# Exploring the Use of Emotional Intelligence Subcomponents as Predictors of intrinsic motivation and Willingness to Communicate: The Case of Vietnamese FLL Undergraduates

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## ABSTRACT

Emotional intelligence (EI), intrinsic learning motivation (IM), and willingness to communicate (WTC) are among the factors that influence students' success in foreign language learning (FLL). However, the research concerning the association between these three factors is limited, especially those dealing with the EI subcomponents. In addition, there has been no report on the link between EI, IM, and WTC of the students learning Japanese and Korean as foreign languages. Therefore, this study investigated the relationships of EI of FLL university students with IM and with WTC. At the same time, it explored the potential of EI subcomponents to serve as predictors for IM and WTC. Using descriptive statistics, Pearson product-moment correlation, and stepwise regression, this study analyzed questionnaire responses from 78 FLL undergraduates. The results indicated that the students' EI positively correlated with their IM and WTC, and one of four EI subcomponents predicted IM and WTC. Meanwhile, the one-way ANOVA test indicated that no significant difference existed within groups of students learning English, Japanese, and Korean as foreign languages. These results suggested several meaningful implications.

**Keywords:** Emotion, predictive role, motivation, communicative readiness, L2

## Introduction

Emotional intelligence, learning motivation, and willingness to communicate belong to factors that influence students' success in foreign language learning. They are far from new topics, but even these three factors have recently attracted much attention from researchers interested in the relationships between learning constructs.

Emotional intelligence (EI) is an individual's ability to manage and differentiate one's and others' feelings and emotions and use this information to make appropriate decisions and responsive actions (Salovey & Mayer, 1990). EI is a recent research topic in education in general and foreign language learning and teaching in particular. Studies showed that EI was an effective tool for assessing the everyday behavior of college students (Brackett, Mayer, & Warner, 2004). Research also indicated that EI influenced the students' learning outcomes and that improving the students' EI made a foreign language learning-teaching process more effective (Tevdovska, 2016). On the other hand, using appropriate teaching methods improved the learners' EI in a face-to-face learning-teaching environment (Goroshit & Hen, 2012). Recently, studies confirmed the relationship between EI and some foreign language learners' aspects, such as oral performance and communicative willingness (Jalilzadeh & Yeganehpour, 2021) or communication apprehension and self-efficacy (Cong & Li, 2022).

Intrinsic motivation (IM) is one of the two types of learning motivation based on Self-determination theory (SDT) (Ryan & Deci, 2000, 2017). The other is extrinsic motivation. Many researchers placed IM higher importance than extrinsic one for its role in learning success and psychological satisfaction (Deci & Ryan, 1985; Deci, Vallerand, Pelletier, & Ryan, 1991). The first study exploring learners' motivation and its relation to learning outcomes appeared over half a century ago (Gardner & Lambert, 1959). Since then, many research papers, review articles, and books have been available on the shelf. In the last decade alone, the number of related work has been abundant (e.g., Ngo, Spooner-Lane, & Mergler, 2017; Jodaei, Zareian, Reza Amirian, & Reza Adel, 2018; Shih, 2019; Lei & Levitan, 2020; Nguyen & Habok, 2021; Khojah & Thomas, 2021). However, reports of the link between FLL students' EI and L2 motivation, especially IM, are still rare.

Willingness to communicate (WTC) is one's choice to or not to enter into a conversational interaction (McCroskey, 1992). This construct is a recent research topic in foreign and second language learning. Many researchers have tried to verify the interaction between WTC and other factors, such as language acquisition and EI. Published investigations have shown that WTC strongly influences foreign language acquisition, and high WTC-level learners tend to employ their linguistic opportunities more effectively and frequently than low ones (MacIntyre, Clement, Dornyei, & Noels, 1998; Yashima, 2002; MacIntyre, 2007). Research has also indicated that there is a close association between WTC and EI (e. g., Janfeshan & Nazeri, 2014; Ketabdar, Yazdani, & Yarahmadi, 2014; Rahbar, Suzani, & Sajadi, 2016; Mehrpoor, & Soleimani, 2018; Mirzapour & Chamani, 2020). However, available research using subcomponents of EI to predict WTC is scarce.

As mentioned above, EI, IM, and WTC are reputable factors that influence the learning success of FLL students. However, few empirical works are available concerning employing EI subcomponents to predict WTC and IM. So, this study examined the possibility of using FLL

university students' EI subcomponents as predictors of their IM and WTC. It aims to deepen our understanding of the predictive role of EI subcomponents in the hope that its results might be practical in the foreign language learning and teaching process.

