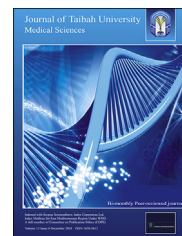




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Original Article

### Factors affecting the transfer of training to the workplace after a faculty development programme: What do trainers think?



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#### المخلص

**أهداف البحث:** يلعب تطوير هيئة التدريس دوراً محورياً في تطوير معلمين أكفاء وفاعلين. الهدف النهائي لتطوير أعضاء هيئة التدريس هو نقل المعارف والمهارات والسلوكيات المكتسبة حديثاً إلى مكان العمل للتأثير إيجاباً على تعلم الطلاب. إلا أن نقل مهارات التدريب ظاهرة معقدة ولم يتم الإبلاغ كثيراً عن العوامل التي تؤثر على عملية النقل هذه، خاصة في العلوم الصحية. تهدف هذه الدراسة إلى استكشاف العوامل المرتبطة بإعاقه أو مساعدة نقل التدريب (الكفاءات المكتسبة حديثاً) إلى مكان العمل.

**طرق البحث:** استخدمت هذه الدراسة النوعية المستعرضة تقنية أخذ العينات الهادفة وساهم فيها سبعة مطورين للبرنامج. تم جمع البيانات من خلال المقابلات شبه المنظمة، التي تم تحليلها بعد ذلك باستخدام التحليل الموضوعي.

**النتائج:** أظهرت المقابلات التي أجريت مع مطوري البرامج ومدربي الكلية أن نقل التدريب إلى الممارسات التعليمية عملية معقدة ومتعددة الأبعاد. بدايةً، يتأثر مثل هذا النقل بعدد من المتغيرات التي يمكن تصنيفها بشكل عام إلى ثلاث مجموعات: خصائص المتدرب ومظاهر تصميم التدريب والعوامل البيئية.

**الاستنتاجات:** للدراسة الحالية مؤشرات لفهم نقل التعلم بعد برنامج تنمية أعضاء هيئة التدريس، ووفرت صورة عامة موجزة عن العوامل الفردية والبرامجية والبيئية التي تؤثر على نقل التدريب إلى الوضعية التعليمية.

**الكلمات المفتاحية:** نقل التدريب؛ تطوير أعضاء هيئة التدريس؛ تدريب أعضاء هيئة التدريس؛ تطوير الموظفين؛ كفاءة التدريس

#### Abstract

**Objectives:** Faculty development plays a pivotal role in developing competent and effective teachers. The

eventual goal of faculty development is to transfer newly acquired knowledge, skills, and attitudes to the workplace to positively influence students' learning. However, the transfer of training skills is a complex phenomenon, and not much has been reported about the factors affecting this process, especially in the health sciences. This study aims to explore the factors hindering or aiding the transfer of training (newly learned competencies) to the workplace.

**Methods:** This cross-sectional qualitative study employed a purposive sampling technique and incorporated seven programme developers. The data were collected through semi-structured interviews, and then analysed using thematic analysis.

**Results:** The interviews with programme developers and faculty trainers revealed that the transfer of training to educational practices is a complex and multidimensional process. Primarily, such transfer is influenced by many variables that can be broadly categorised into three groups: trainee characteristics, training design features, and environmental factors.

**Conclusion:** The current study has implications for understanding learning transfer after a faculty development programme. It provides a brief overview of the individual, programmatic, and environmental factors that influence the transfer of training to an educational setup.

**Keywords:** Faculty development; Faculty training; Staff development; Teaching competence; Transfer of training

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## Introduction

Health professional teachers are reflective practitioners who make critical and responsible decisions in the educational field such as in classrooms, clinics, and institutions. They cater students' individual characteristics, differences in their prior knowledge, and their diverse learning styles, which makes the role of a teacher challenging in academia. The situation becomes more critical if teachers are not well prepared to perform their diversified tasks and responsibilities. This shortcoming is sometimes seen in new recruits and faculty members who have not undergone structured and rigorous teacher training. This is especially a serious concern in health professions education, wherein health professionals are trained to be practitioners and not academic teachers.<sup>1</sup> In these circumstances, faculty development plays a pivotal role if the institutes aim to develop competent and effective teachers.<sup>2</sup> In particular, it has significant value when institutes are undergoing curricular reforms, restructuring, or educational transformations.<sup>3</sup> Faculty development has gained increased popularity in the past decade in response to innovative educational strategies in teaching, assessment, and the curriculum. Many health science institutes now offer various activities to nurture their faculty and equip them with essential teaching skills that can help them perform their diversified academic roles effectively.<sup>4</sup>

