

THE RELATIONSHIP BETWEEN INTERPERSONAL  
COMMUNICATION COMPETENCE, INTERCULTURAL  
COMMUNICATION COMPETENCE AND HEART RATE  
VARIABILITY AMONG INTERNATIONAL  
POSTGRADUATE STUDENTS

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## **SUPERVISOR'S DECLARATION**

I hereby declare that I have checked this thesis and in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Doctor of Philosophy in Humanities Technology.

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## STUDENT'S DECLARATION

I hereby declare that the work in this thesis is based on my own original work except for the quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at University Malaysia Pahang or any other institutions.

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## **LIST OF ABBREVIATIONS**

IPC	Interpersonal communication
IPCC	Interpersonal communication competence
ICC	Intercultural communication
ICCC	Intercultural communication competence
HRV	Heart rate variability
ELP	English Language Proficiency
SNS	Sympathetic Nervous System
PNS	Parasympathetic Nervous System

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## ABSTRAK

Kebanyakan kajian terdahulu dalam bidang komunikasi dijalankan di negara barat. Lazimnya hasil penemuan tersebut berdasarkan maklumat dan laporan yang diperolehi berdasarkan borang soal selidik. Oleh yang demikian timbul persoalan sama ada keputusan yang diperolehi di negara barat ini mampu menjawab persoalan komunikasi di negara Asia. Oleh yang demikian kajian ini akan melihat perhubungan di antara kecekapan interpersonal dalam berkomunikasi (interpersonal communication competence), kecekapan berkomunikasi antara budaya (intercultural communication competence) dan kadar denyutan jantung (heart rate variability) dalam kalangan pelajar antarabangsa yang terdapat di Universiti Awam Malaysia. Reka bentuk kajian ini terdiri daripada kajian kuantitatif, kualitatif dan penyeldika klinikal untuk memperolehi data dalam kajian ini. Kajian ini melibatkan 128 orang pelajar sarjana antarabangsa yang terdiri daripada 17 buah negara yang berlainan. Hasil kajian ini menunjukkan terdapat hubungan yang rapat antara IPCC, ICCC dan HRV. Skor purata dalam kalangan individu yang memperoleh pencapaian HRV yang baik dan pencapaian HRV yang rendah masing-masing adalah 171.1 dan 164.9. Namun begitu, skor pelajar untuk IPCC ialah 99.46 lebih tinggi berbanding dengan skor ICCC mereka iaitu 67.57. Hal ini menunjukkan bahawa sesetengah individu baik di dalam kemahiran interpersonal ketika berkomunikasi kerana mereka berhubung sesama mereka dan kecekapan kemahiran berkomunikasi antara budaya masih tidak baik kerana kurangnya interaksi dengan individu dari negara lain. Berdasarkan keputusan yang diperolehi juga menunjukkan kebolehan personal, sikap positif dan tahap kecekapan berbahasa Inggeris, dan peluang persekitaran yang sedia ada membantu kebanyakan pelajar mempunyai kebolehan interaksi komunikasi yang berkesan. Walau bagaimanapun hasil kajian ini mendapati adanya kesan positif terhadap aspek sosial dan budaya ketika berinteraksi bagi kalangan individu yang mempunyai latar belakang berbeza.

## ABSTRACT

Previous studies on interpersonal communication competence and intercultural communication competence were mostly conducted in the western parts of the world. The findings from such work were reported based on the answers of individuals on survey questionnaires. It is arguable that whether the results from studies in the western parts of the world answer the probable questions for the Asian context of communication, and whether the results from the regular surveys are relevant enough. Thus, this study was carried out to assess the relationship between interpersonal communication competence (IPCC), intercultural communication competence (ICCC), and heart rate variability (HRV) among international postgraduate students of a Malaysian public University. An embedded design of mixed methods which included quantitative, interview and HRV data sets was applied to conduct this study. The participants of this study were 128 postgraduate students from 17 different countries. The results from this study have confirmed the existence of relationships between IPCC, ICCC and HRV attributes of the participants. The results have also confirmed that the participants who were good in HRV were also good in IPCC and ICCC, and vice versa. The mean scores of individuals with good HRV scores and relatively low HRV scores, for IPCC and ICCC were 171.7 and 164.9 respectively. Based on the results, the participants with higher mean scores in IPCC had desirable scores in HRV as well. The participants with higher scores in IPCC with scores of 22.6 in the first relaxation session and 17.6 in the mental arithmetic test, while the participants with relatively low scores in IPCC got 7.5 and 12.1 for the mentioned sessions of HRV, respectively. The findings from this study confirmed the relationship between interpersonal communication competence and HRV of the participants. However, the mean score of the participants for IPCC (99.46) was higher than their mean score for ICCC (67.57). It means that in some cases individuals might be good in interpersonal communication because of their contacts with their own people, but they are still not good in intercultural communication because of the lack of their interactions with other international postgraduate students. Based on the results, it was found that their personal abilities, positive attitudes towards cultural differences, their good levels of English language proficiency, and the available environmental opportunities helped most of the participants to have more successful interactions.



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