

Original Research

Evaluation of The Effect Of Mindfulness-Based Training On Couple Burnout And Its Components (*Fatigue and Emotional and Mental Exhaustion*) In Maladjusted Couples

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Abstract

Background: This study was aimed to evaluate the effectiveness of mindfulness-based training in the treatment of couple burnout in maladjusted couples who referred to counseling centers in 2019.

Method: The study was a quasi-experimental research with a pretest-posttest design and with a control group. The research population consisted of maladjusted couples who referred to counseling centers. The couples were randomly divided into experimental and control groups by using purposive sampling. Pinez couple burnout questionnaire and Bauer marital maladjustment questionnaire were used to collect the data. The validity of the questionnaires was confirmed by content validity and its reliability was confirmed by using the Cronbach's alpha coefficient. The experimental group received eight sessions of 1.5 hours per session of mindfulness-based therapy. The data were analyzed by using covariance analysis with SPSS software.

Result: The results of covariance analysis showed that mindfulness-based therapy significantly affected the couple burnout and marital maladjustment.

Conclusion: Using mindfulness-based therapy techniques has significantly reduced marital maladjustment. The mean of this effect is approximately 33%. Using mindfulness-based therapy techniques has significantly reduced couple burnout. The mean of this effect is approximately 14% using mindfulness-based therapy techniques has significantly increased the mindfulness indicator. The mean of this effect is approximately 10%.

Keywords: Mindfulness, Couple Burnout, Marital Maladjustment

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Introduction

Marriage is a ritual bond with specific rules or ceremonies held between a man and a woman in different religions and countries to form a family and can result in childbirth. Marriage is a treaty whereby a man and a woman unite and

form a family. The goal of marriage is to form a family.

This desire is within all humans. Anthropologists have proposed several definitions of marriage in order to consider a wide range of marital practices observed by

culture. In general, marriage is an institution that links the life of people in a variety of emotional and economic ways. In many Western cultures, marriage usually results in the formation of a new family consisting of married couples who live in a shared home, but it is not true in some other cultures. In today's communities, marital maladjustment is seen as a recurrent phenomenon in many couples, so that it is considered one of the main causes of couple burnout in couples and it increases the likelihood of the phenomena such as stress. Marital maladjustment is part of the daily life of the maladjusted couples and intimate interactions of couples are an inevitable part of their lives. It plays a major role in satisfaction with relationships, quality of life and well-being of couples.

Marital maladjustment is one of the phenomena of the modern community.

It is a factor involved in marital dissatisfaction. Couple burnout is one of the harms threatening the family foundation. Investigating of couple burnout is a multidisciplinary approach that benefits from systematic psychodynamic approaches that combine psychosocial and existential approaches. The psychology of couple burnout focuses on the long-term process of poor relationships, especially when one of them tries to create a meaning for oneself with close relationships, rather than relying on the pathology of an individual or couple. Couple burnout is a painful state of physical, emotional and psychological fatigue,

affecting those who expect love and marriage to give meaning for their lives. The components of couple burnout can be classified into three separated but interrelated dimensions, including physical fatigue, mental exhaustion, and emotional exhaustion. The treatment of couples by considering several simultaneous phenomena such as marital maladjustment and couple burnout can be helpful in achieving macro social goals including elimination or reduction of these phenomena and have an effective role in improving the quality of life of the couples. Given the fact that all three of these factors can have an effective role in improving lifestyle as well as enhancing its quality, this study was conducted to evaluate the effects of mindfulness-based training on improving the couple burnout and marital maladjustment. In general, given what was stated above and the high prevalence of couple burnout in Iran and the necessity of therapeutic interventions and paying attention to the role of the couples, the main question of this research is whether mindfulness-based interventions affect the marital maladjustment and couple burnout. The general objective of this study is to evaluate the effectiveness of mindfulness-based training on couple burnout of maladjusted couples referred to counseling centers.

