



Training Workshop on Research Proposal Writing for Faculty Members: Assessment of the Feedback of the Participants

Rano Mal Piryani^{1*}, Nudrat Zeba², Farah Naz Memon³ 

^{1,2} Bilwal Medical College (BMC), Liaquat University of Medical and Health Sciences, Sindh, Pakistan

*Corresponding author: rano.piryani@gmail.com

Abstrak

Pelatihan penulisan proposal memperkaya kapasitas dosen dalam melakukan penelitian. Tujuan dari penelitian ini adalah untuk menilai umpan balik (reaksi) langsung dari anggota fakultas peserta lokakarya pelatihan penulisan proposal penelitian. Penelitian ini merupakan cross-sectional yang dilakukan melalui kuesioner yang dikelola sendiri. Data dianalisis tendensi sentralnya. Data pra-kuisisioner retro miring, sehingga Wilcoxon Signed Rank Test digunakan untuk perbandingan median. Data pertanyaan terbuka diperiksa secara manual. Hasil penelitian ini menemukan peringkat atribut lokakarya pelatihan, yaitu kegunaan ($8,71 \pm 1,23$), isi ($8,86 \pm 1,15$), relevansi ($8,90 \pm 1,18$) dan fasilitasi ($9,09 \pm 1,09$) juga cukup menonjol dan secara keseluruhan ($9,05 \pm 0,97$). Tingkat kepercayaan diri peserta meningkat secara signifikan ($<0,001$) pada enam item keterampilan kognitif yang relevan; melakukan penelitian (sebelum Median-2, IQ-1, setelah Median-3, IQ-0); melakukan tinjauan sistemis (sebelum Median-2, IQ-1, setelah Median-3, IQ-1), memilih desain penelitian (sebelum Median-2, IQ-2, setelah Median-3, IQ-0), menerapkan biostatistik dasar (sebelum Median-2, IQ-1, setelah Median-3, IQ-0), penulisan akademik (sebelum Median-2, IQ-1, setelah Median-3, IQ-0) dan penulisan proposal penelitian (sebelum Median-2, IQ-1, setelah Median-3, IQ-0). Secara keseluruhan masukan dari para peserta positif dan luar biasa dan tingkat kepercayaan diri mereka meningkat secara signifikan pada penilaian keterampilan kognitif.

Kata kunci: Fakultas, umpan balik, Proposal, penelitian, Pelatihan, lokakarya.

Abstract

Proposal writing training enriches lecturers' capacity in conducting research. The purpose of this study was to assess direct feedback (reactions) from faculty members participating in a research proposal writing training workshop. This was a cross-sectional study conducted through a self-administered questionnaire. The data was analyzed for central tendency. Pre-questionnaire data were retro skewed, so the Wilcoxon Signed Rank Test was used for median comparisons. Open question data were checked manually. The results of this study found a ranking of training workshop attributes, namely usefulness (8.71 ± 1.23), content (8.86 ± 1.15), relevance (8.90 ± 1.18) and facilitation (9.09 ± 1.15). .09) was also quite prominent and overall (9.05 ± 0.97). Participants' confidence levels increased significantly (<0.001) on six relevant cognitive skills items; conducting research (before Median-2, IQ-1, after Median-3, IQ-0); conducting a systemic review (before Median-2, IQ-1, after Median-3, IQ-1), choosing a research design (before Median-2, IQ-2, after Median-3, IQ-0), applying basic biostatistics (before Median-2, IQ-1, after Median-3, IQ-0), academic writing (before Median-2, IQ-1, after Median-3, IQ-0) and research proposal writing (before Median-2, IQ-1, after Median-3, IQ-0). Overall the feedback from the participants was positive and excellent and their confidence levels increased significantly on the cognitive skills assessment.

