

UNIVERSITI MALYSIA PAHANG
Center for Modern Languages and Human Sciences

Go Global

(Assessment and Module Kit to Boost up Intercultural Communication for Individuals Working Abroad)

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1. INTRODUCTION:

This invention focuses on assessing the relationship among interpersonal communication competence (IPC), intercultural communication competence (ICC), and heart rate variability (HRV) of individuals who want to work abroad and dealing with people from different backgrounds.

2. OBJECTIVES:

1- To assess the relationship among interpersonal communication competence (IPC), intercultural communication competence (ICC) and heart rate variability (HRV) of the potential workers of multicultural organizations abroad.

2- To help individuals who want to work abroad to boost their IPC, ICC and HRV levels to overcome the environmental challenges in the new multicultural environments.

3. NOVELTY:

This research as an interdisciplinary work utilized the HRV-biofeedback technology which is available in the emWave PC tool and software for the first time in the field of communication and opened a new window regarding the relationship between the internal and external abilities of individuals.

Based on the results, a Module was developed to help individuals to boost their communication competence and HRV scores.



The emWave tool and ear sensor

4. BENEFITS:

This invention helps individuals to develop the levels of their IPC, ICC and HRV and have more stable communication competence and have coherent hearts, and have successful interactions and collaboration with people from different backgrounds.

5. MARKETABILITY:

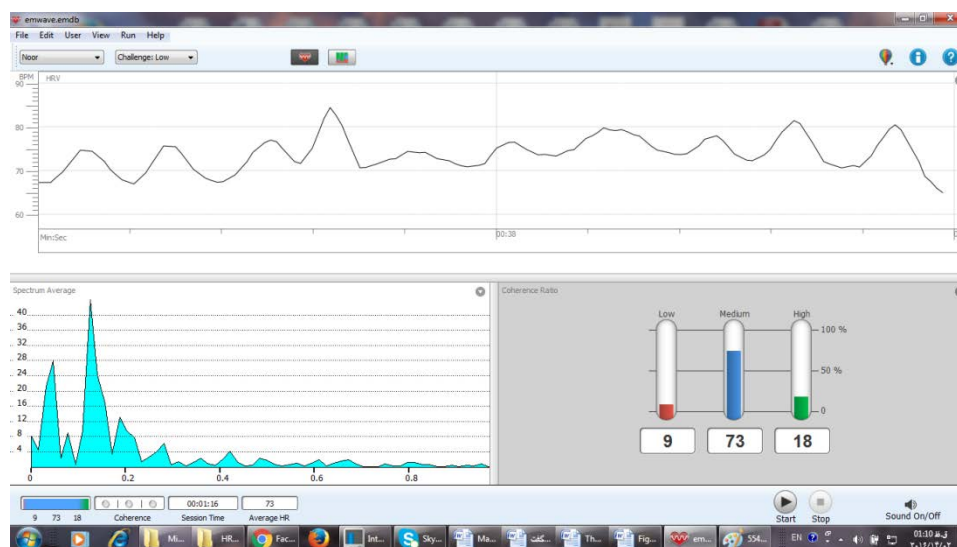
As nowadays some educated individuals want to work abroad, they may look on the probable ways to increase their personal skills and competence, including their communication competence.

The HRV-biofeedback tools are easily achievable and applicable.

The developed Module is also easily applicable and would be available in a cheap handy case in RM 15.00 per unit.

6. MATERIALS:

- 1- Handy case of The IPC, ICC and HRV Module Kit.
- 2- The emWave handy tool and software
- 3- An electronic medium (PC)