Theoretical foundations of research

Marital maladjustment:

Marital maladjustment is a type of persistent and meaningful disagreement between two spouses that at least one of them reports it. Marital maladjustment can include conflicts, disagreements, hatreds, tensions and can include a wide range of verbal and physical harms to the personality traits and behaviors. Marital maladjustment varies in severity, frequency, content, and intention and may be overt or covert. Even a simple request can be considered as ignorance of identity, value or status by one of the spouses. Systemic therapists view marital conflict as a struggle to seize power bases and resources and remove other privileges. Gottman (1994) argues that the quality of interaction between a wife and husband is an important predictor of couple burnout or divorce. His studies have shown that couples who have a more negative relationship with each other will probably have an unhappy marriage and couple burnout. He found that couples seeking divorce use negative emotions more than positive emotions in their marital interactions.

Couple burnout

People marry with certain expectations in their mind, but when they realize that the reality is something else, they are gradually affected by a sense of frustration and discomfort, leading into couple burnout. This phenomenon is gradual and rarely occurs suddenly. In fact, love and intimacy gradually decline and it leads to fatigue. At the worst conditions, it can lead to divorce. Physical fatigue caused by burnout

is associated with *fatigue*, blame, chronic headaches, and stomach discomfort, lack of desire and overeating, and emotional fatigue includes annoyance, unwillingness to solve problems and feelings of sadness, hopelessness, meaninglessness, depression, loneliness, lack of motivation and emotional disorders, and sometimes suicidal thoughts. Emotional exhaustion is associated with symptoms such as reduced self-esteem, negative opinion about spouse, hopelessness and self-dissatisfaction and lack of self-love. The accumulation of psychological stresses reducing love, the gradual increase in fatigue and the accumulation of small sorrows contribute to burnout.

One of the causes of couple burnout in women is their dissatisfaction with sexual issues in their lives. Sexual problems in marital relationships can reduce the quality of sex and, in general, marital relationships. Low quality in these cases can result in marital dissatisfaction and frustration and sexual and marital dissatisfaction in women. Moreover, low marital satisfaction can result in burnout and dissatisfaction with marital life and reduced marital quality. Sexual desire is one of the most important elements of the overall psychological well-being of women. The sexual dysfunctions and problems do not merely associate with personal and interpersonal stresses, but also with psychosocial problems of women's lives that have a significant impact on their health. In

many communities, women have low self-esteem and it is difficult for them to express their needs and maintain their personal independence in marital relationships. Several factors in any community are involved in the development of this situation in women.

One of the factors overwhelming the women's rights in any community relates to myths and sexual misconceptions seen commonly in the communities. Women's lack of knowledge of destructive effects of misconceptions about women's sexual desire and its consequences in marital relationships, lack of proper informing about women's sexual rights and its relationship with their sexual desires, and ultimately, consequences of couple burnout indicate the importance and necessity of doing such research in our community.

Enhancing the women's knowledge on the symptoms of burnout can help them take appropriate and timely steps to resolve this problem, such as referring to a psychologist and counselor. Gaining knowledge of the underlying factors of this problem can provide a half of the solution for them.

Mindfulness

Mindfulness means paying attention to the present time specifically and purposefully without a judgment. According to Kabat-Zein (1994), mindfulness is a mental state that focuses on experiences in the present time without a judgment and a bias. Mindfulness refers to motivated attention and awareness of

the present time. Awareness, flexibility, and intellectual compatibility play a major role in mental and physical health. Mindful individuals view changes less threatening. If couples try to maintain a stable relationship and ignore the changes that will happen unintentionally in their shared life, the probability of conflict and dissatisfaction will increase, while mindfulness will cause the individual to welcome the new and different aspects of life.

Mindfulness results in reduced stress, reduced depression symptoms in women, and increased well-being in men, reduced pain symptoms, improved depression, reduced anxiety, depression, and negative emotions in pregnant women, improved sleep disorders, improved emotional and social learning in students, reduced physiological arousal and psychological distress in patients with psoriasis and headache improvement and control. Mindful individuals have lower moderated responses (event-related potential component in visual cortex areas moderated by the emotional intensity of a stimulus) to unpleasant images with high arousal. Mindfulness probably moderates neural responses in the early stages of emotional processing.

