

Impact of Continuous Professional Education on Leadership for Rehabilitation Professionals in Bangladesh: A Pilot Study

K M Amran Hossain¹, Anawarul Quader Nazim², Md. Shahadat Hossain³, Md. Obaidul Haque⁴, Mohammad Anwar Hossain⁵, Md. Zahid Hossain⁶, Md. Shahoriar Ahmed*⁷

¹Department of Physiotherapy, Centre for the Rehabilitation of the Paralysed (CRP), Dhaka-1343, Bangladesh, ²Bangladesh Physiotherapy Association (BPA), Dhaka-1343, Bangladesh, ³Bangladesh Physiotherapy Association (BPA), Dhaka-1343, Bangladesh, ⁴Bangladesh Health Professions Institute (BHPI), Dhaka-1343, ⁵Department of Physiotherapy, Centre for the rehabilitation of the Paralysed (CRP), Dhaka-1343, ⁶Department of Physiotherapy, Bangladesh Health Professions Institute (BHPI), Dhaka-1343, ⁷Project Coordinator, BPA-TGH, Handicap international (HI), Bangladesh Physiotherapy Association (BPA), Dhaka-1343, Bangladesh

*Corresponding Author's Mail: physio.shahoriar@gmail.com

*Cell: [+8801794859401](tel:+8801794859401)



How to cite this article: Hossain KMA, Nazim AQ, Hossain MS, Haque MO, Hossain MA, Hossain MZ, Ahmed MS. Impact of Continuous Professional Education on Leadership for Rehabilitation Professionals in Bangladesh: A Pilot Study. Journal of Medical Research and Innovation. 2019;3(1):e000158.

Doi: 10.32892/jmri.158.

Publication history: Received:09-11-2018
Accepted: 19-12-2018
Published: 20-12-2018

Editor: Dr. Sojib Bin Zaman and Dr. Varshil Mehta

Copyright: Authors. This is an open-access article distributed under the terms of the Creative Commons Attribution License CC-BY 4.0., which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and sources are credited.

Funding: The training was funded by European Union (EU), organized by BPA - TGH project of Handicap International (Humanity and Inclusion).

Conflict of Interest: NIL

Abstract

Background: In healthcare and rehabilitation profession, continuous professional education (CPE) is deemed as an essential tool by institutions, regulatory bodies and organizations. It is considered to be a safeguard to professional practice to ensure patient safety and efficient service delivery. Leadership program is an emerging subject that integrates technical, management and leadership skill that found indispensable to enhance ultimate professional development. **Objective:** The purpose of this article is to explore the potential impact of CPE on leadership training for rehabilitation professionals in Bangladesh. **Methodology:** This pilot study was a mixed methods study. 20 rehabilitation professionals participated in the study. Quantitative data were collected by structured questionnaire and qualitative data were obtained by face to face video recording interviews. Quantitative data were analyzed by Statistical Package for the Social Sciences (SPSS) and thematic analysis was considered for qualitative data. **Result:** Study findings showed that 95% of the participants (n=19) were in their 2nd to 3rd decade of life, there mean age was 26 and male participation (n=12) were higher than female (n=8). Highest academic qualification was master's degree and none of the participants attended leadership training before. Overall objective, planning and atmosphere of the training course, quality of trainers and time management seemed effective and satisfactory to the participants they agreed with. Leadership qualities and elements have profound impacts on knowledge and attitude towards positivity in performing professional duties and Responsibilities. The training also enhances motivation to be a skilled professional in clinical practice, also encourages serving with outmost excellence towards patients or clients. **Conclusion:** The study demonstrates that education on leadership to professionals have an impact on motivation and positivity towards developing technical, management and professional skills. The study may have impact on developing diverse qualities of a professional in personal and organizational perspective; this can be explored by continuing education on leadership and evaluation of the behavioral changes, professional and management skills in rehabilitation professionals' serving in an organization in longer run.

Keywords: Leadership, Continuous professional education (CPE), Rehabilitation, Bangladesh.

