

The Impact of On-The-Job Pilates Exercise on Job Satisfaction among the Female Employees of Urmia Electricity Distribution Company

El impacto del ejercicio de pilates en el trabajo sobre la satisfacción laboral entre las empleadas de Urmia Electricity Distribution Company

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ABSTRACT

This study intends to investigate the effect of on-the-job pilates exercise on job satisfaction. The study follows a quasi-experimental design with a pre-test and post-test method with a focus on control and experimental groups. The statistical population comprises of all female employees working at Urmia Electricity Distribution Company. The experimental group received 8 weeks of exercise doing sessions (3 sessions per week, 30 minutes per session) in Electricity Distribution Company gym while the control group did not receive any treatment. According to the results obtained, one can conclude that on-the-job Pilates exercise as sports technology had an effect on the job satisfaction of female employees at Urmia Electricity Distribution Company.

Keywords: Pilates exercise, job satisfaction, female employees

RESUMEN

Este estudio intenta investigar el efecto del ejercicio de pilates en el trabajo sobre la satisfacción laboral. El estudio sigue un diseño cuasiexperimental con un método previo y posterior a la prueba con un enfoque en el control y los grupos experimentales. La población estadística se compone de todas las empleadas que trabajan en Urmia Electricity Distribution Company. El grupo experimental recibió 8 semanas de ejercicio haciendo sesiones (3 sesiones por semana, 30 minutos por sesión) en el gimnasio de Electricity Distribution Company, mientras que el grupo de control no recibió ningún tratamiento. Según los resultados obtenidos, se puede concluir que el ejercicio de Pilates en el trabajo como tecnología deportiva tuvo un efecto en la satisfacción laboral de las empleadas de Urmia Electricity Distribution Company.

Palabras clave: ejercicio de Pilates, satisfacción laboral, empleadas

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Introduction

One can understand from a meticulous attention that the world is full of machine-based and computer-based lifestyles which itself emphasizes that employees at different management and execution levels, based on the type of task they accomplish, are prone to be infected by different diseases such as the excessive obesity, overweight, neuropsychiatric disorders, types of arthritis, blood pressure, blood lipids, (Ramezan, 2015) and various cardiovascular diseases and heart attacks. In addition, serious diseases might be experienced by less active employees, and the aforementioned problems can have a negative impact on job satisfaction and working performance which subsequently lead to absenteeism, inefficiency, and ineffectiveness (Dayang, 2012)

Concerning job satisfaction, unsatisfied employees are subject to various diseases including the headaches to the heart problems (Tojari, 2010). United States Psychology Association has reported a 300- milliard dollar cost of lack of job satisfaction due to the absenteeism, poor working performance, and health cares (Dayang, 2012). Considering these statistics, less attention has been directed toward the working context programs which trigger the psychological and physical health of employees (Kull, 2013). The concept of job satisfaction reveals positive emotions and attitudes of an individual with respect to his job (Mehravian, 2013). What is meant by high levels of job satisfaction is that the individual likes his job, values his job, and holds positive attitudes towards his job so that he privileges of good and optimal senses towards it (Tojari, 2010).

The Pilates exercising method is a mixture of sports which concentrate on improving the flexibility and strength across all body organs without bumping or eliminating muscles (Abdol, 2013). The goal of Pilates concerning physical strengthening is to provide a healthy physical status for performing the daily tasks and other relevant physical activities. Since such an exercise is done in erected and resting positions without the need for jumping and leaping, possible injuries are reduced (Shafi, 2010). Positive job-related feelings are correlated to the physical and psychological health, and increased physical readiness results in increased satisfaction of individual toward his job and work context and decreased absenteeism (Bernaldo, 2013). Kol (2013) and Dehkordi et al. (2016) reported in their studies that Pilates exercise doing offers beneficial uses both physically and psychologically which leads to a strengthening of muscles, flexibility of joints, stimulation of blood circulation, and reduction of stress (Badran, 2013). Positive job-related feeling is associated with the physical and psychological health, and increased physical readiness results in increased job satisfaction of an individual and decreased absenteeism. Chrisy and Arnold (2016) indicate that a majority of employers seek solutions to improve the health, efficiency, spirit and job satisfaction, and explore ways to reduce the care costs and workers' absenteeism which are all achieved by increasing the physical activity (Beehr, 2012).

Since previous studies in the field of sports management have not concreted on generalizing and leading the sports in organizations or have not examined the effects of sports on organizational behavior, and that most of studies have been undertaken in the field of sports community and not the non-sports community, as well as the fact that the influences of physical activity on job satisfaction of employees have not been investigated so far, the current study was developed to examine if Pilates exercise has any effects on job satisfaction among the female employees at Urmia Electricity distribution Company. This was achieved through considering the physical and psychological benefits of the aforementioned sport, considering the closed-space of the gym in which the employees were asked to do the exercise, and considering the notion that the researcher was a professional Pilates coach who was also fluent on all benefits and techniques of this exercise.

