Original	Article	

The effect of resiliency promotion training package on self-efficacy and work-family conflict

Bijan Jokar Tang-Karami ¹, Fariba Karimi ^{1*}, Mohammad Ali Nadi ¹

Corresponding author and reprints: Fariba Karimi, Associate Professor, Department of Educational Sciences and Psychology, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran.

Email: faribakarimi2005@yahoo.com

Received: 01 Oct 2021 **Accepted:** 04 Dec 2021 **Published:** 12 Dec 2021

Abstract

Background: Nowadays, resiliency is one of the determining factors of people responses to stressful issues and mental well-being. The aim of present study was to investigate the effectiveness of resiliency promotion training on self-efficacy and work-family conflict of satellite employees in Iranian Oil Terminals Company (IOTC).

Methods: This study was quasi-experimental with pre-test, post-test and follow-up design. The statistical population included the satellite employees of IOTC. Using a convenience sampling method, 30 employees were selected and randomly assigned into two experimental and control groups (each 15 participants). To collect the data, general self-efficacy questionnaire and workfamily conflict questionnaire were used at the beginning, at the end of the training, and after one month. The experimental group received training in 9 sessions of 90 minutes for one month, but the control group did not receive any training. Data analysis was performed by multivariate analysis of covariance in SPSS software.

Results: The effect of the resiliency promotion training on the research variables was significant in each of the post-test and follow-up stages. The rate of this effect in improving self-efficacy and work-family conflict was 98.8% in post-test and 99.8% in follow-up. There is a significant difference between the control group and the experimental group in the self-efficacy and work-family conflict variables in the post-test and follow-up stages (p < 0.001).

Conclusion: The results revealed that resiliency promotion training was effective on self-efficacy and work-family conflict of satellite employees in the post-test stage and the effects of training remained in the follow-up stage.

Keywords: Education; Family Conflict; Resilience, Psychological; Self Efficacy.

Cite this article as: Jokar Tang-Karami B, Karimi F, Nadi MA. The effect of resiliency promotion training package on self-efficacy and work-family conflict. *Soc Determinants Health*. 2021;7(1):1-12 DOI: http://dx.doi.org/10.22037/sdh.v6i1.36766

Introduction:

Resiliency is one's successful approach to life's challenges when faced with stress or trauma. Accordingly, resiliency theory is based on the strengths and weaknesses and it is the way of

perceiving adaptive behavior to cope with the dangers and calamities by using of individual abilities (1). It can be stated that resiliency refers to the factors and processes that separate the growth trajectory from the path of problematic behaviors and psychological

¹ Department of Educational Sciences and Psychology, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran.

damage and lead to adaptive consequences despite the presence of adverse conditions. In other words, resiliency is a process that positively improves one's way of interacting with a challenging situation (2). Thus, a resilient person processes the unfavorable situation more positively and considers himself/herself capable of coping with it (3).

Among resilient people, researchers aim at finding the answer to the question of what makes some people more able to cope with life stress. There are three basic characteristics for resilient people: First, resilient people are able to overcome problems; second, resilient people are able to remain competent in stress times; third: Resilient people are able to recover from the injuries of negative life events (4).

One of the individual factors closely related to resiliency is self-efficacy. Bandura, stated that self-efficacy beliefs affect action, effort, perseverance, and resiliency in the face of unfavorable conditions and events and the achievement of goals. According to Bandura, self-efficacy is one of the characteristics of resilient individuals (5).

Liu et al., also believes that people are born with innate resiliency and retain traits of autonomy, purposefulness and belief in a bright future, social competence and problem-solving ability, including critical and creative thinking, and getting help from others. Thus, knowing the thinking style of people can be effective in measuring their resiliency (6).

Self-efficacy is the assurance of one's ability to control thoughts, feelings, and activities, and thus affects one's real performance, emotions, behavior selection, and finally it affects one's level of effort spend on an activity. As a result, higher self-efficacy leads to more effort and more persistence in dealing with barriers (7). Bandura, argues that self-efficacy is one of the individual beliefs that people need to succeed and can

indicate the way a person thinks and acts. Thus, the competence and professional development of employees is associated with their self-efficacy (8). Self-efficacy affects the acquisition of knowledge, attitude and development of employees' professional skills (9). A strong sense of self-efficacy not only facilitates performing tasks well but also helps a person to stand firm against failure. Moreover, people judgments about their abilities affect how they think and feel about a task, their expectations about doing a task, and how they will accomplish it (10).