Introduction

Health care professionals need to engage in continuous professional education (CPE) on diverse spectrum to upgrade the professional knowledge and skills regularly to enhance professional integrity and leadership in this competitive world. CPE is a necessity to deliver safe and effective health care [1]. The development can be distinct as continuous advancement of knowledge, cognition, creativity, leadership and management skills that contributes to the society with an approach in positive dimension [2]. The previous studies asserted that CPE based on strong scientific evidence and of diverse technical and management skills of service provider can improve the clinical practice, patient care and overall outcomes in serving the mankind [3]. Every professional may not have similar interest for education and development [4]; hence it is important to promote leadership qualities in standard multidisciplinary care, a substantial component for professionals is to encourage and ensure participation in continuing education programs [5, 6]. There are several concepts and theories which are being applied in both corporate and healthcare sector to achieve organizational goals. Leadership is a new and ever-evolving concept with many definition and concepts [7]. Several theories and practical implication have been considered to evaluate the effectiveness of leadership. Leadership is an integral part to establish its impact on education, practice, skill and attitude that plays an important role in human resource development [5, 8]. Conger & Riggio, [9] noted in their review research that leadership style in a particular environment depends upon the specific needs and there is no actual style of leadership for all situations. CPE is important for healthcare professionals, and that leadership styles may impact the behaviors of the professionals. It is, therefore, prudent to know if the impacts could be determined in a systematic approach. The health and rehabilitation professionals strongly feel that they need the skill of leadership, communication and management more than their technical skills now-a-days in Victoria, Australia [5, 10]. The idea of leadership cannot be confined to a specific person or an authority; it's an automated process that conceptualizes the idea of liberating thoughts and leads to any situation [11]. Under a project named "Towards global health" two

physiotherapy professionals completed "Public health leadership short course" from Nossal Institute for global health in Victoria, Australia. The project requirement was to disseminate the training to the rehabilitation professionals in Bangladesh. The dissemination training program was intended to deliver essentials of leadership in a structured module. The module was designed for 16 hours program covering leadership introduction, motivational skills, team building, time management and self-management and managerial skills for leader. The participants were registered members of rehabilitation professional's association. The training module conducted according to the traditional and non-traditional forms of CPE. Leadership training to rehabilitation professionals is newly introduced in Bangladesh. This research aimed to find out the potential impact of CPE on leadership module among the rehabilitation selected professionals in Bangladesh. Although this leadership training may not result in long-term behavior change but the will and engagement of participants may help in long lasting changes in personal, professional & organizational development for the rehabilitation professionals.

Methodology

The study was a mixed-method-type of pilot study. In quantitative analysis, the participants demographics, perception and evaluation has been presented with descriptive statistics. In qualitative part, an open structured interview had been recorded to explore the best possible feedback from the participants for maximum 25-minutes duration. All the participants signed the informed consent for their video to be recorded and broadcasted online. Amongst them, we interviewed five participants and recorded the video via YouTube broadcast as an evidence (which may be required for research purpose in future). For qualitative analysis, videos were recoded under the themes like: Theme 1: Leadership training is essential for Rehabilitation professionals. Theme 2: Leadership skills help to achieve personal, professional and organizational goals. Theme 3: Leadership skills enable a professional to understand his gaps to become one of the qualified professional. Theme 4: Leadership skills are interesting and somehow present in every individual. Theme 5: Leadership training motivates professional to explore their



potentials. All the participants gave their consent. Twenty professionals have been participated in the study, because they responded to the open circular for the training. Inclusion criteria were Bachelor degree completion and willing to participate in training program and in the final evaluation. Exclusion criteria were non-professional person and who were not willing to participate in the final evaluation. The training had been facilitated by an Australian awardee fellow (public health leadership short course from Nossal Institute for Global health affiliated to University of Melbourne). The outcome measure and interviews were conducted by an independent assessor from Bangladesh Physiotherapy Association.

Ethical Consideration:

The ethical permission was taken from the President of Bangladesh Physiotherapy Association (BPA), CRP, Savar, Dhaka, Bangladesh for conducting this CPE training program. The reference no from BPA was BPA-R&E-017-100. Also, the training program was funded by European Union (EU), organized by BPA-Towards Global Health (TGH) project of Handicap International (Humanity and Inclusion).

Data Collection and Management

To conduct the study, a flyer titled "Training on leadership and management for Rehabilitation professional" was circulated through an open circular announcement [Link: <https://www.bpa-bd.org/index.php/2016-12-01-07-28-26/2016-12-01-07-29-13/cpe-module/leadership-course>].

Majority of the interested professionals were the member of Bangladesh Physiotherapy Association (BPA); the national association of Physiotherapists in Bangladesh (www.bpa-bd.org) and member organization of World confederation for Physical therapy (WCPT). Before the training, demographic data of the participants were collected and after completion of training a structured questionnaire were used to find out the feedback. The training feedback questionnaire was adopted from

International Committee of the Red Cross (ICRC) community based psychological support training module questionnaire [12] and Multifactor Leadership Questionnaire (MLQ), that has been developed [13] and used [14-16]. At the end of the training program the participants were requested to give an interview depending upon an open question "How was the training and how it can be helpful for you?" The quantitative data was analyzed by using Statistical package of social science (SPSS) Version 22 and presented by descriptive statistics. Qualitative data were presented considering the themes emerged from interviews.