Methodology

Since the results of the study attempt to increase job satisfaction, one can say the present study is applied in terms of the goal. Also, the study follows a quasi-experimental design in which the effect of Pilates exercise on job satisfaction of female employees at Urmia Electricity Distribution Company is examined. Therefore, two groups were considered with a focus on the pre-test and post-test design. The statistical population comprises of all 54 female employees working at Urmia Electricity Distribution Company.

The conditions for the experimental and control groups were the same and purposeful non-random sampling method was used. 40 individuals were ready for taking part in the study, thus 40 individuals were determined as the available sample among whom 20 subjects were assigned to control group since they did not meet the conditions for taking part in Pilates exercising sessions and the other 20 subjects were assigned to experimental group who were interested in participating in Pilates exercising sessions.

The present study made use of Minnesota's (1970) Job Satisfaction questionnaire. The demographic section involved the personal information, namely, age, level of education, working experience, and the questionnaire included 22 items concerning job satisfaction. The questionnaire comprised of seven subscales, namely, payment system, type of job, occupational interest, organizational climate, leadership style, physical conditions of working context, and physical status. Also, the questionnaire was developed on Likert-seven-point scale. To determine the validity of the questionnaire, content analysis and factor analysis were used. To this end, the questionnaires were initially sent to 10 experts who were mainly the university professors and researchers of the sports management field. Subsequently, in order to finalize the factor analysis, the questionnaires were distributed randomly among 20 participants. Since the extraction subset of all factors in job satisfaction questionnaire is greater than 0.05, the validity of the questionnaire was confirmed (as 89%) in terms of all evaluation indexes of factor analysis. Using Cronbach alpha coefficient and the pilot study (questionnaire was distributed among 30 participants and recollected subsequently) was estimated as 92%.

In November 2018, Job Satisfaction questionnaire was distributed among experimental and control groups, and the data obtained were used as the pre-test. Afterward, the experimental group took part in Pilates exercising sessions which were held 8 weeks (3 sessions per week, 30-minute length per session) at 14:30 in Electricity Distribution Company gym while the control group received no treatment. The first four weeks were followed using the Pilates Level 4 (elementary) exercise and the following four weeks were pursued using the Pilates Level 3 (intermediate) exercise with an aim to exert additional exercise effect on employees. Having completed 8 weeks of treatment, the job satisfaction questionnaire was distributed among the experimental and control group as the post-test. Ultimately, the results obtained were analyzed using SPSS software.

The statistical methods were followed using descriptive and inferential dimension. Descriptive statistics included the demographic data and the inferential statistics were concerned with examining the research hypotheses. Predictable inferential method followed in this study was the use of Kolmogorov-Smirnov test (to determine the normal or non-normal distribution of data). Considering the effect of Pilates exercise effect on job satisfaction of female employee working at Electricity Distribution Company and that the study follows a quasi-experimental design with a focus on pre-test and post-test method, one-variable covariance test (ANOVA) was used.

Results

Descriptive results: The maximum frequency of age was related to the age range of 36-40 years (37.5%) and the minimum frequency of this type was related to the age range of less than 25 years (5%). Also, the majority of participants held Bachelor of Arts degree (52.5%) and only 3% of subjects held the Ph.D. degree. Furthermore, 17 participants had 15-25 years of job experience and 5 subjects reported less than 5 years of job experience.

Table1. Kolmogorov-Smirnov test

Pre- test		Control group		Exam group	
		Post- test	Pre- test	Post- test	
Health condition	Statistics	0.979	1.20	0.844	0.766
	Significant	0.293	0.111	0.474	0.600
Organizational climate	Statistics	0.872	1.06	0.683	0.975
	Significant	0.432	0.203	0.739	0.298
Leadership style	Statistics	1.45	0.885	0.913	1.31
	Significant	0.029	0.414	0.375	0.980
Payment system	Statistics	1.18	0.874	0.802	0.111
	Significant	0.122	0.429	0.701	0.510
Job Type	Statistics	1.29	1.20	0.913	0.471
	Significant	0.069	0.064	0.375	0.980
opportunity of progress	Statistics	1.09	0.712	0.410	0.842
	Significant	0.112	0.690	0.880	0.522
physical condition	Statistics	1.27	1.32	1.09	0.894
	Significant	0.079	0.059	0.185	0.400
Job satisfaction	Statistics	1.09	0.712	0.410	0.842
	Significant	0.112	0.690	0.880	0.522

The results of Kolmogorov-Smirnov test (shown in Table 1) indicates that the level of significance for both experiment and control groups is less than 0.05 ($P < 0.05$), thus confirming the normal distribution of data.

