The Influence of Team Leaders' Emotional Intelligence on their Intercultural Conflict Management Styles in Virtual Multicultural Project Teams

อิทธิพลของความฉลาดทางอารมณ์ของหัวหน้าทีมต่อการจัดการความขัดแย้งระหว่างวัฒนธรรมในทีมทำงานพหุวัฒนธรรมในโลกเสมือนจริง

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Abstract

The objective of this research was to study the influence of Emotional Intelligence (EI) towards the relevant of choices and its adaptation of Intercultural Conflict (ICS) of leaders in virtual multicultural project teams when confronted with two types of conflicts in terms of task and relationship conflicts. The WLEIS Wong and Law (2002) instrument, which consisted of 16 items, was used to assess the EI level of measurement. Moreover, the innovative data collection method, which calls a serious game, was used to assess the ICS in this quasi-experimental research. The total sample of 339 respondents, was used for this study. The sample, who answered the questionnaire, consisted of 106 Thai respondents, 114 French respondents, and 119 American respondents. They were mainly working professionals from different professional fields. The findings of this study confirmed but also contradicted the existing theory to some extent. The findings also showed that leaders with a high EI were more likely to use an indirect approach and an emotionally restraint strategy in conflicts circumstances. In addition, EI had an influence the adaptation of ICS to culturally different team members. Leaders were more likely to adapt their communication approach, but not their emotional strategy, in all types of conflicts. This study will be the benefits for applying through employees' experiences in terms of multicultural work environment. It will also promote the understanding and working together among employees in order to have a happy workplace as well as teams' efficiency and effectiveness.

Keywords: Emotional Intelligence, Intercultural Conflict Management Styles/ Behavior,
serious game, Multicultural Virtual Team, Leaders

บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาอิทธิพลของความฉลาดทางอารมณ์ (EI) ที่มีต่อความเกี่ยวข้องของทางเลือก และการปรับตัวของความเกี่ยวข้องของการเลือกรูปแบบการจัดการความขัดแย้งระหว่างวัฒนธรรม (ICS) ของผู้นำในทีม ทำงานพหุวัฒนธรรมในโลกเสมือนจริง เมื่อเผชิญกับความขัดแย้งสองประเภท ประกอบด้วย ความขัดแย้งที่เกิดจากภาระงาน และความขัดแย้งที่เกิดจากความสัมพันธ์ โดยใช้เครื่องมือชื่อ WLEIS (The WLEIS Wong and Law (2002)) ซึ่งประกอบ ไปด้วย 16 รายการ ถูกใช้เพื่อประเมินในระดับความฉลาดทางอารมณ์ รวมถึงการนำนวัตกรรมใหม่ของเครื่องมือในการเก็บข้อมูล ซึ่งเป็นการใช้เกมในการประเมินรูปแบบ/พฤติกรรมการจัดการความขัดแย้งระหว่างวัฒนธรรม ในการวิจัยกึ่งทดลองนี้ กลุ่มตัวอย่างที่ใช้ในการศึกษา จำนวน 339 คน ประกอบด้วย ผู้ตอบแบบสอบถามชาวไทย จำนวน 106 คน ชาวฝรั่งเศส จำนวน 114 คน และชาวอเมริกัน จำนวน 199 คน โดยส่วนใหญ่เป็นผู้เชี่ยวชาญด้านการทำงานจากสาขาวิชาชีพต่างๆ ผลการศึกษานี้มีทั้งยืนยันทฤษฎีและขัดแย้งกับทฤษฎีที่มีอยู่ในระดับหนึ่ง โดยมีผลแสดงให้เห็นว่าผู้นำที่เข้าร่วมเล่นเกมส์ ที่มีความฉลาดทางอารมณ์ในระดับสูงมีแนวโน้มที่จะใช้วิธีการสื่อสารทางอ้อมและกลยุทธ์การควบคุมอารมณ์เพื่อจัดการ กับความขัดแย้ง นอกจากนี้ ความฉลาดทางอารมณ์ยังมีอิทธิพลต่อการปรับตัวของพฤติกรรมการจัดการความขัดแย้ง ระหว่างวัฒนธรรม กับสมาชิกในทีมงานพหุวัฒนธรรมในโลกเสมือนจริง พวกเขามีแนวโน้มที่จะปรับตัว/เปลี่ยนแนวทาง การสื่อสาร แต่มักไม่ปรับ/เปลี่ยนกลยุทธ์ทางอารมณ์ในความขัดแย้งทั้งสองประเภท การศึกษานี้เป็นประโยชน์ต่อการนำไปใช้ ประยุกต์กับการทำงานของพนักงานที่มาจากวัฒนธรรมที่หลากหลาย เพื่อให้เกิดความเข้าใจและสามารถทำงานร่วมกัน ได้อย่างมีความสุข ซึ่งจะส่งผลประสิทธิภาพและประสิทธิผลในการทำงานร่วมกันเป็นทีม

คำสำคัญ: ความฉลาดทางอารมณ์, รูปแบบ/พฤติกรรมการจัดการความขัดแย้งระหว่างวัฒนธรรม, เกมจริงจัง,
ทีมทำงานพหุวัฒนธรรมในโลกเสมือนจริง, ผู้นำ

Introduction

International business has become the main factor in driving the global economy. Advanced communication technologies allow individuals from different cultures to collaboratively and effectively work together. Jackson and Joshi (2010) pointed out that managing diversity is still a challenge for organizations in the twenty-first Century. Diversity in teams usually provides the team members with more challenges, and they have to work harder to overcome them (Jimenez et al., 2017).

