



Physiotherapy Students' Perception of their Educational Environment: A study to identify the areas of concern for remedial measures at two Schools of Physiotherapy in Malaysia.

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ABSTRACT

Introduction: In order to produce competent physiotherapy graduates with the generic attributes much sought after by the health care providers in the country, the higher education institution needs to ensure the educational environment of the school is positive. Students' positive perception of their educational environment would facilitate their learning experience to be more meaningful and relevant. **Objective:** The aim of this study was to measure physiotherapy students' perception of their educational environment at the School of Physiotherapy AIMST University and Kolej Sains Kesihatan Bersekutu Sungai Buloh and to identify the areas of concern for remedial measures. **Method:** This research was a cross sectional study consisting of two phases using both quantitative followed by qualitative methods. The DREEM inventory consisting of 50 items under 5 domains was circulated to all the students (N=158) from both schools (AIMST and KSKB). The item mean scored below 2.00 were considered as problem areas and it was explored further through focus group discussion (N=12) as a qualitative study. **Result:** The overall mean score on the 50 items was 132.84 (SD 19.22) out of 200. Students' Perception of Learning (SPOL) scored the highest 32.34 (SD 4.17) followed by students' perception of Atmosphere (SPOA) 30.63 (SD 4.84), Students Perception of Teachers (SPOT) scored 30.52 (SD 3.98), Students Academic Self Perception (SASP) scored 22.03 (SD 3.20) and the last domain Students' Social Self Perception (SSSP) scored the least 17.32 (SD 19.22). All the domains scored toward more positive side of the educational environment. Four items scored less than 2.00 and these items were explored further with focus group discussion. Students from both schools had similarities as well as differences in their views over the concerned areas. **Conclusion:** This study revealed important information regarding the low scored items. Overall the students from both schools perceived their schools positively. Implementing the remedial measures for the problem areas would further enhance the respective educational environment and thus provide a conducive place for physiotherapy students to excel in their academic endeavour.

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Introduction

Physiotherapy education in Malaysia was predominantly focused within hospital teaching since the early 70's at the Institute of Orthopedics, Kuala Lumpur Hospital. Solely trained under the Ministry of Health Malaysia, the program started taking a different toll in mid 2000s when colleges and eventually university education dominated the program till today. Private Higher Educational Institutions (PHEI) slowly monopolized the education since the enactment of the 1996 Private Higher Education Act in Malaysia (1).

The private higher educational institutions have intensively publicized the physiotherapy program to the public in order to recruit more students. Physiotherapy became the niche profession during that era, due to the high demand for physiotherapists in the country. As a result, hundreds of physiotherapy graduates were churned out every year by Higher Education Providers (HEP's) seeking employment. However, despite its popularity, the quality of the graduates produced by the private higher educational providers was questionable. The competency of physiotherapy graduates has been much debated in the last few years in our country. Physiotherapy education has undergone a major transitional period in the last few decades (2, 3). The attributes of physiotherapy graduates such as the critical thinking, communication, learning techniques and problem solving ability are the so called generic university skills which seem to be very much in demand in the current healthcare service industry.

These attributes are trademarks of University graduates which have been assumed by the society at large. However there is a mismatch between these generic attributes and their performance when the graduates meet the physiotherapy employers in the health industry. Employers claim new physiotherapy graduates do not possess the skills of integration of knowledge into clinical practice in unfamiliar situations and lacking in independent thinking. According to Hunt et al, 1998, physiotherapy

educators on the other hand, are mainly fostering the discipline specific knowledge and skills and not on the generic attribute which seems crucial in developing the intellectual maturity among graduates.