Keywords: Faculty, Feedback, Proposal, Research, Training, Workshop

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1. INTRODUCTION

A training workshop is an educational or training event designed to provide participants with practical understanding and skills in a particular field or topic. These workshops are usually practical and interactive, allowing participants to learn through hands-on experience and active participation (Ghasya et al., 2023; GP et al., 2018). Training workshops can cover a variety of topics, from technical skills such as computer training, writing research proposals, or software development, to more general topics such as time management, leadership skills, or communication training (Susilowati & Suyatno, 2021; Wakid et al., 2020). Workshops are often led by instructors or facilitators who have knowledge and experience in the topics covered. Participants are given the opportunity to practice, collaborate with fellow participants, and receive constructive feedback. The main goal of this workshop is to provide participants with knowledge and skills that can be applied

in real situations. Training workshops can be held in a variety of settings, including indoors or online via video conferencing platforms (Abdulghani et al., 2014; Shrestha, 2019). They can be attended by individuals, groups or organizations who wish to improve their abilities in a particular area. Training Workshop on Research Proposal Writing is a training program aimed at helping researchers, faculty and academics develop the ability to write effective research proposals. This program is designed with the main aim of providing participants with an in-depth understanding of various key aspects in writing research proposals, which include problem formulation, determining relevant theoretical frameworks, selecting appropriate research methods, and planning appropriate budgets (Al-Riyami, 2008; Gurat et al., 2018). This kind of training also provides opportunities for participants to interact with instructors who are experienced in writing research proposals. Instructors can provide invaluable guidance, feedback, and insight to help participants improve their abilities. Participants are also often given practical assignments to develop research proposals during training, which are then evaluated and given constructive feedback (Baran et al., 2011; Kamińska et al., 2021). Additionally, the training workshop on research proposal writing helps create a collaborative environment among participants, allowing them to share experiences and knowledge. It also helps in building a strong professional network in the research field. The end result of this training is that participants are more confident in writing high-quality research proposals, which can be used to support the submission of their research proposals to various research and funding institutions (Donovan et al., 2013; GP et al., 2018).

This kind of program is very important in improving the quality of academic research and scientific contributions in various fields, thereby supporting the development of science and innovation. Health research, medical education and clinical practice are three pillars of modern day medical practice. Research is an exceptionally essential for the improvement in health care delivery services provided to the people and it is one of the best measures of scientific progress at both individual and institutional levels (Al-Riyami, 2008; Auf et al., 2018). The medical teachers need to play the role of a researcher as it is one of the essential roles of medical teacher to perform. The key reasons for engaging the medical teachers in research are to enhance quality of teaching and patients care (Aggarwal, 2021; Gurat et al., 2018). One of the barrier perceived by the faculty members of medical teaching institution is lack of research training. This point is also highlighted by the junior faculty of medical universities in Pakistan (Kabirpanthi et al., 2022; Sabzwari et al., 2009).

Educating students about the research and supervising postgraduates in their research projects is one of the duties of faculty members serving in medical teaching institution. Research enhances strength of the medical education, thereby making medical practice evidence based (Kabirpanthi et al., 2022; Sabzwari et al., 2009). Research Training on proposal writing enriches the capacity of faculty members in conducting research. Faculty development training in this regard is very essential; a one of the important tasks of the medical teaching institutions (Herder et al., 2018; Komalasari et al., 2021). So, Bilawal Medical College in collaboration with the Medical Research Center (MRC) of Liaquat University of Medical and Health Sciences (LUMHS) organized 3-days Training Workshop on Research Proposal Writing. Previous study titled research productivity among faculty members has documented faculty members who receive training on research skills gives more output (Alghanim & Alhamali, 2011). Assessment of training workshop through feedback helps in updating training program in future. Keeping this in mind, facilitators decided to take feedback from the participant faculty members (Abdulghani et al., 2014; EA, 2008). The aims of the study were to assess immediate feedback (reaction) of participants' faculty members of training workshop on research proposal writing at Kirkpatrick's evaluation model level- and level of the self-reported perceived confidence (perception)

before and after participation in training workshop using retro-pre-questionnaire at Kirkpatrick's evaluation model level-2 a.

