



**A Comparative Study on Students' Perception of  
Educational Environment between a Public and a Private  
Medical Assistant College, Malaysia**

(USM short term grant No: 304/PPSP/6139059)

**Dr. Hafiza Arzuman**

**Prof Dr. Abd Rahman Esa**

**Som Phong A/L Chit**



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**LAPORAN AKHIR PROJEK PENYELIDIKAN JANGKA PENDEK**  
**FINAL REPORT OF SHORT TERM RESEARCH PROJECT**

Sila kemukakan laporan akhir ini melalui Jawatankuasa Penyelidikan di Pusat Pengajian dan Dekan/Pengarah/Ketua Jabatan kepada Pejabat Pelantar Penyelidikan

**1. Nama Ketua Penyelidik:**

*Name of Research Leader*

Profesor Madya/  
Assoc. Prof.

Dr. Hafiza Arzuman  
 Dr.

Encik/Puan/Cik  
Mr/Mrs/Ms

**2. Pusat Tanggungjawab (PTJ):**

*School/Department*

Department of Medical Education, School of Medical Sciences.

**3. Nama Penyelidik Bersama:**

*Name of Co-Researcher*

Prof Dr. Abd Rahman Esa  
Som Phong A/L Chit

**4. Tajuk Projek:**

*Title of Project*

A Comparative Study on Students' Perception of Educational Environment between Public and Private Medical Assistant College, Malaysia

**5. Ringkasan Penilaian/Summary of Assessment:**

	Tidak Mencukupi Inadequate		Boleh Diterima Acceptable	Sangat Baik Very Good	
	1	2		3	4
i) Pencapaian objektif projek: <i>Achievement of project objectives</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Kualiti output: <i>Quality of outputs</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Kualiti impak: <i>Quality of impacts</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Pemindahan teknologi/potensi pengkomersialan: <i>Technology transfer/commercialization potential</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v) Kualiti dan usahasama : <i>Quality and intensity of collaboration</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi) Penilaian kepentingan secara keseluruhan: <i>Overall assessment of benefits</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 6. Abstrak Penyelidikan

(Perlu disediakan di antara 100 - 200 perkataan di dalam Bahasa Malaysia dan juga Bahasa Inggeris. Abstrak ini akan dimuatkan dalam Laporan Tahunan Bahagian Penyelidikan & Inovasi sebagai satu cara untuk menyampaikan dapatan projek tuan/puan kepada pihak Universiti & masyarakat luar).

### *Abstract of Research*

*(An abstract of between 100 and 200 words must be prepared in Bahasa Malaysia and in English).*

*This abstract will be included in the Annual Report of the Research and Innovation Section at a later date as a means of presenting the project findings of the researcher/s to the University and the community at large)*

### **Abstract (English )**

**Introduction:** A cross sectional comparative study which was descriptive in nature was carried out among the final year medical assistant students at Kolej Pembantu Perubatan Seremban(public) and Kolej Islam Sains dan Teknologi (private). The objective of the study was to measure and compare the students' perception of educational environment between a public and a private medical assistant college by using the Dundee Ready Educational Environment Measure (DREEM) inventory. The DREEM inventory is a validated global instrument for measuring educational environment in undergraduate medical and health professional education.

**Methodology:** The Malay version of the DREEM inventory was administered to all the final year students (Public 149 + Private 69 = n 218) from both the colleges. Before administering the questionnaire the purpose, confidentiality and ethical issues were explained to the students. The ethical clearance was obtained from the research ethics committee of the School of Medical Sciences, USM

**Results:** The overall response rate was 80.27% (175 /218) for both the colleges. The response rate from public college was 82.55% while in private it was 75.36%. Overall DREEM mean score for private was slightly higher 130.07/200 (17.70) compared to public was 128.91/200 (16.72). In all five Domains of DREEM the students of both the colleges had positive perceptions. The mean score is higher for 4 domains of private college whereas in domain 5 it was slightly higher for public college. However the scores indicated plenty of scope for improvement in all five Domains of educational environment of both the colleges. In public college 6/50 items scored >3, 39/50 items scored within 2-3 and 5/50 items scored <2. On the other hand private college 17/50 items scored >3, 27/50 items scored within 2-3 and 6/50 items scored <2. However in individual item analysis the private college is in slightly better position than public college. As per DREEM scoring scheme the students' perception of the educational environment of both the colleges were more positive than negative. Nevertheless, the study also revealed some problematic areas of the educational environment for both the colleges.