Research background

[1] conducted a study to evaluate the relationship between marital and job burnout in nursing women. Pinze Couple Burnout Questionnaire (1996) and Job Burnout

Questionnaire were completed by 70 randomly-selected nurses of Tehran hospitals. The results of the study revealed that nurses suffer high stress and job burnout. The results also revealed that there was a significant relationship between the components of job burnout and couple burnout [2]. evaluated the relationship between couple burnout, sexual assertiveness and sexual dysfunction beliefs in women with diabetic spouses compared with women with non-diabetic spouses.

The results of this study suggest that spouse sexual dysfunction is one of the important factors involved in increasing couple burnout, intensifying sexual misconceptions about sexual function and low level of sexual assertiveness in women. In fact, women whose husbands suffer chronic diseases such as diabetes (which can lead to sexual dysfunction) have lower sexual assertiveness and higher couple burnout and sexual misconceptions than other women [3].

conducted a study aimed at evaluating the couple burnout model in relation to the dimensional model of communication with God, thought and language control. One of the findings suggests that the dimensional model of communication with God only indirectly predicted an increase in "couple burnout" through reducing each of the "language control" and "thought control". Moreover, it was shown that the triangular path of "God-centered faith" can be effective in predicting

the reduced couple burnout only through increased language control and thought control. challenged the online positivity training, including positive discrete emotions training in competition with mindfulness trainings in the control of depression. In this study, the effects of positive thinking and deep thinking and their relationship with known personality variables in depression were evaluated. Participants (n=741) were randomly divided into three subgroups of positive thinking, mindfulness, and control conditions. Experiments in these groups were performed for three weeks, and their improvement was reported at the beginning of the treatment and after the experiment (after one and two months). The results suggest that depression decreased significantly after two months in all groups. Positive thinking led to increased understanding and participation, and satisfaction with life. Dependent people showed a good performance in short term but lower levels of satisfaction in the long term. Self-criticism was also evident at the end of the experiments.

Methodology

This study is a quasi-experimental research conducted based on a pretest-posttest design with a control group. Subjects will be evaluated in two stages:

A. Pre-test was performed before the intervention.

B) Subjects received mindfulness-based training to reduce perceived stress and reduce couple burnout.

C- Post-test was performed after the intervention.

The research population consisted of all couples referring to Tabriz counseling centers and based on the inclusion and exclusion criteria. Ten couples were selected by the purposive sampling method, 5 couples were randomly assigned to the experimental group and 5 couples were assigned to the control group.

The treatment process was performed for couples received mindfulness-based therapy to reduce the stress for eight 1.5-hour sessions. These treatments were performed by a researcher.

The inclusion and exclusion criteria included:

The inclusion criteria of the research:

- Age between 30 and 60 years;
- Minimum education level of diploma
- Informed consent to participate in course

The exclusion criteria of the research:

- Not participating in more than two treatment sessions
- Having a history of mental illness and taking psychotropic drugs

Questionnaires were used to collect the data. In this study, 3 questionnaires were used for 3

dependent and controlling variables of the research and relevant protocol was used for the independent variable. For the marital maladjustment variable, Bauer-Sternberg maladjustment questionnaire was used, for the couple burnout variable, couple burnout questionnaire was used, and for the mindfulness variable, Bauer mindfulness protocol was used. Statistical analysis (covariance analysis) was used to analyze the results in this study. SPSS software was used in this regard. According to the research design, trend and slope changes for each patient were used to analyze the data and the trend of changes in scores during sessions on charts was shown separately. Data were analyzed using visual inspection of the charts and impact factors. The ups and downs in the dependent variable were the basis of judgment on the level of changes. According to the obtained data, we calculate the mean of interventions, which is the mean baseline (before treatment) and after treatment. In addition, significant clinical criteria including percentage of improvement and percentage of reduction in scores were used for data analysis.

Method of implementation

Mindfulness-based stress-reducing training was applied by Kabat Zein in 1992. This technique is a combination of relaxation and meditation behavioral techniques that include training the breathing and attention control, observing the senses and feelings of the body, describing these feelings, accepting them

without judgment and accompanying thoughts, and being present at the moment, especially in daily activities. Each session will last 90 minutes per week. Participants practice meditation training through CD for 30 to 45 minutes per day. Mindfulness-based stress-reducing training sessions are presented in this study in 8 steps. The first to fourth sessions focus on enhancing participants' mental and physical stability to increase the capacity of the subjects' to respond effectively to the challenges of daily life.