Faculty development is defined as a series of activities that strengthen and extend the existing knowledge, skills, and attitudes of educators. This exercise leads to a shift in their thinking, teaching practices, and educational behaviour.<sup>5</sup> The aim of refining teaching practices is to support and maximise students' learning process. In other words, the goal of faculty development is to transfer newly acquired knowledge and skills to the workplace to influence learning. The transfer of training (acquired competencies) to the workplace is defined as 'the effective (generalisation) and continuing (maintenance) application in the job (educational) environment of the knowledge, skills and attitude gained in a faculty development context'.<sup>3</sup> However, the transfer of training to the workplace is not a simple phenomenon and is easier said than done. An educator must overcome numerous barriers encountered in an educational environment that hinder the transfer of acquired skills to practice, which often decreases the transfer ratio. For instance, in their review, Ford et al. reported that only 10% of the learning resulting from faculty development activities was transferred to the job.<sup>6</sup>

It is also worth mentioning that the nature of faculty development activities are also an important factor. These initiatives vary in terms of goals, length, methods, targeted participants, and so on. Thus, certain personal, professional, and environmental variables exist that interfere with and affect the transfer process. The current literature highlights many factors influencing the transfer regime in the context of higher education,<sup>7</sup> nursing,<sup>8</sup> and human resource development,<sup>3</sup> but unfortunately, not much work has been done in terms of finding the perspectives of programme developers, especially in the field of health sciences education.<sup>9</sup> To improve the effectiveness of faculty development programmes, we must determine which

variables make a difference in the complex process of achieving the transfer of training. Without identifying and understanding these influencing variables, it will be challenging for programme developers to address them when planning activities. Therefore, the current study aims to present the perspectives of programme developers regarding the variables that affect the transfer of training process.

## Materials and Methods

This cross-sectional qualitative study aimed to determine the perceptions of faculty developers and describe their viewpoints in their own words.<sup>10</sup> To achieve this goal, a purposive sampling method was adopted and data collected through semi-structured interviews, which were then analysed using thematic analysis.

### Participants

Nine educationists were invited to participate in the study. It was ensured that only those educationists actively involved in faculty development workshops and training programmes in various health sciences institutes with sufficient experience as trainers were included in the study. The invited educationists had 5–15 years of experience as health professional trainers in various faculty development workshops, symposia, and structured degree programmes. Seven of the nine invitees accepted the invitation to participate in the study. Detailed interviews were conducted with these participants. Details on the faculty developers, their experience, qualifications, and institutional affiliations are provided in [Appendix A](#).

### Procedure

All participants were interviewed using 12 open-ended, semi-structured questions. The interview questionnaire (listed in [appendix B](#)) was developed and categorised into five sections based on the findings of our literature review. The duration of each interview was approximately 30 min. The interviews took the form of a conversation in which the participants responded to the questions. All interviews were recorded and transcribed by an independent data analyst. All participants were informed about the purpose of the study, the interview method and recording thereof, data collection, and interpretation of the research. All interviews were conducted separately; therefore, the identities of the interviewees are not disclosed. Post interview, all participants were sent a verbatim transcript of their interview individually so that they could verify that the discussion had been correctly interpreted. The interviews were conducted between October 2017 and January 2018.

### Data analysis

A thematic analysis was conducted by both authors using the procedure and protocols suggested by Longhofer et al.<sup>11</sup> To increase the objectivity of the analysis, the transcribed interviews were coded as numbers before starting. Both authors individually read all interviews and identified themes

(notes) relevant to the research objectives. A constant comparative approach was used for the data analysis.

## Results

From the transcribed interviews, the identified notes were grouped into categories, from which the following three main themes emerged:

1. Learner characteristics
2. Programme design characteristics
3. Educational environment characteristics

### *Learner characteristics*

The interviews with faculty developers revealed that participants' individual characteristics play the most significant role in facilitating learning transfer. Further probing of faculty developers revealed participants' prominent attributes to be cognitive abilities, their motivation to learn and transfer, personal traits, and the amount of experience.