**Conclusion:** The study concluded that the educational environment of the colleges was more positive. The private college scored slightly better in all aspects of the educational environment than public one. However there were few items scored <2 and need to be explore further for remedial measures. In terms of educational environment both the colleges had more or less similar findings. Therefore the study recommended that both the colleges should look each other's weak and strong areas, work together and take remedial measures to improve their educational environment. The small number of participants only from the final year was identified as one of the major limitations of the study.

### **Abstrak ( Malay)**

**Pengenalan:** Satu perbandingan kajian rentas yang bersifat deskriptif telah dilakukan di kalangan pelajar tahun akhir pembantu perubatan daripada Kolej Pembantu Perubatan Seremban (awam) dan Kolej Islam Sains dan Teknologi (swasta). Tujuan kajian ini adalah untuk mengukur dan membandingkan persepsi pelajar terhadap persekitaran pendidikan di antara kolej pembantu perubatan awam dan swasta dengan menggunakan inventori 'Dundee Ready Educational Environment Measure (DREEM)'. DREEM adalah inventori global yang telah divalidasikan untuk mengukur persekitaran pendidikan di kalangan pelajar perubatan dan profesional kesihatan.

**Metodologi:** 'DREEM' versi Bahasa Melayu telah diberikan kepada semua pelajar tahun akhir daripada kedua-dua kolej (awam 149 + swasta 69 = 218). Tujuan kajian, kerahsiaan dan isu-isu etika telah diterangkan kepada para pelajar sebelum soalan kaji selidik diberikan. Kelulusan etika diperolehi daripada Jawatankuasa Etika Penyelidikan di Pusat Pengajian Sains Perubatan USM.

**Keputusan:** Secara keseluruhannya, kadar respon untuk kedua-dua kolej adalah 80.27% (175/218). Kadar respon daripada kolej awam adalah 82.55%, manakala di kolej swasta adalah 75.36%. Secara keseluruhan, skor purata DREEM bagi kolej swasta adalah lebih tinggi sedikit iaitu 130.07/200 dengan 'standard deviation' adalah 17.70 berbanding dengan kolej awam iaitu 128.91/200 dengan 'standard deviation' adalah 16.72. Dalam kelima-lima domain DREEM, para pelajar daripada kedua-dua kolej mempunyai persepsi yang positif. Kolej swasta mencatatkan skor purata yang lebih tinggi untuk domain 4 manakala kolej awam memperolehi skor purata yang lebih tinggi sedikit pada domain 5. Walaubagaimanapun, skor menunjukkan masih banyak ruang untuk penambahbaikan di dalam semua kelima-lima domain persekitaran pendidikan untuk kedua-dua kolej. Di kolej awam 6 / 50 item mencatatkan skor lebih dari 3, 39/50 item mencatatkan skor antara 2 hingga 3 dan 5 / 50 item skor kurang dari 2. Manakala kolej swasta 17/50 item mencatatkan skor lebih dari 3, 27/50 item mencatatkan skor antara 2 hingga 3 dan 6 / 50 item skor kurang daripada 2. Namun di dalam analisis item individu, kolej swasta di dalam kedudukan yang lebih baik sedikit berbanding dengan kolej awam. Daripada skema skor DREEM, persepsi pelajar terhadap persekitaran pendidikan adalah lebih kepada positif untuk kedua-dua kolej. Namun, kajian ini juga mendapati bahawa masih terdapat ruang bermasalah terhadap persekitaran pendidikan untuk kedua-dua kolej.

**Kesimpulan:** Keputusan kajian dapat disimpulkan bahawa persekitaran pendidikan untuk kedua-dua kolej adalah lebih positif. Kolej swasta mencatatkan skor yang lebih baik sedikit di dalam kesemua aspek persekitaran pendidikan berbanding kolej awam. Walaubagaimanapun, terdapat beberapa item yang mencatatkan skor kurang daripada 2 dan memerlukan penelitian lanjut untuk pengukuran semula. Berhubung dengan persekitaran pendidikan, kedua-dua kolej mempunyai penemuan yang lebih kurang sama. Oleh itu, kajian mencadangkan kedua-dua kolej melihat kelemahan dan kekuatan masing-masing, bekerjasama dan membuat pengukuran semula untuk meningkatkan lagi persekitaran pendidikan. Bilangan peserta daripada pelajar tahun akhir yang sedikit telah dikenalpasti sebagai salah satu limitasi yang besar terhadap kajian ini.