The content, homework, and daily awareness trainings of these sessions are designed to nurture and operate the ability of "stopping" and "observing" in people (Table 1).

Results

This section presents the results of the statistical description of the research variables. Accordingly, the characteristics of each of the couples are introduced and they are described (Table 2&3).

In this section, descriptive statistics including mean, standard deviation and variance for pre-test and post-test are presented separately for both experimental and control groups. Then, the normality test of the data was performed and the results of the test are presented.

According to Tables 4 and 5, it is observed that the mean of post-test data is lower than that of the pre-test data in the experimental group. It is also observed that the mean of post-test data is not significantly different from that of the pre-

test data in the control group, indicating the effect of the mindfulness-based treatment protocol. In this section, the Kolmogorov-Smirnov (KS) test is used to determine the normality of the data. The results of Table 6 show that the significance level of the variables in this study is greater than 0.5, indicating the normal distribution of the data (Table 6).

Inferential results

Hypothesis: Mindfulness-based training affects couple burnout and its components (fatigue, emotional and mental exhaustion) on maladjusted couples.

Before performing the covariance analysis, the homogeneity of variances assumption and the regression slope homogeneity assumption were tested and the results showed it is confirmed for both of them (Table 7&8).

Moreover, covariance analysis was performed to test the effectiveness of mindfulness treatment on couple burnout in maladjusted couples. The size of this effect, indicated by the chi-square, is 0.345. It means that the mindfulness-based treatment effect on couple burnout is 34%, and this hypothesis is confirmed (Table 9).

Results of descriptive statistics

Descriptive statistics of Subject 3 in the experimental group

Table 10 shows the Subject 3 (male)'s scores on each of the scales at baseline (before treatment) and after treatment. This table also shows the mean of interventions and percentage of improvement after treatment and percentage of reduction in scores after treatment (Table 10).

The presented results show that the male Subject 3 score on the marital maladjustment scale had a significant reduction in the post-treatment stage and showed a 50% improvement as a result of using the treatment. It also showed a significant reduction in the couple burnout scale in the post-treatment stage and a 33% improvement as a result of using the treatment. On the mindfulness scale, a significant increase was seen in the post-treatment stage and an improvement of about 4% indicates the effectiveness of the treatment. Thus, it can be concluded that mindfulness-based therapy is effective on all scales. Table 11 shows the female Subject 3 scores in each of the scales at baseline (before treatment) and after treatment. This table also shows the mean of interventions and percentage of improvement after treatment and percentage of reduction in scores after the treatment.

The presented results show that the male subject 3 score on the marital maladjustment scale had a significant reduction in the post-treatment stage and showed an 8% improvement as a result of using the treatment. It also showed a significant reduction in the couple burnout scale in the post-treatment stage

and 12% improvement as a result of using the treatment. On the mindfulness scale, a significant increase was seen in the post-treatment stage and an improvement of about 12% indicates the effectiveness of the treatment. Thus, it can be concluded that mindfulness-based therapy is effective on all scales.

Table 12 shows male subjects 4 scores on each of the scales at baseline (before treatment) and after treatment. This table also shows the mean of interventions and percentage of improvement after treatment and percentage of reduction in scores after treatment.

The presented results show that the male subject 4 score on the marital maladjustment scale had a significant reduction in the post-treatment stage and showed a 5% improvement as a result of using the treatment. It also showed a significant reduction in the couple burnout scale in the post-treatment stage and 8% improvement as a result of using the treatment. On the mindfulness scale, a significant increase was seen in the post-treatment stage and improvement of about 12% indicates the effectiveness of the treatment. Thus, it can be concluded that mindfulness-based therapy is effective on all scales.

Table 13 shows male subjects 4 scores on each of the scales at baseline (before treatment) and after treatment. This table also shows the mean of interventions and percentage of improvement after treatment and percentage of reduction in scores after treatment.