In general, when people feel that they are not be capable to do something properly, they will not be willing to engage in activities that require such behaviour, their effort will decrease, and give up if they face the barriers (11). Therefore, self-efficacy directly affects performance since people with higher selfefficacy beliefs select higher goals and higher goals have a positive relationship with performance (12). Self-efficacy directly affects performance, even when the ability is controlled. Higher self-efficacy ideas select higher goals, and higher goals have a positive relationship with performance. Self-efficacy associated with past ability performance (13).

Self-efficacy is influential in selecting the degree of challenge and commitment to personal goals. Advanced self-efficacy beliefs lead to more challenging goal setting, and reduced self-efficacy beliefs lead to more common goal setting and a more realistic and accessible motivational model (14).

People with high self-efficacy believe that they can cope effectively with the events and situations they face, since they expect success in overcoming their problems, they persevere in tasks and often act at a high level. Studies have shown that higher self-efficacy increases the likelihood of starting to do a work and make an effort to do it well, and such a person will show higher hardiness when faced with a problem or even failure (15).

When people face difficult and stressful environmental dimensions that need to managed, they will use excellent analytical thinking and perform well if they feel highly efficient and strong. Thus, knowing thinking style of a person is necessary to know the degree of his or her flexibility with his or her environmental and job tasks (16).

Self-efficacy directly affects performance, since people with higher self-efficacy select higher goals and higher goals are positively associated with performance (12).

Work and family are two important areas in every person's life. Since most employees experience many conflicts and problems in performing work and family roles and this conflict has many negative effects on them, people have less mental health facing with family-conflict. Work-family conflict has a negative impact on way of thinking and physiology of people and leads to reduced mental health, well-being and quality of life. Theoretical and empirical studies have shown that the area of work can interfere with the area of family and the area of family can interfere with the area of work (17). Workfamily conflict occurs when people find themselves in situations where they have to play multiple roles that require time, energy, and commitment, and they all of them interfere with each other (18).

Satisfaction with life is conceptually the result of one's satisfaction with having a good work and family life. Work-family conflict has a destructive effect on employees' job attitudes and performance in the workplace and affects the personal health of employees. This mismatch and inconsistency between family and work life roles, which its main consequence is workfamily conflict, disrupts the body's biological and psychological balance (19).

Some jobs and work settings can potentially cause stress in employees. One of these professions is the stressful jobs of satellite employees in operational areas. Work-family conflict is one of the important conflicts that has many negative consequences, such as absenteeism, increased job turnover, reduced performance, reduced productivity and organizational commitment, and burnout (20). The concepts of work and family have the highest and strongest link with the person and society, so that creating a balance between them is crucial. If the relationship between work and family life is not managed, the conflict between them will cause irreparable damage to the individual and the organization and society (21).

Since no study has been conducted so far on the effectiveness of a training package for satellite employees on self-efficacy and work-family conflict of these employees, the researcher decided to increase employee self-efficacy and reduce work-family conflict by implementing this training package and through changing attitudes and enhancing the needed skills. The main aim of this study is to investigate the effect of resiliency promotion training on self-efficacy and work-family conflict of satellite employees in IOTC.

Methods

The method of study was quasi-experimental with pre-test, post-test and follow-up design with two experimental and control groups (Table 1). Due to the availability of the list of employees, samples were selected using a convenience sampling method and they were randomly assigned to experimental and control groups. First, two experimental and control groups completed self-efficacy and work-family conflict questionnaires. Then, the experimental group received the resiliency promotion training based on the real needs of the employees and through qualitative in nine 90-minute sessions for one

month with the presence of a psychologist and trained researcher. It had been approved by 5 experts. The control group received no intervention. Then, at the end of the trainings, the questionnaires were completed again by the participants of two groups of experimental and control. The follow-up test was performed after one month and the two groups completed the questionnaires again and the results were analyzed.