GVTs collaboratively work across locational, temporal, and relational boundaries (Degbey & Einola, 2020). The factors driving GVTs include globalization, the need for rapid development by organizations, distributed skills, increased collaboration technologies, and rapid innovation (Furst et al., 2004). Furthermore, the recent COVID pandemic has dramatically increased virtual communication and teaming globally.

Conflict is a fact of organizational life, and intercultural conflict is even more complicated to cope with. Ayoko et al. (2008) suggested that team/group leaders and members who experienced a destructive reaction to the conflict need training in skills related to EI and conflict management. Moreover, research indicates that EI is an essential element of team performance (Goleman et al., 2002). Applying these skills in the team/group is expected to minimize conflict and increase team effectiveness. Although the EI construct may be universal, Law et al. (2004) agreed that behaviors resulting from the EI skills among individuals might vary in a cross-cultural context.

Objective of the Study

The overall objective of the study is to investigate the influence of emotional intelligence on the relevance of choice and its adaptation of relevance of the choice of Intercultural Conflict Styles (ICS) of leaders from three different types of cultural backgrounds: Thailand (High power distance & Collectivism), France (High power distance & Individualism), and the USA (Low power distance & Individualism), when involved in task and relationship conflicts with multicultural virtual team members.

Research Questions

These research objective correspond to the following four research questions:

RQ1.1: To what extent do team leaders with higher emotional intelligence better manage intercultural conflict among multicultural virtual team members, in the case of task conflict?

RQ1.2: To what extent do team leaders with higher emotional intelligence better manage intercultural conflict among multicultural virtual team members, in the case of relationship conflict?

RQ2.1: To what extent are team leaders with higher emotional intelligence more likely to adapt their intercultural conflict management behavior to the multicultural virtual team members' cultural background, in case of task conflict?

RQ2.2: To what extent are team leaders with higher emotional intelligence more likely to adapt their intercultural conflict management behavior to the multicultural virtual team members' cultural background, in case of relationship conflict?

Literature Review

The systematic literature review (SLR) approach was used to review the relevant literature to understand the depth of the existing knowledge on conflict management, intercultural conflict management, Emotional Intelligence, and Multicultural Virtual Teams. All articles were retrieved from Scopus and EBSCO Discovery Service (EDS) Online Databases to search for potentially relevant articles.

The query resulted in 309 articles plus 31 additional articles found through other sources; thus, 340 articles. Then, the duplications and unrelated journals were excluded. Finally, 65 full-text articles were analyzed in detail, including 27 papers mainly focusing on conflict, 18 on emotional intelligence, and 20 on virtual teams and leaders. Most of those articles ranked in quartile one from Scimago Journal & Country Rank Website. They were from various subject areas; applied psychology, business and international management, business, management and accounting, cultural studies, and psychology and social psychology. Nine articles had more than 1000 citations.

Emotional Intelligence

Emotional intelligence (EI) was initially conceptualized in the 1990s by Salovey and Mayer (Dogra & Dixit, 2019). This concept refers to individuals' ability or tendency to deal, perceive, monitor, understand, regulate, and harness emotions among themselves and others. Finally, they use this information to guide their thinking and actions (Law et al, 2004; Salovey & Mayer, 1990). It can be concluded that EI is an essential factor for organizational performance and success (Noermijati et al., 2019).

Goleman (1998) shared his experience as a consultant in organizations that emotional Intelligence or EQ, later on, known as EI, is twice as important as technical skills and IQ for jobs at all levels and accounts for 47-56% of work success (Alon & Higgins, 2005). Its nature helps increase goodwill and mutual understanding, thus assisting disputes, tension, and stress among project team members (Khosravi et al., 2020). The nature and characteristics of the EI construct are as follows (Law et al, 2004; Zhang et al., 2015).

(1) Appraisal and expression of emotion in oneself or self-emotional appraisal (SEA). This indicator refers to one's ability to understand, express, and evaluate the emotions of oneself. People with this ability will sense and acknowledge their feelings better than others.

(2) Appraisal and recognition of emotion in others or others' emotional appraisal (OEA). This indicator refers to ones' ability to perceive, understand, recognize, and evaluate the emotions of others.

(3) Regulation of emotion in oneself (ROE) or regulating emotions. This indicator refers to ones' ability to monitor, manage, and control their emotions, which is recognized as an enabler for a better recovery from psychological distress and the ability to return quickly to a healthy state.

(4) Use of emotion (UOE) or utilizing emotion to facilitate and improve performance. This indicator refers to ones' ability to express and use their emotions effectively.

