closed form solution; ...

Abbreviations of units should conform with those shown below:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>dl</td>
<td>deciliter</td>
</tr>
<tr>
<td>kg</td>
<td>kilogram</td>
</tr>
<tr>
<td>mg</td>
<td>milligram</td>
</tr>
<tr>
<td>h</td>
<td>hour</td>
</tr>
<tr>
<td>mm</td>
<td>millimeter</td>
</tr>
<tr>
<td>ml</td>
<td>milliliter</td>
</tr>
<tr>
<td>%</td>
<td>percent</td>
</tr>
</tbody>
</table>

Other abbreviations and symbols should follow the recommendations on units, symbols and abbreviations: in “A Guide for Biological and Medical Editors and Authors (the Royal Society of Medicine London 1977). Papers that have not been published should be cited as “unpublished”. Papers that have been accepted for publication, but not yet specified for an issue should be cited as “to be published”. Papers that have been submitted for publication should be cited as “submitted for publication”.

Formulae, numbers and symbols
1. Typewritten formulae are preferred. Subscripts and superscripts are important. Check disparities between zero (0) and the letter 0, and between one (1) and the letter 1.
2. Describe all symbols immediately after the equation in which they are first used.
3. For simple fractions, use the solidus (/), e.g. 10 /38.
4. Equations should be presented into parentheses on the right-hand side, in tandem.
5. Levels of statistical significance which can be used without further explanations are *P < 0.05, **P < 0.01, and ***P < 0.001.
6. In the English articles, a decimal point should be used instead of a decimal comma.
7. Use Symbol fonts for “±”; “≤” and “≥” (avoid underline).
8. In chemical formulae, valence of ions should be given, e.g. Ca2+ and CO32-, not as Ca++ or CO3.
9. Numbers up to 10 should be written in the text by words. Numbers above 1000 are recommended to be given as 10 powered x.
10. Greek letters should be explained in the margins with their names as follows: Αα - alpha, Ββ - beta, Γγ - gamma, Δδ - delta, Εε - epsilon, Ζζ - zeta, Ηη - eta, Θθ - theta, Ιι - iota, Κκ - kappa, Λλ - lambda, Μμ - mu, Νν - nu, Ξξ - xi, Οο - omicron, Ππ - pi, Ρρ - rho, Σσ - sigma, Ττ - tau, Υυ - upsilon, Φφ - phi, Χχ - chi, Ψψ - psi, Ωω - omega. Please avoid using math equations in Word whenever possible, as they have to be replaced by images in xml full text.

Review/Decisions/Processing/Policy

Firstly, all manuscripts will be checked by Docol©c, a plagiarism finding tool. The received papers with plagiarism rate of more than 30% will be rejected. Manuscripts that are judged to be of insufficient quality or unlikely to be competitive enough for publication will be returned to the authors at the initial stage. The remaining manuscripts go through a single-blind review process by external reviewers selected by section editor of JLSB, who are research workers specializing in the relevant field of study. One unfavourable review means that the paper will not be published and possible decisions are: accept as is, minor revision, major revision, or reject. The corresponding authors should submit back their revisions within 14 days in the case of minor revision, or 30 days in the case of major revision. Manuscripts with significant results are typically published at the highest priority. The editor who received the final revisions from the corresponding authors shall not be hold responsible for any mistakes shown in the final publication.

Plagiarism

There is an instant policy towards plagiarism (including self-plagiarism) in our journals. Manuscripts are screened for plagiarism by Docol©c, before or during publication, and if found they will be rejected at any stage of processing. If we discovered accidental duplicates of published article(s) that are determined to violate our journal publishing ethics guidelines (such as multiple submission, bogus claims of authorship, plagiarism, fraudulent use of data or the like), the article will be “Withdrawn” from SCIENCELINE database. Withdrawn means that the article content (HTML and PDF) is removed and replaced with a HTML page and PDF simply stating that the article has been withdrawn according to the Scienceline Policy on Published Article Withdrawal.

Date of issue

All accepted articles are published bimonthly around 25th of January, March, May, July, September and November, each year in full text on the internet.

