

Research Paper



Reflective Practice and Self-assessment of Novice Physical Therapists Graduate From Governmental and Private Sectors in Lahore City, Pakistan: A Comparative Cross-sectional Study

Muhammad Shazib Butt¹, Zohaib Shahid^{2*}, Iqra Rasheed³

1. Department of Physical Therapy, Islam Medical and Dental College Gujranwala, Lahore, Pakistan.

2. Department of Physical Therapy and Rehabilitation, Superior University, Lahore, Pakistan.

3. Department of Physical Therapy, Children Hospital Lahore, Lahore, Pakistan.



Citation Butt MS, Shahid Z, Rasheed I. Reflective Practice and Self-assessment of Novice Physical Therapists Graduate From Governmental and Private Sectors in Lahore City, Pakistan: A Comparative Cross-sectional Study. *Iranian Rehabilitation Journal*. 2023; 21(4):633-638. <http://dx.doi.org/10.32598/irj.21.4.1548.5>

doi <http://dx.doi.org/10.32598/irj.21.4.1548.5>

**Article info:**

Received: 23 Oct 2022

Accepted: 20 Jun 2023

Available Online: 01 Dec 2023

Keywords:

Reflective practice, Novice physical therapists, Cross-sectional study

ABSTRACT

Objectives: Reflective practice is a thinking method about experiences, learning from mistakes, identifying skills and strengths, and developing options and actions for change and future success. This practice empowers individuals to explore diverse methods of introspection, thereby enhancing their proficiency in applying reflective techniques within both personal and professional domains and ultimately fostering their learning skills and self-development.

Objectives: This study aims to compare the reflective practice and self-assessment methods of novice practitioners who graduated from the governmental and private sectors.

Methods: A comparative cross-sectional study was conducted on 138 practitioners who graduated from the governmental and private sectors (69 from the governmental sector and 69 from the private sector). A random sampling method was used to collect data. Data were analyzed using SPSS software, version 20. Mean±SD was calculated for five main variables. Independent t-test was applied to calculate the reflective practice of novice practitioners. $P \leq 0.05$ was considered statically significant.

Results: The study focused on investigating various factors related to the reflective practice of novice practitioners. All five main variables, namely reflection on events, reflection methods, others' points of view, questioning of assumptions, and ability to reflect, were examined for potential differences between the graduates of private and governmental sectors. The results indicated no significant differences between these sectors, as evidenced by the $P < 0.05$.

Discussion: This study concluded that no significant difference is observed between reflective practice and self-assessment methods of novice practitioners who graduated from government or private institutes because reflective practice is the ability of a person to think and learn from experience in a way.

* Corresponding Author:

Zohaib Shahid, Assistant Professor.

Address: Department of Physical Therapy and Rehabilitation, Superior University, Lahore, Pakistan.

Tel: +92 (33) 36979114

E-mail: zabi809@live.com

Highlights

- The practice of novice physical therapy compromises patient health.
- The effect of novice physical therapy on senior physical therapist practice.
- Novice physical therapy compromises the quality of life of patients.

Plain Language Summary

Reflective practice is a thinking method about experiences, learning from mistakes, identifying skills and strengths, and developing options and actions for change and future success. On the other hand, self-assessment helps you examine the ways of reflection to use in your personal and professional life. To make you skillful in knowing the extent of reflective activities you use in your learning and self-development, this study aims to compare the reflective practice and self-assessment methods of novice practitioners who graduated from the governmental and private sectors. This study was a comparative cross-sectional study. Data were collected from the physiotherapy department of the governmental and private clinical setups in Lahore City, Pakistan. The non-probability convenience sampling method was used to collect data. A total of 138 participants were included in this study. A pre-established and structured reflective practice self-assessment instrument was employed to collect data. This is a valid and reliable tool to determine the individuals' self-perception regarding the use of reflective practice in personal and professional life. The data was analyzed using a spreadsheet of SPSS software, version 20. Frequency tables or histogram were used for demographic variables.

Introduction

Reflective practice entails a cognitive process that involves thoughtful contemplation of one's experiences, enables individuals to learn from mistakes, recognize their strengths and skills, and generate alternative approaches and strategies for attitudinal change and future success. By connecting reflections with actions, reflective practice fosters critical thinking, leading to the acquisition of new knowledge and insights while facilitating lifelong learning and professional development.

Reflective practice is an individual's ability to imitate his actions and to remain indulged in a progressive learning process [1].