Conflict Management

Conflict is defined as "an intense disagreement process between a minimum of two interdependent parties when they perceive incompatible interests, viewpoints, processes, and/or goals in an interaction episode" (Zhang et al., 2015). Conflict is unavoidable, inevitable, stressful, perceived as a natural part of daily interaction in the workplace, and disruptive to most teams (Jehn, 1997). Conflict management refers to designing effective strategies for minimizing the dysfunctions of conflict and maximizing the constructive functions of conflict. It also enhances learning and effectiveness in an organization. Importantly, scholars have found that appropriate management of conflict and organizational performance is positively related (Sudhakar, 2015).

Rahim (1983) developed the most widely used scale for conflict management styles (Boonsathorn, 2007), known as "ROCI-II", which categorized five generally accepted conflict management styles, which are based on high and low "concern for self" and "concern for others," termed as avoiding (low self/other concern), compromising (moderate self/other concern), dominating (high self/low other concern), integrating (high self/ other concern), and obliging (low self/ high other concern).

Past work first distinguished workplace conflict into two categories: task conflict and relationship conflict (Jehn, 1995). Later, process conflict was added as a third type of conflict (Jehn, 1997). Task conflict is described as the awareness of disagreements that exist in the actual tasks in the team (Jehn, 1997). Relationship conflicts involve an affective or emotional reaction (Hammer, 2001) and disputes over interpersonal incompatibility such as frustration, anger, and stress (Jehn & Chatman, 2000). Process conflict is defined as disagreements among group members about the logistics of task accomplishment, such as allocating tasks, duties, resources, and responsibilities (Jehn & Chatman, 2000).

Intercultural Conflict Styles

Hammer (2005) developed one of the few models and assessment tools of conflict management styles based on cultural difference dimensions, termed the Intercultural Conflict Styles (ICS) model which categorizes how disagreements and emotions are generally addressed and dealt with in cross-cultural conflict interaction. The model of intercultural conflict management styles is based on two dimensions that explain how problems and conflicts are solved. Those two dimensions are behaviors that reflect "(1) direct versus indirect approaches for communicating about substantive issues (disagreements) and (2) emotionally expressive versus emotionally restrained strategies for dealing with emotional upset" (Hammer, 2009).

Direct communication strategies include a straightforward way to deal with disagreements, such as using precise words and explicit language to increase understanding. In contrast, indirect communication strategies rely on ambiguity in language, use of analogies and metaphors, hinting or saying one thing to refer to another, and use of the third party to mediate during the conflict management process. An emotionally expressive strategy tends to let out emotion and values more overt and visible displays of emotion and feeling through nonverbal behaviors. In an emotionally restrained strategy, the focus is on containing, suppressing, masking, and minimizing the expression of overt emotion through nonverbal behavior.

Hammer (2005) combines these strategies and proposed four-quadrant models of intercultural conflict management Styles (see Figure 1): discussion style (direct & emotionally restrained), engagement style (direct & emotional expressiveness), accommodation style (indirect & emotionally restrained), and dynamic style (indirect & emotional expressiveness).
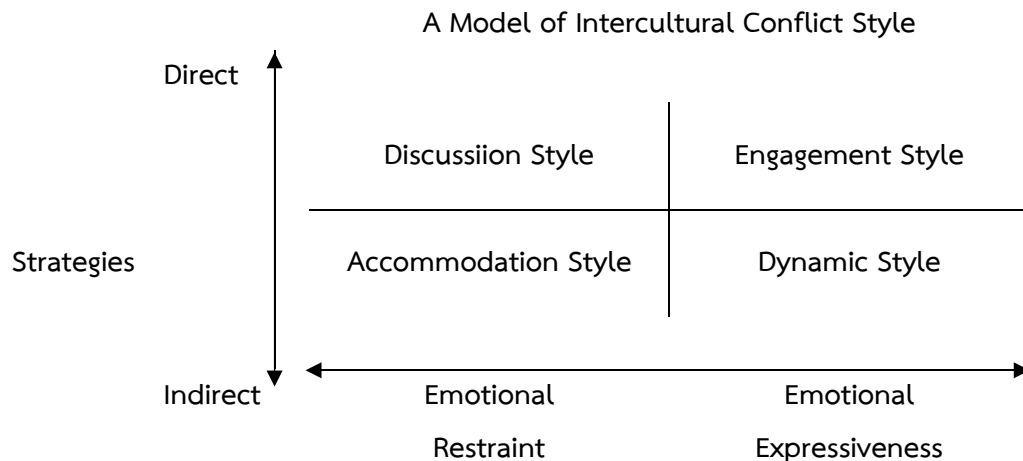
A Model of Intercultural Conflict Style

	Direct	
	Discussiion Style	Engagement Style
Strategies	Accommodation Style	Dynamic Style
	Indirect	
	Emotional Restraint	Emotional Expressiveness

Figure 1: The four-quadrant model of intercultural conflict style (ICS) (Hammer, 2005)

To conclude, emotional intelligence and conflict management have a long history and have been studied extensively. Nevertheless, there are many calls for future research on emotional intelligence (Caputo et al., 2019), types of conflict (O'Neill et al., 2013), intercultural conflict resolution (Ma et al., 2012) in the context of multicultural virtual project teams (Liu et al., 2018). This study attempts to address these research gaps by studying the relationship between the above-mentioned variables and context and using a serious game as a novel experimental methodology for data collection.

