THE ALLIED HEALTH SCHOLAR

The Value Placed on Roles and Attributes of Clinical Educators: An International Comparison of Indian, South African and Australian Undergraduate Physiotherapy Students by Milanese, S.; Gordon, S. & Swaminathan, N.

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Abstract:

Aim and Background: Clinical Education opportunities for undergraduate Physiotherapy students are now increasingly occurring internationally. The clinical educator (CE) plays a significant role in the clinical education process particularly when a student undertakes a clinical placement in a different country as the CE often takes on a surrogate caretaker role. This study explores the self-reported perceptions of Physiotherapy students from three countries representing different global society clusters – South Africa (Sub-Saharan Africa), India (Southern Asia) and Australia (Anglo), regarding the roles and attributes of a CE that they value in the clinical education process.

Method: Data was collected from undergraduate Physiotherapy students in a university in India (n=23) and Australia (n=154) and compared with data from a similar student cohort in South Africa (n=70). Students were asked roles and attributes of a clinical educator were of most value in the clinical education setting.

Results: The relative values placed on CE roles/attributes across the three cohorts was similar, however specific differences between cohorts suggest that clinical educators should be aware of differences when supervising international students.

Introduction

Clinical education is an essential part of Physiotherapy training, allowing Physiotherapy students to translate theoretical knowledge into professional skills and behaviours to become 'work-ready'. The importance of clinical education is reflected in the World Congress of Physical Therapists "Guidelines for the clinical education component of physical therapist professional entry level education" (World Confederation for Physical Therapy 2011) which provide extensive general guidance for development and assessment of clinical education activities. It does not however provide guidance about cross-cultural clinical education and international contexts. As the diversity and number of international physical therapy clinical placements increases it is becoming important to understand the student's perceptions of the clinical educator (CE) roles and attributes that optimise cross-cultural supervision during clinical education experiences.

Most of the literature regarding clinical educator attributes to maximise student learning were published prior to the mid 2000's and focus on physical therapy students in Western countries (Bennett, 2003; Cross, 1995; Ladyshewsky, 1996; Onuoha, 1994; Stith et al., 1998). They identified approachability, enthusiasm, being a good communicator and a desire to share knowledge important attributes for CEs (Bennett, 2003). According to students, educators with good communication and interpersonal skills have the most significant impact and enhance their clinical experiences (Cross, 1995; Onuoha, 1994). Differences in student ratings of CEs have also been related to gender (Stith et al., 1998) and students overall life satisfaction (Stith et al., 1998). Since the mid 2000's the student

profile has changed, with increased use of technology including simulation and online education altering the way Physiotherapy students learn before and during their clinical placements. As well changes in gender roles in society have occurred and it is unclear if this has changed student expectations of the clinical educator role.

Few studies have considered cultural differences in student experiences during clinical education. Ladyshewsky (1996) in a study of South East Asian Physiotherapy students studying in an Australian university, compared learning preferences and cultural groups. They reported that cultural membership, issues of authority and respect, in particular the expectations of what constituted the learning process had a direct influence on the clinical education process. Australian CEs reported that they expected the students to be independent, allowing critical analysis, whilst Asian students viewed learning more in terms of memory work and passivity (Ladyshewsky, 1996). However minimal differences in themes related to clinical placements were identified when Physiotherapy students from the United Arab Emirates and Canada were compared (Larin et al., 2005).

The clinical education process primarily involves a three way interaction between the student, the CE and the patient. This interaction occurs in an unstable, often complex real world environment, usually a hospital, clinic or community centre. The challenges this clinical education process presents to the student can be a significant source of stress as the student navigates these complexities whilst striving to learn and pass their assessment hurdles. The CE has been identified as one of the most significant influences on learning during the clinical education process (Bennett 2003). The quality of the interaction, or relationship, between the clinical educator and student maximises their learning during the clinical education placement. This relationship is potentially more

important to student learning than standard classroom activities as the student finds themselves working in an unfamiliar, challenging environment, with changing patients and presentations. The CE remains a constant in this ever changing environment with the relatively low student to educator ratio magnifying the importance of this relationship.