Results

The demographic data were explored, most of the participants were within 25-30 years of age (n=17, 85%), having bachelor degree (n=18, 90%) and male (n=12, 60%). None of them participated in any leadership program before. The majority of the participants, participated in the program influenced by someone (n=8, 40%) followed by interest to be a leader (n=6, 30%). Thus, it was obvious that, none of them (n=20) had an idea about leadership styles and leadership skills [shown in the Table 1]. Majority of the participant (62%) strongly agreed that the objective of the program has been achieved and 34% agreed that positively to the questions. The objective was cumulating their interest and module content, that has been displayed separately throughout the program. Four participants disagreed; possibly they attended late in first session. In planning, there was satisfactory result with majority agreeing (70%) while in training method it was a better outcome with 73%. 50% of them strongly agreed that the time management was pertinent to satisfaction [Table 2].



Table1: Distribution of the demographic variable of the respondents (n=20).

Demographic variable	Frequency	Percentage (%)
Age category		
<25 years	1	5.0
25- 30 years	17	85.0
>30 years	2	10.0
Gender		
Male	12	60.0
Female	8	40.0
Education		
Bachelor	18	90.0
Masters	2	10.0
Knowledge about leadership		
Participated any leadership program	Yes: 0	0
	No:20	100
Leadership means	Working on politics : 8	40.0
	Leading a profession : 4	20.0
	Skills to be a pioneer :1	5.0
	No idea :7	35.0
Interested in leadership because	Online articles : 2	10.0
	Want to be leader : 6	30.0
	Develop skill : 2	10.0
	Others influence : 8	40.0
	Certificate : 2	10.0

Qualitative Analysis:

Theme 1: Leadership training is essential for Rehabilitation professionals.

60% of the participants admired that training on leadership is as much as important like technical skill-based training. It is a valuable asset to adapt to become a good professional and a manager.

Participant 1 stated, *“The training is so much helpful for me to explore my potential as a leader and as a professional”*, and *“this is an effective training module for professionals”* she added [Paraphrased from Video 1: Link: <https://youtu.be/7bHjMyWIB5A>]

Theme 2: Leadership skills help to achieve personal, professional and organizational goals

Majority (80%) of the participants agreed that leadership training is not just about creating leaders, but it also integrates leadership qualities into professional roles. They expressed, that practicing these skills and understanding leadership qualities can help in achieving personal progression at

workplace which may contribute to professional dignity.

Participant 2 expressed, *“I believe these elements can be practiced in my workplace and thus I can reach the goals that I dreamt for a long time”*.

Participant 3 stated, *“Practicing these skills will make me someone different in my workplace”* [Paraphrased from Video 2-4: Link: <https://youtu.be/7bHjMyWIB5A>].

Theme 3: Leadership skills enable a professional to understand his gaps to become one of the qualified professional.

All of the participants interviewed (n=5) avowed that, they learned the gap of skills that is essential to be a pioneer, leader and entrepreneur in professional field. They said, they never knew what is to be achieved and now they know what to improve and how it can be improved.

Participant 1 stated, *“Now I know about my gaps which I need to improve”*,



Table 2: Training feedback of the participants according to feedback assessment (n=20).