Multicultural Virtual Team

Virtual teams (VT) are gaining more popularity at present, as organizations have started to envision their capability of using virtual teams and realize its potential benefits (Paul et al., 2004). Three key variables that influence the success of virtual teams (VTs) or global virtual teams (GVTs), proposed by Jimenez et al. (2017), are location, distance and time (synchronous and asynchronous time). GVTs have become widely used in all forms of work. No matter where employees are located or how far they live from each other, collaboration and coordination are possible through the use of both synchronous/real-time media (VDO conference, skype meeting, telephone, etc.) and asynchronous (e-mail, bulletin-board system, etc.) communication tools (Jimenez et al., 2017).

Liu et al. (2008) emphasized that the VT has become one of the building blocks of a successful organization. Even it is challenging to get diverse groups/teams to work together, but having people work virtually has been acknowledged as diversity exploitation and increases capacity in developing creativity.

Conceptual Model and Hypotheses

We developed the conceptual model and associated hypotheses that are presented in figure 2:
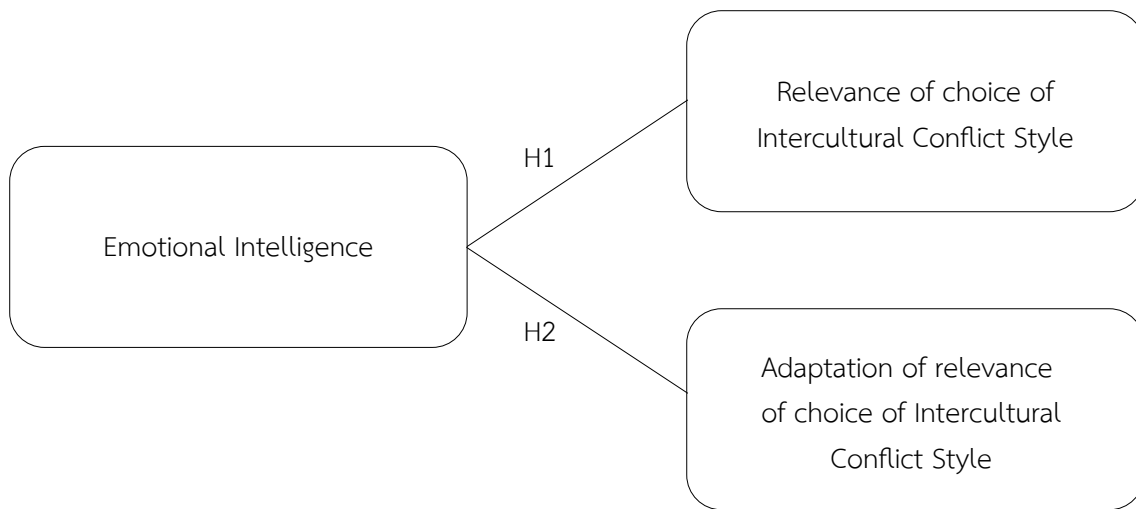
Figure 2: Conceptual Model

H1: Team leaders with higher emotional intelligence better manage conflict among multicultural virtual team members.

> *H1.1: Team leaders with higher emotional intelligence better manage task conflict among multicultural virtual team members*
>
> *H1.2: Team leaders with higher emotional intelligence better manage relationship conflict among multicultural virtual team members.*

H2.1: Team leaders with higher emotional intelligence are more likely to adapt the communication approach of their intercultural conflict management behavior to team members from different cultural backgrounds.

> *H2.1.1: Team leaders with higher emotional intelligence are more likely to adapt the communication approach of their intercultural conflict management behavior to team members from different cultural backgrounds, in the case of task conflict.*
>
> *H2.1.2: Team leaders with higher emotional intelligence are more likely to adapt the communication approach of their intercultural conflict management behavior to team members from different cultural backgrounds, in the case of relationship conflict.*

H2.2: Team leaders with higher emotional intelligence are more likely to adapt the emotional strategy of their intercultural conflict management behavior to team members from different cultural backgrounds.

> *H2.2.1: Team leaders with higher emotional intelligence are more likely to adapt the emotional strategy of their intercultural conflict management behavior to team members from different cultural backgrounds, in the case of task conflict.*
>
> *H2.2.2: Team leaders with higher emotional intelligence are more likely to adapt the emotional strategy of their intercultural conflict management behavior to team members from different cultural backgrounds, in the case of relationship conflict.*

Research Methodology

In response to calls for more experimental research (Bartel-Radic et al., 2019), this study is using a one-group posttest-only design, which is a quasi-experimental research design. This design used one posttest observation on respondents who experienced a treatment, with no pretest nor control groups.

Population

Cultural diversity among respondents is studied through two cultural dimensions, power distance, and individualism/collectivism. This research investigates a population of working professionals and master's and Ph.D. students from three nationalities: Thailand (High power distance & Collectivism), France (High power distance & Individualism), and the USA (Low power distance & Individualism). These nationalities were selected based on their different Power Distance Index (PDI) and Individualism Index (IDV) scores by Hofstede et al., (2010). The unit of analysis is the individual level. Participants are acting as leaders of a multicultural virtual team project and have to make decisions related to various types of intercultural team member conflicts.