The student or learner-centred approach to curriculum development has been promoted in the higher education sector since the 1990's (Cornelius-White, 2007). This approach, which has been described as a 'perspective that couples a focus on individual learners . . . with a focus on learning' emphasises quality teacher-student relationships (McCombs & Whisler, 1997, p. 9). Key attributes of this relationship include teachers' honouring of students' voices, adapting to individual and cultural differences, encouraging learning, thinking, and having learner-centred beliefs. This learner-centred model encourages that learning occur in contexts where learners have supportive relationships, have a sense of ownership and control over the learning process, and can learn with and from each other in safe and trusting learning environments.

Ernstzen et al. (2009) developed and validated a questionnaire to explore Physiotherapy student's perceptions of clinical learning opportunities from surveys of students and educators at Stellenbosch University, South Africa. This survey included questions to determine the attributes of the CE that the student values during the clinical education process. Due to the potential for cultural differences to affect a student's satisfaction and learning outcomes from their clinical education experience, student centred feedback on CEs attributes should be captured within different cultural groups. Understanding the clinical education experience from the perspective of the Physiotherapy student may help identify strategies to improve the clinical learning

process when students complete clinical education activities in other countries. This is important for organisations to consider when sending students overseas for clinical placements as well as when accepting international students for clinical placement. As well the authors believe the CE student relationship is potentially more important when the student is overseas, in an unfamiliar environment, where the CE may take on a surrogate caretaker role.

This study describes and compares the roles and attributes of a CE reported by physical therapy students from three different countries to be of most value in the clinical education setting. The survey of Ernstzen et al.'s (2009) was completed by students representing different global society clusters – South Africa (Sub-Saharan Africa), India (Southern Asia) and Australia (Anglo) (Joy & Kolb, 2009) to inform cross-cultural clinical supervision practices.

This study was not related to student research.

Methodology

Ethical approval was obtained from the James Cook University Human Research Ethics committee (Ethics Approval Number H4314) and Father Muller Medical College, India. Data from South Africa represented a secondary analysis of a published dataset (Ernstzen et al., 2009) therefore no ethics approval was required.

Study design

A cross sectional, non-experimental survey design was used to compare the roles and attributes of a clinical educator valued by physical therapy students from India, South Africa and Australia.

Sample

Three participant samples were used in this comparison. Two datasets were collected by the researchers and the third dataset was a secondary analysis of data presented for a research degree.

Australia

James Cook University is a regional university established in 1970 in Townsville, Australia, with a student population of 22,159 (JCU, 2015). A significant proportion of students enrolled at JCU are from rural and remote locations within the North Queensland region, and are often the first family member to attend university. The methodology related to the collection of the JCU data is presented elsewhere (Milanese et al., 2013).

All final year undergraduate Physiotherapy students at James Cook University (JCU) were invited to participate in the study. Students completed the questionnaire after 30 weeks of full time clinical placement over the previous 12 months, just prior to graduation. The clinical placements were organised in five-week blocks, and all students had completed placements in musculoskeletal, acute care and neurology practice, as well as a rural or remote placement and elective placements in a specialised area of practice such as spinal injuries or women's health. Students completed 1000 hours of clinical placement before graduation.

India

Father Muller Medical College is a unit of Fr. Muller's Charitable Institutions, a Registered Society sponsored by the Catholic Diocese of Mangalore; a Religious

Minority Educational Institution. Father Muller Allied Health Sciences commenced a Bachelors in Physiotherapy degree program in 1994. Entry level Physiotherapy graduates are required to complete 1200 hours of supervised clinical training prior to graduation. All final year Physiotherapy students at the Father Muller Medical College, Physiotherapy Programme, were invited to participate in the study.

South Africa

Stellenbosch University was established in 1918, in the city of Stellenbosch (population 130,000) in the Western Cape Province of South Africa. The university has ten faculties and had a student population of 28,156 in 2013 (Stellenbosch University, 2014).

