

# Parameters Affecting Training Transfer in Health Professions after Faculty Development: A Qualitative Study

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## Abstract

**Background:** Health care institutes invest valuable resources to improve health care delivery and maximize profitability. Health professionals are selected for training programs to acquire the desired knowledge and skills, and apply those at workplace for the brighter future of the institute. However, occasionally the desired outcomes after such measures are usually not attained.

**Methodology:** A qualitative descriptive study was undertaken. Semi-structured interviews conducted over ZOOM from July 2021 to August 2021. Purposive sampling was done, and 12 health professionals were interviewed about parameters of training transfer.

**Results:** The qualitative data analysis was the second stage. Twelve people took part in a semi-structured interview, which included health professionals from the following domains: 3 medical doctors, 4 dental professionals, 1 DPT faculty member, 2 nursing faculty members, and 2 allied health sciences faculty members. Following a content analysis of the qualitative data, ten themes were identified, which were then divided into four domains: Trainee characteristics, training design, organizational environment, and profession are all factors to be considered.

**Conclusion:** The study explores many factors that influence training transfer, and conducting diagnostic evaluations can assist learners, trainers, and training managers achieve effective training transfer. It will pave ways to improve faculty development program by early diagnosis and interventions to improve overall outcome of the program.

**Keywords:** Transfer of Training (TOT), Faculty Development, Health Professionals, Qualitative Research

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## Introduction

A robust faculty development program (FDP) is essential for every academic institution. Faculty development (FD) is defined “ as a series of activities that strengthen and extend the existing knowledge, skills and attitude of educators”.<sup>1</sup> Faculty development nurtures the future health professionals education, to improve health services.<sup>2</sup> Studies reveal that factors which affect the effectiveness of faculty development have a direct impact on training transfer.<sup>3</sup> Consequently, influencing faculty development program and organizational performance.<sup>4</sup>

Health professional education is the backbone of a strong health care system. Health professional

educationist have hefty burden on their shoulders to tutor future health care professionals.<sup>5</sup> Transfer of training is defined as the “degree to which trainees effectively apply the knowledge, skill and attitudes gained in a training context to the job”.<sup>6</sup> The barriers need to be identified that serve to cause hindrance in the process of transfer of training.<sup>7</sup> Both the generalization of learned material to the job, and the maintenance of taught skills over a period of time on the job and condition of training transfer need monitoring.<sup>8</sup>

The training transfer is a multi-factorial process which can be broadly categorized into trainee characteristics, trainer characteristics, training design and work environment.<sup>9</sup> These multi-layered factors influencing training transfer involve many stakeholders (program

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developers, medical teachers, students, and administrative bodies). These selected group of individuals will become the next generation of educational leaders and scholars.

However, even after a thorough FD, the intended results from training transfer are not always attained. As a result, in order to improve individual competence and organizational performance, evaluation of factors affecting training transfer is required.<sup>10</sup> Previous literature has signified many factors serving to promote and halt the transfer process. But a systematic method of objectively exploring zones hindering and boosting training transfer will navigate to elevate organizations ranking and program effectiveness.<sup>11</sup>

## Methodology

Qualitative cognitive interviews: Semi structured interviews conducted over ZOOM from July 2021 to August 2021. Health professionals from the fields of medicine (3), dentistry (4), DPT (1), nursing (2), and allied health sciences (2) were selected. Sample size was twelve health professions (n=12): Using AMEE Guide 87, we discovered that the appropriate sample size for cognitive interviews is ten to thirty participants.<sup>12</sup> Purposive convenience sampling technique was used.

Ethical review committee of Islamic International Medical College gave ethical approval to conduct this research (Reference# Riphah/IIMC/IRC/21/14). All the participants of the study were sent an Information sheet before the data collection process. Informed consent of the participants also included assurance of confidentiality of the data provided for each participant.

Email was sent to the participants and also the questions were shared prior to the interview. Informed consent was taken from each participant prior to conduction of interview. The interview was purely in English language to avoid inconvenience during transcription. Semi structured interviews from each participant were conducted and recorded. Duration of each interview was approximately 15 minutes over ZOOM owing to the pandemic and convenience of the subjects.<sup>13</sup>

After taking informed consent, validation of the Interview Guide was carried out by expert panel of 3 medical educationists. In addition, triangulation was done which has been described to strengthen a qualitative study.<sup>14</sup>

Triangulation refers to observing the research issue from more than one perspective. Triangulation can be done with data, investigators, theories and methods. Same

strategy to validate interview guide in which the guide was developed in light of the available literature and peer consultation. The developed questions were edited in light of opinion by experts in the field.