Sampling Design

This study employed a purposive or judgmental sampling where the participants are selected on the judgment of the researchers, who decide who will be the most accessible or representative population for the study (Babbie, 2004). Researchers use this type of sampling to access a particular subset of people who meet the study's objective. In this study, two main criteria were employed; working experience and nationality. Thus, only participants with working experience, from Thailand, France, and the USA, were included.

Research Instrument

Two research instruments were used for this study: The Wong and Law (2002) Emotional Intelligence Scale (WLEIS) and the Intercultural Conflict Styles (ICS) from Hammer (2005).

The Wong and Law (2002) Emotional Intelligence Scale (WLEIS)

One of the most popular self-reported EI instruments is the Wong and Law (2002) Emotional Intelligence Scale, or WLEIS (Libbrecht et al., 2014). The WLEIS is a 16-item scale to assess four EI dimensions with the response format of a 7-point Likert-type scale. The value for Cronbach's Alpha for EI was α = .82, which is considered an acceptable reliability. Thus, with its popularity among scholars to measure EI in the workplace, convenience of short measurement, high reliability, good convergent and discriminant validity of the instrument, this study used the WLEIS to measure EI.

The Intercultural Conflict Styles (ICS) from Hammer (2005).

As previously discussed, the ICS framework was used as a reference to define the conflict management styles that the team leader (survey participant) could select from.

Based on our literature review, the most relevant intercultural conflict style choice was defined to develop a scoring scheme on what were better choices than others based on the culture of the interlocutor and based on the scenario situation. People from cultures with a high power distance and strong collectivism tend to use an indirect communication approach and emotional restraint strategy; on the contrary, people from cultures with a low power distance and strong individualism tend to be more direct and emotionally expressive. Thus, the accommodation style (direct and emotionally restraint) was defined as the most relevant ICS choice in a conflict situation with Thais (5 points). The dynamic style

(indirect and emotionally expressive) was the most relevant choice when dealing with French, and the discussion style (direct and emotionally restraint) was the most relevant choice when dealing with Americans. Scores of 3 and 1 were also granted for choice partially meeting the expected relevant style choice criteria. The ICS score sheet is shown in Table 1.

Table 1: The score for Intercultural Conflict Resolution Styles/Behavior (ICS)

Expected ICS style	Score for			Communication Approach		Emotional Strategy	
	Type I (Thailand)	Type II (France)	Type III (USA)	Direct	Indirect	EE	ER
Accommodation	5	3	3		/		/
Dynamic	3	5	1		/	/	
Discussion	3	1	5	/			/

Remark: Accommodation style represents indirect and ER approach. And since indirect approach and ER approach are expected for cultural background type II and III respectively, therefore both of them score 3.

The Serious Game

A serious game approach was used to create the conflict scenarios and propose the various choices of conflict management style to the participants. The term "serious game" was initiated by Abt (1987) and referred to games that are not primarily for amusement but for educational purposes. Serious games increasingly attract more attention and are recognized as innovative and effective tools for learning and knowledge management (Michel et al., 2009; Vallat et al., 2016, as cited in Bartel-Radic et al., 2020).

The serious game we developed for this research was named "CRIT" which stands for "Conflict Management in Intercultural Teams". It is an interactive online simulation game that used that used an online platform that allows researchers to design and run the serious game by uploading content (i.e., documents, images, and videos) and defining an interactive journey of the player through the content, depending on a scenario and underlying theoretical dimensions. The choices made by the players are recorded on the platform and can be exported into a database for further data analysis.

The critical incident technique (CIT), developed by John C. Flanagan (1954), was used in CRIT to create team members' conflict scenarios that reflect real-conflict situations. Thus, CRIT uses a game-based approach that facilitates data collection that allows the players to experience different conflict scenarios and choose their preferred choices of conflict management style through gameplay. The content of CRIT the serious game provides learning information for players, including skill, knowledge, or attitude applied in the real world. The main three characters in the game are comprised of the Thai, French, and American team members who work virtually on a global project. The player acts as the team leader. The CRIT serious game uses text content (for email exchanges), but also short videos, to simulate video call interactions.

Creswell and Creswell (2018) state that a pilot study is essential to establish the content validity of a research instrument. Therefore, two pilot studies were conducted to test the validity of the scenarios. They allowed evaluating the internal consistency of the items and improved questions, format, and instructions and increasing the level of validity of our instrument in measuring intercultural conflict management styles/behavior. After the pilot study, scenarios and the game interface were improved based on the pilot participants' feedback and suggestions. Specifically, the engagement style (direct style and emotionally expressive) from Hammer's (2005) model was seen as the most inappropriate/unlikely to be selected by the participants and was dropped out (from the four original possible choices) after the pilot study feedback. Therefore, CRIT the serious game includes only the three remaining intercultural conflict styles (Discussion, Accommodation and Dynamic).

To ensure ethics in conducting research, informed consent was included in the game, no pressure was put on the players' participation, and they were notified that data was collected from them, but would be kept anonymous to maintain confidentiality. To make CRIT the serious game as realistic as possible, we developed three game versions in three different languages: English, French, and Thai. The back-translation methodology was used to ensure the quality of this research.