Objective of the training course					
	Strongly agree n (%)	Agree n(%)	Neither disagree nor agree n(%)	Disagree n(%)	Strongly disagree n(%)
1. I was given sufficient information on the objectives of the training course before my arrival.	7 (35.0)	5 (25.0)	4 (20.0)	4 (20.0)	0
2. The training course encouraged exchange of information and expression of ideas successfully.	10 (50.0)	10 (50.0)	0	0	0
3. The course covered the topics I needed to learn about.	14 (70.0)	6 (30.0)	0	0	0
4. The objectives of the course were achieved.	10 (50.0)	10 (50.0)	0	0	0
Planning of the training course					
5. I feel that the program drawn up for the course took into account what participants considered important to learn	4 (20.0)	14 (70.0)	2 (10.0)	0	0
Training methods (relevant and of good quality)					
6.1. Lectures	15(75.0)	5 (25.0)	0	0	0
6.2. Whole group discussion/brainstorming	11 (55.0)	9 (45.0)	0	0	0
6.3 Small group discussion	10 (50.0)	10(50.0)	0	0	0
6.4. Role-play	10 (50.0)	6 (30.0)	3(15.0)	1(5.0)	0
6.5. Review and revision	10 (50.0)	6(30.0)	4(20.0)	0	0
7. The language used in the training sessions was easy to understand.	17(85.0)	3(15.0)	0	0	0
The training atmosphere					
8. The general atmosphere during the course enhanced the learning process.	14(70.0)	6(30.0)	0	0	0
9. The course fostered teamwork and cooperation among participants.	10(50.0)	10(50.0)	0	0	0
Trainers					
10. Trainers have sufficient knowledge.	18(90.0)	2(10.0)	0	0	0
11. Trainers communicate well.	16(80.0)	4(20.0)	0	0	0
12. Trainers are open, honest and fair to all.	16 (80.0)	4 (20.0)	0	0	0
The modules (covered adequately)					
13.1. Module 1: Introduction to leadership	17(85.0)	3(15.0)	0	0	0
13.2. Module 2: Motivation	15(75.0)	5(25.0)	0	0	0
13.3. Module 3: Team Building	14(70.0)	6(30.0)	0	0	0
13.4. Module 4: Time management and self-management	12(60.0)	8(40.0)	0	0	0
13.5. Module 5: Management skill for leaders	12(60.0)	8(40.0)	0	0	0
13.6. Module 6: Practical session	16(80.0)	4(20.0)	0	0	0
Time management					
14. Enough time was devoted to each module.	11(55.0)	9(45.0)	0	0	0
15. Enough time was given for feedback from the participants.	9(45.0)	11(55.0)	0	0	0

Participant 2 expressed, *“Fulfillment of these gaps will make me a better person in workplace”*,

Participant 4 said, *“It’s something, I knew that I had in me, but I didn’t know what was it in specific, but now, this will me to lead my workplace and my profession”*. [Paraphrased from Video 2-3: Link: <https://youtu.be/7bHjMyWIB5A>]

Theme 4: Leadership skills are interesting and somehow present in every individual.

80% of the participants found interest in leadership qualities. They felt that the program might be on theories, but when they had practical discussions, it made them understood the subject much better. They noticed everyone has some leadership qualities, but only that,



everyone needs to know how to explore their potentials to become a leader in their area of expertise or interest.

Participant 4 stated, *"Now I know that, I have some qualities to be a leader and it's interesting"*, participant 2 expressed, *"Everyone has leadership skills and it needs to be integrated"*. [Paraphrased from Video 2: Link: <https://youtu.be/T22MZbZDvHY>].

Theme 5: Leadership training motivates professional to explore their potentials.

Every participant who has been interviewed (n=5) agreed that motivation was the premier outcome of the leadership training. The training motivates participants to work on diverse scopes. It helps and inspires them to learn and explore their potentials.

Participant 1 said, *"It's so much effective that, I know what I need to do in upcoming days"*, participant 2 expressed, *"It helped me to know more"*. Participant 3 added, *"It encouraged me to work harder"* Participant 4 appealed, *"The training should be continued, to make the professionals skilled day by day"* [Paraphrased from Video 2: Link: <https://youtu.be/T22MZbZDvHY>].

Discussion

The pilot study was conducted to explore the impact of leadership training on health and rehabilitation professionals in Bangladesh. The primary findings suggested the necessity and interest of leadership training in developing country which indicates a positive change in conducting CPE amongst the rehabilitation professionals. If there is a high participation in CPE within an organization, it may be the most beneficial [17]. This is especially true in many effectively designed systems that adds leadership and management styles, particularly those with inherent responsiveness and adaptability [18, 17]. There is the requirement of diverse skills for professional and organizational development focusing on comprehensive skills of leadership, time management, self-management, and managerial skills rather than only technical skill training. Majority of the participants were younger, in 25-30 years (n=17) and they were the future of their professions. They were professional, employees in an organization and represented a majority age group in the country. Leadership training has enormous necessity in developing profession and faced