The presented results show that the female subject 4 scores on the marital maladjustment scale had a significant reduction in the post-treatment stage and showed 34% improvement as a result of using the treatment. It also showed a significant reduction in the couple burnout scale in the post-treatment stage and 4% improvement as a result of using the treatment. On the mindfulness scale, a significant increase was seen in the post-treatment stage and improvement of about 7% indicates the effectiveness of the treatment. Thus, it can be concluded that mindfulness-based therapy is effective on all scales.

Discussion and conclusion

The results of this study show a significant difference in indicators of maladjustment and burnout in the pre-treatment and post-treatment stages. It is observed that post-treatment scores are lower than pre-treatment scores (baseline scores), indicating the success of mindfulness-based treatment techniques. Examining the post-treatment improvement indicators indicates that maladjustment in couples decreased significantly so that a significant reduction is seen in other variables such as burnout.

Hypothesis: Mindfulness-based training affects couple burnout and its components (fatigue, emotional and mental exhaustion) in maladjusted couples.

Examining the results of questionnaires completed by those referred to counseling

centers indicated that the burnout indicator decreased significantly in maladjusted couples after treatment compared to baseline, indicating the success of the mindfulness-based therapy techniques. Examining the results of the questionnaires completed by those referred to counseling centers indicated that the indicators of burnout and emotional and mental exhaustion caused by burnout decreased significantly after treatment compared to baseline. This phenomenon indicates the success of mindfulness-based therapy techniques. The results are in line with those of the research conducted by [1], Asadi et al (2013), [3], and Shah Taheri et al (2016).

In explaining the above-mentioned hypothesis, it can be stated that the use of mindfulness-based therapy has a significant effect on decreasing the factors of couple burnout and its sub-components so that the quality and quantity of this reduction has been examined in several therapeutic sessions. In this regard, it was observed that the use of mindfulness-based techniques had a significant effect on reducing couple burnout during treatment so that this effect was highly significant in the initial treatment sessions. In general, based on the data extracted and the statistical study as well as the inferential statistics factors, it

can be stated that mindfulness-based training is effective in reducing the couple burnout and its components (fatigue, emotional and mental exhaustion) in maladjusted couples.

Conclusion

-Using mindfulness-based therapy techniques has significantly reduced marital maladjustment. The mean of this effect is approximately 33%.

-Using mindfulness-based therapy techniques has significantly reduced couple burnout. The mean of this effect is approximately 14%.

-Using mindfulness-based therapy techniques has significantly increased the mindfulness indicator. The mean of this effect is approximately 10%.

Recommendations

Based on the second hypothesis, it is recommended to examine couple burnout of the maladjusted couples suffering cancer.

Acknowledgments

None.

Conflict of interest

There is no conflict of interest for the authors of this article.

References

1. Adibrad, N (2006): Investigating the Relationships of Couple burnout and Job Burnout in Women Working in Nursing Services, Quarterly of Counseling Research, Volume 5, Issue 19, 2006, pp. 35-47
2. Asadi, A, Fathabadi, J, and Sharifi, FM (2013) Investigating the Relationship between Couple burnout, Sexual Dysfunction, and Sexual Assertiveness in Married Women, Family Research Quarterly: Fall 2013, Volume 9, Issue 35; pp. 311-324.
3. Rakhshani, P, Shahabizadeh, F and Alizadeh, H (2016), Couple burnout Model with Dimensional Model of Communication with God, Control of Thought and Language, Journal of Islamic Studies and Psychology, Article 1, Volume 10, Issue 19, Spring and Summer 2016, pp. 7-30

Tables and Charts:

