

Original Article

Evaluation of Level of Satisfactory Reaction Among Participants Attending the First Session of Masters of Health Professions Education Through level 1 of Kirkpatrick Model

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Abstract

Objective: The objective of this study is to evaluate participant's reactions for satisfaction through level 1 of the Kirkpatrick model after 1st contact session of MHPE training Program.

Methodology: This cross-sectional study is carried out through convenience sampling among 18 participants of the MHPE programme during their first contact session from March 8th 2023 to 14th March, 2023. Those students who had at least 80% attendance in the first contact session, and were present on the day of data collection were enrolled in the study. The exclusion criteria included those students with less than 80% attendance, and not willing to participate. In this study, the reaction of the students to the MHPE programme (Level I of Kirkpatrick model) was determined by evaluating five core items.

Results: Out of 18 students, 12 males and 6 females from different areas of specialties were enrolled in the study. Sixteen out of 18 students were overall satisfied, enhanced their knowledge, and showed conscientiousness over relevancy in an emergency. Fifteen out of 18 students mentioned that the content was relevant to their daily job, and 17 out of 18 students stated that they would recommend this course to others.

Conclusion: The present study has shown that overall, participants showed satisfactory reaction towards the first session of MHPE program.

Keywords: Kirkpatrick model, MHPE program, Program evaluation, reaction

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Introduction

A successful program running in an organization must plan and prepare for periodic evaluations to prosper efficiently. Educators around the globe have multi-layer program evaluations for intrinsic and extrinsic motives. Primary extrinsic reason are often found as a prerequisite for medical education accreditation to medical councils.^{1,2} Basically the medical education program evaluation utilizes statistics and facts to assess the value and worth of the educational program.³ Formally the process of Programme evaluation is defined as the, "systematic collection and analysis of

information related to the design, implementation and outcomes of a program, for the purpose of monitoring and improving the quality and effectiveness of the program."⁴ The program evaluations approach in medical education considers various paradigms such as objective-oriented, process-oriented, and participant-oriented.⁵ These educational evaluation approaches serve as the theoretical framework for the four commonly accepted models of program evaluation. The experimental/quasi-experimental approach to evaluation, the Kirkpatrick approach, the Logic Model, and the Context/Input/Process/Product (CIPP) model.⁴

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Among these models Kirkpatrick Four level Approach has enjoyed wide-spread popularity as a model for evaluating learner outcomes in training programs. ⁶ The first hierarchical level focuses on the learner's reaction to the program. Level two is the measure of the learning attributes to the program e.g. Increase in knowledge, acquiring new skills or transformed attitudes as a result of the program. Thirdly, there is the behavioural change

in the learner. Finally, level four assesses the impact the training program has created at organizational level. ⁷ Faculty development programs like Masters in Health profession education serve to enhance capacity building of teachers. ^{8,9} However, the tool also assessed learner perception at level 2a and prior knowledge/skill at level 2b to some extent. ¹⁰ The objective of this study is to evaluate participant's reactions for satisfaction through level 1 of Kirkpatrick model after 1st contact session of MHPE training Program.

Methodology

This cross-sectional study was carried out in the Department of Medical Education, SZABMU, Islamabad from March 8th, 2023 to 14th March, 2023. Eighteen students enrolled in MHPE program were recruited in the study by convenience sampling. Those students who had at least 80% attendance in the first contact session, and were present on the day of data collection were enrolled in the study. The exclusion criteria included those students with less than 80% attendance, and not willing to participate. In this study, the reaction of the students to the MHPE program (level I of Kirkpatrick model) was determined by evaluating five core items, which are stated as overall satisfaction, enhanced knowledge, relevancy in emergency, relevancy to daily job, and recommendation to others. ¹¹ These five core items were graded as 1= strongly disagree, 2= somewhat disagree, 3= neutral, 4= somewhat agree, 5= strongly agree. Data analysis was done using SPSS

version 21.0. Frequencies and percentages were determined for the descriptive variables, and the reaction of the students to the first session of MHPE program.

Results

Out of 18 students, 12 males and 6 females from different areas of specialties were enrolled in the study. The demographics of the participants are mentioned in table I.