challenges in recent times. Positivity and enthusiasm towards them could bring great achievements to their professions, organizations and society. Although there are many studies that demonstrate that leadership styles lead to greater productivity in followers, they are not always realistic. The primary objective of leadership is to change or transform the state of an organization or group when tasks are simple and routine, such as having people attend the staff trainings. Sometimes there is a risk that leaders induce overly complex solutions to artificial problems [19]. It is also important to understand that follower characteristics, combined with their perceptions of the leader and their own situations, impact the effectiveness of each style of leadership [20]. By spurring intellectual curiosity and creativity, individual expression can be fostered, which can help a team to solve problems in innovative ways. One of the greatest challenge is for the organization to be self-actualized; there is a need for evolution, for evolving sufficiently with the ever-changing world [17]. The main outcome of the study was changing of knowledge, attitude and motivation towards doing anything right. This motivation will help the learners to motivate others and explore new possibilities. Their followership will encode the future possibilities in larger scale. The leader is only one variable in the complexity of motivation and participation [21]. Clearly, context is a paramount consideration when assessing the degree to which leadership behaviors can influence learners [22]. If a healthcare provider is goal-oriented in their technical activities, they are less likely to be affected by a leadership style [22]. Creating leader from the profession is as much as important to creating good leader who will motivate followers achieving goals. Self-motivated person are intrinsically motivated learners and productive to motivate others into action [20]. O'Connell and Pascoe believed that leadership training worked well if incorporated into clinical activities where the skills could be used [23]. Peter F. Drucker quoted "leadership is doing things right and management is doing right thing" [24]. Considering all these factors, the feedback questionnaire was complied with International Committee of Red Cross Community based psychological support training module questionnaire and Multifactor Leadership Questionnaire (MLQ). Bass et al. [14] proposed a questionnaire which identified the satisfaction and



performance of the team. The integration of both questionnaires was done to evaluate the educational and psychological impact of training. An unstructured interview was planned to explore new ideas and thoughts from the learner. It is evident that qualitative and quantitative study design is important to explain the research question and for possible explanation [25].

Limitations

This pilot study provided satisfactory impact on training methods and dissemination of module, although couldn't reveal actual relationship between leadership skill and performance of learners. The impacts are somehow intrinsic towards the learner, but the impact on their performance towards profession and organization might be explored with next phase of the study. The performance of the participants in their workplace might be taken in consideration in next study to explore the actual impact of the training. Moreover, the complex nature of motivation to participate in CPE and the various external variables make it difficult to explore the actual impact of leadership training for the learners, as their knowledge level, biasness to the trainer, duration of training or outcome measurement process. A multicenter larger scale training and evaluation in several steps, immediately after training and long-term work performance, can reveal the relationship and thus the impact will be prominent to present.

Conclusion

Most of the organizations are continuously working towards improving the quality of the services they provide and the staff they employ, whether it is a health institution, a non-profit health organization, or a credentialing or regulating body. By gaining a greater understanding and awareness of how leadership make changes, can promote comprehensive qualities and facilitate training to achieve the desired professional and organizational goals.

Acknowledgement

Author acknowledges Dr. Wes Pryor, Handicap International (Humanity and Inclusion), all the participants of CPE training program, Nossal Institute

for Global Health, Australia Awards, European Union, BPA-TGH team and Bangladesh Physiotherapy Association (BPA) to promote training on "Public health leadership in Rehabilitation".

Conflict of Interest

Authors declares no conflict of interest.

Funding

The training was funded by European Union (EU), organized by BPA-towards global health project of Handicap International (Humanity and Inclusion).

References

1. Katsikitis M, McAllister M, Sharman R, Raith L, Faithfull-Byrne A, Priaux R. Continuing Professional Development in Nursing in Australia: Current Awareness, Practice and Future Directions. *Contemporary Nurse*. 2013;;3394-3424. Doi: [10.5172/conu.2013.3394](https://doi.org/10.5172/conu.2013.3394)
2. Hueppchen N, Dalrymple J, Hammoud M, Abbott J, Casey P, Chuang A et al. To the point: medical education reviews—ongoing call for faculty development. *American Journal of Obstetrics and Gynecology*. 2011;205(3):171-176. Doi: [10.1016/j.ajog.2011.02.070](https://doi.org/10.1016/j.ajog.2011.02.070)
3. Kiessling A, Lewitt M, Henriksson P. Case-Based Training of Evidence-Based Clinical Practice in Primary Care and Decreased Mortality in Patients With Coronary Heart Disease. *The Annals of Family Medicine*. 2011;9(3):211-218. Doi: [10.1370/afm.1248](https://doi.org/10.1370/afm.1248)
4. Boeren E, Nicaise I, Baert H. Theoretical models of participation in adult education: the need for an integrated model. *International Journal of Lifelong Education*. 2010;29(1):45-61. Doi: [10.1080/02601370903471270](https://doi.org/10.1080/02601370903471270)
5. Finkelstein S, Hambrick D, Cannella A. *Strategic leadership*. New York: Oxford University Press; 2009. 1-451p.
6. Nolan M, Owen R, Curran M, Venables A. Reconceptualising the outcomes of Continuing Professional Development. *International Journal of Nursing Studies*. 2000;37(5):457-467. Doi: [10.1016/s0020-7489\(00\)00025-0](https://doi.org/10.1016/s0020-7489(00)00025-0)
7. Grimm J. Effective Leadership: Making the Difference. *Journal of Emergency Nursing*. 2010; 36(1):74-77. Doi: [10.1016/j.jen.2008.07.012](https://doi.org/10.1016/j.jen.2008.07.012)



