The effect of educational intervention based on theory of planned behavior and self-regulatory strategies on the social vitality of women employee

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Abstract:
BACKGROUND: Social vitality is one of the most important social indicators to develop a sense of public satisfaction. The aim of this study was to investigate the effect of educational intervention based on theory of planned behavior (TPB) and self-regulatory strategies on the social vitality of women employee.

MATERIALS AND METHODS: In this randomized controlled field trial study, 66 women employees of Birjand University of Medical Sciences (Iran) were selected including intervention (n = 31) and control (n = 35). Data were collected by standard Oxford Happiness Questionnaire and a researcher-made questionnaire based on TPB which its the validity and reliability were confirmed. The educational intervention consisted of 5 sessions based on the constructs of the TPB and self-regulatory strategies which were to the interventional group. Data analysis was performed using the Chi-square, Fisher’s exact test, independent t-test, repeated measures ANOVA, and Bonferroni post hoc test at a significance level of <0.05.

RESULTS: The mean age of women in the intervention and control group was 37.1 ± 9.3 and 36.2 ± 7.6 years (P = 0.67). Model constructs and happiness scores were homogeneous (P > 0.05) before the intervention, in two group of study, but after attitude (P = 0.016), subjective norm (P = 0.029), perceived behavior control (P = 0.01), intention (P = 0.006), and happiness score (P < 0.001) had a significant increase in the intervention group. In the control group, only a significant difference occurred over time in the happiness rate (P = 0.031).

CONCLUSIONS: The results of the present study showed the effectiveness of educational intervention on the social vitality of women employees. Therefore, TPB is recommended to use in interventions to promote social vitality.

Keywords: Attitude, education, self-regulation, social vitality, theory of planned behavior

Introduction

Happiness and vitality are one of the positive root emotions and one of the most essential natural desires and psychological needs of human beings, it can protect a person against pressures and problems and also deprive him/his physical and mental health.[1,2] Social vitality has a decisive role in ensuring the health of the individual and society, and since happiness is always accompanied by optimism, hope, and trust, it can play an accelerating role in the process of society development. In this regard, since 2000, according to United Nations in order to determine the level of development of countries, the variables of vitality or happiness, satisfaction of people
in society have been considered as a key variable in the calculation.[9] Despite the importance of the discussion of social vitality, studies indicate that the overall states of vitality in Iranian society is not appropriate.[2,3] The results of a study showed that the state of vitality among Iranians aged 18 to 65 years is moderate.[3] Global reports of happiness and vitality indicate that the state of social vitality in Iran is also inappropriate. United Nations Livelihoods Report (2016), which collected data from 157 countries from 2013 to 2015 indicate that the situation of vitality in Iran is less than average. In the study of the trend of vitality during the two periods of 2005–2007 and 2013–2015, the score of vitality in Iran had decreased about 0.507.[2] A number studies show that social capital/support, quality of life, economic factors, constructive and positive relationships with others, personality development, self-esteem, life satisfaction, hope for the future, satisfaction of emotional needs, employment, respect for women’s rights in society, education, strengthening cultural identity, sense of social, and psychological security affect vitality.[2,4,6] The results of some studies show that various interventions can improve social vitality in society.[7-11] Models and theories of health education including theory of planned behavior (TPB) have a decisive role in behavior change. This identifies the relationship between behavior and beliefs, attitudes, and intentions and expresses and intentional behavior as the most important predictor and determinant of behavior. Constructs of this model include attitudes, subjective norms, behavioral intent, and perceived behavioral control [Figure 1]. Self-regulation is the practice of modifying behaviors based on self-observations. Also is a continuous process, including identifying goals, tracking the achievement of them, and identifying other goals that can be used to change oneself and guided him to achieve the goal.[12] Psychologists consider vitality as a kind of positive emotion that has a profound effect on physical, cognitive, and psychological mechanisms, including the ability to do work in the organization.[13] so pay attention to happiness of employees in the organization and providing the condition of it is an effective and reliable way for the mental health of employees. According to the management experts, the biggest key to productivity is happy employees. There is a clear link between job satisfaction and productivity. Other effects of happiness in the workplace include increasing profits, production, improving decision-making ability, reducing absenteeism, doing things with more enthusiasm, improving communication, increasing employee commitment to the organization, strengthening teamwork, and increasing innovation in the organization pointed out.[14] Among employees, attention to the mental health needs of women is of particular importance, due to the multiplicity of roles need. According to the declining trend of social vitality in Iran in recent years and the importance social vitality in the health system and the role of women employee, the present study aimed to determine the effect of educational intervention based on TPB and self-regulatory strategies on the social vitality of women employees.