Table I: descriptive statistics of Demographic characteristics (n=18)

Variables	N	%	
Age	Less than 35 years	2	11.1%
	35-39 years	1	5.6%
	40-44 years	4	22.2%
	45-50 years	5	27.8%
	50 years and above	6	33.3%
Gender	Male	12	66.7%
	Female	6	33.3%
Speciality	Surgery	9	50.0%
	Medicine	1	5.6%
	Dentistry	1	5.6%
	Others	7	38.9%
Work experience in years	6-10 years	3	16.7%
	11-15 years	2	11.1%
	16-20 years	10	55.6%
	21-25 years	1	5.6%
	More than 25 years	2	11.1%
Working in	Government institute	16	88.9%
	Private setup	2	11.1%
Designation	Demonstrator/ Lecturer	2	11.1%
	Senior Registrar	2	11.1%
	Assistant Professor	8	44.4%
	Associate Professor	3	16.7%
	Professor	3	16.7%

Five core evaluation items are listed to rate the extent to which the respondents agreed or disagreed. Frequencies and percentages of the core values are mentioned in table II.

Table II: Five core evaluation items (Level I of Kirkpatrick model)

Core evaluation items	1	2	3	4	5
	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
1. I was satisfied with the course overall	0 (0%)	0 (0%)	2 (11.1%)	9 (50%)	7 (38.9%)
2. This course enhanced my knowledge of the subject matter	0 (0%)	0 (0%)	2 (11.1%)	8 (44.4%)	8 (44.4%)
3. The course was relevant to what I might be expected to do to (prevent, prepare for, or respond to) an emergency	0 (0%)	0 (0%)	2 (11.1%)	10 (55.6%)	6 (33.3%)
4. This course provided content that is relevant to my daily job	0 (0%)	0 (0%)	3 (16.7%)	7 (38.9%)	8 (44.4%)
5. I would recommend this course to others	0 (0%)	0 (0%)	1 (5.6%)	9 (50.0%)	8 (44.4%)

Table III illustrates the results of the (Level I) reaction of Kirkpatrick model for each core item, the number of respondents who responded somewhat agree and strongly agree was placed in the numerator, and total number of respondents in the denominator. Then, the result of the success rate of each item was calculated.

Table III: Results of Kirkpatrick's Level I evaluation for this learning project

Core evaluation items	Number of respondents who responded somewhat agree and strongly agree in the numerator, and total number of respondents in the denominator
Overall satisfaction	16/18
Enhanced knowledge	16/18
Relevancy in emergency	16/18
Relevancy to daily job	15/18
Recommended	17/18

Discussion

The present study has shown that overall students showed a satisfactory reaction towards the first session of MHPE program. Sixteen out of 18 students were overall satisfied, enhanced their knowledge, and showed conscientiousness over relevancy in emergency. Fifteen out of 18 students mentioned that the content was relevant to their daily job, and 17 out of 18 students stated that they would recommend this course to others. In this study, level I of Kirkpatrick model is discussed in detail, where the students were found to be satisfied with the course. This finding is in line with the previous literature.¹² The current study only included satisfactory reaction of the participants enrolled in the study, which is similar to the other studies where only level 1 of Kirkpatrick's model is determined.^{10,13} In contrast to this, the previous studies also included learning (level 2) of Kirkpatrick model along with reaction (level 1).^{12,14}

Moreover, this study only determined the reaction of the students after the first contact session of MHPE, whereas the previous literature determined the pre- and post-training reaction of the participants. However, the findings of the study were similar with this one, that is, overall satisfactory reaction was noted among the participants.¹⁰ These results were also found in coherence with the evaluation of faculty development program conducted online during covid-19 times.¹⁵ In this study, participants mentioned that their knowledge was improved as well as the content was relevant, which is similar to the other studies.¹³ These findings were also found in relevance with another study in which an infection prevention and control training workshop of healthcare workers was conducted. The trainers found

that the workshop was engaging and well organized, and course content was found to be relevant.¹⁶ Furthermore, it was also found that the Kirkpatrick model at level 1 can also be implemented for evaluation of clinical competencies in the clinical settings.^{17,18}

The limitations of the study include that this study should be conducted out in other institutes with MHPE programs, since then the results can be generalized. Moreover, the convenience sampling technique may induce a bias.