## Literature Review

### Emotional Intelligence and Foreign Language Learning Study

Emotional intelligence (EI), or emotional quotient (EQ), is a framework relating to emotional expression and interaction with other people. Salovey and Mayer (1990) defined EI as "the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 185). They also divided EI into four psychological components: i.e., emotional managing, understanding, facilitating, and perceiving (Mayer & Salovey, 1997). Some researchers, including Goleman (1995), believed EI was more important than intelligence quotient (IQ).

There are two distinct EI models of frequent use: ability and trait. Although no contradiction exists in these models, they have somewhat different concepts and measurement perspectives. The ability model refers to EI as intelligence or cognitive ability and measures it by objective performance tests. On the other hand, EI views EI as a personality characteristic and evaluates it by self-report tests (Mayer, Caruso, & Salovey, 2000; Zeidner, Matthews, & Roberts, 2009). The challenge of ability-EI measurement is considering whether a response is correct, especially when the respondent comes from a culture different from Western ones. Meanwhile, trait EI measurement, based on the respondent's thoughts, feelings, and behaviors in certain situations and thus, may be effectively used regardless of cultural background (Fukuda, Saklofske, Tamaoka, Fung, Miyaoka, & Kiyama, 2011). For instance, although based primarily on samples from Western countries, Schutte Emotional Intelligence Scale (SEIS) applies well to Japanese university students (Fukuda et al., 2011).

Two EI measurements appear to be used frequently in foreign language learning studies, including most of those cited in the current work. The first, probably the most popular, is Bar-On's EI questionnaire (Bar-On, 1997), also known as EQ-i, containing 133 items. The second is SEIS (Schutte et al.,1998; Ciarrochi, Chan, & Bajgar, 2001), with 33 items. Since the number of items of SEIS is much smaller than that of EQ-I, using it may avoid losing the focus of the learners answering the questionnaire.

The Schutte Emotional Intelligence Scale (SEIS) consists of four components: Perception of Emotions (PE), Managing Emotions in the Self (MES), Managing Others' Emotions (MOE), and Utilizing Emotions (UE). Ciarrochi et al. (2001) reported that this scale measures the emotional intelligence in adolescents with very high reliability and possesses positive correlations with "skill at identifying emotional expressions, amount of social support, the extent of satisfaction with social support, and mood management behavior" (p. 1105). Schutte et al. (1998) suggested that measuring the students through the self-report SEIS can help reduce the risk of poor performance at the university.

Since EI connects to work performance and outcomes (Carmeli, 2003), many researchers used EI in their foreign language learning studies. In recent years, the number of works on EI and related issues has been substantial. Fahim and Pishghadam (2007) collected EI data from 508

second-year students at four universities in Iran and demonstrated a close relationship between some sub-components of EI and academic achievement. Maqbool (2019) found a similar relationship among Pakistani students learning English as a foreign language (EFL). Meanwhile, based on questionnaire responses from 138 university EFL students, Ghanadi and Ketabi (2014) established a positive correlation between Iranian EFL students' EI and their learning beliefs and the predictive role of the former for the latter. At the same time, Zafari and Biria (2014), investigating EI and language learning strategy use, discovered that students with higher EI scores employed more strategies than those with lower scores. They also found that the metacognitive one was the most frequently used strategy. Recently, Esmaeeli, Sabet, and Shahabi (2018) reported that EFL students' achieved scores in English speaking skills possessed a link to their EI. The finding of Jalilzadeh and Yeganehpour (2021) was insistent with the above result.

**Motivation and Its Relationship with Emotional Intelligence**

Learning motivation is a notion that can help to understand why some students get a better learning outcome than others (Gardner & Lambert, 1959, 1972). Dörnyei and Ushioda (2013) considered motivation as a guide leading students "to make certain choices, to engage in action, to expend effort and persist in action" (p. 3). Self-determination theory (SDT) classifies motivation into intrinsic and extrinsic (Deci & Ryan, 1985; Ryan & Deci, 2000, 2017). Intrinsic motivation (IM) is all aspects of activation and intentions arising from internal factors such as interest, enjoyment, and satisfaction in performing learning activities. Meanwhile, extrinsic one, based on external factors, relates to performing learning activities to gain an achievement such as financial success, other people's respect, fame, and even saving time for other activities. Between these two motivations, many researchers give IM a more crucial role than extrinsic one regarding learning success and psychological satisfaction (Deci & Ryan, 1985; Deci et al., 1991). Furthermore, IM has three dimensions: knowledge, accomplishment, and stimulation (Noels, Pelletier, Clement, & Vallerand, 2003).