7. Sila sediakan laporan teknikal lengkap yang menerangkan keseluruhan projek ini.  
[Sila gunakan kertas berasingan]  
*Applicant is required to prepare a Comprehensive Technical Report explaining the project.  
(This report must be appended separately)*

Senaraikan kata kunci yang mencerminkan penyelidikan anda:  
*List the key words that reflect your research:*

Comparative, Educational Environment, Kolej Pembantu Perubatan Seremban, Kolej Islam Sains Dan  
Teknologi (Kist), DREEM, Private, Public

8. Output dan Faedah Projek  
*Output and Benefits of Project*

(a) \* **Penerbitan Jurnal**

*Publication of Journals*

(Sila nyatakan jenis, tajuk, pengarang/editor, tahun terbitan dan di mana telah diterbit/diserahkan)  
*(State type, title, author/editor, publication year and where it has been published/submitted)*

*Submitted to : Education for Health*

Type: Original research paper.

Title: Educational Environment: Measuring and comparing students' perception of between a  
public and private medical assistant college, Malaysia

Authors: Hafiza Arzuman  
Prof Dr. Abd Rahman Esa  
Som Phong A/L Chit

(b) **Faedah-faedah lain seperti perkembangan produk, pengkomersialan produk/pendaftaran paten  
atau impak kepada dasar dan masyarakat.** \* Sila berikan salinan/*Kindly provide copies*

*State other benefits such as product development, product commercialisation/patent registration or impact  
on source and society.*

- The findings of this study would be helpful for the public and private sector to identify and compare their weak and strong areas. The concerned institutes would be able to modify and improve their educational environment to foster the desirable approaches for learning that will enhance their academic achievement and meaningful learning experiences for the students.
- The findings would be helpful in minimising the implementation gap between the two streams of medical assistant programme and thereby helpful in quality assurance recognition of the programme.
- The results would also provide a baseline information for future study in the same field in different institutes and in different perspectives and would reduce the research gap in this field

(c) **Latihan Sumber Manusia**

*Training in Human Resources*

i) Pelajar Sarjana:

*Graduates Students*

(Perincikan nama, ijazah dan status)

*(Provide names, degrees and status)*

Som Phong A/L Chit  
MSC Medical Education, Graduated

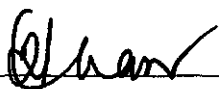
ii) Lain-lain:

*Others*

9. Peralatan yang Telah Dibeli:

*Equipment that has been purchased*

No equipment has been purchased



Tandatangan Penyelidik  
*Signature of Researcher*

16/02/2011

Tarikh

Date

**Komen Jawatankuasa Penyelidikan Pusat Pengajian/Pusat**  
*Comments by the Research Committees of Schools/Centres*

This research work project has  
been completed successfully and  
all objectives achieved.

The output include a paper  
submitted to *Education*  
for health journal.

The report has been assessed  
by an independent assessor  
and approved by the  
PTJ / PTD committee.

PROFESSOR AHMAD SUKARI HALIM  
Chairman of Research Committee  
School of Medical Sciences  
Health Campus  
Universiti Sains Malaysia  
16150 Kubang Kerian, Kelantan

TANDATANGAN PENERUSI  
JAWATANKUASA PENYELIDIKAN  
PUSAT PENGAJIAN/PUSAT

*Signature of Chairman*  
[Research Committee of School/Centre]

25/3/24

Tarikh  
Date

## SENARAI SEMAKAN UNTUK BUKU LAPORAN AKHIR GERAN USM JANGKA PENDEK

<b>NAMA PENYELIDIK UTAMA</b>	: Dr. Hafiza Arzuman
<b>NAMA CO-RESEARCHER</b>	: Prof Dr. Abd Rahman Esa Som Phong A/L Chit
<b>TAJUK GERAN</b>	: A Comparative Study on Students' Perception of Educational Environment between Public and Private Medical Assistant College, Malaysia
<b>NO.AKAUN</b>	: 304/PPSP/6139059

