

## Investigating Effectiveness of Happiness Training on Psychological Well-Being and Optimism of Pregnant Women with a History of Spousal Abuse

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### ABSTRACT

**Background and objectives:** Spousal abuse, also known as domestic violence, can impose negative psychological effects on women, including a decline in psychological well-being and optimism. Hence, development of capabilities such as happiness can be helpful in coping with these outcomes. Therefore, the purpose of this study was to investigate the effectiveness of happiness training on the psychological well-being and optimism of pregnant women with a history of spousal abuse.

**Methods:** In this semi-experimental study (with a pretest and posttest design), 30 pregnant women who were referred to health centers of Gorgan (Iran) in 2015 were selected via non-random sampling. The subjects were randomly divided into an experimental group (n=15) and a control group (n=15). The experimental group received 10 sessions of happiness training, but the control group received no training. Data were collected using a demographic questionnaire, the Ryff's psychological well-being scale and an optimism questionnaire. Data analysis was done using the SPSS software (version 16) and descriptive and inferential statistics at significance level of 0.05.

**Results:** The happiness training significantly increased the level of psychological well-being and optimism. There was a significant difference in the mean score of psychological well-being and optimism between the two groups (P-value= 0.001)

**Conclusion:** The findings show that happiness training significantly improves happiness and psychological well-being in women with a history of domestic violence. We recommend performing future studies with a larger study population and short- and long-term follow-ups to evaluate the effectiveness of such training over time.

**KEYWORDS:** Education, Happiness, Psychological well-being, Optimism, Pregnant women, Spousal abuse

Received: 2018/11/15

Revised: 2018/12/01

Published:2019/01/12

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## INTRODUCTION

Today, the issue of violence against women is known as an important social problem. Spousal abuse, also known as domestic violence, is one of the most prominent cases of human rights violation. This serious issue is common in many cultures and has permanent and destructive effects on various aspects of a woman's life (1). Pregnant women are higher risk of being confronted with domestic violence. Pregnancy increases the incidence of domestic violence for various reasons, including reduced frequency of intercourse, misconceptions about pregnancy and abnormal attitude of spouse towards pregnancy (2). The prevalence of spousal abuse during pregnancy is reported to be between 9% and 21% (3). Continuous domestic violence not only affects the pregnancy outcome (such as low weight at birth and premature birth), but also significantly affects the mental health and well-being of parents (4). The psychological consequences of spousal abuse during pregnancy include depression, mood disorder, anxiety disorder, somatization disorder and feeling of inadequacy (5).

Psychological well-being is defined as a positive assessment of life and balance between positive and negative affect (6). Various factors such as inner satisfaction, history of abortion, gestational age, intended/unintended pregnancy, social communications, life events and personality traits can influence the psychological well-being of pregnant women (7). Cognitive behavioral therapies, including happiness training, can be effective in making positive changes to life problems and increasing happiness and psychological well-being (8). Happiness is defined as having positive or pleasant emotions and feelings towards oneself. This assessment includes emotional reactions to events and cognitive judgments about life satisfaction and accomplishments (9). Happiness can be effective in preventing mental disorders in victims of domestic violence, and help them cope better with the violence and reduce maltreatment in marital relationships (10). Studies show that positive

personality traits can positively influence the psychological well-being of pregnant women. Optimism is one of the cognitive constructs that lead to happiness and well-being (11). In fact, optimistic people generally experience more positive outcomes because they imagine their goal to be achievable and use more problem-solving processes (12). They are more satisfied with their lives and feel healthier and happier than other people (13). In recent years, much attention has been paid to the mental health of pregnant women and its subsequent effect on the physical and mental health of fetus. Studies have sought to identify sources of stress and tension in pregnant women in order to provide suitable solutions for increasing satisfaction and happiness in these individuals (14). Considering the importance of pregnancy and the effect of this period on the health of mother and child, this study examined effect of happiness training on the psychological well-being and optimism of pregnant women with a history of spousal abuse.

## MATERIAL AND METHODS

### *Study design and population*

In this semi-experimental study (with a pretest and posttest design), all pregnant women who were referred to the health centers of Gorgan (Iran) in 2015 were enrolled. Overall, 30 pregnant women were selected via non-random sampling. The subjects were randomly divided into an experimental group (n=15) and a control group (n=15). It should be noted that the two groups were matched in terms of demographic characteristics.