Materials and Methods

The present study is a randomized controlled field trial was conducted on women working in the headquarters of Birjand University of Medical Sciences in 2019. The sample size was determined according to Tehrani et al.[7] and following formula in which (α = 0.05, β = 0/1, s1 = 5.96, s2 = 5.83, X1=35.16, X2=43.5). Eleven people were estimated in each group, which according to the probability of falling sample size and achieving the appropriate accuracy 35 people were included in the study. In the intervention group, four people were excluded from the study due to incomplete questionnaire in the third stage. Individuals were selected based on the inclusion criteria and then randomly divided into intervention and control groups. Inclusion criteria were as following being employed in the headquarters university, had at least 1 year of service, no use of psychiatric drugs, no unusual events such as death of loved ones and incurable disease in the family during the past 6 months and a desire to participate in the study. The exclusion criteria were absence in more than one session and incomplete fulfillment of the questionnaires. For data collection, a questionnaire consisting of three sections was administered to the participants. The first section was the “demographic section” which contained questions (age, marital status and…). The second section consisted of the standardized 29-item “Oxford Happiness Questionnaire,” whose reliability and validity have been confirmed in different studies. The items in this section were rated on a four-point Likert scale ranging from 0 to 3. The minimum score (0) represents a low level of happiness, and the maximum score (87) indicates a high level of happiness.[15,16] The third section comprised the “researcher-made questionnaire based on TPB,” which was consists of 13 items on attitude, 21 items on subjective norm, 13

![Figure 1: Conceptual framework of the Theory of Planned Behavior](image-url)
items on perceived behavioral control and behavioral intention (7 items). The items in this section were rated on a five-point Likert scale ranging from strongly agree to strongly disagree. Then, its validity was confirmed by content validity method by summing up the opinions of 10 faculty members and health experts. Content validity index and content validity ratio were calculated and confirmed. Cronbach’s alpha was used to confirm the reliability, which was calculated above 0.8. Before starting the educational interventions, all of the samples were completed the questionnaire and then educational sessions for the intervention group were held. The educational intervention was included five sessions of intervention based on the constructs of TPB and self-regulatory strategies [Table 1]. The educational content was designed based on a review of related texts and scientific sources and was presented through lectures, questions and answers, and group discussion. At the end of the class, homework and pamphlets were provided to the class participants. The average duration of each education class was between 90 and 120 min. The training class was conducted by 3 people (PhD in Health Education and Health Promotion, Master of Clinical Psychology, and Master of Health Education). The questionnaires were completed in 3 stages (before, immediately, and 3 months after the intervention) in two groups. Data analysis was performed by SPSS 19 software (SPSS IBM Inc., Chicago, Illinois, USA) using the Chi-square, Fisher’s exact test, independent t-test, repeated measures ANOVA, and Bonferroni post hoc test. Significance level was considered <0.05. This study was conducted following the approval of the Research and Ethics Committee of Birjand University of Medical Sciences (approval IR. BUMS. REC.1398.261) and in accordance with the ethical norms.

Table 1: Structure and content of educational sessions

| Number of session | Title of the session                                                                 | Target variables                                      |
|-------------------|-------------------------------------------------------------------------------------|------------------------------------------------------|
| First session     | Introduction, expression of goals, definition of vitality. Providing statistics on the status of vitality in Iran and different countries (importance and necessity of the subject) | Aiming to raise awareness                             |
|                   | Expressing the effects of vitality and happiness on body and soul                    | Attracting attention with the aim of increasing awareness |
|                   | Identifying the important behaviors and beliefs of others in people’s lives about Discussion of cheerfulness | Aiming to influence the constructs of subjective norm |
|                   | Identifying women’s beliefs about the impact of cheerfulness on various aspects of their personal, family, social: organizational life (examining some misconceptions about cheerfulness) | Aim to improve attitude                               |
| Second session    | Identify barriers to happiness empowering women employees to increase social vitality (teaching positive thinking techniques and teaching life in the present) | With the aim of influencing the control and self-regulatory |
| Third session     | Identifying facilitators and strategies for people to be happy and empowering employee women to increase social vitality training techniques | With the aim of influencing control perceived behavior and self-regulating |
| The fourth session| Training to express emotions and training to maintain and pay attention to the importance of happiness Empowering women employees to increase the vitality of the community, increase social relations and interpersonal intimacy | With the aim of influencing self-regulation             |
| The fifth session | The general summary of the content, answering the questions and solving the problem after the end of the education | -                                                     |