Publication charge & the waiver policy

Articles of Journal of Life Science and Biomedicine are freely accessible. No submission and peer-reviewing charges are required. Publication of short reports and letter are free of charge; however, a negligible editor fee will be applied for long research and review papers before copyediting and publication. The editor fee will also be waived for invited authors, authors of hot papers, and corresponding authors who are editorial board members of the Journal of Life Science and Biomedicine. The Journal will consider requests to waive the fee for cases of financial hardship (for high quality manuscripts and upon acceptance for publication). Requests for waiver of the submission fee must be submitted via individual cover letter by the corresponding author and cosigned by an appropriate institutional official to verify that no institutional or grant funds are available for the payment of the fee. Letters including the manuscript title and manuscript ID number should be sent to: editors@jlsb.science-line.com. It is expected that waiver requests will be processed and authors will be notified within two business day.

The OA policy

Journal of Life Science and Biomedicine is an open access journal which means that all content is freely available without charge to the user or his/her institution. Users are allowed to read, download, copy, distribute, print, search, or link to the full texts of the articles, or use them for any other lawful purpose, without asking prior permission from the publisher or the author. This is in accordance with the BOAI definition of Open Access. The journal also allows the author(s) to hold the copyright without restrictions and will retain publishing rights without restrictions.
Scienceline Publication, Ltd is a limited liability non-profit non-stock corporation incorporated in Turkey, and also is registered in Iran. Scienceline online journals that concurrently belong to many societies, universities and research institutes, publishes internationally peer-reviewed open access articles and believe in sharing of new scientific knowledge and vital research in the fields of life and natural sciences, animal sciences, engineering, art, linguistic, management, social and economic sciences all over the world. Scienceline journals include:

<table>
<thead>
<tr>
<th>Journal Name</th>
<th>ISSN</th>
<th>Frequency</th>
<th>View Journal</th>
<th>Editorial Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Journal of Animal and Feed Research</td>
<td>2228-7701</td>
<td>Bi-monthly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Editors@ojafr.ir">Editors@ojafr.ir</a></td>
</tr>
<tr>
<td>Journal of Civil Engineering and Urbanism</td>
<td>2252-0430</td>
<td>Bi-monthly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Editors@jceu.ir">Editors@jceu.ir</a></td>
</tr>
<tr>
<td>Journal of Life Sciences and Biomedicine</td>
<td>2251-9939</td>
<td>Bi-monthly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Editors@jlsb.science-line.com">Editors@jlsb.science-line.com</a></td>
</tr>
<tr>
<td>Asian Journal of Medical and Pharmaceutical Researches</td>
<td>2322-4789</td>
<td>Quarterly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Editor@ajmpr.science-line.com">Editor@ajmpr.science-line.com</a></td>
</tr>
<tr>
<td>Journal of World's Poultry Research</td>
<td>2322-455X</td>
<td>Quarterly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Editor@jwpr.science-line.com">Editor@jwpr.science-line.com</a></td>
</tr>
<tr>
<td>World's Veterinary Journal</td>
<td>2322-4568</td>
<td>Quarterly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Editor@wjv.science-line.com">Editor@wjv.science-line.com</a></td>
</tr>
<tr>
<td>Journal of Educational and Management Studies</td>
<td>2322-4770</td>
<td>Quarterly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Info@jems.science-line.com">Info@jems.science-line.com</a></td>
</tr>
<tr>
<td>Journal of World's Electrical Engineering and Technology</td>
<td>2322-5114</td>
<td>Irregular</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Editor@jweet.science-line.com">Editor@jweet.science-line.com</a></td>
</tr>
<tr>
<td>Journal of Art and Architecture Studies</td>
<td>2383-1553</td>
<td>Irregular</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Jaas@science-line.com">Jaas@science-line.com</a></td>
</tr>
<tr>
<td>Asian Journal of Social and Economic Sciences</td>
<td>2383-0948</td>
<td>Quarterly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Ajses@science-line.com">Ajses@science-line.com</a></td>
</tr>
<tr>
<td>Journal of Applied Business and Finance Researches</td>
<td>2382-9907</td>
<td>Quarterly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Jabfr@science-line.com">Jabfr@science-line.com</a></td>
</tr>
<tr>
<td>Scientific Journal of Mechanical and Industrial Engineering</td>
<td>2383-0980</td>
<td>Quarterly</td>
<td><a href="#">View Journal</a></td>
<td><a href="mailto:Sjmie@science-line.com">Sjmie@science-line.com</a></td>
</tr>
</tbody>
</table>

Copyright © 2012. All Rights Reserved.
Scienceline Journals
Email: administrator@science-line.com