Methods of Data Analysis

In terms of data analysis software, SPSS (Statistical Package for Social Science) was used to statistically test our hypotheses. A one-way ANOVA, regression analysis, and Chi-Square were primarily used to analyze the data in this study.

Results

Descriptive Analysis

339 respondents were included in this study, from three nationalities with different cultural dimensions: Thai (n=106, high power distance & collectivism), French (n=114, high power distance & individualism), and American (n=119, low power distance & Individualism). The age range is between 18 to over 65. The majority held a master's degree or equivalent, and had an advanced level in English, were working professionals employed in the private sector, in the field of research and education, with 1-5 years of working experience. Most of them have international experience, i.e. have lived abroad, and interact globally and virtually at work very frequently.

In terms of EI measured with WLEIS (Likert scale from 1-Low EI, to 7-High EI), the mean value of EI levels for French participants was the highest ($\overline{X}$= 5.24), followed by Thai participants ($\overline{X}$= 5.18), and by Americans (USA) ($\overline{X}$ = 4.58) respectively, which are statistically significant differences between the three countries.

วารสารวิชาการบริหารธุรกิจ **35**

สมาคมสถาบันอุดมศึกษาเอกชนแห่งประเทศไทย
ในพระราชูปถัมภ์ สมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี
ปีที่ 12 เล่ม 1 ประจำเดือน มกราคม - มิถุนายน 2566

Regarding the relevance of choice of Intercultural Conflict Styles, the use of the accommodation style (Indirect, Emotional restraint) is most frequent among Americans ($\overline{X}$= 5.88), while French and Thai are significantly lower and similar ($\overline{X}$= 5.28, $\overline{X}$= 5.11 respectively). Similarly, Americans also have the highest mean value for the use of dynamic style (Indirect, Emotional expressiveness) ($\overline{X}$= 7.73), while the mean values for French and Thai are significantly lower and similar ($\overline{X}$= 5.62, $\overline{X}$= 5.68 respectively). Conversely, the mean value for the use of the discussion style (Direct, Emotional restraint) among Thai is the highest ($\overline{X}$= 7.21), and the French are quite close to Thai ($\overline{x}$= 7.10), while the Americans rank lowest ($\overline{X}$= 4.39). To summarize, Thai and French similarly use all intercultural conflict styles. In contrast, Americans favor the accommodation and dynamic styles but less the discussion style.

When looking closely at the communication and emotional strategies used for Intercultural conflict management, the results are quite surprising: the mean value for the use of a direct approach among the Thai is the highest ($\overline{X}$ = 7.21), followed by the French ($\overline{X}$= 7.10), while the Americans ranked lowest ($\overline{X}$= 4.39). On the other hand, Americans have the highest mean value for the use of the indirect approach ($\overline{X}$= 13.61), while the mean values of French and Thai participants are close ($\overline{X}$= 10.90, $\overline{X}$= 10.79 respectively).

Inferential statistics

Table 2: Summarized regression results for H1

Conflict Type	EI		ICS		R Square	df1	df2	F	Sig.
	Mean	Std. Deviation	Mean	Std. Deviation					
The summary of regression results of EI and ICS									
All 3 countries									
Combined Conflicts			3.22	0.33	0.03	1	337	10.08	.002[b]
Task Conflict	4.99	0.71	3.13	0.44	0.01	1	337	3.82	.051[b]
Relationship Conflict			3.30	0.47	0.02	1	337	6.89	.009[b]
Thailand									
Combined Conflicts			3.16	0.29	0.02	1	104	1.64	.203[b]
Task Conflict	5.18	0.71	3.05	0.43	0.01	1	104	1.24	.268[b]
Relationship Conflict			3.26	0.43	0.00	1	104	0.37	.546[b]
France									
Combined Conflicts			3.12	0.34	0.00	1	112	0.16	.686[b]
Task Conflict	5.24	0.61	3.09	0.44	0.00	1	112	0.18	.674[b]
Relationship Conflict			3.15	0.48	0.00	1	112	0.04	.836[b]
USA									
Combined Conflicts			3.37	0.30	0.00	1	117	0.07	.786[b]
Task Conflict	4.58	0.63	3.24	0.42	0.00	1	117	0.05	.819[b]
Relationship Conflict			3.49	0.42	0.00	1	117	0.03	.861[b]

Table 2 presents the results of statistical tests related to hypotheses 1, 1.1, and 1.2, and shows that none of the hypotheses is supported, as explained below:

The results of the linear regression analysis for H1 (R^2 = .03, F(1, 337) = 10.08, p = .002) show that the influence of a team leader's emotional intelligence and the relevance of the Intercultural Conflict Style when interacting with multicultural virtual team members is significant (p=.002). Still, the predictor value (R^2 = .03) is very weak.

The results of the linear regression analysis for H1.1 (R^2 = .01, F(1, 337) = 3.82, p = .051) show that the influence of a team leader's EI and the relevance of the Intercultural Conflict Style when interacting with multicultural virtual team members, in case of task conflict, is slightly not significant (p=.051) and the predictor value (R^2 = .01) is also very weak.