Rationale of the Study

Currently there is a surplus of unemployed physiotherapy graduates in the country. The unemployment rate has been on the rise in an exponential pattern. Physiotherapy graduates are perceived poorly in term of professional aspect of knowledge, skills and autonomy of judgment by our doctors (3) in Malaysia. Ramli stressed that the current physiotherapy graduates are not able to meet the competency in clinical skills in their practice. Measuring the educational environment provides information on the aspects of teaching and learning that could be rectified, to ensure the quality of graduates produced is marketable. Students' perception of their educational environment is a useful tool for modifying and improving the quality of educational environment of an institution (4). As the educational environment affects students' motivation and achievement, it is important to get their feedback on how they are experiencing their educational environment (5). Our study focused on measuring the physiotherapy students' perception of the educational environment from both the schools, the perception differences between the years of study and gender. Up to date there has been no study conducted to identify the educational environment of physiotherapy education. The need to measure physiotherapy education environment is crucial in order to make improvements in areas of concerns among the students. In Ramli's study investigating employers perception of employability skills, 34 physiotherapy graduates from Faculty of Allied Health Science, UKM, revealed that the most highly valued skill is integration of theory into practice with a mean score of 2.93, followed by keeping up-to-date on latest information regarding the professional, professionalism, honest and know their own limitations, establishing good rapport with patients was given 2.90, being responsible and reliable and

ability to work as a team member 2.86. The employability skills perceived by the employers (health providers) have direct repercussion to the quality of healthcare service in our country. In order to produce competent graduates the school needs to address many issues which will reflect strongly on its educational environment. This study aimed to measure physiotherapy students' perception of their educational environment at the School of Physiotherapy AIMST University and Kolej Sains Kesihatan Bersekutu Sungai Buloh to identify the areas of concern for remedial measures.

Method

This study was conducted in two phases. The second phase was carried out by structured focus group discussion with a random sampling of students from both schools to identify the areas of concern. A cross sectional descriptive study was carried out in two physiotherapy schools. The first phase was on quantitative approach using the DREEM inventory and the second phase was carried out by structured focus group discussion with a random sample of students from both schools to identify the areas of concern.

Background of the two Physiotherapy Schools

Kolej Sains Kesihatan Bersekutu (KSKB) commenced in the early 70's under the Ministry of Health (MOH), the only school in the country providing 3 years physiotherapy certification training program. KSKB has excellent teaching facilities following its relocation, funded by MOH. The concept of interprofessional learning has given the school its state of the art, clinical skills laboratory, lecture halls, computer rooms with internet access, fully fledged library system, and tutorial rooms. Moreover, the school under MOH has strong support and access to all the government hospital for its clinical education. The School of Physiotherapy at AIMST University was established in 2006, at Semeling, Bedong, Kedah. The first batch of students' intake was in 2007 and graduated in 2010. The school's 3 years Diploma Program is similar to KSKB. Students start their clinical placement

from year 2 semester 2 and more intensively in year 3 to encourage the application of the knowledge and skilled learned. Likewise AIMST too possess similar clinical skills laboratory, lecture halls, computer rooms with internet access, fully fledged library system, and tutorial rooms as KSKB. AIMST University environment has courses from M.B.B.S to Business.

Phase 1

The sample size was calculated as shown in Table 1. The sample consisted of all the students from year 1 to year 3 from both schools. Universal sampling method was used due to the small number of students in the Physiotherapy program in both schools. (The KSKB students N= 69 and AIMST students N= 89. Total N =158.). The DREEM contains of 50 items relating to a range of topics directly relevant to the educational environment that has been generated by a Delphi panel of nearly 100 international medical and health profession educators and validated by administering worldwide in a wide range of countries (6).

The inventory has 5 subscales relating to students' perception (Table 2). It gives a global score of 200 for these items (7) (Table 3). The data can be collected and analyzed across year of study, ethnicity, gender, age and courses. Validation of the DREEM tool has been conducted across various professions (4, 5, 8-10). The tool has been validated in various studies as a universal diagnostic inventory for assessing the quality of educational environment of health care institutions. It is also used for guiding strategic planning as well as focusing on institutional resources in areas that require remedial action (11). The Dundee Ready Education Environment Measure has been highly accredited for its non-cultural specificity, universal and diagnostic capability with high validity and reliability to measure the education environment generic for undergraduate healthcare students (12).

Data Collection & Administration Method

Data on gender and academic year was collected as part of the demographic profile of the student. Data on students' perception of educational environment was obtained using the validated DREEM inventory for the five subscales. One way ANOVA was computed for all the 5 domains between the years of study and gender with significant level at 0.05. The DREEM questionnaire was administered to all the physiotherapy students from year 1 to year 3. Prior briefing and clarifications was performed with confidentiality preserved. The negative values for the specified items were also clarified. The entire data collection process took approximately 15 to 20 minutes for each batch of students. Implied consent was assumed when student returned the completed questionnaire.