Table 1. Pre-test-post-test plan, follow-up design with control group

Groups	pretest	Dependent variables	posttest	Follow-up
1	T1	Resilience-promotion package training (X)	T2	Т3
2	T1	-	T2	T3

Research samples were selected by a convenience random sampling with a list of employees. Since the minimum volume of 15 subgroups is recommended in experimental studies (Delavar, 2012), a group of 30 people was selected as the sample and they were divided into two groups of experimental and control (15 in each group).

Criteria for inclusion of employees into the training process: informed consent, being a satellite employee, permission of the direct supervisor, observance of rules and regulations and commitment to attend regularly in all training sessions and related exams.

The content of the training package is presented in Table 2. It was developed by the researcher through qualitative research and was approved by experts. Accordingly, the problems and needs affecting the resiliency of satellite employees (resiliency components) were first identified through inductive content analysis and using need-based interviews with satellite employees. Then, scientific texts (including books,

articles and dissertations) were used to identify training techniques to develop a package of resiliency promotion training. Finally, the content validity of the training package, which included 9 sessions of 90 minutes, was approved by experts.

Data collection tools included two standard questionnaires of general self-efficacy questionnaire and work-family conflict questionnaire.

Self-efficacy questionnaire: This questionnaire includes 17 items answered based on a 5-point Likert scale, including strongly disagree, disagree, no idea, agree, and strongly agree. In the present study, Cronbach's alpha coefficient for this scale was obtained at 0.96. Thus, since the coefficient obtained was higher than the desired criterion of 0.7, it can be concluded that this questionnaire has good internal reliability.

Work-family conflict questionnaire: The Carlson family work-conflict questionnaire has 18 questions, answered on a 5-point Likert scale, including strongly disagree, disagree, no idea, agree, and strongly agree. Also, in this research, general reliability of this test using Cronbach's alpha method was obtained at 0.99, indicating the appropriate internal reliability of the questionnaire. In this research, the researcher tried to observe ethical principles. All participants participated in the study with their consent. They were also reassured that their information would remain confidential and can leave the study at any stage of the study. The research objectives and responsibilities of the participants were also explained for them. The data of the present study were analyzed using multivariate analysis of covariance or MANCOVA in SPSS software. Descriptive statistics were used when appropriate. Kolmogorov-Smirnov test was used for normality.

Table 2. Training package to improve the resiliency of satellite employees

Sessions	Focus and training goals	The process of teaching techniques
1	Communicating with clients, justifying, introducing and starting training - Factors affecting the resiliency of satellite employees	Familiarity of group members with each other and introduction and expression of rules and principles governing the class and the framework of the training course and the number of sessions and familiarity with the concept of resiliency and other training concepts of the course / Homework
2	Effective communication with the family - ways to reduce conflict and improve marital relationships in satellite life	Familiarity with the concept of communication and communication components - Verbal communication barriers - Effective communication skills between spouses - Problem solving skills in the family - Top steps to solve marital problems - Factors affecting marital relationships - Summarizing and presenting exercises / homework
3	Identifying automatic negative thoughts and allowing the presence for negative thoughts and not judging them - Learning to change attitudes towards life – Body scan meditation, sitting and standing meditation and cognitive change skills	Familiarity with negative thoughts and ways to moderate it and finally being optimistic, breathing meditation practice to manage negative thoughts and not judging thoughts, exercising cognitive change to solve cognitive, emotional and social anxiety problems - Summarizing and presenting exercise / homework
4	Walking meditation training - mental imaging - Introduction to Hata yoga stretching exercises - interpersonal skills - creativity skills	Walking meditation exercise to reduce cognitive problems - Mental imagery training to reduce depression and negative mood - Hata yoga stretching exercise to increase composure - Interpersonal skills training to increase assertiveness and improve relationships with others and reduce passivity – Various creative techniques (six thinking hats, brainstorming technique, etc.) - Summarizing and presenting exercises / homework
5	Coping with problems - skills of saying no - promoting positive aspects of life	Exercise of coping with unsolvable problems to create opportunities for positive thinking - types of saying no - How do we know when to say no? -Ways to say no and how to do it- Teaching to institutionalize positive thinking strategies in life - Teaching and implementing the technique of continuity in practicing positive thoughts - Positive thinking- Summarizing and presenting exercises / homework
6	Anger management - Managing anxiety and stress and coping with existential anxiety	Anger management technique - Concept of anxiety and stress, Symptoms of anger and stress, causes and consequences of anxiety and stress, Stress management methods - Encouraging to deal with existing anxiety and increasing assertiveness to face life problems - Summarizing and presenting exercises / homework
7	Training focused on hope and optimism, practicing closed and open doors - They way of cultivating positive emotions - training to focus on happiness and vitality	The exercise focused on optimism and hope, exercise of closed and open doors, strengthening positive mood and increasing self-value and reducing social anxiety and increasing positive behaviours. Visualizing enjoyable and unpleasant events and expressing the created emotions - teaching and performing the technique of being happy based on the feeling of life and vitality and the technique of living in the moment and staying in the present - social relations techniques with humour - Summarizing and presenting exercises / homework
8	Self-efficacy (decision-making skills, problem-solving skills, responsibility skills) - goal setting and the way of achieving it	The right criteria for a good decision, the importance and value of a right decision in life, the consequences of decisions, the steps to solving a problem, the way of thinking about a problem, the way of solving problems, a simple definition of responsibility, taking a small responsibility in the dormitory or family, the characteristics of a responsible person. The concept of goal, short-and long-term goals, the way of gaining confidence in using your abilities, the way of planning to achieve the goal, Summarizing and presenting exercises / homework
9	The ways of creating positive and optimal relationships – the ways of communicating and finding friends (Henderson) – the ways of accepting and approving the weaknesses and commitment to new goals	Encouraging to communicate positive communications with others - a simple and clear definition of communication and its importance, establishing correct communication with others, a simple and clear definition of friendship and the characteristics of a good friend, distinguishing a good friend from a bad one, the disadvantages of having a bad friend. Listing weaknesses and finding new goals based on. Summarizing and presenting exercises / homework