2. METHODS

This study belongs to descriptive cross-sectional study (Omar, 2015; Raka & Dedushaj, 2011). This study was conducted at Bilawal Medical College (BMC) for Boys, a constituent college of Liaquat University of Medical and Health Sciences (LUMHS) Jamshoro, Sindh, Pakistan with the objective to assess the immediate feedback (reaction) of participants faculty members and the level of their self-reported perceived confidence (perception) before and after participation in 3-days Training Workshop on “Research Proposal Writing”.

Director MRC, LUMHS, was the main resource person while all authors facilitated the training workshop. The methods used for conducting the training workshop were interactive tutorial with brainstorming and group work. The participants self-assessed themselves through pre and posttest. Twenty-three participants from basic and clinical sciences participated in the training workshop. At the end of training workshop written feedback was taken from the participants on self-administered valid questionnaire. The questionnaire was comprised of four parts: The data collected was checked for completeness, accuracy and consistency. The data was entered in Microsoft Excel and transported to SPSS V 23 for analysis. The data was analyzed for central tendency. The data of retro-pre-questionnaire was not normally distributed, so, the nonparametric test i.e. Wilcoxon Signed Rank Test was applied for comparison of medians.

3. RESULTS AND DISCUSSION

Results

The mean rating of participants on attributes (characteristics) of training workshop on research proposal writing on the scale 1-10 (1 poor, 10 excellent) is given in **Table 1**.

Table 1. Rating of Participants on Attributes (Characteristics) of Training Workshop on Research Proposal Writing on Scale

Attributes (characteristics)	Mean \pm Standard Deviation (SD) (Range)
Usefulness	8.71 \pm 1.23 (Range 7-10)
Content	8.86 \pm 1.15 (Range 7-10)
Relevance	8.90 \pm 1.18 (Range 7-10)
Facilitation	9.09 \pm 1.09 (Range 7-10)
Overall	9.05 \pm 0.97 (Range 7-10)

Base on **Table 1**, twenty-one participants provided feedback; 13 (61.9%) were males and 8 (38.1%) females. Their mean age in years was 36.52 \pm 7.86 (range 26-55 years). The mean teaching experiences in years was 3.07 \pm 2.78 (range 0-12 years), while mean research experiences in years was 2.28 \pm 2.8 (range 0-8 years). Out of 23 participants, 21 provided the written feedback; the response rate was 91.3%. The level of self-reported perceived confidence of the participants on six related cognitive items before and after participation in training workshop on research proposal writing on Likert scale 1-4 (1= Not confident, 4= Extremely Confident) using retro-pre-questionnaire is documented in **Table 2**.

Table 2. Level of Self-Reported Perceived Confidence of Participants on Cognitive Skills Items Before and After Participation in Training Workshop on Research Proposal Writing on Likert

Item Statement	Before participating in training workshop?	After participating in training workshop?	p-value
Level of confidence in conducting research	Median 2 Interquartile Range 1	Median 3 Interquartile Range 0	< 0.001
Level of confidence in conducting systemic review	Median 2 Interquartile Range 1	Median 3 Interquartile Range 1	< 0.001
Level of confidence in selecting study design for research	Median 2 Interquartile Range 0	Median 3 Interquartile Range 0	< 0.001
Level of confidence in applying basic biostatistics	Median 2 Interquartile Range 1	Median 3 Interquartile Range 0	< 0.001
Level of confidence in Academic writing	Median 2 Interquartile Range 1	Median 3 Interquartile Range 0	< 0.001
Level of confidence in Research proposal writing	Median 2 Interquartile Range 1	Median 3 Interquartile Range 0	< 0.001