Based on literature review, the questions used in the interview guide had the following attributes.

- The questions were all open ended to encourage discussion
- Factual questions preceded the opinion questions

The researcher had no supervisory relationship to the participant and they were assured that their responses would not affect their performance appraisal. Participants were asked to verify the accuracy of the information discussed during the interview and before the end of the interview. After being recorded, the quotes were transcribed using standard verbatim. Verbal probing method was used for cognitive interviews.<sup>12</sup>

Data analysis was carried out concurrently with data collection until there were no new themes emerging. The data were analyzed using qualitative content analysis. Coding criteria was applied to analyze the data manually.

## Results

Eight females and 4 male health professionals. And represented 1 prosthodontics post graduate trainee, 1 maxillofacial surgeon, 2 dental educationist holding MHPE, 1 doctor of physiotherapy, 1 research analyst and 1 behavioral sciences specialist from allied health sciences group. 2 MBBS graduates and 1 MD (doctor of medicine). Content analysis of the qualitative data resulted in the identification of ten themes and they have been grouped into four domains:

### Domain A: Trainee Characteristics

Theme 1: Motivation: The attitude and intrinsic motivation of trainees toward whether or not to use the training content in practice influenced training transfer, according to participants. Some trainees expressed a desire to use what they gained in training for both personal growth and training junior peers, as noted. The reason was that they didn't want the future generations to undergo the same path. In which trainers used to conceal learnt knowledge and skill to keep superior edge over others. Hence intrinsic motivation facilitated the TOT:

*"Recently I had attended a workshop on the how to check the credibility of a journal. In this workshop we discussed what HJRS,*

medallions, HEC categories, H is and I index. This knowledge helped me that how can I rate the journal and target the journal for my articles.” (Participant 11)

**Theme 2: Aptitude:** Participants suggested that there should be standard set to select trainee for certain training programs. Instead of just having a criterion to have participation from all departments irrelevant of taking into account trainee’s availability to give time, energy and ability to translate the training content to workplace to improve turn over. Therefore, participant selection needs to be rigorous to have better transfer of training to workplace:

“I feel that benchmarks should be set for faculty training selection.....also a needs assessment should be done to establish relevant program outcome...as group, trainee’s attitude towards learning and prior level of knowledge plays a significant role ..... to scaffold new data learnt and use it on job ...” (Participant 03)

### **Domain B: Training Design:**

**Theme 3: Trainer and Training Managers attitude:** The expert of the program translating the knowledge and skill sets need to be trained as well. The training managers should focus on the primary goal and objective of the whole training as oppose to petty personal gain and objective which in turn lead to negative training transfer:

“I have recently attended a workshop, which was on advanced research methodologies.... But the organizer had invited everyone in the workshop to generate funds from the participants. Due to this reason they had to include everyone and there was nothing ADVANCE in it.... It was hardly useful for novice researcher.” (Participant 12)

### **Theme 4: Training Content**

Majority of participants mentioned that training content should have prior needs assessment of the audience. It needs to be relevant to work environment and reflect scenarios faced in real life on their jobs. Some addressed their concerns about poor structured content to their cultural as hampering factor to transfer of training such as:

“Since I started my PG training ... I was very apprehensive and anxious, not sure where to begin from so I decided to dive in experience like my fellows...I started observing seniors and assisting them. I felt very strongly that post graduate training should have structured curriculum program and a trainee should be trained to his learning stage rather it all being an irregular experience...” (Participant 04)

### **Theme 5: Instructional Design**

Apart from training content the instructional methods of conducting the training influences trainee’s comprehension of knowledge and TOT, it was always emphasized that practice-oriented learning had powerful and lasting effects on transfer of training:

“I attended a Hands-on workshop of delivering and Effective lecture based on Gagne’s 9 events...applying the learned concepts in second half of workshop really improved my learning.... most effective instruction method in adult learning is experiential learning.....simulations and role plays enable us to learn and apply ...” (Participant 05)

### **Domain C: Organizational Environment**

**Theme 6: Facilitators of Workplace:** The support from the organization, managers, and coworkers was regarded a facilitating aspect in the organizational environment by the participant. Excellent organizational support was based on fair policies to reward transfer of training with incentives. Harmony among departments facilitated the organizational climate.