Results

The demographic characteristics of the employees participating in the research presented in Table 3.

Table 3. Demographic characteristics of the research subjects

Variable	subgroups	experimental group N (percent)	Control group
	20-30	0	0
	31-40	%26.7	0
Age (years)	41-50	%73.3	%20
	51-60	0	%80
	diploma	0	0
	bachelor	%100	%40
Education	Master and higher	0	%60
	10-15	%26.7	0
Employment	16-20	%46.6	0
history	21-25	%26.7	%33.3
(year)	> 25	0	%66.7

Descriptive results related to research variables are presented in Table 4. As seen in Table 4, the mean scores of self-efficacy in the experimental group showed a greater increase than that in control in the post-test and follow-up stages compared to the pretest. Also, the mean scores of work-family conflict in the experimental group showed a greater reduction in the experimental group than that in the control group in the post-test and follow-up than compared to pre-test was used for this purpose.

The results of Kolmogorov-Smirnov showed that the distribution of scores in the research

variables was normal in both groups and in all three stages of research (significant levels are more than 0.05). Levene's test was used to examine the equality of variances. The results showed that in the post-test and follow-up stages, the equality of variance was confirmed (significance level was obtained higher than 0.05). M box test results to evaluate homogeneity of variance-covariance matrices of scores were confirmed in the post-test stage (M box= 3.49, F = 1.07, sig = 0.358) and in the follow-up stage (M box = 7.85, 2.02 = F, sig = 0.055). Due to the confirmation of the normality of the data as well as the confirmation of statistical presuppositions, and equality in the number in the groups, the parametric method of multivariate analysis of covariance can be used by considering the pretest as a covariate. Table 5, presents the results of multivariate test scores of research variables.

The results in Table 5 show that by controlling the effect of pre-test self-efficacy scores and work-family conflict in multivariate analysis, the main effect of the group in all analyses was significant (p <0.05). These results indicate that the effect of the resiliency promotion training on the research variables was significant in each of the post-test and follow-up stages. The rate of this effect in improving self-efficacy and work-family conflict was 98.8% in post-test and 99.8% in follow-up.

