

### Analysis of In-service Virtual Training Courses from the Expert Staffs' Perspective of Vice Chancellor for treatment of Mashhad University of Medical Sciences (2013)

**Background:** In-service education is one of the best and major methods to provide, train and improve the performance of the staffs. This study aims to determine the strengths and weaknesses of the virtual trainings from the staffs' perspective of Mashhad University of medical sciences.

**Methods:** this is a cross-sectional study conducted among staffs from different parts of the therapy department of Medical sciences of Mashhad University. Questionnaires were used to gather the data. The questionnaire included personal information, assessment of staffs' satisfaction of virtual trainings, contents and materials, professors, services and the facilities of university, whether the trainings are practical and useful, and the quality of virtual training website. The data were analyzed by SPSS (16-version).

**Results:** there was no statistical significant relationship between the staffs' satisfaction and gender, age, marital status, degree, major of study, computer proficiency and internet access at home. None of the demographic factors were influential on staffs' satisfaction of the virtual trainings. Virtual training practicality had the highest average of the staff's satisfaction and the next one was about the contents and materials.

**Conclusion:** from the staff experts' perspective the virtual trainings are practical and provide good contents.

**Key words:** Training, In-service, Virtual, Staff

Shapour badiee ava<sup>1</sup>, Yalda ravanshad<sup>2\*</sup>, Homaira froozandehfar<sup>2</sup>, Sakineh samadi hasanabad<sup>2</sup>

<sup>1</sup> Complementary Medicine research Center, Mashhad University of medical science

<sup>2</sup> Treatment affair of Mashhad University of medical science

\* Fakoori street, Mashhad, IRAN, Postal code: 9177899191

Fax: 8713609  
phone: +98 0511 8799896  
Email: ravanshady@mums.ac.ir

### دراسة الدورات التعليمية ضمن الخدمة من خلال روية القسم العلاجي في جامعه مشهد للعلوم الطبية .

**التمهيد و الهدف:** إن التعليم ضمن الخدمة يعتبر من الصم و افضل أساليب تأمين و تربية و تحسين اداء العاملين في المؤسسات إن الهدف من هذه الدراسة تبين نقاط القوة و الضعف في التعليم المجازي من خلال روية موظفي جامعه مشهد الطبية.

**الأملوب:** إن هذه الدراسة المقطعية التي تم اجرائها في القسم العلاجي في جامعه مشهد للعلوم الطبية.

تم تجميع المعلومات عبر استمارات تشتمل على المعلومات الشخصية. مستوى الرضا من التعليم المجازي (المتضمنة على الفعالية في العمل. المادة التعليمية. الاساتذة. الخدمات و الإمكانيات في الجامعة) تم تحليل المعلومات عبر برنامج SPSS.

**النتائج:** لم يكن هناك اي ارتباط ذوقية من جره نسبة رضا الموظفين الجنس و السن و الزواج و المقطع الدراسي و المجال الدراسي و مستوى معرفه العمل بالحاسوب و وجود الانترنت في المنزل من جره اخرى.

لم يكن اي عامل ديموغرافي ذي دل في مستوى رضا الموظفين من الدورات المجازية.

اعلى مستوى من الرضا كان في مجال مقوله إن هذه الدراسة تغيرنا بشكل عملي و من بعد ذلك المواد و المحتوى التعليمي.

**الإستنتاج:** قال الاخصائيون في هذا المجال إن التعليم المجازي كان مفيداً و ذو محتوى مطلوب.

**الكلمات الرئيسية:** التعليم . ضمن الخدمة . المجازي. موظفوا المؤسسة.

### بررسی دوره های آموزش ضمن خدمت مجازی از دیدگاه کارشناسان ستادی معاونت درمان دانشگاه علوم پزشکی مشهد در سال ۹۱

**زمینه و هدف:** آموزش‌های ضمن خدمت یکی از مهم‌ترین و بهترین راه‌های تأمین و تربیت نیروی انسانی و بهبود عملکرد کارکنان در سازمان‌هاست. هدف این مقاله آگاهی از نقاط قوت و ضعف آموزش‌های مجازی، از نظر کارکنان دانشگاه علوم پزشکی مشهد می باشد.