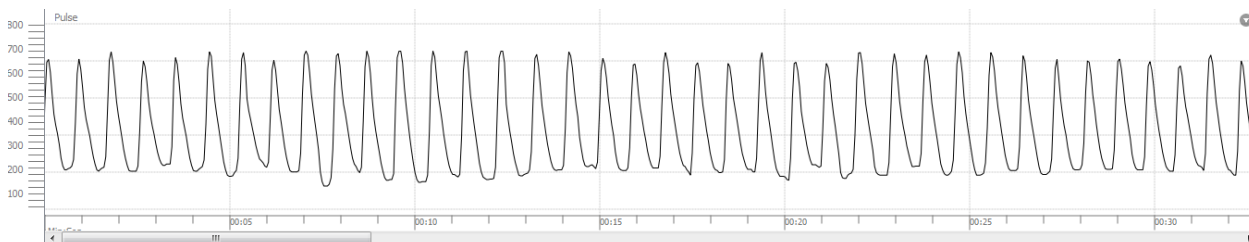


The visible HRV data in the PC screen

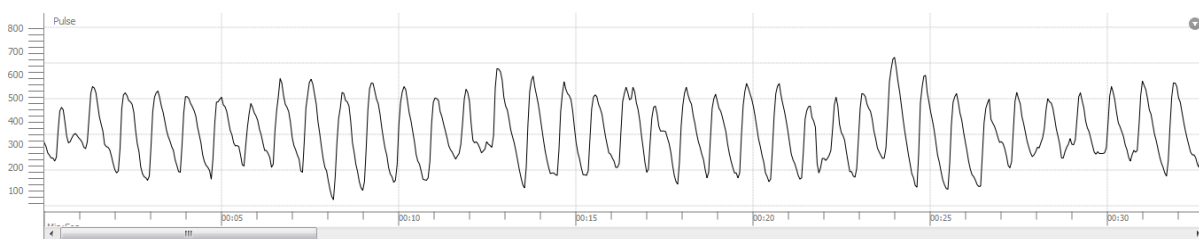
7. ENVIRONMENTAL IMPACT:

The environmental achievements of this invention would be:

- 1- This invention would increase the levels of successful interactions and productive cooperation among professionals.
- 2- It would prevent and reduce the probable misunderstanding and conflicts among individuals from different backgrounds.
- 3- It would help individuals to have happier lives when living and working abroad.



The regular pulse graph of an individual with good HRV scores

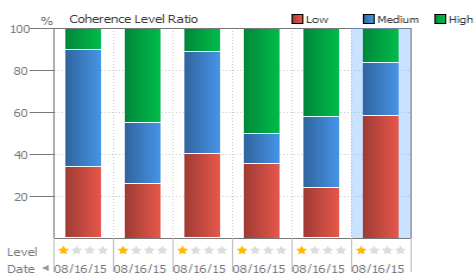


The irregular pulse graph of an individual with not good HRV scores

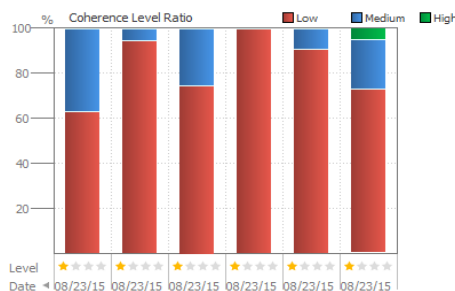
8. RESULT

This research established the followings:

- 1- An assessment method for IPC and ICC profile.
- 2- Module to improve the level of IPC and ICC
- 3- HRV training protocol to improve HRV scores, and IPC and ICC performance



The HRV graph with good IPC & ICC



The HRV graph with not good IPC and ICC

The Relationship among Interpersonal Communication Competence, Intercultural Communication Competence and Heart Rate Variability

The previous researchers have argued that the use of HRV biofeedback has positive effects on the human performance. Studies on HRV showed that the higher and good level of HRV is linked with psychological flexibility, creativity and skills of individuals to deal faster with the affective, cognitive and physiological stresses (Lagos et al., 2008). At the same time, the low level of HRV is connected with stress, anxiety, and depressions (Senik et al., 2013). According to Sutarto et al. (2012), individuals with social nervous may bring a high level of negative perspective about their performance in the society.

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The Main Attributes of Interpersonal Communication Competence

The main attributes of interpersonal communication competence (IPC) are: Initiation, Negative assertion, Disclosure, Emotional support, and Conflict management.

- The initiation attribute indicates the skills and abilities of individuals that enable them to conduct interactions and be involved in.
- The negative assertion attribute includes the skills and abilities that help individuals to stand for their own rights or oppose the harassing and unpleasant actions.
- The disclosure attribute is the skill that enables individuals to disclose and share their personal information with their friends and others to make trusts and establish relationships.
- The emotional support attribute includes the abilities of individuals which enable them to express genuine empathy to their friends and companions when facing problems and difficulties.
- The conflict management attribute indicates the skills and abilities that help individuals to manage the conflicts properly and deal with the probable disputes in the proper ways (Michaeli, 2013; Buhrmester et al., 1988).

The Main Attributes of Intercultural Communication Competence

The main attributes of intercultural communication competence (ICC) are: Interaction engagement; Respect for cultural differences; Interaction confidence; Interaction enjoyment; Interaction attentiveness.