Table 4. Descriptive indices of the scores of research variables in two groups and three stages of research

		Ex	perimenta	.1	Control		
Variables	ariables		posttest	Follow- up	pretest	posttest	Follow- up
Self-	Mean	37.86	72.8	73.67	35.47	37.4	35.67
efficacy	SD	3.44	4.5	3.22	3.31	5.07	4.6
Work- family	Mean	86.87	21.53	22.53	86.67	86.87	58.8
conflict	SD	2.06	1.88	0.84	1.88	1.35	1.74

Table 5. Results of multivariate test of self-efficacy and work-family conflict scores
--

stage	effects	Lambda coefficient	F	Hypothesis df	Error df	Probability level	Effect size	Statistical power
s	Self-efficacy pre-test	0.969	0.401	2	25	0.674	0.031	0.108
posttest	Work-family conflict pre-test	0.898	1.42	2	25	0.261	0.102	0.275
	group	0.002	5475.57	2	25	0.001	0.988	1.000
dn-	Self-efficacy pre-test	0.898	1.42	2	25	0.26	0.102	0.276
Follow-	Work-family conflict pre-test	0.969	0.404	2	25	0.672	0.031	0.108
Ю	group	0.002	7190.26	2	25	0.001	0.998	1.000

Table 6 presents the results of univariate analysis test to compare the two groups in post-test and follow-up or to examine the differences between the two groups in post-test and follow-up stages in self-efficacy and work-family conflict.

According to the results obtained in Table 6 or univariate analysis of covariance, there was a significant difference between the control group and experimental group in the self-efficacy and work-family conflict in the post-test and follow-up stages (p<0.001). In other words, resiliency promotion training in the post-test stage increased the mean scores of self-efficacy in the experimental group and the effect of training remained in the follow-up stage. The effect of resiliency promotion training on increasing self-efficacy is 92.8% in the post-test stage and 96.2% in the follow-up stage. According to the results, it can be

stated that resiliency promotion training in the post-test stage reduced the mean scores of work-family conflict in the experimental group and the effect of training remained in the follow-up stage. The effect of resiliency promotion training on reducing work-family conflict is 99.8% in the post-test phase and 99.8% in the follow-up stage.

Discussion

The aim of present study was to develop a training package to promote resiliency and evaluate its effectiveness on self-efficacy and work-family conflict in satellite employees of IOTC. The results of the present study revealed that in multivariate analysis, the main effect of the group was significant in all analyses by controlling the effect of pre-test scores of self-efficacy and work-family conflict. These results suggest that the effect of the resiliency promotion training on the research variables was significant in each of

Table 6. Results of univariate analysis of covariance on the effect of resiliency promotion training on self-efficacy and work-family conflict in post-test and follow-up stages

Variable	stage	Squared sum	df	Squared mean	F	sig	Effect size	Statist ical power
Self-	posttest	8240.348	1	8240.348	336.904	0.001	0.928	1.000
efficacy	Follow-up	9847.72	1	9847.72	662.26	0.001	0.962	1.000
Work-	posttest	28123.766	1	28123.766	10462.47	0.001	0.998	1.000
family conflict	Follow-up	23218.32	1	23218.32	13197.008	0.001	0.998	1.000

the post-test and follow-up stages. Also, the results of univariate analysis of covariance showed a significant difference between the control group and the experimental group in the self-efficacy variable and work-family conflict variable in the post-test and follow-up stages.

Results of the study revealed that resiliency promotion training has an effect on the self-efficacy of satellite employees and the effect of these trainings remained in the follow-up stage. The results of this study are in line with those of studies conducted by Sharifi et al., and Kiani, regarding the positive effect of resiliency on self-efficacy. In a study conducted by Kiani, results showed that at the individual level, self-efficacy and emotional stability had a positive and significant effect on job resiliency (11, 22)

Also, job resiliency played a mediating role in the relationship between emotional stability and job success and it showed a positive and significant effect on job success. At the organizational level, the contextual effect of organizational socialization on job resiliency was confirmed. It was also found that organizational socialization moderates the effect of self-efficacy on job success and the effect of emotional stability on job success. The mentioned study showed that personality traits along with the organizational variable of socialization could strengthen people resiliency in their jobs and thus improve their job success.

Also, a study conducted by Sagone & Caroli, examined the relationship between self-efficacy and resiliency among 130 Italian adolescents and the results showed that there was a positive and significant association between self-efficacy and resiliency, which were in line with the results of the present study (23).