Table 1. Mindfulness protocol of the research

| Sessions | Description |
|-----------|---|
| Session 1 | This session includes introducing and expressing the goals and explaining the nature of session formation and mindfulness, stating the effect of stress on the level of awareness, self-esteem, and self-assertiveness, the way of using mindfulness every day, starting the informal trainings and homework and stating the goals of the treatment |
| Session 2 | At the beginning of the second session, the mindfulness and the association between the mind and body are explained. Then, the cases such as response to stress, mindfulness, and its key role in reducing the stress, mindfulness, and everyday stress are explained, starting the formal training and relaxation training |
| Session 3 | In this session, mindfulness meditation is taught. Relaxation training is also provided by refocusing on what has been taught through stress-reducing techniques. |
| Session 4 | In this session, we explain to subjects how mindfulness reduces stress. In this session, we also describe the generalization of relaxation to different situations and daily activities. In addition, the traps of the mind and negative conversation with themselves and the usual ways of thinking and meditating are provided. |
| Session 5 | This session is concerned with body mindfulness and the benefits of body awareness, breathing control training and breathing meditation (pervasive awareness through observing physical senses). |
| Session 6 | This session involves generalizing breathing control training and breathing meditation in daily activities. The sitting meditation, mindfulness of emotions, mindfulness of listening, mindfulness of thoughts and emotions and conscious yoga are also taught in this session. |
| Session 7 | This session includes meditation for anxiety and stress, conscious self-questioning, standing yoga, complete mindfulness, which includes a brief overview of previous sessions. |
| Session 8 | The last session involves creating a formal way for mindfulness, formulating the formal trainings, formulating the informal trainings, and making a conclusion of the cases mentioned in the previous sessions |

Table 2. Demographic characteristics of the subjects in the experimental group

| Subject type | subject | gender | age | education | job | Marriage duration | Number of children | treatment |
|--------------------|-----------|--------|-----|-----------|----------------|-------------------|--------------------|-----------------------------------|
| Experimental group | Subject 1 | female | 22 | bachelor | housewife | years 2 | 0 | Mindfulness-based stress reducing |
| | | male | 30 | PhD | Faculty member | | | |
| | Subject 2 | female | 36 | bachelor | employee | year 1 | 2 | Mindfulness-based stress reducing |
| | | male | 37 | bachelor | employee | | | |

| | | | | | | | | |
|--|-----------|--------|----|----------|----------------|----------|---|-----------------------------------|
| | Subject 3 | female | 35 | master | housewife | years 15 | 0 | Mindfulness-based stress reducing |
| | | male | 35 | PhD | faculty member | | | |
| | Subject 4 | female | 37 | bachelor | employee | years 15 | 3 | Mindfulness-based stress reducing |
| | | male | 42 | bachelor | employee | | | |
| | Subject 5 | female | 39 | diploma | housewife | years 23 | 2 | Mindfulness-based stress reducing |
| | | male | 45 | bachelor | employee | | | |

Table 3. Demographic characteristics of the subjects in the control group

| Subject type | subject | gender | age | education | job | Marriage duration | Number of children | treatment |
|---------------|-----------|--------|-----|-----------|----------------|-------------------|--------------------|--------------|
| Control group | Subject 1 | female | 30 | bachelor | employee | years 10 | 2 | No treatment |
| | | male | 35 | master | Faculty member | | | |
| | Subject 2 | female | 42 | diploma | housewife | years 20 | 5 | No treatment |
| | | male | 55 | PhD | Faculty member | | | |
| | Subject 3 | female | 30 | master | housewife | years 8 | 1 | No treatment |
| | | male | 35 | master | Self-employed | | | |
| | Subject 4 | female | 20 | student | housewife | years 2 | 0 | No treatment |
| | | male | 22 | student | Work seeking | | | |
| | Subject 5 | female | 25 | bachelor | housewife | years 4 | 0 | No treatment |
| | | male | 31 | PhD | employee | | | |

Table 4. Descriptive statistics of experimental and control groups for pre-test

| Variable name | group | mean | SD | variance | n |
|-----------------------|--------------|-------|-------|----------|----|
| Marital maladjustment | experimental | 8.43 | 53.4 | 56.20 | 10 |
| | control | 6.42 | 21.4 | 23.24 | 10 |
| Couple burnout | experimental | 1.83 | 58.12 | 49.158 | 10 |
| | control | 1.79 | 50.11 | 25.149 | 10 |
| mindfulness | experimental | 4.110 | 27.9 | 04.86 | 10 |
| | control | 2.118 | 23.10 | 21.90 | 10 |