Data Analysis

Data was processed and analyzed using the software SPSS (version 20). All the data were entered with individual ID given for each candidate, gender and year of study. Verifications were made on the data for any typing error. The descriptive statistic was used to compute for the data processing. It was assumed that all the data is normally distributed and parametric test was executed. The researcher has set the significance level at 0.05 with confident interval 95% similar to (13). The overall mean DREEM score was computed with scores by each domain for year 1, 2 and 3. Mean score for

DREEM was also computed by gender and year of study to study the perception differences. Permission from respective parties were obtained as part of ethical exercise. The confidentiality of the information received from the students was maintained. Ethical approval was obtained from the ethics committee of USM, Kubang Kerian, Kelantan. All the participants were briefed regarding the study purpose. A written consent was also obtained from them and the students were assured about the anonymity and confidentiality of data.

Phase 2

The focus group discussions were conducted based on the information gathered from the first phase of the study. Two structured focus group discussion were conducted based on the low scored items from the DREEM inventory specifically the mean score less than 2.00.

Twelve participants took part in this focus group discussion session. Each year was represented by two students from both schools. Thus each school had six participants respectively. A random selection of students from each year was conducted for both the schools. Students were greeted in a non-threatening environment. Students were informed that the session will be recorded. Their feedback will be kept confidential. The students were given a consent form to be filled as an agreement to have the focus group discussion session 3.

Table 1. Sample size calculation by total and individual domain score

| Outcome (mean score) | SD | Precision (5% of mean score) | N | Adjusted N after 50% dropout rate |
|----------------------|------|------------------------------|----|-----------------------------------|
| Total DREEM (117.9) | 14.6 | 5.9 | 24 | 48 |
| SPOL (28.3) | 4.8 | 1.42 | 44 | 88 |
| SPOT | 3.7 | 1.30 | 31 | 62 |
| SASP | 3.6 | .98 | 55 | 110 |
| SPOA | 5.1 | 1.4 | 51 | 102 |
| SSSP | 2.6 | .79 | 42 | 84 |

Alpha = 5%, calculation made based on finding of ArzumanH et al (2010) pg 42
Ideally there should be 48 study samples with the estimated dropout rate of 50%.

Table 2: Total DREEM and 5 Domains Score

| Domains | No. of items | Max. Score | Satisfactory Score |
|---|--------------|------------|--------------------|
| Students' Perception of Learning (SPOL) | 12 | 48 | 24 |
| Students' Perception of Teachers (SPOT) | 11 | 44 | 22 |
| Students' Academic Self-Perceptions(SASP) | 8 | 32 | 16 |
| Students' Perception of Atmosphere (SPOA) | 12 | 48 | 24 |
| Students' Social Self-Perceptions (SSSP) | 7 | 28 | 14 |
| Total DREEM score | 50 | 200 | 100 |

Table 3: Detailed interpretation of DREEM domains

| Domains | Score | Interpretation |
|--|-------|--|
| Students' Perception of Learning (SPOL) | 0-12 | Very poor |
| | 13-24 | Teaching is viewed negatively |
| | 25-36 | A more positive approach |
| | 37-48 | Teaching highly thought of |
| Students' Perception of Teachers (SPOT) | 0-11 | Abysmal |
| | 12-22 | In need of some retraining |
| | 23-33 | Moving in the right direction |
| | 34-44 | Model teachers |
| Students' Academic Self-Perceptions (SASP) | 0-8 | Feeling of total failure |
| | 9-16 | Many negative aspects |
| | 17-24 | Feeling more on the positive side |
| | 25-32 | Confident |
| Students' Perception of Atmosphere (SPOA) | 0-12 | A terrible environment |
| | 13-24 | There are many issues that need changing |
| | 25-36 | A more positive atmosphere |
| | 37-48 | A good feeling overall |
| Students' Social Self-Perceptions (SSSP) | 0-7 | Miserable |
| | 8-14 | Not a nice place |
| | 15-21 | Not too bad |
| | 22-28 | Very good socially |

Result

A total of 158 s who took part in this study. The respondent rate among the Diploma Physiotherapy was 100%, 158. All the students returned the complete survey forms. Out of 158 students, 81 (54%) were year 1, 51 (34%) from year 2 and the least number was from year 3 which is 26 (17.3%) as shown in Table 4.