Discussion

Our study assessed the feedback of the participant faculty members of “Training Workshop on Research Proposal Writing” at Kirkpatrick level 1 (reaction) and level 2a (perception). Kirkpatrick’s model of evaluation has 4 levels: level 1- reaction; level 2- learning (level 2a: attitudes/perceptions and level 2b: knowledge/skills); level 3: change in behavior; and level 4: overall impact of training (level 4a: organizational practice, level 4b: student benefit and level 4c: patient benefit) (GP et al., 2018; Herder et al., 2018). In our study the immediate reaction of the participants on the attributes of training workshop i.e. usefulness, content, relevance and facilitation on scale 1-10 (1 poor, 10 excellent) was notable. Overall rating of the participants on training workshop were noteworthy 9.05 ± 0.97 on scale 1-10 (1 poor, 10 excellent) and participants recommended to organize such trainings for other teachers and also refresher training for all faculty members (McAllister & McKinnon, 2009; Rosa, 2020; Syaifullah, 2021). Previous study conduct assessment of research faculty development program efficacy in writing research proposals concluded that workshop on writing research proposal was efficient as per feedback assessment of participants faculty members and participants recommended to continue such research capacity building trainings (Gurat et al., 2018). Other study brief report on workshop on proposal writing for research for health care professionals” mentioned about positive feedback of the participants on worth of workshop including its usefulness, content, relevance and facilitations (Shrestha, 2019).

The self-reported perceived level of confidence of the participants was significantly (< 0.001) enhanced as revealed from the responses to all six statements (items) relevant to cognitive skills; conducting research, conducting systemic review, selecting study design for research, applying basic biostatistics, academic writing and research proposal writing (Akatay et al., 2015; Araujo Portugal, 2020; Petersen et al., 2020). It is predicted the positive change in level of self-reported perceived confidence may bring positive behavioral changes (level-3) among the faculty members in conducting research and facilitating and supervising undergraduates and postgraduates in the research process and indirectly anticipates results (level-4) (Chung et al., 2019; Clack & Dommett, 2021; Liao & Hsu, 2019). This can be assessed at Kirkpatrick’s level 3 and 4 as a post workshop follow-up after some time period

even though the evaluation at Kirkpatrick's level 3 and 4 is challenging task. Other study conducted workshops evaluation using the Kirkpatrick's model: Translating theory into practice. Documented improvement in study design, writing manuscripts and writing proposals cognitive skills while significant improvement in data collection, biostatistics and SPSS skills after participation in research methodology workshops (Abdulghani et al., 2014).

The implications of this research reveal that this training was successful in developing faculty academic competence. This can mean improved research skills, proposal writing, and a deeper understanding of the research process. Feedback from participants shows that they are satisfied with the training, this can increase their motivation to contribute to academic research. This can also increase their job satisfaction. In addition, the results of this research can provide insight to training program organizers about what worked and what needs to be improved in similar programs in the future. However this cross-sectional study has some limitations. The study was conducted in one medical college and feedback was taken from the participants of one training workshop having less than 30 participants, so the findings of this study cannot be generalized. The results documented here are on perceptual data provided by the participants immediately in the form of feedback; the long-term outcome cannot be deduced from findings of this study but just anticipated.

4. CONCLUSION

The confidence of participant faculty members was significantly enhanced on cognitive skills; conducting research, conducting systemic review, selecting study design for research, applying basic biostatistics, academic writing and research proposal writing. Overall reaction of the participants on training workshop was positive and remarkable. Participants' feedback is essential and helpful for bringing improvement in conducting such workshops in future. The suggestions provided for the improvements were precise and practical. The change in behavior of the participants and overall impact of training can be detected in follow-up study.