The reflective practice aims to investigate feelings and understanding that cross the line separating one's profession from the outside world. This method of inquiry and investigation makes a relationship between two fields. It is beneficial to combine a professional's technical knowledge with their interpersonal and emotional skills. Although emotions can be a source of understanding, the notion is unique in today's world. The reflective practice facilitates a professional approach and enhances the synergy between primal inclinations. When emotions and thoughts are engaged, actions gain considerable potency.

This strategy is essential not only for personal grooming but also for progressive professional development. Therefore, moreover, the reflective practice focuses on analytical concentration on empirical values and knowledge that provide day-to-day actions through thoughtful analysis of one's practice.

This may exceed progressive intuition. The principle for reflective practice is that knowledge alone does not necessarily lead to learning, deliberate reflection on experience is essential [2].

The concept of reflective practice is the most basic. In the early 20th century, John Dewey was one of the writers who inscribed his experience, cognition, and interaction about reflective practice. In 1983, Donald Schon published his book the reflective practitioner, in which he presented the idea of reflection-on-action and reflection-in-action. He explains how professionals fulfill challenges by overcoming their infirmities [3]. Reflective practice serves as a significant means of learning in practice-based professional settings, wherein individuals acquire expertise through their practical experiences, rather than relying solely on conventional modes of learning and knowledge transfer.

This systematic approach, on the one hand, helps in professional development and on the other hand, makes a person able to run theory and practice in parallel [4].

Professor David Boud and his associates interpret that “reflection is a significant human action, by which people recognize their skills and make judgments about their internal talents and capabilities [5]. It is an ability that enhances with experience and is crucial to the continuous learning process”. It is discovered that the concept of reflection in learning may be linked to Aristotle’s discussions of practical judgment and moral action in his ethics.

The reflection process is complex, encompassing interactions and close relationships between emotions and intellect. Negative emotions, particularly those directed towards oneself, can serve as significant barriers to learning. They have the potential to distort perceptions, lead to inaccurate conclusions about events, and undermine the resolve to persist. Positive emotions and moods can significantly improve learning; they can keep the learner focused and can act as a stimulus for future learning [5].

Health professional education programmers often provide fieldwork or practical education as a key element of their curricula. Clinical experts are presumed to prepare novice practitioners to be competent in practice, make them ready to enter a particular field, and meet the demands of effective practice. Becoming and embodying clinical expertise is a progressive and ongoing developmental process. This voyage of growth and evolution as a clinical expert requires active learning approaches integrated with reflection on one’s practice [6].

Previous studies focused on finding the reflective practice of experienced physical therapists, while this study helps to compare the self-perception regarding the reflective practice of novice physical therapists graduating from the governmental and private sectors. The current study, unlike the available literature targeting other healthcare disciplines, only provides the physical therapy population.

Materials and Methods

This study was a comparative cross-sectional study. Data were collected from the physiotherapy department of the governmental and private clinical setups in Lahore City. A non-probability convenience sampling method was used to collect data.

A total of 138 participants were included in this study. An established and structured reflective practice self-assessment instrument was utilized to collect the data. This instrument is valid and reliable to assess individuals’ self-perception regarding the application of reflective practice in both personal and professional domains.

The inclusion criteria included male as well as female physical therapists working in clinical and academic setups for the last 2 years, aged between 23 to 35 years, novice practitioners working in governmental and private sectors regardless of academic institutes either governmental or private, novice physical therapists having either honorary or on job status at their respective workplace. The exclusion criteria included subjects who did not want to participate in the study. Informed consent of physical therapists with a degree other than physiotherapy was also obtained from the study participants. Every step will be taken to ensure the privacy of the participants. A self-administered questionnaire was used to gather basic demographic information, including age, gender, and marital status. The data was collected using a reflective practice self-assessment questionnaire containing five sections with six questions. A questionnaire was given and received from the subjects as handouts. After data collection, it was saved in a secure place to prevent and avoid any issues or biases.

Data analysis

The data were analyzed using a spreadsheet of SPSS software, version 20. Frequency tables or histogram were used for demographic variables. Descriptive statistics (Mean±SD) were used for variables. An independent sample t-test was used as the data is normally distributed.