Data from Ernstzen et al's (2009) Masters Dissertation was used as reflective of the perspective of South African Physiotherapy students attending Stellenbosch University. All Physiotherapy students at Stellenbosch University who had clinical experience in taking responsibility for patient management in 2005 were invited to participate in the study. This cohort was made up of 40 third year and 40 final year students, with no significant difference reported in responses between the two student cohorts Further information on data collection can be accessed from Ernstzen et al. (2009).

Protocol

All Australian and Indian participants were provided with an information sheet, were invited to seek clarification of the study aims from the researcher and completed informed consent prior to completing the questionnaire in a classroom setting. All questionnaire data was anonymous.

Questionnaire

The questionnaire asked for basic demographic information, including age and gender. Students were provided with a list of clinical educator roles, attributes and teaching and learning strategies as per Ernstzen et al. (2006) (see supplemental material). They were asked to nominate five (5) roles, attributes and teaching and learning strategies they regarded as necessary for their optimal learning. The questionnaire underwent content validation during its development (Ernstzen et al., 2009).

Data Analysis

Data was transferred from the hard copy questionnaire to spreadsheet software (Excel 2007©), which was used for data storage, retrieval and creation of descriptive statistics. The number of times a specific attribute was nominated was expressed as a percentage of the maximum number of times the attribute could have been reported across the specific student cohort. This was calculated for each individual variable for each cohort of students. Mean differences along with the interquartile range (IQR), between the calculated percentages for each of the three cohorts were calculated. The IQR for differences across the whole population were calculated and the cross country differences in the top interquartile range have been highlighted in the presentation of the results.

Results

Description of participants

In Table 1, the demographic details for the participants across the three cohorts, is presented.

Table 1 Demographic Details of the Three Student Cohorts

Country	Total number of students	Respondents (%)	Age Ave (Min:Max)	Gender (%)
Australia	201	154 (77%)	22.6 (20-40)	Male : 32 (27%) Female : 85 (73%)
India	32	23 (72%)	21.6 (20 – 25)	Male : 5 (22%) Female : 18 (78%)
South Africa	80	70 (87%)	22 (20 - 30)	Male : 6% Female : 94%

Clinical Educator Roles

In Table 2 the results from the three cohorts for CE roles, is presented. The top quartile value for percentage difference between cohorts was 23%. Differences between countries above this value are highlighted.

Table 2 Clinical Educator Roles

Role	Responses (%)			Differences (%)		
	Australia	**India**	**South Africa**	**Australia / India**	**Australia/ South Africa**	**India/South Africa**
Mentor	83.3	56.5	91	26.8	7.7	34.5
Friend	7.3	13.0	11	5.7	3.7	2
Technique Demonstrator	88.7	91.3	99	2.6	10.3	7.7
Facilitator of Learning	91.3	87.0	93	4.3	1.7	6
Role Model	36.0	34.8	30	1.2	6	4.8
Questioner	26.0	13.0	40	13	14	27
Assessor/ Evaluator	48.7	78.3	83	29.6	34.3	4.7
Knowledge Provider	94.7	95.7	83	1	11.7	12.7
Reflector	32.7	13.0	37	19.7	4.3	24
Counsellor	2.7	4.3	30	1.6	27.3	25.7
			Ave	10.55	12.1	14.91
			IQR	1.8 – 18	4.7 – 13.4	5.1 – 25.3

**Shaded cells indicate inter-country differences > 75th%ile*

Clinical Educator Attributes

In Table 3 the results from the three cohorts for CE attributes, is presented. The top quartile value for percentage difference between cohorts was 20%. Differences between countries above this value are highlighted.