“Organizational climate fosters transfer of training. It should be positive and conducive to learning.” (Participant 10)

“Did residency in Qatar in general medicine learned a lot in those 4 years ... most patients and peers were Arabic speaking and that was difficult for me at times... This motivated me to improve my language skills and better serve the community as a gesture of gratitude” (Participant 02)

**Theme 7: Barriers of Workplace:** Interviewees highlighted opposition from co-workers can demoralize and serve as resistance in transfer of training activities. There could be a multitude of factors being involved but overall outcome leads to decreased performance.

“Opposition from co-worker and team members had posed some problem during training transfer. There have been few hurtful incidences when trainer or training managers were not kind or sincere but life is all about moving on.” (Participant 09)

Occasionally there as conflicting views and contrasting objectives regarding the ongoing training activities at the institute. This creates unstable consequences as there is mismatch between the available logistics and resources utilized to achieve the desired objectives of the training.

“Knowledge is not always applicable in workplace due to mismatch alignment between organizational objective and ongoing training programs.... biggest setback is lack of training evaluation...” (Participant 03)

**Domain D: Profession**

Theme 8: Career Progression: Participants stated that due to limits in professional development, they believe that achieving monetary reward or professional career success, no matter how hard they try, is a long shot... However, the desire of promotion is always striven for:

*“My institute asks us to go above and beyond the PMC criteria for promotion.... this policy pushes the faculty to work in proper way which ultimately improves the standing of faculty and thus the quality of education and student training is also influenced in positive way” (Participant 11)*

Theme 9: Continuous Professional Development: Trainers even learn while training their subordinates. It a continuous cycle with a snowball effect keeping all the stakeholders (trainees, trainers and training manager) in check, thus improving their quality assurance standards in form of maintaining CPD activities as part of faculty development program.

*“A good and properly learnt skill has a trickle-down effect.” (Participant 11)*

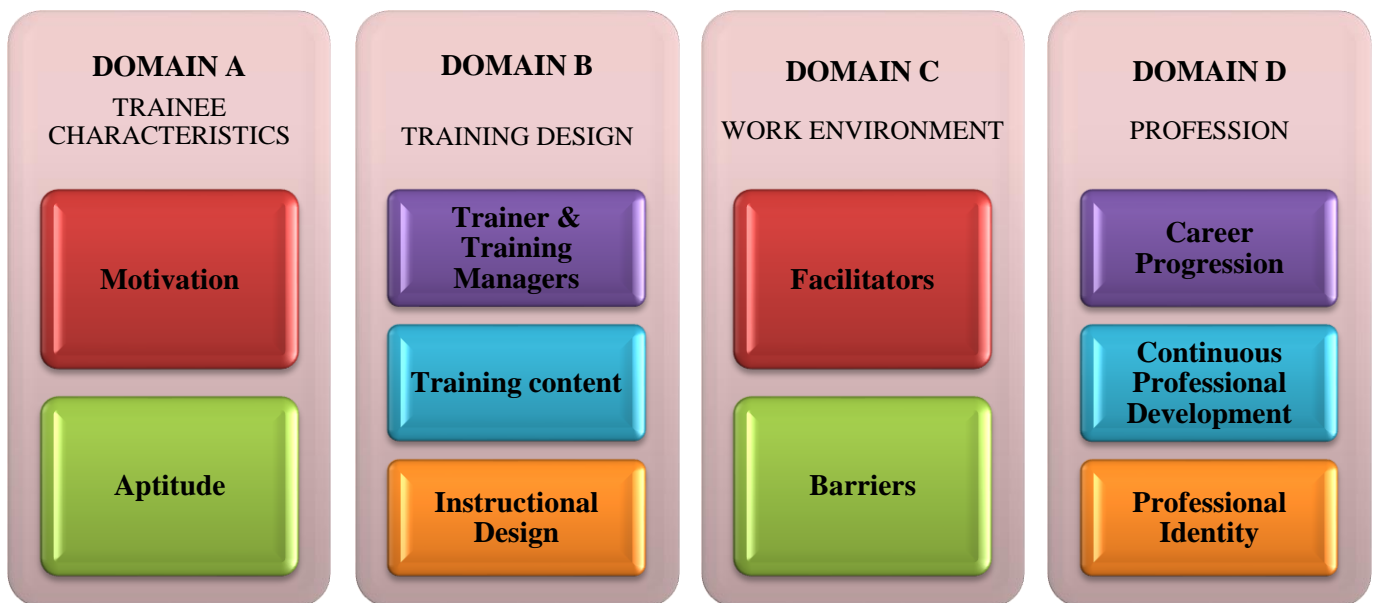
*that matter. The fact is quite demotivating at time.” (Participant 09)*