### SENARAI SEMAKAN SEMASA PENYERAHAN BUKU LAPORAN AKHIR (Sila Tandakan (√) Pada Kotak Yang Berkenaan)

NO.	PERKARA	ADA	TIADA
1.	Borang Laporan Akhir Projek Penyelidikan USM jangka Pendek	√	
2.	Borang Laporan Hasil Penyelidikan, PPSP	√	
3.	i) Salinan Menuskrip	√	
	ii) Salinan surat/email bukti penghantaran kepada mana-mana journal	√	
4.	Penyata Perbelanjaan (Financial Statement) (Sila dapatkan daripada Jabatan Bendahari)	√	
5.	Laporan Komprehensif (termasuk kertas persidangan atau seminar dan penerbitan saintifik hasil daripada projek ini)		X
6.	Surat pemakluman penghantaran Laporan Akhir ke Bhg. Penyelidikan	√	

**Nota:**

- \* Sila buat 3 salinan buku laporan Akhir
- \* No. 1-5 - Perlu dimasukkan dalam Buku Laporan Akhir
- \* No.6 - Hantar terus Kepada Cik Amra Othman (RCMO) hanya salinan sahaja kepada Bhg. R&D, PPSP

## BORANG LAPORAN HASIL PENYELIDIKAN

### PPSP

Tajuk geran: A Comparative Study on Students' Perception of Educational Environment between Public and Private Medical Assistant College, Malaysia

Penyelidik: Dr. Hafiza Arzuman

Jenis geran: Short Term grant

Tempoh geran: 28th February, 2011

Jenis laporan: Laporan Kemajuan  Alatan di beli  Ya:nyatakan.....


Laporan Akhir\*:   Tidak

OBJEKTIF SPESIFIK KAJIAN (sama spt dalam proposal asal)	SECARA RINGKAS TERANGKAN PENCAPAIAN/HASIL	OBJEKTIF TERCAPAI ATAU TIDAK
1. To measure the students' perception of educational environment of a private and a public medical assistant college	To measure the students' perception of educational environment of a private and a public medical assistant college	Achieved
2. To compare the students' perception of educational environment between the two colleges	To compare the students' perception of educational environment between the two colleges	Achieved
3. To compare the strengths and weaknesses of different areas of educational environment between the two colleges	To compare the strengths and weaknesses of different areas of educational environment between the two colleges	Achieved
4. To identify the correlation between the different domains of the educational environment of the two colleges	To identify the correlation between the different domains of the educational environment of the two colleges	Achieved
5. To provide feedback to the concerned institute regarding the improvement of educational environment	To provide feedback to the concerned institute regarding the improvement of educational environment	Achieved

- *Laporan Akhir perlu disertakan salinan manuskrip dan surat yang dihantar kepada mana-mana jurnal untuk penerbitan.*

Nama Penyelidik Utama (PI): Dr. Hafiza Arzuman

Tarikh: 15th February, 2011

t.t.: 



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### Authors

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**Educational Environment: Measuring and comparing students' perception between a public and private medical assistant college, Malaysia**

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## **Cover page**

**Title:** Educational Environment: Measuring and comparing students' perception between a public and private medical assistant college, Malaysia

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**Title:** Educational Environment: Measuring and comparing students' perception between a public and private medical assistant college, Malaysia

**Abstract**

**Objective:** A comparative study was done to measure and compare students' perception of educational environment at a public and private medical assistant college, Malaysia by using Dundee Ready Educational Environment Measure (DREEM) inventory.

**Methods:** The Malay version of the DREEM was administered to the final year students (Public 149 + Private 69 = n 218). DREEM is a globally validated instrument for measuring the educational environment in health professional education. The ethical clearance was obtained from the research ethics committee of the School of Medical Sciences, USM

**Results:** The response rate was 80.27% for both the colleges which was higher for public (82.55%) compared to private (75.36%). Overall DREEM score for private was slightly higher 130.07/200 (17.70) than public 128.91/200 (16.72) college. The students had positive perception in five Domains of DREEM. The mean score was higher in Domains 1 to 4 for private whereas in Domain 5 it was slightly higher for public college. However the scores indicated scope for improvement in all five Domains for the colleges. In public college 6/50 items scored >3, 39/50 items scored 2-3 and 5/50 items scored <2 compared to private 17/50 items >3, 27/50 items within 2-3 and 6/50 items <2. In individual item analysis the private was in better position than public college. The students' perception of the educational environment of the colleges was more positive than negative.

**Conclusion:** Both the colleges had positive educational environment with some problematic areas. The study recommended that both colleges should work together and take remedial measures to improve their educational environment.

**Key words:** Educational environment, Comparative, Public (Kolej Pembantu Perubatan Seremban), Private (Kolej Islam Sains Dan Teknologi), Dundee Ready Educational Environment Measure (DREEM), Universiti Sains Malaysia (USM)