Table2. Covariance analysis (Pilates exercise is considered as independent variable)

dependent variable	source	Average squares	DOF	F	sig	Eta
Job satisfaction	Between subjects	3.04	1	4.36	0.044	0.106
	group	3.99	1	5.75	0.022	0.135
	Error	25.7	37	0.695		

Organizational climate	Between subjects	3.049	1	3.049	0.042	0.107
	group	4.78	1	6.03	0.019	0.014
	Error	3.04	37	0.792		
Job Type	Between subjects	4.42	1	7.50	0.009	0.169
	group	6.43	1	11.4	0.02	0.236
	Error	20.8	37	4.78		
Leadership style	Between subjects	7.54	1	18.1	0.001	0.329
	group	0.184	1	0.442	0.51	0.012
	Error	15.0	37	0.416		
Health condition	Between subjects	2.40	1	6.45	0.015	0.289
	group	8.90	1	23.9	0.001	0.067
	Error	28.6	37	0.775		
physical condition	Between subjects	25.7	1	0.695	0.001	0.003
	group	13.5	1	0.695	0.001	0.018
	Error	13.5	37	0.365		
Payment system	Between subjects	6.235	1	11.4	0.02	0.236
	group	0.168	1	0.308	0.582	0.008
	Error	20.1	37	0.545		
opportunity of progress	Between subjects	3.03	1	6.26	0.044	0.145
	group	3.99	1	1.66	0.022	0.043
	Error	25.7	37	0.698		

According to Table 2, the level of significance for covariance analysis for the experimental group was obtained as 0.022. Since P value was reported less than 0.05, the research hypothesis is confirmed which emphasized that on-the-job Pilates exercise has an impact on job satisfaction of female employees working at Urmia Electricity Distribution Company. Also, the level of significance for the subscales were obtained as follows: organizational climate (0.019), job type (0.02), and physical status (0.001) which are all less than 0.05, representing that Pilates exercise has an impact on the afore-mentioned subscales. Additionally, the level of significance for other subscales were obtained as follows: leadership style (0.51), physical conditions (0.410), payment system (0.308), and development opportunity (0.22) which are all greater than 0.05, thus emphasizing that Pilates exercise does not have any impact on the afore-mentioned subscales.

Discussion and Conclusion

Most of the jobs including the employees lack the element of mobility (Dayang, 2012). The physical activity not also improves the performance and health of employees but also leads to job satisfaction an improvement of job performance quality and results in reduced absenteeism (Etal, 2013). Pilates exercise is composed of controlled movements which make harmony between the body and brain and increases the capability of the body in every age (Kull, 2013). The objective of the current study was to explore the effect of on-the-job Pilates exercise on job satisfaction of female employees working at Urmia Electricity Distribution Company. The finding, indicating that Pilates exercise had an effect on job satisfaction, is consistent with the one reported by Berand et al. (2013), Robert et al. (2012), and Tejari et al. (2011). Also, the result obtained concerning the effect of Pilates exercise on organizational climate corresponds to the findings of Nazari et al. (2013). It is argued that interpersonal relations among employees, communications and relation in general, is one of the most important variables of organizational climate (Robert, 2013). Greetings and social interactions among employees are the prerequisite and necessary conditions for creating a positive organizational climate. Thus, interpersonal relations are one of the important variables for evaluating the organizational climate. According to Henzelman et al. (2012, workplace physical activity leads to increase cooperation and improvement on interpersonal relations among the employees, leading to the creation of a suitable organizational climate which supports the finding of the present study.

It was also found that Pilates exercise in the workplace has an effect on the type of job among the female employees of Urmia Electricity Distribution Company. This is supported by Biher et al. (2012) who emphasized that physical activities in the workplace increase the job-related capabilities and job satisfaction which directly influence the physical and psychological health. Such a finding was confirmed in the current study, manifesting that increased physical and psychological health in employees influences the type of job and that employees get positive attitudes towards their job.

Another finding illustrated that on-the-job Pilates exercise does not have any effect on leadership style as one of the dimensions of job satisfaction. Thus, one can infer that leadership style is defined as behavioral characteristic concerning the leading, motivation, guidance and management of a group, and according to the findings of Bikoi Mogadam et al. (2014), suitable leadership style is considered as one of the most important organizational factors and that manager opts for a leadership style with an aim to represent the most effective charisma. Choosing a suitable leadership style which is congruent to the extrinsic motivation can lead to the fulfillment of belonging, respect, position, performance improvement, job promotion and job satisfaction needs, thus bringing about individual and organization purpose attainment. As indicated by the same researchers, choosing leadership style is mostly related to the time requirement and conditions which rule the organization, and physical activities do not have to do with the leadership style choosing on the part of managers. Therefore, there was no relationship between these two variables as reported by the participants of the current study.