**روش:** این مطالعه به صورت مقطعی در واحدهای ستادی معاونت درمان دانشگاه علوم پزشکی مشهد با گردآوری اطلاعات از طریق پرسشنامه ای شامل مشخصات فردی، سنجش رضایتمندی کارکنان از آموزش‌های مجازی (شامل بخشهای کارایی شغلی، مواد و محتوای آموزشی، اساتید، خدمات و امکانات دانشگاه) کیفیت وب سایت آموزش مجازی، تهیه شده بود- اجرا شد و اطلاعات با نرم افزار spss16 آنالیز شد.

**یافته ها:** رضایتمندی کلی کارکنان با جنسیت، سن، تاهل، مقطع تحصیلی، رشته تحصیلی، میزان آشنایی با کامپیوتر و دسترسی به اینترنت در منزل ارتباط معنی داری نداشت. هیچ کدام از عوامل دمو گرافیک در میزان رضایت کارکنان از دوره های آموزش مجازی موثر نبود بیشترین میانگین درصد از کل مربوط به رضایت کارکنان از مقوله کاربردی بودن آموزش مجازی بود و پس از آن کارکنان از مواد و محتوای آموزشی رضایت خوبی داشتند.

**نتیجه گیری:** از دیدگاه کارشناسان ستادی آموزش‌های مجازی کارکنان کاربردی بوده و از محتوای مطلوبی برخوردار است

**واژگان کلیدی:** آموزش، ضمن خدمت، مجازی، کارکنان ستادی

### ملازمت کے دوران آن لائن تعلیم مشہد یونیورسٹی آف میڈیکل سائنس کے ماہرین کی نظر میں۔

**ہیک گراؤنڈ:** ملازمت کے دوران تعلیم افرادی قوت کو مہارت دینا اور افرادی قوت حاصل کرنے کا بہترین راستہ ہے۔ اس تحقیق کا مقصد آن لائن تعلیم کے نقائص اور مثبت پہلوؤں کا جائزہ لینا ہے۔ یہ تحقیق مشہد یونیورسٹی آف میڈیکل سائنس میں انجام دی گئی۔

**روش :** اس تحقیق میں سوالنامے دئے گئے اور جن میں ذاتی کوائف اور آن لائن تعلیم کے شعبے سے کارکنوں کی رضایت اور اطمینان کا جائزہ لیا گیا تھا۔ یہ جائزہ ملازمت، تعلیمی مواد، اساتذہ کی کارکردگی، اور یونیورسٹی کی طرف سے پیش کئے جانے والے وسائل و ذرائع کے لحاظ سے لیا گیا۔ ویب سائٹ کے معیار کا جائزہ لیا گیا اور ڈاٹا کا تجزیہ ایس پی ایس ایس سافٹ ویئر سے کیا گیا۔

**تجزیہ:** کارکنوں کی رضایت مندی کا رابطہ عمر، شادی شدہ یا غیر شادی شدہ ہونے، تعلیمی معیار، کمپیوٹر سے آشنائی کے معیار، ڈیموگرافیک مسائل اور انٹرنیٹ رکھنے سے بالکل نہیں دیکھا گیا۔ کارکن اس بات سے بہت مطمئن تھے کہ آن لائن تعلیم کو عملی طور پر اپنایا جاسکتا ہے، اسی طرح کارکن تعلیمی مواد سے بھی راضی تھے۔

**سفارشات :** ماہرین کی نظر میں آن لائن تعلیم عملی شکل میں لائی جاسکتی تھی اور اس کا مواد بھی فائدہ مند تھا۔

**کلیدی الفاظ:** آن لائن تعلیم، ماہرین، انٹرنیٹ۔

## INTRODUCTION

In today complex and dynamic world, learning is highly important that plays a crucial role in the staff improvement (1).

Particular and considerable attention should be given to educate and improve the staffs. Moreover, in-service training takes a leading role in upgrading the organization performance. In-service trainings usually lead to the promotion of existing capacities, facilitation of knowledge acquisition, enhancement of skills and potentials and performance improvement. One of the best and most important ways to train and empower the staffs in organizations and ministries is in-service training.(2)

The training of the staffs could be highly influential in gaining experiences and increasing the performance of the organization. It could also ensure the survival and integrity of the organization with strategic development (3).