Table 4: Distribution of the respondents by year of study.

| Year of study | Frequency | Percentage |
|---------------|-----------|------------|
| 1st year | 81 | 54 |
| 2nd year | 51 | 34 |
| 3rd year | 26 | 17.3 |
| Total | 158 | 100 |

Table 5: Distribution of the respondents by gender

| Gender | Frequency | Percentage |
|--------|-----------|------------|
| Male | 46 | 29.11 |
| Female | 112 | 70.88 |
| Total | 100 | 100 |

Table 5 shows the frequency and percentage of male and female students who took part in this

study. From the overall 100% respondent, 46 (29.11%) are male students and the remaining 112 (70.88%) are female.

Table 6 describes the overall DREEM score and mean score for each domain for both schools. The total mean score is 132.84/200 (SD 19.22). The total means score of SPOL is 32.34/48 (SD 4.17). The total means score for domain SPOT 30.52/44 (SD 3.97). The overall mean score for Student Academic Self Perception (SASP) is 22.03/32 (SD 3.20). The total mean score for students' perception of atmosphere (SPOA) is 30.62/48 (SD 4.84). The students' social self-perception domain SSSP scored 17.32/28 (SD 3.05). Overall, the global score by both the schools on the educational environment is 132.84/200 (SD 19.22) is more positive as per the guideline of DREEM.

Table 6: The DREEM domain means scores for both the schools (KSKB and AIMST).

| Domain | Maximum Score | Mean Score | SD |
|--|---------------|------------|-------|
| Students' Perceptions of Learning (SPOL) | 48 | 32.34 | 4.171 |
| Students' Perceptions of Teachers (SPOT) | 44 | 30.52 | 3.976 |
| Students' Academic Self-Perceptions (SASP) | 32 | 22.03 | 3.202 |
| Students' Perceptions of Atmosphere (SPOA) | 48 | 30.62 | 4.835 |
| Social Self Perceptions (SSSP) | 28 | 17.32 | 3.050 |
| Global DREEM score | 200 | 132.84 | 19.22 |

Table 7 presents the individual mean score for all the 50 items in 5 domains. In domain SPOL one item have mean score less than 2.00. One item with mean score above 3.00 and the other 10 item have mean score between 2.00 to 3.00. Item 1 has *the highest mean* score of 3.22 (SD 0.65). The lowest mean score is 1.65 (SD 0.66) for item 25. The remaining 10 items have scored between 2.00 to 3.00. The SPOT domain. There are a total of three items with mean score above 3.00. One item has means score below 2.00. The remaining 7 items have mean score between 2.00 to 3.00.

The highest score is 3.39 (SD 0.62) for item 2. In summary for the scores of all 5 domains, students from all the three years of study has consistency scored highest for SPOL followed by SPOA, SPOT, SASP and finally the lowest score for SSSP (Table 8). Table 9 shows the male (N=46) and female (N=112) students perception regarding the educational environment of both AIMST and KSKB Sungai Buloh School of Physiotherapy with significant level at 0.05