**Discussion**

This study examines the factors that impact training transfers in Pakistan from the perspective of the health profession. Individual aptitude towards training, such as intrinsic drive to transfer, has been discovered to influence training transfer in other works. <sup>15</sup>

Personal development and information exchange may be the fundamental source of motivation to transfer, according to our findings. In Pakistani culture, face saving has an impeding effect as well on transfer of learning. Team members shy away and don't ask their senior or peers to avoid embarrassment. Moreover, the hierarchical culture in organizations occasionally blames and shames leading to lack of knowledge sharing and training transfer. <sup>16</sup> All following suggest that individual and organizational level hindrances serve as barriers to training transfer in Pakistani health care settings.

Few strategies need to be employed at managerial level



**Figure 1. Summarized qualitative findings of 11 themes under the 4 domains.**

Theme 10: Professional Identity: Participant identified that professional identity needs to be given due respect and significance so positive training transfer can occur.

*“No experience is unsuccessful as you either gain from it or learn from it. In our setup, I feel problem on grass root level is that profession of nursing is not given due importance and respect for*

to reward and appraise performance of individuals caring our knowledge sharing. This can be in the form of faculty development programs designed by the organization to create opportunities for health professional interactions and incorporating experiential learning activities.<sup>17</sup> Our results highlight that health professionals attitude towards the objective if training is directly proportional to TOT. The honest beliefs and values of training should be developed in health care professions. As Subedi <sup>18</sup> suggested that we should