5. REFERENCES

- Abdulghani, H. M., Shaik, S. A., Khamis, N., Al-Drees, A. A., Irshad, M., Khalil, M. S., Alhaqwi, A. I., & Isnani, A. (2014). Research methodology workshops evaluation using the Kirkpatrick's model: translating theory into practice. *Med Teach*, 36(1), 24–29. <https://doi.org/10.3109/0142159X.2014.886012>.
- Aggarwal, R. (2021). Why must faculty members in medical institutions engage in research? *Int J Adv Med Health Res*, 8, 1–3. https://doi.org/10.4103/ijamr.ijamr_105_21.
- Akatay, A., Eroğlu, U., & Özdemir, S. (2015). Competencies of Hr Professionals: a Study on the Hr Competencies of University Students. *Journal of Life Economics*, 2(4), 47–60. <https://doi.org/10.15637/jlecon.104>.
- Al-Riyami, A. (2008). How to prepare a research proposal. *Oman Medical Journal*, 23(2), 66–69. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3282423/>.
- Alghanim, S. A., & Alhamali, R. M. (2011). Research productivity among faculty members at medical and health schools in Saudi Arabia. *Saudi Med J*, 32(12), 1297–1303. https://applications.emro.who.int/imemrf/Saudi_Med_J/Saudi_Med_J_2011_32_12_1_297_1303.pdf.
- Araujo Portugal, J. C. (2020). A proposal to teach implicature to intermediate students of English. *IKASTORRATZA.e-Journal on Didactics*, 96–132. <https://doi.org/10.37261/25>.

- Auf, A. I., Awadalla, H., Ahmed, M. E., & Ahmed, M. H. (2018). Perception, barriers, and practice of research among teaching staff at five Sudanese medical faculties. *J Public Health Emerg*, 2(22). <https://doi.org/10.21037/jphe.2018.07.01>.
- Baran, E., Correia, A. P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education*, 32(3), 421–439. <https://doi.org/10.1080/01587919.2011.610293>.
- Chung, C. H., Shen, C., & Qiu, Y. Z. (2019). Students' acceptance of gamification in higher education. *International Journal of Game-Based Learning*, 9(2), 1–19. <https://doi.org/10.4018/IJGBL.2019040101>.
- Clack, A., & Dommett, E. J. (2021). Student learning approaches: Beyond assessment type to feedback and student choice. *Education Sciences*, 11(9). <https://doi.org/10.3390/educsci11090468>.
- Donovan, J. D., Maritz, A., & McLellan, A. (2013). Innovation training within the Australian advanced manufacturing industry. *Journal of Vocational Education and Training*, 65(2), 256–276. <https://doi.org/10.1080/13636820.2013.783614>.
- EA, K. (2008). A guide for the design and conduct of self-administered surveys of clinicians. *CMAJ*, 179(3), 245–252. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2474876/>
- Ghasya, D. A. V., Samodra, Y. T. J., Seli, S., Gustian, U., Pranata, R., Thamrin, L., & Riyanti, D. (2023). Workshop for Preparation of Lecturers' Research Roadmap in Faculty of Teacher Training and Education. *Tanjungpura University*, 4(1), 771–783. <https://doi.org/10.36526/gandrung.v4i1>.
- GP, P. R. M. D., S, P., & MS, N. (2018). Evaluation of teachers training workshop at Kirkpatrick level 1 using retro-pre-questionnaire. *Advances in Medical Education and Practice*, 9, 453–457. <https://doi.org/10.2147/AMEP.S154166>.
- Gurat, M. G., Rosario, F. Y. G., Dizon, P. K. L., & Saludarez, M. U. (2018). Assessment of research faculty development program efficacy in writing research proposals. *International Research Journal of Management, IT and Social Sciences*, 5(4), 1–17. <https://doi.org/10.21744/irjmis.v5n4.238>.
- Herder, A., Berenst, J., de Glopper, K., & Koole, T. (2018). Reflective practices in collaborative writing of primary school students. *International Journal of Educational Research*, 90(February), 160–174. <https://doi.org/10.1016/j.ijer.2018.06.004>.
- Kabirpanthi, V., Gupta, V., & Chavan, P. V. (2022). Barriers perceived by researchers in pursuing medical research in an evolving medical college of tribal Madhya Pradesh, India. *J Family Med Prim Care*, 11, 701–7. https://doi.org/10.4103/jfmmpc.jfmmpc_1706_21.
- Kamińska, D., Zwoliński, G., Wiak, S., Petkovska, L., Cvetkovski, G., Barba, P. Di, Mognaschi, M. E., Haamer, R. E., & Anbarjafari, G. (2021). Virtual Reality-Based Training: Case Study in Mechatronics. *Technology, Knowledge and Learning*, 26(4), 1043–1059. <https://doi.org/10.1007/s10758-020-09469-z>.
- Komalasari, E., Sihite, M., & Supriyadi, E. (2021). The Performance of Distribution Government Assistance Toward School Dropout Communities Based on the E-Proposal Banper Management Information System, Organization Transformation and HR Capabilities in Course Institutions. *Journal of Management and Leadership*, 4(1). <https://doi.org/10.47970/jml.v4i1.208>.
- Liao, S.-C., & Hsu, S.-Y. (2019). Evaluating a continuing medical education program: New World Kirkpatrick Model Approach. *International Journal of Management, Economics and Social Sciences (IJMESS)*, 8(4), 266–279. <https://doi.org/10.32327/IJMESS/8.4.2019.17>.