Table 7: Individual item analysis of DREEM by different domain

| Domain | Items | Mean | SD |
|--|--|--------------|--------------|
| Students' Perceptions of Learning (SPOL) | | | |
| 1 | I am encouraged to participate during teaching sessions | 3.23*** | 0.647 |
| 7 | The teaching is often stimulating | 2.80 | 0.753 |
| 13 | The teaching is student centered | 2.76 | 0.786 |
| 16 | The teaching helps to develop my competence | 2.92 | 0.810 |
| 20 | The teaching is well-focused | 2.99 | 0.696 |
| 21 | The teaching helps to develop my confidence | 2.54 | 0.803 |
| 24 | The teaching time is put to good use | 2.71 | 0.824 |
| 25* | <i>*The teaching over –emphasizes factual learning</i> | 1.65! | 0.648 |
| 38 | I'm clear about the learning objectives of the course | 2.98 | 0.711 |
| 44 | The teaching encourages me to be an active learner | 2.94 | 0.762 |
| 47 | Long term learning is emphasized over short term learning. | 2.67 | 0.845 |
| 48 | <i>*The teaching is too teacher centered</i> | 2.17 | 0.909 |
| Total Mean score | | 32.34 | 4.17 |
| Students' Perceptions of Teacher s (SPOT) | | | |
| 2 | The teacher are knowledgeable | 3.40 | .618 |
| 6 | The teachers adopt a patient centered approach to consulting | 3.00*** | .698 |
| 18 | The teacher have good communication skill with patients | 2.98 | .720 |
| 29 | The teachers are good at providing feedback to students | 2.90 | .691 |
| 32 | The teachers provide constructive criticism here | 2.43 | .893 |
| 37 | The teachers give clear examples | 3.01*** | .679 |
| 40 | The teachers are well-prepared for their teaching sessions | 2.93 | .885 |
| 49 | The students irritate the teachers | 2.85 | .890 |
| 8* | <i>The teacher ridicule the students*</i> | 2.51 | 1.003 |
| 9* | <i>The teachers are authoritarian*</i> | 1.93! | 1.019 |
| 39* | <i>The teachers get angry in teaching*</i> | 2.58 | 1.069 |
| Total Mean score | | 30.52 | 3.97 |
| Students' Academic Self Perceptions (SASP) | | | |
| 5 | Learning strategies that worked for me before continue to work for me now. | 2.82 | .761 |
| 10 | I am confident about my passing this year | 2.89 | .826 |
| 22 | I feel I am being well prepared for my profession | 2.87 | .711 |
| 26 | Last year's work has been a good preparation for this year's work. | 2.56 | .840 |
| 27 | I am able to memorize all I need. | 2.11 | .909 |
| 31 | I have learnt a lot about empathy in my profession | 2.96 | .642 |
| 41 | My problem-solving skills are being well developed here | 2.67 | .868 |
| 45 | Much of what I have to learn seems relevant to a career in healthcare. | 3.11*** | |
| Total Mean score | | 22.02 | 3.202 |
| Students' Perceptions of Atmosphere (SPOA). | | | |
| 11 | The atmosphere is relaxed during ward teaching | 2.64 | .910 |
| 12 | This school is well time-tabled | 2.29 | 1.142 |
| 17* | <i>Cheating is a problem in this school*</i> | 1.46! | 1.249 |
| 23 | The atmosphere is relaxed during lectures | 2.69 | .819 |
| 30 | There are opportunities for me to develop my interpersonal skills | 2.75 | .877 |
| 33 | I feel comfortable in class socially | 2.98 | .690 |
| 34 | The atmosphere is relaxed during class/seminars/tutorials | 2.81 | .758 |
| 35* | <i>I find the experience disappointing*</i> | 2.51 | 1.044 |
| 36 | I am able to concentrate well | 2.46 | .871 |
| 42 | The enjoyment outweighs the stress of the course | 2.46 | .871 |
| 43 | The atmosphere motivates me as learner | 2.85 | .694 |
| 50* | <i>I feel able to ask the questions I want</i> | 2.66 | 1.068 |
| Total Mean score | | 30.62 | 4.835 |

| Students' Social Self Perceptions (SSSP) | | | |
|---|--|--------------|-------------|
| 3 | There is a good support system for students who get stressed | 2.34 | 0.935 |
| 4* | I am too tired to enjoy the course | 2.53 | 1.045 |
| 14 | I am rarely bored in this course | 1.94 | 1.192 |
| 15 | I have good friends in this course | 2.97 | 0.740 |
| 19 | My social life is good | 3.00*** | 0.736 |
| 28 | I seldom feel lonely | 2.02 | 1.270 |
| 46 | My accommodation is pleasant | 2.54 | 0.955 |
| Total Mean score | | 17.34 | 3.05 |

**italic*: negative individual items; **italic* and bolded with ! : negative values scored < 2.00.

***: items score > 3.00.

Table 8: Perception Differences on Educational Environment in DREEM mean scores across years of study.