Results

This comparative cross-sectional study included men and women who met the inclusion criteria and were willing to participate. A total of 138 participants were included, 60 men and 78 women (Table 1). The age range of the participants varied from a minimum of 23 years to a maximum of 30 years. Of the 138 participants, 69 have graduated from the government sector, while the remaining 69 had graduated from the private sector (Table 2). Among the participants, 97 were working in clinical setups, while 41 were working in academic setups (Table 3).

To compare between variables of the governmental and private sectors, a t-test was utilized. The analysis revealed differences in the Mean±SD of each variable derived from the reflective practice assessment scale for graduates of the government and private sectors. However, upon conducting an independent t-test to compare the variables, it was found that none of the variables reached statistical significance because all the variables had $P > 0.05$ (Table 4).

Discussion

In clinical practice, reflection on thinking, standard behavior, and skill development are effectively linked with system-

Table 1. Frequency of gender

Variables	No (%)
Male	60(43.5)
Female	78(56.5)
Total	138(100.0)

Iranian Rehabilitation Journal

Table 2. Graduation institutes

Variables	No (%)
Valid graduate from the governmental institute	69(50.0)
Graduated from a private institute	69(50.0)
Total	138(100)

Iranian Rehabilitation Journal

atic critical inquiry, analysis, and clinical decision-making. This typically belongs to the methods of perception and clinical reasoning [7].

Reflective practice is fundamental education for professional development which provides both assessment and feedback for the betterment of practitioners [8].

A total of 138 subjects between the ages of 23 and 30 years participated in this study. The highest frequency of participants was observed in the age group of 26 years, account-

ing for 28.3% of the total sample. The lowest frequency was found among participants aged 30 years, with only 1 individual representing 0.7% of the sample. The study included men and women, with a frequency of 78 women (56.6%) and 60 men (43.5%).

The sample included an equal number of participants who graduated from governmental and private sectors, with 69 individuals (50%) in each category. Regarding the participants' professional settings, the majority were clinicians, with a high

Table 3. Comparison of variables of governmental and private sectors

Variables	Mean±SD		T-test	
	Government Sector	Private Sector		
How much you reflect on events	Make decision about events	1.09±0.612	1.30±0.577	-2.147
	Change my behavior	1.26±0.779	1.29±0.709	-0.228
	Think about events and reasons	1.46±0.558	1.29±0.545	1.852
	Talk to others about event	1.22±0.661	1.22±0.539	0.000
	Think proactively after the event	1.41±0.626	1.33±0.586	0.702
	Investigate issues	1.45±0.654	1.32±0.630	1.193
Your use of reflection method	Write notes	0.74±0.700	0.81±0.733	-0.594
	Talk with others about events	1.38±0.571	1.29±0.517	0.937
	Explore theories	1.13±0.765	1.09±0.658	0.358
	Get feedback	1.30±0.734	1.23±0.598	0.636
	Make images of events	0.97±0.727	1.12±0.654	-1.231
	I observe events	1.22±0.745	1.30±0.602	-0.754

Variables	Mean±SD		T-test	
	Government Sector	Private Sector		
Considering other point of view	Understand my self-views	1.45±0.530	1.26±0.634	1.895
	Empathies with others	1.16±0.585	1.42±0.526	-2.755
	Seek the stand point of ex-theories	1.26±0.610	1.23±0.667	0.226
	Look for relevant discussions	1.14±0.753	1.30±0.713	-1.227
	Look at research	1.17±0.706	1.26±0.634	-0.761
	Try to make objective sense	1.20±0.608	1.29±0.450	-0.796
Your questioning of assumptions	Question my ideas	1.43±0.528	1.30±0.626	1.324
	People's point of view	1.29±0.621	1.28±0.539	0.146
	Task-related problems	1.20±0.719	1.30±0.602	-0.899
	How and why I think	1.30±0.671	1.30±0.523	0.000
	Books, newspaper, etc	1.14±0.625	1.25±0.579	-0.989
	Internet information	1.33±0.700	1.43±0.581	-0.926
Your ability to reflect	Time to reflect	1.20±0.502	1.04±0.400	2.063
	Necessary reflection knowledge	1.22±0.639	1.09±0.535	1.300
	Overcome self-imposed barrier	1.36±0.707	1.29±0.571	0.662
	Understand why I think	1.33±0.679	1.36±0.618	-0.262
	Sufficient empowered personally	1.28±0.539	1.33±0.586	-0.605
	Free of negative influence	1.25±0.628	0.94±0.566	2.991

Iranian Rehabilitation Journal

frequency of 97 individuals (70.3%), while a smaller proportion worked in academic settings, with 41 individuals (29.7%).