#### *Cognitive abilities*

*'In my experience, faculty attending the workshops often vary in their backgrounds and prior skillset. We try to cater to all levels, but unfortunately, new recruits sometimes suffer, as they are not familiar with the previously taught concepts and principles' (P2). '...Of course, training activities are very helpful for the teachers, but only if they have some prior knowledge and experience regarding teaching and learning' (P4).* The interviewees emphasised that mostly, the participants in their training programmes have diverse backgrounds and possess varying cognitive abilities. Often, they easily comprehend the newly taught information. However, sometimes, because of their different cognitive abilities, it becomes challenging for the trainers to make them understand all essential concepts, which results in reduced retention and transfer.

#### *Motivation to learn and transfer*

*'Faculty development is a rigorous process. If the participants are enthusiastic to attend and actively participate, then it is very likely that they will apply the newly learned skills to their classrooms' (P1). 'How can they learn something new if they are not motivated?' (P3). 'I think it is not possible for the teachers to modify their existing teaching techniques if they are not internally driven to change' (P6).*

#### *Personal traits*

The personal attributes of the teacher are significant when transferring new skills to the workplace. *'If the faculty member is not confident in his/her capabilities, then it will be difficult for him/her to deliver' (P3). 'It is important that faculty members recognise their training as part of their lifelong learning process; otherwise, it will be difficult for them to internalise and apply the new concepts' (P6). 'Well, participants should be creative and active learners so that they can find new ways to teach their students' (P7).*

#### *Amount of experience*

*'There is no parallel to experience. Even if the learned content is new, prior teaching experience will always be useful'*

*(P1). 'I have seen that experienced faculty members adapt to the new concepts more quickly and they try to implement them in their educational activities' (P3). However, this is not always the case, as one interviewee expressed: 'Experienced teachers often show resistance to change. Sometimes, it becomes difficult to make them understand that they have to change their old teaching practices' (P5).*

### *Programme design characteristics*

The second empirical feature influencing the transfer process is the programme design, duration, structure, and delivery methods. *'We should try to make the training sessions as hands-on as possible; otherwise, it will merely be an interactive lecture. Participants usually lose interest in such cases and do not try to implement newly learned skills later' (P2). 'Training programmes should be designed that are practical. Usually, clinical faculty do not have much time to take lengthy training courses. If the participants find utility and relevance in the content of the programme, then they will be more enthusiastic and attentive' (P4). 'While planning my training sessions, I try to be precise, realistic, and practical so that participants can invest their precious time in gaining new knowledge, skills, and attitudes' (P6). 'I think the programmes should be well structured and transparent. In my experience, timely announcements, sharing reading content, and using implementation exercises in the workshops really motivate the faculty in the learning and transferring process' (P7).*

### *Educational environment characteristics*

After personal and programme attributes, the third-most significant characteristic is the educational and institutional environment in which the faculty will be applying the newly acquired knowledge, skills, and attitudes. *'It is important that the institutional and departmental hierarchy supports faculty members in experimenting with the new educational tools learned in faculty training' (P2). 'Sometimes, the faculty do learn and show promising skills after faculty training, but the environment is just not favourable for them to apply it in' (P4). 'Once they participate in faculty training, departmental support plays a key role in the implementation and transfer thereof' (P5). 'Sometimes, after the training, the faculty feel reluctant to apply new teaching methods. They go back to their traditional methods. This may be because there is no assessment method in most institutions to see if they are transferring the newly learned competencies' (P6). 'I think that peer support is extremely important, as it gives them the confidence and motivation to transfer their learning. Conversely, if peer support is absent, the transfer process gradually stops' (P7).*

## Discussion

Faculty development programmes aim to improve teaching competence and the transfer of training to the workplace. The effectiveness of faculty training reduces significantly if the trained teachers fail to implement new teaching and learning modalities.<sup>4</sup> However, the transfer of training to educational practices is a complex and multidimensional process that takes place before, during, and after training, and involves many factors that aid and/or hinder it.<sup>12</sup> In the current

study, we tried to determine the influencing variables that affect the transfer process through the perspectives of faculty trainers and programme developers. After careful analysis, we categorised these influencing factors into three groups: learner characteristics, programme design characteristics, and educational environment characteristics. Similar categorisation exists in the extant literature,<sup>3,12</sup> with which our findings from the thematic analysis are consistent.

Learners are the core component of any training activity and their attributes play a key role in achieving and transferring competence. Changing teaching practices and transferring new modalities require immense motivation, initiative, power, and positivity. It also involves the investment of an individual's time, energy, and resources. The attributes faculty developers consider imperative for learning transfer are their cognitive abilities, motivation to learn and transfer learning, personal traits, and amount of experience. However, the list of learners' characteristics is not limited to these characteristics. Previous studies noted other learner attributes such as leadership abilities, persistence, understanding systematic limitations, openness to change, and risk taking.<sup>8</sup> These characteristics are often considered the hallmarks of academic leadership and effective teaching. However, the current study did not examine the factors contributing to the intrinsic and extrinsic motivation of the learner, which remains a gap in the literature.