8. Shriberg A, Shriberg D, Lloyd C. Participating Leadership Principles and Applications. J. Wiley & Sons; 2002. 112-149 p.
9. Bass B, Riggio R, Conger J. The practice of leadership. San Francisco, Calif.: Jossey-Bass; 2013.
10. [Internet]. Caphia.com.au. 2018 [cited 8 November 2018]. Available from: <http://caphia.com.au/documents/Building-PH-Workforce-Capacity-Australia.pdf>
11. Sinclair A. Leadership for the Disillusioned. Melbourne Review: A Journal of Business and Public Policy, The. 2007;3(1):65.
12. Simonsen LF, Reyes G. Community-based psychological support: A training manual. Geneva, Switzerland: International Federation of Red Cross and Red Crescent Societies. 2003:1-100p.
13. Bass B. Leadership and performance beyond expectations. New York: Free Press; 1985.
14. Bass B, Avolio B, Jung D, Berson Y. Predicting unit performance by assessing transformational and transactional leadership. Journal of Applied Psychology. 2003;88(2):207-218. Doi: [10.1037/0021-9010.88.2.207](https://doi.org/10.1037/0021-9010.88.2.207)
15. Lowe K, Kroeck K, Sivasubramaniam N. Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the mlq literature. The Leadership Quarterly. 1996;7(3):385-425. Doi: [10.1016/s1048-9843\(96\)90027-2](https://doi.org/10.1016/s1048-9843(96)90027-2)
16. Tejeda M, Scandura T, Pillai R. The MLQ revisited: psychometric properties and recommendations. The Leadership Quarterly. 2001;12(1):31-52. Doi: [10.1016/s1048-9843\(01\)00063-7](https://doi.org/10.1016/s1048-9843(01)00063-7)
17. Brown S, Eisenhardt K. The Art of Continuous Change: Linking Complexity Theory and Time-Paced Evolution in Relentlessly Shifting Organizations. Administrative Science Quarterly. 1997;42(1):1. Doi: [10.2307/2393807](https://doi.org/10.2307/2393807)
18. Brown M, Treviño L. Leader–follower values congruence: Are socialized charismatic leaders better able to achieve it?. Journal of Applied Psychology. 2009;94(2):478-490. Doi: [10.1037/a0014069](https://doi.org/10.1037/a0014069)
19. Schuh S, Zhang X, Tian P. For the Good or the Bad? Interactive Effects of Transformational Leadership with Moral and Authoritarian Leadership Behaviors. Journal of Business Ethics. 2012;116(3):629-640. Doi: [10.1007/s10551-012-1486-0](https://doi.org/10.1007/s10551-012-1486-0)
20. Wyld DC. Transformation leadership: When is it redundant. AMP. 2013;27(2):1-2.
21. Pool I, Poell R, Berings M, ten Cate O. Motives and activities for continuing professional development: An exploration of their relationships by integrating literature and interview data. Nurse Education Today. 2016;38:22-28. Doi: [10.1016/j.nedt.2016.01.004](https://doi.org/10.1016/j.nedt.2016.01.004)
22. Li N, Chiaburu D, Kirkman B, Xie Z. Spotlight on the Followers: An Examination of Moderators of Relationships Between Transformational Leadership and Subordinates' Citizenship and Taking Charge. Personnel Psychology. 2012;66(1):225-260. Doi: [10.1111/peps.12014](https://doi.org/10.1111/peps.12014)
23. O'Connell MT, Pascoe JM. Undergraduate Medical Education for the 21st Century: Leadership and Teamwork. Family Medicine. 2004; 1;36(1):S51-6.
24. Drucker PF. The coming of the new organization.1988:1-11p.
25. Johnson RB, Onwuegbuzie AJ, Turner LA. Toward a definition of mixed methods research. Journal of mixed methods research. 2007;1(2):112-33.