| Domains | Year 1 | Year 2 | Year 3 | p-value |
|---------|------------------|------------------|------------------|---------|
| | Mean score (SD) | Mean score (SD) | Mean score (SD) | |
| SPOL | 33.09 (3.726) | 33.04 (4.289) | 32.92 (4.058) | 0.980 |
| SPOT | 26.914 (3.237) | 26.45 (3.562) | 28.23 (2.957) | 0.932 |
| SASP | 19.68 (2.823) | 19.70 (2.981) | 19.03 (2.891) | 0.570 |
| SPOA | 30.77 (3.825) | 30.43 (4.920) | 31.92 (4.399) | 0.308 |
| SSSP | 16.11 (2.593) | 16.37 (2.972) | 16.61 (3.262) | 0.772 |

p-value < 0.05 is considered significance

Table 9: Perception Differences of educational environment as per gender.

| Domains | Male | Female | p-value |
|---------|---------------|---------------|---------|
| SPOL | 34.06(3.523) | 32.63(4.047) | 0.803 |
| SPOT | 27.73(3.108) | 26.66(3.388) | 0.945 |
| SASP | 20.17(3.388) | 19.33(2.621) | 0.234 |
| SPOA | 31.54(3.487) | 30.56(4.575) | 0.768 |
| SSSP | 16.69 (3.298) | 16.10 (2.600) | 0.154 |

p-value < 0.05 is considered significance

In SPOL domain the male and female students have scored 34.06 (SD 3.52) and 32.63 (SD 4.05) respectively. Following domain SPOT has scored 27.73 (SD 3.11) and 26.66 (3.39) for male and female students. Domain SASP has score 20.17 (SD 3.39) and 19.33 (SD 2.62) respectively. Next domain is SPOA with mean score 31.54 (SD 3.49) and 30.56 (SD 4.58) for both male and female students. The last domain SSSP has mean score 16.69 (SD 3.30) and 16.10 (SD 2.60) respectively. The differences between male and female is not significant at $p > 0.05$. However although the differences are not significant, the male students have perceived all the 5 domains higher than the female students. This concludes that there are no perception differences at 5% significant level between male and female students at both Schools of Physiotherapy.

Comments from Two Schools.

Four items from different domains scored < 2 and explored further by focus group discussion.

The items are item 25 (The teaching over emphasizes factual learning), item 9 (The teachers are authoritarian), item 17 (Cheating is a problem in this school) and item 14 (I am rarely bored on this course).

Student comments that related to the teaching over emphasizes factual learning were:

"The lecturers teach according to publication from books, journals and teach from power point and quote from the facts taken."

"Most of our class teaching is facts oriented because the teachers stress so much on the importance of the topic for exams, so we focus on the facts rather than why it is taught."

"When we were taught subjects that require practical skills, certain application was taught and we were asked in final examination essay questions. I agree that it is good to know that such process is available. But in Malaysian setting, the application is not practiced, so why test us on facts that are not used in clinics."

Regarding teachers as authoritarian, students commented as follows.

“Some lecturers do not like us asking too many questions, especially when it comes to difficult concepts. They simply ask us to follow the facts as it has been taught that way only.”

“Yes I feel the lecturers are authoritarian, because they keep pushing us to complete the assignments and send by the date given.”

“In cardio respiratory subject, when I ask why patients are taught in that manner, they say the text quotes it like that and we should follow the text without questioning the book.”

Students feel that the lecturers need to update their teaching skills to the current trend in teaching. They claim that they can get more information from Google Scholars, facebook and tweeting. So they too could get updated knowledge which sometimes contradicts with the book.

“I agree to the word authoritarian, because I think they just want us to follow their given information”.

It seems that the students would be much happier if the teaching and learning activity were on two way communication.

Another item rated poorly by students were item 17 (Cheating is a problem in this school) with their comments like:

“Yes cheating is a problem in my school.”

“Most of the assignments are easy to score because most of it is written assignment, so students easily get their 30% by cutting and pasting. This is not fair for the students who present their assignments properly.”

“I don't think cheating is a problem because the students really get checked thoroughly by the exam invigilator before exam starts.”