In the third fast-paced millennium, expanding educational opportunities have become the pressing and chief concern of the governments as the nature of market economy and occupation has changed; there are various different educational needs due to the explosion of sciences and technology. Lifelong learning and education has become a necessity because of rising expectations. Whilst there are limited sources, the population is growing and the demand for flexible learning opportunities increases owing to the fact that the attendees are not able to be present in the courses regularly (4). Although the teaching and learning arena have not changed a lot in comparison with other arenas since two thousand years ago up to present, nowadays this field has enhanced a lot with the help of information technology, the use of technology improves motivation, learning, experience and innovation (5).

Virtual education has conceived a new paradigm that lets anyone learn in any field, anytime and anywhere. The students and professors are not obliged to be in the same place and at the same time. The content of the course are presented for the students through course management software, multimedia resources, internet, and video conference. For individual and group learning activities the students could interact with their professors and classmates through computer(6).

Since the staffs were too occupied and had a whole host of problems to participate in the in-service training courses, the essence of distance education courses became much more apparent. In this study, we have searched for the strengths and weaknesses of virtual training provided for the staffs so that they could be used in the policy-making of the organization.

## METHODS

This is a cross-sectional study. The study population was the expert Staffs of **Vice Chancellor for treatment** of Mashhad University of Medical Sciences who have worked more than a year in this department. Questionnaires were distributed to 110 eligible staffs. 53 people filled in the questionnaires and returned to the researcher.

A questionnaire of 48 questions was devised in different parts by the researcher. There were 28 questions in the first

part including personal information, assessment of the staffs' satisfaction of virtual training (12 questions about the practicality, 10 questions about the educational contents and materials, 3 questions about the professors, and 3 questions about the services and facilities of the university). 12 questions asked about the quality of the virtual training workshop. All of the questions, except the demographic part, were developed according to Likert measurement scale. A 5-point scale developed ranging from strongly agree, agree, neither, disagree, and strongly disagree, respectively. The reliability of the questionnaire was estimated by Cronbach's  $\alpha$  (alpha), which demonstrated good reliability in all subjects and the whole questionnaire. Table 1 shows the estimated Cronbach's  $\alpha$  in all 5 subjects and in the whole questionnaire.

The validity of the questionnaire was determined by experts and managers. The target population completed the questionnaires. The data were analyzed by SPSS 16 and described by average and standard deviation; then quantitative variables was analyzed by t-test exams and ANOVA.

**Table 1. Cronbach's alpha estimation in all subjects**

Subject	Cronbach's alpha
The practicality of virtual training	0/936
Educational contents and materials	0/921
Professors	0/840
Services and facilities of the university	0/864
The quality of the website	0/939
Total score	0/963

## RESULTS

Initially, the demographic Information of the staffs was scrutinized and is presented in the two following tables.

In each subject, the average of the numbers is calculated and the overall score of each part is compared with T-test. In all of them the *Pvalue* is over0/0001, and then the percentage of the total score gained by each subject was estimated. (Table 3)

The overall satisfaction of the staffs was evaluated. According to the results of T-test and ANOVA, there was no significant association between the staffs' satisfaction and gender, age, marital status, degree, major of study, computer skills and internet access at home(table4).

## DISCUSSION

In California a study was conducted to determine the influencing factors in students' satisfaction of virtual education; and the target population was 43 nurses. The relationship between learners' characteristics, educational variables and students' satisfaction were measured. The results revealed that learners' characteristics and

educational variables were influential on students' satisfaction of virtual education. The students' characteristics that had impact on the satisfaction included: previous courses in IT, technology skills, and technology use during courses and the learners' age (6). In another

study, the managers and staffs of Tehran University of medical sciences were asked about in-service virtual education. 57 persons (70/3%) of the staffs and 25 persons (%83/3) of the managers believed that the attending classes require be reviewing and changing. Moreover, 74% of the staffs (60 persons) and % 93/3 of the managers (28 persons) declared that e-learning could solve the in-service trainings' problems. 60 persons (74%) of the staffs and 20 persons of the managers (66/7%) believed that the staffs' computer skills are good enough for virtual trainings (7).