As for the other findings reported in this study, Pilates exercise does not influence the development opportunity as a dimension of job satisfaction which is supported by Atal (2010). One can determine that development opportunities emphasized the establishment of equal opportunities for personnel development. Tejari (2008) believes that when the employer provides development opportunities in technical, management and leadership skills for employees, the employees feel much more supported. Pilates exercise would not have any effect on technical instructions of job and required technical skills. Findings of the study confirmed the lack of relationship between these two variables.

The results also indicated that Pilates exercise does not have any effect on the payment system as one dimension of job satisfaction which is consistent with the one demonstrated by Dayang et al. (2012). It is feasible to mention that the payment system is directly tied to the payment and income. Dessler (2006) believes that the fundamental and ultimate goal of individuals who are employed is their financial privilege and this is one of the effective strategies of organizations to attain their goals and increase the efficiency of employees. Accordingly, no association between these two variables was found in the current study.

One can declare that increased physical readiness in workplace results in increased psychological and physical readiness. In other words, employees hold better spirits in their workplace, thus enjoying higher levels of motivation for extended work challenges and accepting various responsibilities. Considering the motivation theories, people experience motivational factors while accomplishing a task and these factors can have positive impacts on their job-related feeling, and consequently, increase their job satisfaction and overall efficiency capability. In addition, increasing physical readiness results in increased tendency of individual toward accepting added responsibility, effort-exerting tasks, and extended development and growth. Therefore, concerning Maslow's hierarchical needs, respect and self-actualization needs of individual are fulfilled in organization which brings about increased job satisfaction. Accordingly, the researcher found the similar results highlighting that Pilates, as a suitable physical activity for the body and psychological dimension, has a positive effect on increasing the job satisfaction among female employees at Urmia Electricity Distribution Company. Since job satisfaction is one of the important factors pertaining to the performance of individual and increasing the organizational efficiency, managers and supervisors should gain knowledge of the factors which give rise to employees' job satisfaction and offer effective solutions through establishing sports spaces in the workplace and designing extra-curriculum programs such as Pilates.

BIBLIOGRAPHIC REFERENCES

- Abdol- Hamid Hassan, E. A. (2013). "Pilates exercises influence on the serotonin Hormone, some Physical Variables and the Depression Degree in Battered Women." *World Journal of Sport Sciences*, 4(7): 11-89.
- Badran, A. (2013). "Women and coexistence with stress." *Gezraht E1 Arabic Cairo*. (5) 2: 25-28.
- Beehr, T. (2012) "Job Stress, Employee Health, and Organizational Effectiveness: a Facet Analysis, Model, and Literature Review." *personnel psychology*, 3(1): 167-169.
- Bernaldo, L. M. (2013). "The effectiveness of Pilates training in healthy adults: an appraisal of the literature." *Bodywork and Movement Therapies*. 12(2):101-106.
- Dayang, N., and Munna, A. (2012). "Effect of wellness programs on job satisfaction, stress and absenteeism between two groups of employees (attend and not attend)." *Social and behavioral sciences*, 3(1): 21-26.
- Etal, K. I. A. (2013) "The effectiveness of worksite physical activity programs on physical activity, physical fitness and health." *Clinical Journal of Sport Medicine*, 6(3): 75-83.
- Kull, M. (2013). "The relationships between physical activity, health status and psychological wellbeing of Fertility-aged." *Women." Journal of Medicine and Science in sports*. 12(2): 241-248.
- Mehrabian, Fardin., Feli, H., and Fazli, M. (2013). The role of general health in job satisfaction of employees. *Journal of Health and Hygiene*, 6(1):338-330.

- Ramezan Khani, A., and Hag Doosti, A. (2015). Investigating the determinants of physical activity in the workplace. *Razi Journal of Medical Sciences*. 14 (2): 14-24.
- Robert, L. (2013). "The Effects of Workplace Health Promotion on Absenteeism and Employment Costs in a Large Industrial Population." *Program Costs and Benefits*. 4(1): 55-664
- Shafi Abadi, A. (2010). Relationship between Job Satisfaction and Mental Health of University Employees. *New Quarterly Journal of Industrial Psychology*. pp 28-29.
- Tojari, F., and Mahmood, A. (2010). Survey on Physical Activity in the Workplace Case Study of Male Post Officers. *Sports and Motorcycling magazine*. 3 (7):7-17
- Tojari, F., Sheikh Alizadeh., and Azarbaijan, M. (2010.) Survey on Physical Activity in the Workplace, Study of Male Post Officers. *Sports and Mobility Magazine*, 3(7): 7-17