Students from both schools had differing views when it comes to boredom. Most of AIMST students' claim bored due to the location they are in, remote area away from the city and the heavy workload from the program do not allow them to enjoy with other activities. Most students' felt the boredom was largely due to heavy workload and they get burned out fast and do not enjoy the course any longer but they do it for the sake of passing the exam and to obtain Diploma. Some

students felt the lecturers could make the course to be more interesting.

“I am bored most of the time because the course prevents me from enjoying on other things in life” because too many assignments and projects to complete’.

“The teachers do not motivate us to make the learning fun and some teachers are very strict.”

“I feel very bored because my home is very far (Kuantan) so cannot go back home often, like my other friends, when most of my friends go back home, I left alone in the campus.”

“Although a lot of friends I feel bored because I am from Penang and could not go back like other.”

Discussion

The overall DREEM score from both schools (KSKB and AIMST) was 132.84/200 (Refer table 4.3). Based on the DREEM practical guideline (14) this, score is interpreted as more positive than negative. The learning environment score of our studied college was higher compared to many reported score. (15-17). Both schools of physiotherapy are still very much adhered to traditional curriculum. Several factors could have contributing to the overall high score on the DREEM inventory. Students from both schools perceived their education environment more positively although they have highlighted four problem areas. Most students were quite pleased with their teachers teaching approaches during the focus group discussion. Considering the study was conducted in two different schools with KSKB being established much earlier, their teachers' longstanding academic experiences could have probably contributed to the students' positive perception about their educational environment.

On the other hand, though the school at AIMST is rather young in its establishment, students get to experience the benefit of full-fledged University facilities. This could have contributed to their positive perception of the educational environment. Although our present study shows high DREEM score, the low scored items indicates problem areas that require attention. These identified areas are pertaining to teaching and learning aspect of educational environment

which needs improvement for both the schools. In the current study, the mean score for differences in perception between the years of study are statistically insignificant and this could be possibly due to the in equal number of students across the years with final year being the minority. The year three students scored higher for SPOT compared to the year one and two. This could be due to better exposure of the third year students to the atmosphere and thus able to assess the educational environment better than the first year. The KSKB students claim their teacher give very good examples during the teaching sessions and willing to share information with them during the classroom teaching. Although the scores are positive, attention needs to be given to item 9. There are no statistical significance differences across the years from year one to three for Domain SASP this domain. Our study is consistent with Nahar's findings for this domain observing the scores for academic achievers (19.56/32) and under-achievers (18.51/32). Students from both schools scored 2.82 (SD 0.761) for item 5 (*Learning strategies that worked for me before continue to work for me now*). There were no items scored less than 2.00 in this domain by both the groups. The final year physiotherapy students have scored higher compared to year one and two in SPoA. Our present study has one item that needs attention. Item 17 a negative item (*Cheating is a problem in this school*). All the students across the years have scores this domain SSSP as the lowest. There is no statistical significance between the year one, two and three for this domain. However, item 14 (*I am rarely bored in this course*) scored 1.94 (SD1.192), need to be given due attention by both the schools. It is difficult to conclude the perception differences by their year of study based on the variation seen in other studies. Ideal learning environment is a blueprint for all health professional educators to improve on their students' perception thus increasing their academic performance. Overall both gender have strong perception regarding all five domains.

Comparatively SPOL had the highest, followed by SPOA, SPOT, SASP and the least scored is SSSP by both gender. Both male and female

students scored low for SSSP. This indicates both male and female students are in agreement to most of the items which reflects on their social life. However, both male and female students perceived positively on learning and their academic atmosphere.

On the whole, the first hypothesis stated as: There are no major areas of concern for remedial measures in educational environment at the Schools of Physiotherapy, is accepted since there are only four weak areas scoring below 2.00. These four areas require attention to give recommendation. However, the second hypothesis is accepted based on the 5% significant difference level as both the year of study and gender do not show statistical significance differences between the groups.

Conclusion

This study has provided an insight into the educational environment of two schools in Malaysia. Although the scores reflect more towards the positive side of the learning environment, students from both schools have highlighted on their areas of concern. Four areas were identified as weak areas. On the whole, to produce conducive, education environment, continuous quality improvement needs to be put in place in order to provide better learning environment and opportunities for the education of our future health care providers.

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