Table 3 Clinical Educator Attributes

Role	Responses (%)			Differences (%)		
	Australia	India	South Africa	Australia / India	Australia/ South Africa	India/ South Africa
Respects the student	70	43.5	53	26.5	17.0	9.5
Supports the student	68.7	26.1	63	**42.6**	5.7	**36.9**
Good communication	77.3	82.6	67	5.3	10.3	15.6
Approachability	84.7	91.3	91	6.6	6.3	0.3
Enthusiasm	37.3	30.4	49	6.9	11.7	18.6
Not prejudiced	18.7	8.7	49	10.0	**30.3**	**40.3**
Organised	49.3	39.1	56	10.2	6.7	16.9
Interpersonal skills	16.7	34.8	41	18.1	24.3	6.2
Listener	13.3	39.1	9	**25.8**	4.3	**30.1**
Self-confident	2.0	17.4	10	15.4	8.0	7.4
Shows concern for the student	14.0	26.1	39	12.1	25.0	12.9
Gives recognition for student abilities	52.7	52.2	67	0.5	14.3	14.8
			Ave	15.0	13.7	17.5
			IQR	6.8 - 20	6.6 – 18.8	8.9 – 21.5

**Shaded cells indicate inter-country differences > 75th%ile*

Clinical Educator Strategies

In Table 4, the results from the three cohorts for CE strategies, is presented. The top quartile value for percentage difference between cohorts was 23%. Differences between countries above this value are highlighted.

Table 4 Clinical Educator Strategies

Role	Responses (%)			Differences (%)		
	Australia	India	South Africa	Australia / India	Australia/ South Africa	India/ South Africa
Gives constructive feedback	90	52.2	83	37.8	7.0	30.8
Links theory to practice	44.7	82.6	84	37.9	39.3	1.4
Promotes learner participation	33.3	21.7	23	11.6	10.3	1.3
Teaches according to individual student needs	36.7	30.4	30	6.2	6.7	0.4
Facilitates documentation skills	8.7	13.0	26	4.4	17.3	13.0
Allows student to take the initiative	54.0	39.1	20	14.9	34.0	19.1
Gives guidance on patient management	52.7	56.5	76	3.9	23.3	19.5
Gives guidance on assessment priorities	20.0	43.5	66	23.5	46.0	22.5
Facilitates evidence based practice	16.0	30.4	13	14.4	3.0	17.4
Facilitates problem solving	42.0	13.0	64	29.0	22.0	51.0
Familiarises student with assessment procedures	20.0	39.1	31	19.1	11.0	8.1
Facilitates clinical reasoning	70.7	73.9	80	3.2	9.3	6.1
Lets student maintain their own learning	7.3	0.0	3	7.3	4.3	3.0
			Ave	16.4	18	14.9
			IQR	6.2 – 23.4	7 – 23.3	3 – 19.5

**Shaded cells indicate inter-country differences > 75th%ile*

Discussion

This is the first study we are aware of to compare the reports of undergraduate Physiotherapy student from different countries about the CE roles, attributes and teaching and learning strategies that best support them during clinical education activities. With increasing use of international placement we believe it is important to understand the differences in international student expectations of the clinical educator. This information

will assist the clinical educator to address the gap between student expectations and the reality of a different international setting and optimise the clinical education experience.

The three student cohorts represented similar age ranges and gender splits with a predominance of females. Overall, the relative value placed on CE roles was similar across the different cohorts for six of the 10 roles, half of the attributes and slightly more than half of the teaching and learning strategies. However large relative differences from 23.5% up to 51% were identified in a number of categories.

Indian students appeared to place less value on the role of the CE as a Mentor compared to Australian and South African cohorts, which was also reflected in the relatively low value placed on the CE's role as a reflector and the attributes of being a listener, providing support to the student and facilitating problem solving amongst this cohort. This may reflect a view of the Indian students that the CE is of more value as a teacher of knowledge and techniques, rather than as an educator that facilitates the learning process.

Australian students appeared to place less value on the CE's role as an Assessor/ Evaluator than the Indian and South African students, which is also reflected in the lower values placed on activities involving giving guidance on assessment priorities. This suggests that the Australian students focus less on the assessment process and more about the learning process.