- The interaction engagement attribute includes the skills and abilities of individuals that enable them to commit and be involved in interactions in the intercultural setting of communication.
- The respect for cultural differences attribute includes the awareness and abilities that help communicators to prevent cultural bias and unfair judgment about different social and cultural norms.
- The interaction confidence attribute refers to the mutual trusts and the levels of self-confidence of communicators.
- The interaction enjoyment attribute refers to levels of eagerness of individuals for communication commitment and the levels of their happiness when interacting with individuals from diverse backgrounds.
- The interaction attentiveness attribute indicates the treatments and abilities of communicators, and the ways that they behave when interacting with other individuals (Michaeli, 2013; Kim, 2012; Chen and Starosta, 2000).

The main Attributes of Heart Rate Variability

The main attributes and effects of good HRV scores are on the human performance and actions and reactions, and also on the ways that individuals control their physiological stresses, and their decision and action when facing with different choices and alternatives to choose the fair option. Also, the use of HRV-biofeedback technology and good HRV scores are connected with harmony, order and stability, self-control, and reduction of their psychological anxieties and challenging behaviors. The use of HRV biofeedback technology and good HRV scores are associated with creativity, psychological flexibility, and personal skills of individuals to deal with cognitive, affective, physiological stresses, and anxieties (McCraty et al., 2000; Ross, 2011). The heart actions and reactions affect the mental, spiritual, emotional, and physical wellbeing of people (Ross, 2011).

The Relationship among the Main Attributes of IPC, ICC and HRV

The above mentioned attributes and effects of IPC, ICC and HRV based on the cited scholars and researchers show some relationships between/among the attributes of the three different concepts of this study. As the initiation attribute of IPC and the communication engagement attribute of ICC both indicate the abilities of engagement in interactions in the interpersonal and intercultural settings. As mentioned earlier, the use of HRV-biofeedback technology and good HRV scores have effects of the human performance, and action and reactions and of individuals, and also their creativity. Thus, the initiation and communication engagement of individuals could have relationship with their performance, actions and creativity. Also, the disclosure and emotional support attributes of IPC and the respect for cultural difference, and interaction confidence attributes of ICC have some similarities which focus on the trust building among communicators and their well-being during their interactions.

The impacts of HRV on stress control, psychological flexibility and personal skills could affect the mentioned attributes of IPC and ICC. The conflict management attribute of IPC and the interaction attentiveness attribute of ICC which both focus on the ways communicators treat well and prevent conflicts to continue their involvements in interactions with other people. Based on the cited scholars, the self-control, stability, and reduction of problematic behaviors and physiological stresses have connections of the recent mentioned attributes of IPC and ICC. Also, the helpful effects of good HRV scores on the ways that individuals deal with the challenging behaviors could affect the negative assertion attribute of IPC, and the interaction enjoyment attribute of ICC may have relationship with the harmony and psychological flexibility attributes of HRV (Michaeli, 2013; Paulk et al., 2011; Buhrmester et al., 1988;

Michaeli, 2013; Kim, 2012; Lin, 2011; Chen and Starosta, 2000; McCraty et al., 2000; Lagos et al., 2008).

The main effects and attributes of good HRV scores are the increase of the levels of creativity, performance, self-control, harmony, psychological flexibility and control of psychological stress of individuals (McCraty et al., 2000; Lagos et al., 2008; Ross, 2011). The main attributes of interpersonal communication competence and intercultural communication are: initiation, disclosure, emotional support, conflict management, and negative assertion for interpersonal communication. Also, interaction engagement, interaction confidence, respect for cultural differences, interaction enjoyment, and interaction attentiveness for intercultural communication competence (Michaeli, 2013; Buhrmester et al., 1988; Lin, 2011; Chen and Starosta, 2000). The above mentioned effects and outcomes of good HRV and the use of HRV-biofeedback technology may have some effects on the mentioned attributes of IPC and ICC.

The Quick Coherence Technique

The Quick Coherence Technique (QCT) of the HeartMath Institute was used to assess its relationship with the probable developments in the levels of heart coherence of the participants. The QCT includes three stages which are:

1- Heart focus

During the data collection process, the heart focus stage asks the participants to focus on the area of their hearts.

2- Heart breathing

The heart breathing stage asks the participants to breathe slowly and deeply and imagine the process of their breathing.

3- Heart feeling

The heart feeling stage asks the participants to try to remember a good moment of their lives and try to re-experience that moment again (HeartMath.org, 2016).

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