As explained above, self-efficacy is one's beliefs and judgments about his or her abilities. When these beliefs and judgments

are deeper, a person will be more capable in performing his or her tasks. Self-efficacy skills can help employees to use their expertise properly in the face of work or even family problems and make them feel happy and successful. Self-efficacy skills such as decision-making, problem responsibility, etc. have a significant impact on family life and job performance. For example, people who work in critical and operational jobs and do not have the ability to make decision-making skills may make mistakes in the decision-making process in problems or difficult situations that require immediate and important decisions. Problem solving is another skill of self-efficacy skill (24).

Since employees face many new problems and issues in performing their job duties and operational activities, those who lack problem-solving skills may not be able to solve the problem timely, but those who have problem-solving skills are better able to solve problems with more confidence. Thus, learning problem-solving skills will enable employees to perform their job duties with more peace of mind. Since all people face many different issues and problems in family life, organization and society, if they lack self-efficacy skills and are not able to make the best decision at the right time or solve the problem, they will suffer stress and it can cause conflict or different problems in the family or organization. Employees who have learn the skills of training package can prevent or resolve many problems. Thus, the mentioned training package improves the resiliency of employees and has a positive effect on their self-efficacy, and can cause motivation and success in performing organizational tasks and solving the family problems.

The present study also revealed that the resiliency promotion training is effective in work-family conflict of satellite employees of IOTC and the effect of these trainings

remained in the follow-up stage. The researcher's search showed that no similar had been conducted on the statistical population studied in the present study. However, the study conducted by Tavangar et al., showed that the lack of self-efficacy in nurses increases work-family conflict. In other words, it creates a vicious cycle, resulting in negative consequences in both work and family areas (25). In line with this result, Erdwins et al., showed a negative relationship between work-family conflict and self-efficacy at work and family. They stated that the level of work-family conflict in women decreases as their self-efficacy in work and family roles increases (26).

Also, regarding the negative consequences of work-family conflict in the present study, the results of a research carried out by Duxbury & Higgins, showed that in the family dimension, conflict is a major source of stress for individuals and it is associated with negative consequences, including increased risks to health of employees' parents, depression, anxiety, misconduct misbehavior with spouse and children, poorly performing of parental responsibilities, decreased life satisfaction and poor mental health. Work-family conflict is a kind of conflict between the roles, which is very important to the organization and employees. This conflict can reduce productivity, increase stress and burnout. It also may cause family problems and conflicts in the family environment (27).

Thus, given the conditions of employees and their distance from the family, to reduce the conflict between employees and family and colleagues, strategies used to reduce conflict in the family and establish effective communication in the family and organization and life and social skills and some other skills and techniques that can play a role in reducing the conflict have been included in the training package (20).

Proper, close and friendly communication with family has a special importance in the lives of satellite employees. If they have difficulty in communicating with their spouse, children or other family members and are unable to solve family issues problems through negotiation, they will face many problems in family life and psychological trauma and stress. This psychological stress caused by not communicating properly with the family, can negatively affect employees in the workplace and make it difficult for them to perform their job duties properly.

In addition, if employees have poor organizational communication, the resulting stress can enter their family life and create further problems. Thus, effective family and organizational communication communication skills have a particular importance for satellite employees. By learning the relevant skills, they can improve organizational communication and reduce their psychological stress, and they can solve many problems through dialogue establishing a correct and close relationship with the family. Thus, having effective communication skills in the family and the organization has a great impact on creating employees' peace of mind, which leads to reduce work-family conflict in them.

Marital conflict is another important factor that has a great impact on peace of mind of employees. Marital issues are one of the most important issues that can play a very important role in family relationships and the comfort of couples. If couples have marital problems, they will suffer from depression and bad mood, as well as many psychological problems. Marital issues are one of the most important issues that can play a major role in family relationships and the peace of mind of couples. If couples have marital problems, they will suffer depression and bad temper, and thus they will experience many psychological problems. This bad temper and depression are transmitted to the workplace

and causes many problems in organizational communication or performing job duties. By learning these skills, employees can prevent marital problems and conflicts and thus depression and psychological stress, and it helps them to have a peace of mind at workplace.

Thus, improving marital relationships could have a great impact on reducing family-work conflict. In addition, skills such as problem solving, coping with problems and self-efficacy skills are effective in reducing work-family conflict and can increase productivity in the organization. Hence, it can be concluded that learning skills and techniques helps them to improve their capabilities to increase resiliency and reduce work-family conflict, resulting in development and promotion in social status and job satisfaction in the organization.