The results of the linear regression analysis for H1.2 (R^2 = .02, F(1, 337) = 6.89, p = .009) show that the influence of a team leader's EI and the relevance of the Intercultural Conflict Management Style when interacting with multicultural virtual team members, in case of relationship conflict, is significant (p=.009) and the predictor value (R^2 = .02) is also very weak.

Moreover, we further explored these associations among Thai, French, and American respondents in all types of conflict and found that none of the R-Squared values was above 0.4. Therefore, we conclude that for our sample, emotional intelligence of team leaders from three cultural background types are not a good predictor of the intercultural conflict style when interacting with multicultural virtual team members in all types of conflict.

For testing the remaining hypotheses, the EI variable was converted into a categorical variable. The median value of the EI distribution curve was used as a cutting point to distinguish a high from a medium EI category. The median and mean values for EI were 5.0 and 4.99. The EI measurement instrument scale was from 1 to 7 with a scale median value of 4.0. Since the median value of our sample distribution is much higher (=5) than the measurement median value (=4), we labeled it "Medium EI" rather than "Low EI." Thus, when the EI score was greater than 5.0, it was classified as high EI. When the EI score was equal to or lower than 5.0, it was classified as medium EI.

Consequently, a Chi-Square test was used to compare frequencies between two categorical variables (EI and intercultural conflict management behavior) in a (task and relationship) conflict.

Table 3: The summary of Chi-Square results for Hypothesis 2

Hypothesis	Type of Conflict	EI Level	Change Direct/Indirect Style		Pearson Chi-Square		Symmetric Measures	
			Rarely	Often	Phi Value	Interpretation	Phi Value	Interpretation
Communication approach (Direct/Indirect) (N=339)								
H2.1	Combined Conflicts	Medium	136	31	9.367[a]	**0.002**	**0.166**	**Strong**
		High	115	**57**				
H2.1.1	Task Conflict	Medium	130	37	15.908[a]	**0.000**	**0.217**	**Strong**
		High	99	**73**				
H2.1.2	Relationship Conflict	Medium	139	28	9.888[a]	**0.002**	0.171	Strong
		High	118	54				
Emotional Strategy (Expressive/Restraint) (N=339)								
H2.2	Combined Conflicts	**Medium**	105	**62**	15.531[a]	**0.000**	-0.214	**Strong**
		High	141	31				
H2.2.1	Task Conflict	**Medium**	99	**68**	4.556[a]	**0.033**	-0.116	Moderate
		High	121	51				
H2.2.2	Relationship Conflict	**Medium**	109	**58**	16.338[a]	**0.000**	-0.220	**Strong**
		High	145	27				

Table 3 presents the results of statistical results associated with hypotheses 2.1, 2.1.1, 2.1.2, 2.2, 2.2.1, and 2.2.2. The results of the hypotheses' tests are as follows:

Hypothesis 2.1 is supported. The result indicates that a high EI level was significantly and strongly associated with the way respondents adapted their communication approach when dealing with a conflict with a member from a different culture in a multicultural virtual team, $X2$ (1, N = 339) = 9.367, p = .002, f = 0.166 (strong). Participants with high EI scores are more likely to adapt their (Direct/Indirect) communication style than participants with a medium EI level when managing any type of conflict.

Hypothesis 2.1.1 is supported. The result indicates that a high EI level was significantly and strongly associated with the way respondents adapted their communication approach when dealing with a task conflict with a member from a different culture, $X2$ (1, N = 339) = 15.908, p = .000, f = 0.217 (strong). Participants with high EI scores are more likely to adapt their (Direct/Indirect) communication style than participants with a medium EI level when managing a task conflict.

Hypothesis 2.1.2 is supported. The results indicate that the EI level was significantly and strongly associated with the way respondents adapted their communication approach when dealing with a relationship conflict with a member from a different culture in a multicultural virtual team, $X2$ (1, N = 339) = 9.888, p = .002, f = 0.171 (strong). Participants with high EI scores are more likely to adapt their (Direct/Indirect) communication style than participants with a medium EI level when managing a relationship conflict.

Hypothesis 2.2 is negatively supported. The result indicates that a lower EI level was significantly and strongly associated with the way respondents adapted their emotional strategy when dealing with a conflict with a member from a different culture in a multicultural virtual team, $X2$ (1, N = 339) = 15.531, p = .000, f = -0.214 (strong).

Hypothesis 2.2.1 is negatively supported. The result indicates that a lower EI level was significantly and moderately associated with the way respondents adapted their emotional strategy when dealing with a task conflict with a member from a different culture in a multicultural virtual team, $X2$ (1, N = 339) = 4.556, p = .033, f = -0.116 (moderate).

Hypothesis 2.2.2 is negatively supported. The result indicates that a lower EI level was significantly and strongly associated with the way respondents adapted their emotional strategy when dealing with a relationship conflict with a member from a different culture in a multicultural virtual team, $X2$ (1, N = 339) = 16.338, p = .000, f = -0.220 (strong).