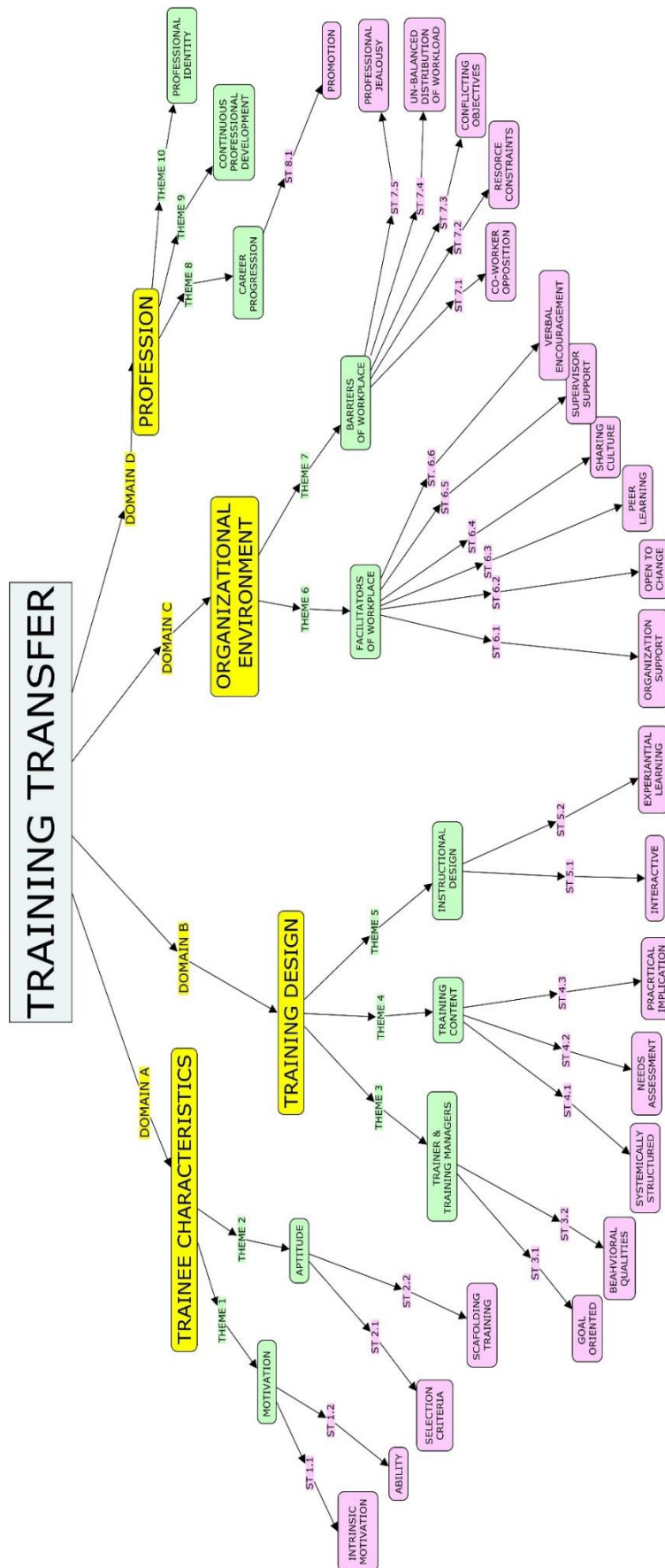


Figure 2. Concept Map of the Qualitative thematic analysis of the 4 major Domains and 10 themes generated along with the sub themes.

deject the tendency to take training as mode of financial gains and Relief from work for better training outcomes. Performance improvement and achieving organizational goals should be perceived as of the highest value for training.

Ability and self-efficacy strongly impact and steer the training transfer process, which have been reported in other research finding.<sup>19</sup> On a particular instance our finding showed personal intellect of training managers also affected TOT. To avoid Bias in staff selection of health professionals to be sent for training should undergo formal criteria of selection. The factors should primarily include:

- Organizational need
- Job requirement
- Performance requirement

Internal rotations or turns are used to choose employees for training, indicating a circumstance that is not particularly favorable to the TOT.<sup>20</sup>

In the training domain, our findings revealed that teacher ability, training content, and instructional design all had significant effects on training transfer. Furthermore, appealing to the audience and making training relevant increases the effectiveness of trainings.<sup>21</sup> The qualitative results confirmed that we should develop and provide training that is practical and has parts that are similar to real-world circumstances, based on adult learning principles. The old didactic method to training is obsolete, and there is no such thing as a one-size-fits-all approach to all types of training.<sup>22</sup> The training environment is “all about the condition or surrounding of the medium the training program takes place in,” it is the key factor responsible for successful implementation. In organizations with unsatisfactory environment it distracts the participants also might impact next year’s intake of potential trainees if they hear adverse report.<sup>23</sup>

The organizational support is fundamental factor influencing transfer of training. To accelerate the process and extract positive results a system of rewards and incentives needs to be founded to

improve. Peer learning and support from co-workers is always beneficial to training transfer.<sup>24</sup> Apart from negative role of few co-workers' intimidation at work place offering as a barrier to training transfer. The unfair and informal selection procedure charted out by organizations where the needs assessment is skipped. The unbalanced investment in trainings may up rise conflict among colleagues and creating opposition to application by fellow trainees. Moreover, health professionals are almost always occupied at multiple places. For example a clinician will be treating patient, performing procedures, teaching and training both undergraduate and post graduate trainees, thus application of training content might involve added burden of workload resulting in resistance to application.<sup>25</sup> Few added components not mentioned in the Baldwin and Ford model of transfer was professional progression. The limited professional development translates as a negative professional identity and career stagnation. In turn decreasing intrinsic motivation. The individuals who excel and honor the organizations with medal of trainings acquired need to be granted with authority as a reward.<sup>26</sup> This will in return motivate other to follow in suit and gain more mementos for the organization leading to improved organizational progress. This generates a positive image and professional identity not only of the individual but also of the department.

Our analysis translated those participants from urban area and more positive training transfer experiences. On the contrary, rural area participant faced many hindrances in training transfer. Owing to lack of resources to the organizational need only focusing on providing basic health care support forced them to only work as per the policies of the institute. It was an intelligent decision to incorporate different cultural background with varying experiences to help enrich the data collected for the research.

**LIMITATION:** The current study's shortcoming is that it only includes Pakistani health professionals. This may not be indicative of all health professions, such as doctor of pharmacy, psychologists, and therapists.

## Conclusion

Our study signifies that how imperative it is to have correct set of beliefs and values to motivate trainees. A structured selection process for training program needs to be appropriately devised. Keeping it goal oriented on basis of job requirement and need based training. The training designs need to be a simulation of real-life

situation at workplace. An active organizational policy linking reward and appraisal system will make health care professional bloom in their fields. Providing conducive environment with appropriate allocation of resources will always reward departmental outcomes.