The study was conducted to compare the reflective practice of practitioners who graduated from the governmental

and private sectors. The total scores obtained from the reflective practice assessment were 37.34 for governmental sector graduates and 37.26 for private sector graduates. These scores indicated no significant difference in the results between the two groups.

Table 4. Value of variables

Variables	t	Sig. (Two-tailed)	95% CI	
			Lower	Upper
Reflect on events	0.329	0.742	-0.10879	0.15227
Reflection methods	-0.248	0.804	-0.15168	0.11787
Other people's point of view	-0.941	0.348	-0.18726	0.06649
Questioning of assumptions	0.389	0.698	-0.16640	0.10850
Ability to reflect	1.672	0.097	-0.01762	0.21086

Iranian Rehabilitation Journal

Five major elements existed in the reflective practice self-assessment scale with six sub-items. Major elements included reflection on events, reflection methods, other points of view, questioning of assumptions, and the ability to reflect.

Each major element score is categorized on a scale of 0-6 showing the need for potential development for reflective practice gained by the subjects. Scores range from 7 to 12 showing good potential in fair use of reflective practice if the subject falls in this range.

Each sub-element has a score of 2 with a total score of 60. Subjects falling in the range of 0-20 indicate low interest in reflective practice. Subjects with scores in the range of 21-40 show good potential to use reflective practice and subjects falling in the range of 41-60 have strong potential to use reflective practice [9].

The results of this study showed good potential for the use of reflective practice because most scores obtained by every practitioner either graduated from the governmental or private sector and works as a clinician or in academic centers range between 21 and 40.

The P for every variable is <0.05 showing no remarkable difference in the use of reflective practice self-assessment graduated from the governmental and private sector. This is the result of confirming the null hypotheses because no significant difference is observed in the scores of participants of both sectors.

The results of this study showed that the reflective practice of practitioners has no significant dependence on the educational sector. Both groups showed good potential for the use of reflective practice because the total score of government sector graduated practitioners is 37.34 with a minimal difference in the score of private sector graduated i.e. 34.26

Conclusion

This study shows no significant differences in the use of the reflective practice and self-assessment methods of novice practitioners regardless of their educational institute. Practitioners who graduated from any sector have an almost similar reflection on events, reflection methods, considering another point of view, questioning of assumptions, and ability to reflect on any issue. According to this study, it is concluded that the educational sector does not have a major impact in developing reflective practice and self-assessment among the students, but it may be an innate ability to use reflective thinking and reflection methods linked with clinical reasoning and decision-making power.

Ethical Considerations

Compliance with ethical guidelines

There were no ethical considerations to be considered in this research.

Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

The authors declared no conflict of interest.

References

- [1] Osterman KF. Reflective practice: A new agenda for education. *Education and Urban Society*. 1990; 22(2):133-52. [DOI:10.1177/013124590022002002]
- [2] Bolton G. Reflective practice: Writing and professional development. Los Angeles: Sage publications; 2010. [Link]
- [3] Dewey J. How we think. A restatement of the relation of reflective thinking to the educative process. Boston: Heath; 1960. [Link]
- [4] Cowan J, Goldhaber D, Theobald R. Massachusetts teacher preparation and licensure: Performance Review Program for Initial Licensure study. Washington, DC: American Institutes for Research; 2018. [Link]
- [5] Boud D, Keogh R, Walker D. Reflection: Turning experience into learning. Abingdon: Routledge; 2013. [Link]
- [6] Higgs J, McAllister L. Educating clinical educators: Using a model of the experience of being a clinical educator. *Medical Teacher*. 2007; 29(2-3):e51-7. [DOI:10.1080/01421590601046088] [PMID]
- [7] Donaghy ME, Morss K. Guided reflection: A framework to facilitate and assess reflective practice within the discipline of physiotherapy. *Physiotherapy Theory and Practice*. 2000; 16(1):3-14. [DOI:10.1080/095939800307566]
- [8] Hargreaves J. So how do you feel about that? Assessing reflective practice. *Nurse Education Today*. 2004; 24(3):196-201. [DOI:10.1016/j.nedt.2003.11.008] [PMID]
- [9] Mann K, Gordon J, MacLeod A. Reflection and reflective practice in health professions education: A systematic review. *Advances in Health Sciences Education*. 2009; 14(4):595-621. [DOI:10.1007/s10459-007-9090-2] [PMID]