In another study conducted in Tehran University of medical sciences, the staffs' satisfaction of in-service virtual training was assessed. 651 of the staffs filled in the satisfaction e-questionnaire which asked about the content, methods of e-learning courses and programs. The highest average was for staffs' satisfaction of the program  $3/96 \pm 0/9$  (out of 5) and the least average ( $3/84 \pm 0/8$ ) of satisfaction was for the contents. There was no association between other variables such as work experience, type of employment and major of study and the staffs' satisfaction. It has concluded that the staffs were to a considerable extent satisfied with e-learning; and since they were not satisfied with the contents, it was necessary to enhance the contents of the courses.(8)

A research was done in Arak University of medical sciences about the influence of in-service trainings on the staffs' job performance. They used questionnaires to collect data. The

Demographic Profile		N	(%)
Gender	Male	30	(56)
	Female	23	(43)
Age	Under 30 years	6	(11.3)
	Over 30 years	47	(88.7)
Marital status	Married	50	(94.3)
	Single	3	(5.7)
Degree	Diploma	7	(13.2)
	Technician	4	(7.5)
	BA/ BS	27	(50.9)
	MA/ MS	11	(20.8)
	PHD	4	(7.5)
Major of study	Majoring in computer	15	(28.3)
	Not related to computer	38	(71.7)
Computer skills	Basic	3	(5.7)
	3 skills of ICDL	9	(17)
	7 skills of ICDL	41	(77.4)
Experience in using the internet	Less than 6 months	2	(3.8)
	Between 6 months and 2 years	3	(5.7)
	More than 2 years	48	(90.6)
Internet access at home	Yes	34	(64.2)
	No	19	(18)

Variable	P value
Gender	0/44
Marital status	0/064
Degree	0/89
Major of study	0/072
Computer skills	0/706
Internet access at home	0/795
Age	0/338

Subject	Total number	Mean ( SD)	The mean percentage of total
The practicality of virtual training	60	45/4 (8/6)	75/6
Educational contents and materials	50	36 (6/4)	72/2
Professors	15	92/4 (9)	60
Services and facilities of the university	15	2/4 (10/2)	74
The quality of the website	60	7/9 (44/4)	68
Total score		200	

---

**REFERENCES**


---

1. Emamzadeh Qasemi, H.S. The influence of in-service education for nurses and their occupation in surgery section, *Medical Sciences Education journal*, 2004, 4 (12):12-18
2. Rezaee, A. The influence of in-service education on job performance, *Economy magazine*, 2004, 19 (4), 81-100
3. Rabiee, F. The influence of in-service training courses on the expert staffs' performance of the university. *Journal of Instructional Strategies*. 2011,19(4),81-100
4. Ghorchian, N. Gh. & Jafari, P. Education in Virtual University: providing an appropriate model for virtual university in Iran. *Report and discourse magazine*. 2005 16,17-20
5. Fathi, K. Assessing the influence of virtual training in Iran educational system in Mashhad.(case study Ferdosi university of mashhad) *Information and Technology in Education magazine*.2011,1(4),20-25
6. Alestalo, M. H. & Peltola, U.The problem of the market - oriented university. *Higher Education*,2006, 52(2), 251-281
7. GREGORY A.. Predictors of Student Satisfaction in Distance-Delivered Graduate Nursing Courses: What Matters Most?. *Journal of Professional Nursing*, 2003,19(3),149-163
8. Shohreh, A. In-service training for the staffs and managers of Tehran University of medical Sciences. *Journal of Instructional Strategies*.2010,3(2),47-50
9. Alavi, S.Sh. & Shariati, M. The staffs' satisfaction of in-service trainings at Tehran University of medical Sciences.2010,10(3),200-210
10. Fathi, K. Assessing the influence of virtual training in Iran educational system in Mashhad. *Information and Technology in Education magazine*. 2011,1(4),21-6