Conclusion

This study concluded that the participants showed satisfactory reaction regarding the first contact session of MHPE program. However, it is further recommended to evaluate other levels (level 2, level 3, and level 4) of Kirkpatrick model by the end of this program.

References

1. Stratton TD. Legitimizing continuous quality improvement (CQI): Navigating rationality in undergraduate medical education. *J. Gen. Intern. Med.* 2019;34:758-761.
2. Gamage KA, Pradeep RR, Najdanovic-Visak V, Gunawardhana N. Academic standards and quality assurance: The impact of COVID-19 on university degree programs. *Sustainability.* 2020;12(23):10032.
3. Gordon M, Patricio M, Horne L, et al. Developments in medical education in response to the COVID-19 pandemic: a rapid BEME systematic review: BEME Guide No. 63. *Med. Teach.* 2020;42(11):1202-1215.
4. Frye AW, Hemmer PA. Program evaluation models and related theories: AMEE guide no. 67. *Med. Teach.* 2012;34(5):e288-e299.
5. Chen W, Reeves TC. Twelve tips for conducting educational design research in medical education. *Med. Teach.* 2020;42(9):980-986.
6. Alsalamah A, Callinan C. Adaptation of Kirkpatrick's four-level model of training criteria to evaluate training programmes for head teachers. *Educ. Sci.* 2021;11(3):116.
7. Heydari MR, Taghva F, Amini M, Delavari S. Using Kirkpatrick's model to measure the effect of a new teaching and learning methods workshop for health care staff. *BMC research notes.* 2019;12(1):1-5.
8. Teherani A, Nicastro T, Clair MS, et al. Faculty Development for Education for Sustainable Health Care: A University System-Wide Initiative to Transform Health Professional Education. *Academic Medicine.* 2023;10.1097.
9. Cervero RM, Artino Jr AR, Daley BJ, Durning SJ. Health professions education graduate programs are a pathway to strengthening continuing professional development. *J Contin Educ Health Prof.* 2017;37(2):147-151.
10. Piryani RM, Dhungana GP, Piryani S, Sharma Neupane M. Evaluation of teachers training workshop at Kirkpatrick level 1 using retro-pre questionnaire. *Advances in medical education and practice.* 2018:453-457.

11. Richmond AL, Sobelson RK, Cioffi JP. Preparedness and Emergency Response Learning Centers. *Journal of Public Health Management and Practice*. 2014;20:S7-S16.
12. Masood RQ, Usmani MAW. EVALUATION OF MEDICAL TEACHER'S TRAINING PROGRAM THROUGH KIRKPATRICK'S MODEL. *Khyber Med. Univ. J.* 2015;7(2).
13. Shrivastava SR, Shrivastava PS. Evidence-based medicine workshop for teaching faculty of a medical college: Kirkpatrick level 1 evaluation. *Int. J. Acad. Med.* 2018;4(3):289.
14. Sahni J. Managerial training effectiveness: An assessment through Kirkpatrick framework. *TEM Journal*. 2020;9(3):1227-1233.
15. Swaminathan N, Govindharaj P, Jagadeesh NS, Ravichandran L. Evaluating the effectiveness of an online faculty development programme for nurse educators about remote teaching during COVID-19. *J. Taibah Univ. Medical Sci.* 2021;16(2):268-273.
16. Alp E, Altun D, Cevahir F, Ersoy S, Cakir O, McLaws M-L. Evaluation of the effectiveness of an infection control program in adult intensive care units: A report from a middle-income country. *Am. J. Infect. Control.* 2014;42(10):1056-1061.
17. Salam A, Allaw BAQ, Begum H, et al. Audit on Clinical Competency of Fresh Medical Graduates in a Malaysian Private University Using Kirkpatrick Level-1 Evaluation Model. *Education in Medicine Journal*. 2021;13(4).
18. Lee H, Song Y. Kirkpatrick model evaluation of accelerated second-degree nursing programs: a scoping review. *J. Nurs. Educ.* 2021;60(5):265-271.