### *Inclusion/exclusion criteria*

Pregnant women (second trimester) aged 20-40 years with/without history of domestic violence who were literate, willing to participate in the study and residing in Gorgan were included in the study. Drug addiction and history of illness, high-risk pregnancy, referral to a psychiatrist, drug use or hospitalization due to mental illness over the past year and severe tension in the past six

months (mourning or divorce) were the exclusion criteria.

**Data collection tools**

Data were collected using a demographic questionnaire, the Ryff's psychological well-being scale and an optimism questionnaire.

The demographic questionnaire included questions about age, education and employment of the subjects. The Ryff's psychological well-being scale was used for evaluation of psychological well-being (scored 18 to 126) (15). Validity, reliability and internal consistency of this questionnaire have been confirmed (16, 17). Optimism was measured using the questionnaire designed by Carver and Scheier (scored 0 to 24) (18). Validity and reliability of this questionnaire have been verified previously (19, 20).

The Ryff's psychological well-being scale consists of 18 items with six factors: self-acceptance, positive relations with others positive, autonomy, purpose in life, personal growth and environmental mastery (15). The

participants' response was scored based on a 7-point Likert scale: strongly disagree (score 1); disagree (score 2); somewhat disagree (score 3); neither agree nor disagree (score 4); somewhat agree (score 5); agree (score 6); strongly agree (score 7). A higher score indicates a higher level of psychological well-being in pregnant women.

The optimism questionnaire designed by Carver and Scheier consists of 10 items, of which four items are divertive (18). The responses were scored based on the Likert scale: strongly agree (score 4); agree (score 3); no comment (score 2); strongly disagree (score 1).

**Fordyce happiness intervention program**

Happiness training sessions (120 minutes a session) based on the Fordyce model was held twice a week for five weeks, with help of a doctor of psychology (Table 1). The training was provided only to subjects in the experimental group.

**Table 1. Summary of the Fordyce happiness cognitive-behavioral training**

Session	Topic	Brief description
1	Introductory meeting-pretest	1. Introductions 2. Instructions 3. Handing out the psychological well-being and optimism questionnaires
2	Formula of happiness, increased happiness with physical activity	1. Introducing the happiness formula 2. Overview of happiness techniques 3. Providing a technique for increasing physical activity
3	Increase in happiness with social skills	1. Presenting formula of happiness 2. Providing techniques for improving social relationships
4	Optimism and its effects	Providing a technique for increased optimism
5	Creativity and its effects	Providing a technique for developing creativity
6	How to escape anxiety, reduce expectations and express feelings	1. Providing a technique for escaping anxiety 2. Providing a technique for reducing expectations
7	Increased intimacy and being oneself	Providing the appropriate technique
8	Focus on the present	Providing the appropriate technique
9	Planning training	Providing the appropriate technique
10	Review-posttest	1. Providing a technique for prioritizing happiness 2. Reviewing the 10 joyful techniques explained in previous sessions 3. Handing out the questionnaires in posttest

**Statistical analysis**

Data collected from the completed questionnaires were analyzed with SPSS software (version 16). Descriptive statistics (frequency, mean and standard deviation) and inferential statistics (one-way ANCOVA, Fisher's exact test, t-test and paired t-test) were used for data analysis. All analyses were performed at significance of 0.05.

**Ethical considerations**

Before obtaining written consent from all participants, the researchers explained the

purpose of the research to participants and ensured anonymity and confidentiality of data. It should be noted that the training program was also offered to pregnant women in the control group after the study.

**RESULTS**

The mean age of pregnant women was  $28.8 \pm 4.34$  years in the experimental group and  $28.4 \pm 5.09$  years in the control group (Table 2).

**Table 2. Absolute and relative frequency distribution of demographic characteristics of pregnant women in the study groups**

Demographic information		Control group		Experimental group		Statistical test
		Percent	Number	Percent	Number	
Age	20-26	26.6	4	26.6	4	F= 0.091
	27-33	60	9	53.4	8	
	34-40	13.4	2	20	3	
	Total	100	15	100	15	
Education level	Illiterate/under high school diploma	20	3	26.6	4	F= 0.811
	High school diploma	40	6	33.4	5	
	University degree	40	6	40	6	
	Total	100	15	100	15	
Employment status	Employed	20	3	26.6	4	X <sup>2</sup> = 0.827
	Housewife	80	12	73.4	11	
	Total	100	15	100	15	

According to the results presented in tables 3 and 4, the happiness training increased the components of psychological well-being and

optimism in pregnant women with a history of spousal abuse.