Discussion

Our findings related to RQ1.1 and RQ1.2 reveal that for our sample, the level of emotional intelligence is not a strong predictor of what could be considered as the most relevant choice of Intercultural Conflict Style to manage a conflict with an interlocutor from a particular culture. The critical point is that using the "relevant" style for evaluating good management of a conflict was probably not the best approach since there might not be a single "relevant" choice, especially when dealing with multicultural team members from various backgrounds.

Our findings on RQ2.1 and RQ2.2 reveal that the emotional intelligence level influences the adaptation of the intercultural conflict style. Participants with a high EI often change their communication strategy, but not their emotional strategy in all types of conflicts. To support the influence of EI on the emotional strategy, McShane and Glinow (2022) stated that people with higher EI have a better awareness of their emotions. They can better make sense of them; thus, they can adjust their emotional responses to specific situations.

Conclusion

In terms of EI level measured with WLEIS, the result from this study concluded that French and Thai have a higher EI level than Americans. This doesn't mean that French and Thai people have higher EI than Americans, at least in our sample. This finding should not be generalized to the entire country population. Participants with a high EI are more likely to use an indirect approach and an emotionally restraint strategy in conflicts. In addition, they are more likely to adapt their communication approach but don't often adapt their emotional strategy in all types of conflict. We see three possible reasons for these results, which contradict the existing literature based on the context of cultural differences, task-oriented, multicultural virtual team, and intercultural experience. Firstly, the goal for the serious game was task-oriented since it clearly stated that players needed to accomplish the task. Secondly, the players took the role of the coordinator of a multicultural virtual team and focused on their goals of getting the job done.

They typically collaborated in the work process through electronic media. Thirdly, the role of the leader is to keep group members organized and stay focused on the task's goal. Thus, they focused mainly on getting the job done using different strategies to work collaboratively and minimize conflict. Lastly, since most participants had international experience, this might be another reason why our sub-samples have reacted differently to conflict than expected. In other words, the samples are aware of cultural differences (Bartel-Radic & Giannelloni, 2017), which may influence their intercultural conflict styles.

In summary, according to the finding of this study, EI influenced the intercultural conflict style and its adaptation to some extent. The relationship of EI with the intercultural conflict style is not clearly established for our sample. But, the role of EI was demonstrated in a substantial connection with the adaptation of conflict style to different cultural backgrounds.

Contributions

Academic Contributions

The first contribution of this research to theory is the innovative data collection methodology developed, i.e. CRIT, the serious game. This novel method aims at two primary objectives: an immersive, engaging, and entertaining data collection method through the use of a serious game, which provides a simulation of an actual virtual working environment, and an educational tool, where participants can receive feedback on how to improve their EI and Conflict Management style based on their scores.

Our second contribution is that we filled a research gap. None of the previous studies has explored the influence of emotional intelligence on intercultural conflict management style and behavior, especially in a virtual team context, in the case of task and relationship conflict.

Managerial Contributions

The results that are relevant for practitioners concluded that stereotyping should not be used when managing intercultural conflict. Not only may cultural background influence the intercultural conflict styles used, but also should other factors be taken into consideration, such as age, educational background, international experience, and working and virtual team experiences.

Limitation

Every research has limitations. The limitations of this study could be grouped in two areas: the serious game and the research context and methodology. For the limitations related to the serious game, it would be beneficial to use a real game platform that allows interactive and scores feedback features (since we had to use the limited features of a survey instrument tool to re-create a serious game environment). It will help to improve the game's enjoyability and ability to let the players receive their score and recommendation all along the game and/or after the game completion. The time to complete the whole game was a bit too long, thus shortening the scenarios might need to be considered. However, if the serious game could be developed by adding more fun and interactive features, then the players might further enjoy the game and may forget about the time spent during the game, increasing their engagement level.

Another limitation of this research is related to its context and methodology. The size of our sample was relatively small (100 respondents per country/culture) and consequently cannot lead to any form of generalizability, but we believe it has some explorative value. The game involved only 3 culture types, each represented by a single country. Consequently, including more countries and different culture types in the game could be useful to widen the scope of this study and lead to more generalizable findings. When it comes to the design of the scenarios and choices provided to the player to address the conflict, it will have been interesting to capture the reasons why they picked this choice, to make sure it was aligned with our underlying measurement dimensions.

Since this study used two of Hofstede's cultural dimensions when looking at the cultural difference, it may be interesting to look further into the Globe study, which is the more recent study and contains more cultural dimensions. Moreover, even though it is challenging to use a global population, the probability sampling design will help increase its generalizability.

Future Research

The authors would like to propose the following suggestions for future research. Firstly, since this research was purely quantitative, the future use of qualitative methods should help enriching the results of our initial findings. Next, concerning conflict context in the game scenario, due to time constraints, the idea of investigating how conflict escalated in different conflict stages was dropped. Adding a "process conflict" category would also be useful to cover all types of potential virtual team conflicts.

Thirdly, Breuer et al. (2020) stated that trust is often a critical success factor in ensuring effective collaboration. Recent meta-analyses showed that team trust matters more in virtual teams, reflecting additional uncertainty and risks when communicating through electronic means. Therefore, future research could also include interpersonal trust as an additional variable. Last but not least, our serious game could be reused with different samples, also from other cultures/countries, as we believe that there are still many exciting aspects to be explored.

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