Various faculty development design elements exist that significantly influence the transfer of learning, such as the use of active learning strategies, cognitive load balancing, constructive feedback, hands-on training practice, and the effective use of technology tools.<sup>13</sup> Faculty training activities vary drastically in their length and breadth depending on institutional goals, dedication, and resources. For instance, most training sessions consist of short one or two-day activities, while some are longitudinal programmes spreading over weeks or months. We cannot assume that the same level of competencies is acquired in these varied programmes. In the health sciences, scant literature is available on the effectiveness of these training programmes.<sup>14</sup> In the available literature, the effectiveness of training and transfer intention is usually based on self-reported feedback by faculty, claiming increased teaching effectiveness after faculty training. However, the intervention with the maximum impact on the transfer process is still not well known and remains under-researched.<sup>3</sup>

Training programmes also differ in terms of their instructional design, delivery method, and evaluation criteria. In general, faculty training programmes are designed based on the *wish list* of faculty members or administrative authorities. These training activities focus on specific skills and they fail to address generic teaching competencies.<sup>2</sup> This study also found that most training programmes do not provide follow-up protocols and do not observe whether the intended outcomes have been achieved. This may be attributed to the lack of assessment frameworks in faculty development programmes. In future, research is required to design a systematic assessment process that can evaluate teaching effectiveness and the extent of training transfer by incorporating third-party reviewers, i.e. peers, administrators, students, and faculty developers, rather than through a self-evaluation.<sup>14,15</sup>

The third domain influencing the training transfer process is educational, departmental, and/or institutional factors. Research shows that teachers are more likely to transfer their learning to their workplace when a supportive environment is in place.<sup>16</sup> The support provided in the work environment can come from various levels and be in various forms. Findings from the current study demonstrate that sources of support in trainees' work environments stem from institutions, departments, peers, and students. Organisations can provide support by promoting a quality-driven culture and acknowledging innovative teaching practices. Departments can support their teachers by encouraging them to try different teaching tools and modalities.<sup>6</sup> Rock<sup>8</sup> advocated that an important contributing factor influencing transfer is the alignment of teachers' transfer efforts and institutional or departmental goals. If there is disharmony between the trainee and institutional goals, or a sufficient support system does not exist in the institution or department, it will lead to the discouragement and demotivation of the teacher and eventually transfer of training will be decreased.

### Limitations

The current study incorporated the perceptions of faculty trainers and does not provide insights into the perceptions of other stakeholders such as faculty members who participate in training activities and students who are at the receiving end of the training transfer process. In addition, the sample size was limited for convenience. In future, a more extensive and in-depth interview study should be conducted to elucidate additional aspects in the transfer of training process. Because of the limited number of study participants, the perspectives of programme developers may not be generalisable to training and development programmes in other disciplines and professions.

### Conclusion

The transfer of training is a multifactorial process involving many stakeholders (faculty developers, medical teachers, students, and administrative bodies). All stakeholders involved in the faculty development process have their own attributes and perceptions about the transfer of training process. The current study has implications for understanding the perspective of programme developers regarding the transfer of training process. Moreover, this study has provided a brief overview of the individual, programmatic, and environmental factors that influence the transfer of training to an educational setup.

### Recommendations

To increase the efficacy of faculty development programmes, we advocate that more in-depth qualitative research is required that involves other stakeholders such as students, administrative bodies, and faculty members. Future researchers should also investigate the process of training transfer in more detail, especially in the context of health sciences education. A better understanding of the



transfer process and its attributes will help programme developers design more structured and evidence-based training programmes that can ensure the achievement of teaching competence and transfer of training to the workplace.

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Nil.

#### Conflict of interest

The manuscript holds no conflict of interest with any person or institution.

#### Ethical approval

Ethical approval was obtained from the research ethics committee of Imam Abdulrahman Bin Faisal University, KSA.

#### Authors' contributions

MZI conceived the idea and designed the study, conducted the literature review, collected and analysed the data, and wrote the initial and final draft of the article. MHA conducted the literature review, designed the interview questionnaire, and critically reviewed the manuscript. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

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#### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jtumed.2018.11.001>.

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