- McAllister, M., & McKinnon, J. (2009). The importance of teaching and learning resilience in the health disciplines: A critical review of the literature. *Nurse Education Today*, 29(4), 371–379. <https://doi.org/10.1016/j.nedt.2008.10.011>.
- Omair, A. (2015). Selecting the appropriate study design for your research: Descriptive study designs. *Journal of Health Specialties*, 3(3), 153. <https://doi.org/10.4103/1658-600x.159892>.
- Petersen, S. C., McMahan, J. M., McFarlane, H. G., Gillen, C. M., & Itagaki, H. (2020). Mini-Review - Teaching Writing in the Undergraduate Neuroscience Curriculum: Its Importance and Best Practices. *Neuroscience Letters*, 737(August), 135302. <https://doi.org/10.1016/j.neulet.2020.135302>.
- Raka, L., & Dedushaj, I. (2011). Medical education in Kosova. *Medical Teacher*, 33(4). <https://doi.org/10.3109/0142159X.2011.545843>.
- Rosa, A. T. R. (2020). Teacher Development Potential (Creativity and Innovation) Education Management in Engineering Training, Coaching and Writing Works through Scientific Knowledge Intensive Knowledge Based on Web Research in the Industrial Revolution and Society. *International Journal of Higher Education*, 9(4), 161–168. <https://eric.ed.gov/?id=EJ1258955>.
- Sabzwari, S., Kauser, S., & Khuwaja, A. K. (2009). Experiences, attitudes and barriers towards research amongst junior faculty of Pakistani medical universities. *BMC Med Educ*, 9(68). <https://doi.org/10.1186/1472-6920-9-68>.
- Shrestha. (2019). Workshop on proposal writing for research for health care professionals: a brief report. *Journal of Multidisciplinary Healthcare*, 12, 565–572. <https://doi.org/10.2147/JMDH.S211257>.
- Susilowati, W. W., & Suyatno, S. (2021). Teacher competence in implementing higher-order thinking skills oriented learning in elementary schools. *Premiere Educandum : Jurnal Pendidikan Dasar Dan Pembelajaran*. <https://doi.org/10.25273/pe.v11i1.7762>.
- Syaifullah, D. H. (2021). The Effect of Employee Engagement and Organizational Citizenship Behavior on the Performance of Employees of the Research & Development and Education & Training Agency of the Ministry of Religion of the Republic of Indonesia. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(5), 1077–1084. <https://doi.org/10.17762/turcomat.v12i5.1753>.
- Wakid, M., Usman, T., & Sulisty, B. (2020). Project based learning model to increase the competency of automotive engineering teachers candidates. *Journal of Physics: Conference Series*, 1700(1), 1–8. <https://doi.org/10.1088/1742-6596/1700/1/012063>.