Conclusion

In general, the results of present study indicate the impact of training package techniques in improving the resiliency of satellite employees on increasing selfefficacy and reducing family-conflict, so that the mentioned package improved selfefficacy and reduced work-family conflict in the post-test and follow-up stages. Thus, based on the positive results obtained, organizations that have satellite jobs and have conditions similar with IOTC, can use this training package to increase self-efficacy and reduce work-family conflict of their employees, as it empowers them and increases productivity their the organization. Also, according to the results of the present study, it is recommended to implement the mentioned training package for all satellite employees so that employees can experience better family life and work life by learning the relevant skills and increasing self-efficacy skills and reducing work-family conflict and increase their quality of work and organizational productivity.

Limitations

One of the limitations of the present study is the implementation of the training package on the satellite employees of the Iranian Oil Terminals Company, so it may not be effective on non-satellite employees or satellite employees of other companies who have different conditions.

The basic characteristics of participants were different in two groups of study. As we used tests to overcome this weak point but it is recommended to consider this issue in designing next similar studies.

Recommendations

To implement the mentioned training package on the satellite employees of other companies, it is recommended to review and update this training according to the conditions of those employees.

Author's contribution

BJ, TK and FK developed the study concept and design. MAN acquired the data. BJ, TK and FK analyzed and interpreted the data, and wrote the first draft of the manuscript. All authors contributed to the intellectual content, manuscript editing and read and approved the final manuscript.

Informed consent

Questionnaires were filled with the participants' satisfaction and written consent was obtained from the participants in this study.

Funding/financial support

There is no funding.

Conflict of interest

The authors declare that they have no conflict of interests.

References

- Betancourt TS, Meyers-Ohki S, Charrow A, Hansen N. (2013). Annual Research Review: Mental health and resilience in HIV/AIDS-affected children—a review of the literature and recommendations for future research. Journal of Child Psychology and Psychiatry. 2013;54(4):423-444.
- MacPhee D, Lunkenheimer E, Riggs N. Resilience as Regulation of Developmental and Family Processes, Family Relation. 2015;64(14):153-175. https://doi.org/10.1111/fare.12100
- Ogińska-Bulik N, Zadworna-Cieślak M. The role of resiliency and coping strategies in occurrence of positive changes in medical rescue workers. Int Emerg Nurs. 2018;39(1):40-45. doi: 10.1016/j.ienj.2018.02.004.
- 4. Fathi D, Jamalabadi M. Investigating the role of resilience mediation in relationto academic support and academic vitality in students. Education Strategies. 2017;10(4):263-269. https://www.sid.ir/en/journal/ViewPaper.aspx?id=54010 2.
- Bandura A. Self-efficacy: The exercise of control. W H
 Freeman/Times Books/ Henry Holt & Co; 1997.
 https://www.amazon.com/Self-Efficacy-ExerciseControl-Albert-Bandura/dp/0716728508
- Liu H, Zhang C, Ji Y, Yang L. Biological and Psychological Perspectives of Resilience: Is It Possible to Improve Stress Resistance? Front. Hum. Neurosci. 2018;12(1):326-340. doi: 10.3389/fnhum.2018.00326.
- 7. Ahmad S, Batool A. Association Between Leadership Practices and Self-Efficacy of Personnel. Journal of Education and Practice. 2019;16(10):57-61.
- 8. Bandura A. Self efficacy in changing societies. New York: Freeman; 1995. https://www.passeidireto.com/arquivo/20645923/bandur a-a-1995-self-efficacy-in-changing-societies/16
- 9. Fereday J, Muir-Cochrane E. The role of performance feedback in the self-assessment of competence: a research study with nursing clinicians. Collegian. 2006;13(1):5-10. doi: 10.1016/s1322-7696(08)60511-9.
- 10. Bandura A. Regulation of cognitive processes through perceived self-efficacy. In G. H. Jennings & D. Belanger (Eds.); 1996.
- Sharifi N, Basharpoor S, Narimani M. Comparison of the Effectiveness of Resilience Training and Emotion Regulation on Psychological Well-being and Selfefficacy of Firefighters. Avicenna J Neuro Psycho Physiology. 2021;8(4):199-204. URL: http://ajnpp.umsha.ac.ir/article-1-288-en.html