## References

1. Iqbal MZ, AlSheikh MH. Factors affecting the transfer of training to the workplace after a faculty development programme: What do trainers think? *J Taibah Univ Sci.* 2018;13(6):552-556.
2. Lewis LD, Steinert Y. How Culture Is Understood in Faculty Development in the Health Professions: A Scoping Review. *Academic Medicine.* 2020;95(2):310-319.
3. Steinert Y, Mann K, Centeno A, et al. A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. *Medical teacher.* 2006;28(6):497-526.
4. Steinert Y, Mann K, Anderson B, et al. A systematic review of faculty development initiatives designed to enhance teaching effectiveness: A 10-year update: BEME Guide No. 40. *Medical teacher.* 2016;38(8):769-786.
5. Khattak AH, Malik FR, Khan MR, et al. Peer Tutoring With Simulations in Undergraduate Medical Students to Teach Basic Life Support: A Randomized Controlled Education Trial. *JRMI* 2017.
6. Gegenfurtner A, Knogler M, Schwab S. Transfer interest: measuring interest in training content and interest in training transfer. *Hum. Resour. Dev. Int.* 2020;23(2):146-167.
7. Seiberling C, Kauffeld S. Volition to transfer: Mastering obstacles in training transfer. *Personnel Review.* 2017.
8. Steinert Y. Faculty development: from rubies to oak. *Medical Teacher.* 2020;42(4):429-435.
9. Blume BD, Ford JK, Baldwin TT, Huang JL. Transfer of training: A meta-analytic review. *Journal of management.* 2010;36(4):1065-1105.
10. Tenzin K, Dorji T, Choeda T, Pongpirul K. Impact of faculty development programme on self-efficacy, competency and attitude towards medical education in Bhutan: a mixed-methods study. *BMC medical education.* 2019;19(1):1-12.
11. Singh J, Singh H. Continuous improvement philosophy—literature review and directions. *Benchmarking: An International Journal.* 2015.
12. Artino Jr AR, La Rochelle JS, Dezee KJ, Gehlbach H. Developing questionnaires for educational research: AMEE Guide No. 87. *Medical teacher.* 2014;36(6):463-474.
13. Upadhyay UD, Lipkovich H. Using online technologies to improve diversity and inclusion in cognitive interviews with young people. *BMC Med. Res. Methodol.* 2020;20(1):1-10.
14. Triangulation DS. The use of triangulation in qualitative research. Paper presented at: *Oncol Nurs Forum* 2014.
15. Song I-S, Kwon S-J. An analysis of structural relationships among employee training, servant leadership, self-efficacy, transfer behavior of training, and knowledge sharing. *Knowledge Management Research.* 2017;18(4):261-286.
16. Kim B, Lee D-Y, Kim B. Deterrent effects of punishment and training on insider security threats: a field experiment on phishing attacks. *Behaviour & Information Technology.* 2020;39(11):1156-1175.
17. Sahoo M, Mishra S. Effects of trainee characteristics, training attitudes and training need analysis on motivation to transfer training. *Management Research Review.* 2019.
18. Subedi BS. Emerging Trends of Research on Transfer of Learning. *International education journal.* 2004;5(4):591-599.
19. Karbach J, Könen T, Spengler M. Who benefits the most? Individual differences in the transfer of executive control training across the lifespan. *Journal of Cognitive Enhancement.* 2017;1(4):394-405.

20. Ma F, Bai Y, Bai Y, Ma W, Yang X, Li J. Factors influencing training transfer in nursing profession: a qualitative study. *BMC medical education*. 2018;18(1):1-9.
21. Kodwani AD, Prashar S. Influence of individual characteristics, training design and environmental factors on training transfer: a study using hierarchical regression. Paper presented at: Evidence-based HRM: a Global Forum for Empirical Scholarship 2021.
22. Mohamed H, McAuliffe N, O'Connor R, et al. Proficiency based progression training—implementing a novel approach to training for epidural analgesia in labour. *International Journal of Obstetric Anesthesia*. 2021:103213.
23. Alsalamah A, Callinan C. Adaptation of Kirkpatrick's Four-Level Model of Training Criteria to Evaluate Training Programmes for Head Teachers. *Education Sciences*. 2021;11(3):116.
24. Reinhold S, Gegenfurtner A, Lewalter D. Social support and motivation to transfer as predictors of training transfer: testing full and partial mediation using meta-analytic structural equation modelling. *International Journal of Training and Development*. 2018;22(1):1-14.
25. Brown T, McCracken M. Building a bridge of understanding: How barriers to training participation become barriers to training transfer. *Journal of European industrial training*. 2009.
26. Dirani KM. Professional training as a strategy for staff development: A study in training transfer in the Lebanese context. *Eur. J. Train.*. 2012.