Results

The mean age of the studied women was 37.1 ± 9.3 and 36.2 ± 7.6 years in the intervention and control group, respectively ($P = 0.67$). Their mean work experience was 11 ± 9.1 and 10.3 ± 6.9 years in the intervention and control groups, respectively ($P = 0.7$). They were similar in terms of age and work experience in two groups. Two groups did not have a significant difference in terms of education level ($P = 0.12$) a marital status, income, residence status, and service status were not observed in both intervention and control groups and the two groups were similar in terms of these variables [Table 2]. Before the intervention, there was no statistically significant difference in the mean score of attitude, subjective norm, perceived behavior control, and behavioral intention in the two study groups. In the intervention group, there was significant increase in the mean score of these domains over time [Table 3]. Furthermore, the mean changes of attitude score, subjective norm, perceived behavior control, intention, and happiness before with 3 months after the intervention in the intervention group was significantly higher than the control group ($P < 0.05$) [Table 4]. In the intervention group, the mean happiness score increased from 40.9 to 49.9 during the intervention period ($P < 0.01$) and in the control group increased from 45.7 to 47.4. The mean changes of happiness score before and 3 months after the intervention were estimated in the intervention group (8 ± 12.2) and in the control group (1.68 ± 9.38) which was statistically significant ($P = 0.02$) [Table 5].
Happiness is one of the most important and effective components in the process of human life, and without it, the field of activity, creativity, initiative, and healthy life cannot be created. Happiness is a valuable tool for improving the personality and job performance of employees so that happy people are more successful in
In accordance with a certain set of behaviors. In this study, in order to influence the perceived behavioral control, the subjects discussed the identification of individual, organizational, family, and social barriers affecting vitality. Facilitators as well as ways to overcome these barriers were identified by women in the group discussion. Then, using self-regulatory strategies such as goal setting and teaching positive thinking techniques, living in the present and tried to adjust or eliminate obstacles in front of people. Therefore, it is inferred that self-regulatory strategies deepen the spontaneous learning process in women and play an important role in promoting women’s mental health. It could also make people more successful in solving problems. Therefore, self-confident people could feel higher self-sufficiency, self-efficacy, and ultimately increased social vitality lead to reduced many of behavioral and communication problems in the organizational system. In the present study, TPB-based educational intervention increased the average behavioral intention score of female employees. This finding was consistent with Zeinab Gholamnia Shirvani et al.,[24] Gheysvandi.[25] As behavioral intention refers to a person’s thought to perform a certain behavior and is the determining factor of special behavior. The strength of an intention indicated by a person’s mental probability that he/she will perform the desired behavior.[26] In this study, the presentation of the educational pamphlet also strengthened and continued the behavioral intention in the period after the intervention. We also tried to strengthen the intervention in the determinants of intention (attitude–subjective norm-control of perceived behavior) to generalize the goal to achieve the enhancing possibility of performing behavior. Finally, based on the findings of the present study, educational intervention increased the score of social vitality of women employees, which was also found by Ghasemi,[8] Fani and Aghaziarati,[21] Akhshi and Golabi,[27] Shabadi Zare Akbar and Mahmoud,[23] and Alizadehfar.[29] In the present study, by performing interventions in the constructs of attitude, subjective norms and behavior control, and especially the effect on behavioral intention of individuals as a group discussion, homework, questions and answers their social vitality increased. The best strength of the current investigation

| Time                  | The study group (group), ±SD | Control (n=35) | test independent |
|-----------------------|-----------------------------|---------------|-----------------|
| Previous              | 40.9±9.9                    | 45.7±11.7     | 0.08            |
| Immediately           | 53.1±12.7                   | 49.5±12.2     | 0.23            |
| With 3 months         | 49.9±14.6                   | 47.4±12.5     | 0.6             |

P-value repeated measures analysis of variance

| Previous with immediately | P-value <0.001 | Previous with 3 months | P-value 0.004 |
|---------------------------|----------------|------------------------|---------------|

SD=Standard deviation
is the study of social vitality as one of the most important priorities of the health system in Iran and South Khorasan province. Moreover, performing study in women employees who they have multiplicity of roles. Another strength of this study was conducting a descriptive study before the intervention, which helped us a lot in designing the educational intervention. Having a control group and random selection of people was another strength of this study. Weaknesses of the study can be attributed to the lack of previous studies in the field of vitality using models and theories of health education to compare with the results of this study. Furthermore, completing the questionnaire by self-reporting method, the limited statistical population and also limited information sources that relied to self-assessment tools and did not used other information sources such as the families of the subjects for the study situation were other weakness of this study. Based on results of this study suggest to implement interventions such as workshops to promote social vitality behavior for employee women.

Conclusions

The results of the present study showed that the application of TPB significantly increased a positive attitude and tendency to vitality, strengthening the control of perceived behavior, changing subjective norms in the direction of happiness and vitality, and finally behavioral intention and performing effective happy behavior. Therefore, in order to increase the happiness and social vitality of women, it is necessary to provide the ground for strengthening their cognitive, emotional, and behavioral dimensions in educational interventions. Considering that in order to achieve happiness and vitality, education based on self-regulatory strategies can lead women employees to have a meaningful and purposeful life, love and motivation for work and life, educational interventions through group classroom methods, workshops, and even in-service education of employees are recommended. Certainly, by increasing the social vitality of women employees, organizational climate can be changed and leads to productivity in the organization because per sample, which have better organizational support, could control their negative emotions, and as a result, have more happiness and satisfaction than other employees.

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