- 12. Su X, Qin F, Zhen L, Ye X, Kuang Y, Zhu M, Yin X, Wang H. Self-efficacy and Associated Factors in Patients With Temporary Ostomies: A Cross-sectional Survey. J Wound Ostomy Continence Nurs. 2016;43(6):623-629. doi: 10.1097/WON.00000000000000274
- 13. Zamani A. The effectiveness of job decision making skills training on job decision self-efficacy and job indecision of Isfahan University students. Master Thesis, Isfahan University; 2006.
- 14. Margolis H, McCabe P. Self-efficacy: A Key to Improving the Motivation of Struggling Learners; 2010. Available at http://www.informaworld.com/smpp/title~connect=t9 14957660
- 15. Luthans F, Peterson SJ. Employee engagement and manager self-efficacy. Journal of Management Development. 2002;21(5):376-387. https://doi.org/10.1108/02621710210426864
- 16. Bodys-Cupak Majda A, Zalewska-Puchała J, Kamińska A. The impact of a sense of self-efficacy on the level of stress and the ways of coping with difficult situations in Polish nursing students. Nurse education today. 2016;4(5):102-107. https://doi.org/10.1016/j.nedt.2016.07.004
- 17. Özbağ GK, Ceyhun GÇ. Does Job Satisfaction Mediate the Relationship between Work-family Conflict and Turnover? A Study of Turkish Marine Pilots. Procedia Social and Behavioral Sciences. 2014;14(1):643-649. https://doi.org/10.1016/j.sbspro.2014.04.485
- 18. Matthews RA, Bulger CA, Barnes-Farrell JL. Work social supports, role stressors, and work–family conflict: The moderating effect of age. Journal of Vocational Behavior. 2010;76(1):78-90. https://doi.org/10.1016/j.jvb.2009.06.011
- 19. Shenavar F, Bashlideh K, Hashemi E, Naami A. Investigating the mediating role of work-family conflict in the relationship between Stress and social support with job satisfaction and family satisfaction. Journal of Psychological Achievements. 2015;22(1):111-132.
- 20. Lambert EG, Hogan NL. Work–Family Conflict and Job Burnout among Correctional Staff. Psychological Reports. 2010;106(1):19-26. doi:10.2466/PR0.106.1.19-26
- Lagerström M, Josephson M, Arsalani N, Fallahi-Khoshknab M. Striving for balance between family and work demands among Iranian nurses. Nurs Sci Q. 2010;32(2):166-72. doi: 10.1177/0894318410362543
- 22. Kiani E. Explain the multilevel pattern of factors determining job resilience and its consequences, Master Thesis, Faculty of Economics and Social Sciences of Shahid Chamran University of Ahvaz; 2017.

- 23. Sagone E, Caroli ME. Relationships between Resilience, Self-Efficacy, and Thinking Styles in Italian Middle Adolescents. Procedia Social and Behavioral Sciences. 2013;92(1):838-845. https://doi.org/10.1016/j.sbspro.2013.08.763
- 24. Ng TWH, Feldman DC. The effects of organizational and community embeddedness on work-to-family and family-to-work conflict. Journal of Applied Psychology. 2012;97(6):1233-1251. https://doi.org/10.1037/a0029089
- 25. Tavangar H, Alhani F, Vanaki Z. Decline of Self-efficacy: the Consequence of Nursing Work-family Conflict. Journal of Qualitative Research in Health Sciences. 2020;1(2):135-147. http://jqr1.kmu.ac.ir/article 90718.html
- 26. Erdwins CJ, Buffardi LC, Casper WJ, O'Brien AS. The relationship of women's role strain to social support, role satisfaction, and self-efficacy. Family Relations: An Interdisciplinary Journal of Applied Family Studies. 2001;50(3):230-238. https://doi.org/10.1111/j.1741-3729.2001.00230.x
- 27. Duxbury LE, Higgins CA. Gender differences in work-family conflict. Journal of Applied Psychology. 1991;76(1):60-74. https://doi.org/10.1037/0021-9010.76.1.60