**Table 3. Mean pretest and posttest scores of psychological well-being in the study groups**

Subscales	Control group				Experimental group				T-Test
	Posttest		Pretest		Posttest		Pretest		
	SD	Mean	SD	Mean	SD	Mean	SD	Mean	

<b>Life satisfaction</b>	2.16	7.33	2.24	6.2	1.94	13.27	2.69	8.67	P= 0.001
Paired t-test	P= 0.092				P= 0.001				
<b>Spirituality</b>	2.78	7.07	2.44	6.4	2.05	15.67	3.39	11.37	P= 0.045
Paired t-test	P= 0.263				P= 0.011				
<b>Happiness</b>	2.96	6.67	3.05	6.8	1.92	14	2.23	6.13	P= 0.001
Paired t-test	P= 0.892				P= 0.001				
<b>Personal growth</b>	2.47	6.53	2.99	7.4	1.38	11.93	2.19	11.6	P= 0.196
Paired t-test	P= 0.154				P= 0.736				
<b>Self-acceptance</b>	2.29	6	3.04	6.4	0.83	12.47	2.16	11.13	P= 0.001
Paired t-test	P= 0.813				P= 0.091				
<b>Positive relations</b>	2.57	6.93	2.23	6.13	0.88	11.93	2.53	10.87	P= 0.092
Paired t-test	P= 0.113				P= 0.041				
<b>Total score of psychological well-being</b>	6.41	40.53	9.74	39.33	5.47	79.27	6.17	60.13	P= 0.001
Paired t-test	P= 0.642				P= 0.001				

**Table 4. Mean pretest and posttest scores of optimism in the study groups**

Subscale	Control group				Experimental group				T-Test
	Posttest		Pretest		Posttest		Pretest		
	SD	Mean	SD	Mean	SD	Mean	SD	Mean	
<b>Optimism</b>	7.84	18.07	5.03	16.93	2.58	31.87	4.75	18.73	P= 0.001
Paired t-test	P= 0.173				P= 0.001				

Furthermore, one-way ANCOVA showed that after eliminating the effects of pretest, there was a significant difference in the mean score

of psychological well-being and optimism between the two groups (P-value= 0.001).

## DISCUSSION

The results showed that the happiness training increased the components of psychological well-being, which is consistent with findings of previous studies (21-26). Generally, all humans seek happiness, which is a crucial part of life (27), but experiencing stress significantly reduces happiness, thus leading to a decline in mental health (28). Happiness training for women with a history of spousal abuse can reduce physical complaints, depression, anxiety and aggression while improving social relationships, adaptability and self-esteem. In this way, domestic violence could be avoided by accepting the problems and constraints in life and finding better solutions, which ultimately will increase the psychological well-being of these women (29).

Happiness training also increased optimism in pregnant women with a history of spousal abuse. This finding is consistent with findings of some previous studies (30-32). One of the key elements of teaching happiness is to create a model of constructive and resilience thinking, understand self-worth and avoid self-destructive behaviors when confronting problems. Moreover, promoting optimism can increase the psychological well-being of people (33). In the present study, the happiness training significantly increased optimism and subsequently psychological well-being in the subjects. This is consistent with findings of a similar study (34). Optimism can make people believe in their personal abilities and draw positive inferences from the society and environment, and thus expect positive outcomes. A positive emotional state can improve psychological and physical well-being, which will also strengthen the individual's capacity to cope with unfortunate conditions.

## CONCLUSION

The findings show that happiness training significantly improves happiness and psychological well-being in women with a history of domestic violence. We recommend performing future studies with a larger study population and short- and long-term follow-

Ups to evaluate the effectiveness of this training over time.

## ACKNOWLEDGEMENTS

This study was derived from a thesis for completion of a Master's degree in general psychology at the Islamic Azad University of Gorgan. The researchers would like to express their gratitude to the Deputy of Research and Technology of the Islamic Azad University of Gorgan for the financial and spiritual support.

## DECLARATIONS

### *Funding*

This study received financial support from the Islamic Azad University of Gorgan, Iran (code: 2451/55).

### *Ethics approvals and consent to participate*

Written informed consent was obtained from all participants.

### *Conflict of interest*

The authors declare that there is no conflict of interest.

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