Table 5. Descriptive statistics of experimental and control groups for post-test

| Variable name | group | mean | SD | variance | n |
|-----------------------|--------------|--------|-------|----------|----|
| Marital maladjustment | Experimental | 7.33 | 01.7 | 21.49 | 10 |
| | control | 58.43 | 98.4 | 35.24 | 10 |
| Couple burnout | Experimental | 6.76 | 11.7 | 44.50 | 10 |
| | control | 56.82 | 46.12 | 36.152 | 10 |
| Mindfulness | Experimental | 6.122 | 16.10 | 24.103 | 10 |
| | control | 26.115 | 22.11 | 25.98 | 10 |

Table 6. Data normality test results

| Variable name | group | Test value | Significance level | n |
|-----------------------|--------------|------------|--------------------|----|
| Marital maladjustment | experimental | 861.0 | 455.0 | 10 |
| | control | 132.0 | 632.0 | 10 |
| Couple burnout | experimental | 138.0 | 722.0 | 10 |
| | control | 895.0 | 401.0 | 10 |
| mindfulness | experimental | 578.0 | 549.0 | 10 |
| | control | 701.0 | 284.0 | 10 |

Table 7. Homogeneity of variances assumption

| Significance level | df2 | df1 | f | Variable name |
|--------------------|-----|-----|-------|---------------|
| 23.0 | 45 | 1 | 567.1 | burnout |

Table 8. Regression slope homogeneity assumption

| Significance level | Squared mean | df1 | f | Variable name |
|--------------------|--------------|-----|-------|---------------|
| 35.0 | 46.3 | 1 | 869.0 | burnout |

Table 9. Covariance analysis on the effect of mindfulness on couple burnout

| Test power | Eta square | Significance level | F | Mean of squares | df | Sum of squares | Source of change |
|------------|------------|--------------------|-----|-----------------|----|----------------|------------------|
| 00.1 | 689.0 | 001.0 | 538 | 70641 | 1 | 70641 | Pre-test |
| 00.1 | 345.0 | 001.0 | 89 | 813 | 1 | 813 | group |
| - | - | - | - | 96 | 58 | 96 | error |

Table 10. Male Subject 3 scores at baseline, after treatment, and level of effectiveness

| Scale | Baseline | After treatment | Mean of interventions | Percentage of improvement after treatment | Percentage of reduction in scores after treatment |
|-----------------------|----------|-----------------|-----------------------|---|---|
| Marital maladjustment | 45 | 30 | 5.37 | 50 | 33.33 |
| Couple burnout | 76 | 57 | 5.66 | 33.33 | 25 |
| Mindfulness | 123 | 129 | 126 | -65.4 | -88.4 |

Table 11. Female Subject 3 scores at baseline, after treatment and level of effectiveness

| Scale | baseline | After treatment | Mean of interventions | Percentage of improvement after treatment | Percentage of reduction in scores after treatment |
|-----------------------|----------|-----------------|-----------------------|---|---|
| Marital maladjustment | 52 | 48 | 50 | 33.8 | 69.7 |
| Couple burnout | 83 | 74 | 5.78 | 16.12 | 84.10 |
| Mindfulness | 109 | 124 | 5.116 | -1.12 | -76.13 |

Table 12. Male Subject 4 scores at baseline, after treatment, and level of effectiveness

| Scale | baseline | After treatment | Mean of interventions | percentage of improvement after treatment | percentage of reduction in scores after treatment |
|-----------------------|----------|-----------------|-----------------------|---|---|
| Marital maladjustment | 39 | 37 | 38 | 41.5 | 13.5 |
| Couple burnout | 78 | 72 | 5 | 33.8 | 69.7 |
| Mindfulness | 101 | 115 | 108 | -17.12 | -86.13 |

Table 13. Female Subject 4 scores at baseline, after treatment, and level of effectiveness

| Scale | baseline | After treatment | Mean of interventions | percentage of improvement after treatment | percentage of reduction in scores after treatment |
|-----------------------|----------|-----------------|-----------------------|---|---|
| Marital maladjustment | 47 | 35 | 41 | 29.34 | 53.25 |
| Couple burnout | 90 | 87 | 5.88 | 45.3 | 33.3 |
| Mindfulness | 119 | 129 | 124 | -75.7 | -4.8 |