South African students value the role of the CE as a non-prejudiced, counsellor with a higher value placed on interpersonal skills and showing concern for the student compared to the Indian cohort.

A CE who respected the student was valued more highly by the Australian students than the South African and Indian students. The South African and Australian students valued support provided by the CE much more highly than Indian students and in contrast the Indian students valued a CE who would listen much more often than the Australian or South African students. The Indian students may consider being listened to as a means to gain assurance of their knowledge. South African students valued a CE who was not prejudiced and showed concern for the student.

If we were to describe the values that are deemed important by each cohort, where at least 80% of students or less than 20% valued the attribute/role, then

a) An ideal clinical educator for Australian students would be a knowledge provider (94.7%) who facilitates learning (91.3%) demonstrates techniques (88.7%) and who is also a mentor (83.3). They should be approachable (84.7%) and give constructive feedback (90%). They should not try to be a friend (7.3%) or counsellor (2.7%), just listen (13.3%) or act self-confident (2%), nor should they focus on documentation skills (8.7%), evidence based practice (16%) and just let the student maintain their own learning (7.3%).

b) An ideal CE for Indian students would be a knowledge provider (95.7%) who demonstrates techniques (91.3%) and facilitates learning (87%), who is approachable (91.3%), with good communication skills (82.6%) and who can link theory to practice (82.6%). The CE should not try to be a friend (13%), counsellor (4.3%), questioner (13%) or reflector (13%), act self-confident (17.4%) nor should they focus on documentation skills (13%), facilitate problem solving (13%) and just let the student maintain their own learning (0%).

c) An ideal CE for a South African cohort would be a technique demonstrator (99%) who facilitates learning (93%), acts as a mentor (91%), knowledge provider (83%) and an assessor (83.3%). They should be approachable (91%), give constructive feedback (83%) and facilitate clinical reasoning (80%). They should not try to be a friend (11%), be a listener (9%), be self-confident (10%), allow the student to take the initiative (20%) facilitate evidence based practice (13%) or just let the student maintain their own learning (3%).

Implications

This study has implications for CEs and students. As students are offered opportunities to undertake clinical experiences in different countries it is important that the student and the relevant CEs are aware that the role of the CE may be seen differently across different countries. A program of cultural awareness for students prior to the clinical placements may reduce the potential effects this may have on the student's overall clinical experience.

Limitations of this study

Both this study and the Ertstzen et al. (2009) study are cross sectional studies, and therefore it is difficult to identify how much the responses to the questionnaire survey reflect relatively fixed traits, such as personality types/learning styles and cultural issues or are related to the most recent clinical education experience the student remembers. Given the diverse range of areas in clinical education in Physiotherapy i.e. neuro, musculoskeletal, acute care, rehab etc. it is naive to consider that the same teaching and learning opportunities will be relevant across the different placements. This is an area that requires further investigation.

Another limitation of this study is the diverse number of students in each cohort, particularly the small numbers of students in the Indian cohort (n=23) compared to the Australian cohort (n=154) which may affect the generalizability of the findings. Studies with greater participant numbers and involving regular data collection over the period of the undergraduate programs will allow an understanding of the stability of the value students place on CE roles, attributes and strategies.

Conclusion

Overall this study identified similarities in the relative value placed on clinical educator roles/attributes amongst Physiotherapy students from Australian, South African and Indian Universities. Being a knowledge provider, learning facilitator and demonstrator of techniques are consistently identified as most valuable across the three cohorts with being a friend identified as the least valuable. Despite these similarities there are some differences between the three cohorts suggesting that clinical educators who are providing clinical educator services to undergraduate Physiotherapy students from other countries should be sensitive to these differences.

Key Points:

- Clinical educators are most valued as being a knowledge provider, learning facilitator and demonstrator of techniques across all cohorts of students
- The value undergraduate physiotherapy students place on other clinical educator roles/attributes differed between students from different countries.

- When students undertake clinical placements in universities in other countries, or clinical educators supervise students from other countries, they should be aware of the potential differences in the clinical educator/student relationship.

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