The relationship between learning motivation and emotional intelligence has attracted considerable attention. In a sample of 737 primary students, Tam et al. (2018) found that an increase in the EI level of the students enhanced their learning motivation. Also, focusing on primary students, Arias, Soto-Carballo, and Pino-Juste (2022) indicated a positive correlation between EI and motivation. Meanwhile, Trigueros et al. (2019) point out that EI positively correlated with motivation among 615 secondary school pupils. Studying a much larger sample of 3512 adolescent students, Usán Supervía and Salavera Bordás (2018) confirmed the positive correlation between EI and motivation. Furthermore, they revealed that the relationship between EI and intrinsic motivation was firmer than between extrinsic and motivation. Investigating a sample of 404 university students who participated in online-English courses during the COVID-19 pandemic, Chang and Tsai (2022) concluded a positive effect of the students' EI on their learning motivation.

Some studies have explored the interplay between learning motivation and EI. However, the authors of this study found no available report on the predictive role of FLL university students' EI subcomponents for their IM.

**Willingness to Communicate and Its Relationship with Emotional Intelligence**

Students' communicative skill is one of the paramount goals that a foreign language learning and teaching process aim to obtain. There is the case that linguistically competent students do not want to communicate in the foreign language they are learning. Meanwhile, not-so-good ones are willing to use the target language to communicate (MacIntyre et al., 1998). The concept of Willingness to Communicate (WTC) may help give a reasonable explanation. WTC is one's state of communicative readiness. In other words, WTC reflects what a student freely chooses between communicating and keeping silent in a given situation (MacIntyre, 2007). Studies indicated that WTC is essential for learners to use the target language in communication (Kang, 2005).

As one of the ultimate goals of foreign language learning and teaching is the ability to communicate the target language efficiently, WTC and its relation with other learning factors, especially EI, have drawn many investigations. Rahbar et al. (2016) showed that EFL learners' EI had a tight relationship with WTC. Meanwhile, Tabatabaei and Jamshidifar (2014), analyzing a sample of 60 participants, showed that EFL students' EI positively correlated with their WTC. They also found that gender played an essential role in this relationship. Scrutinizing on a larger sample size of 100 EFL learners, Gohlami (2015) confirmed the positive link between EI and WTC and the outperforming of the female group compared to their male counterparts. Several other reports also noted the EI-WTC positive correlation (e.g., Janfeshan & Nazeri, 2014; Ketabdar et al., 2014; Mehrpoor & Soleimani, 2018; Mirzapour & Chamani, 2020).

Almost the published studies on the EI-WTC relationship employed EI as a whole in their analysis. The investigations using subscales of EI for a similar association are very few. In a sample of 165 EFL Turkish students, Oz (2015) found that four subscales of EI positively correlated with WTC, and two even served as predictors of WTC. Recently, studying 65 Iranian EFL learners, Dastgoshadeh and Javanmardi (2021) also reported similar findings. As the number of research employing subscales of EI to explore the EI-WTC link is significantly moderate, it is clear that more investigation needs to be done to deepen our understanding of this relationship, especially for those learning Japanese and Korean as a foreign language (JFL and KFL).

In summary, studies have proved that EI, learning motivation, and WTC are among FLL constructs that influence learning success. Research has also established positive correlations between EI and learning motivation and EI and WTC. However, few investigations used EI and its subcomponents as predictors of IM and WTC. In addition, previous studies almost dealt with English-learning students, and no similar work on students learning foreign languages different from English.

By analyzing the questionnaire responses of university FLL students, this study looked for the answer to the following research questions:

(1) Is there any correlation between FLL undergraduates' EI and their IM and WTC?
(2) Does any EI subcomponent serve as a predictor of IM and WTC?

### Hypothesis

This study supposes the following null hypotheses:

(1) There is no significant correlation between subcomponents of emotional intelligence and students' intrinsic motivation.
(2) There is no significant correlation between subcomponents of emotional intelligence and students' willingness to communicate.
(3) None of the subcomponents of emotional intelligence can predict students' intrinsic motivation.
(4) None of the subcomponents of emotional intelligence can predict students' willingness to communicate.

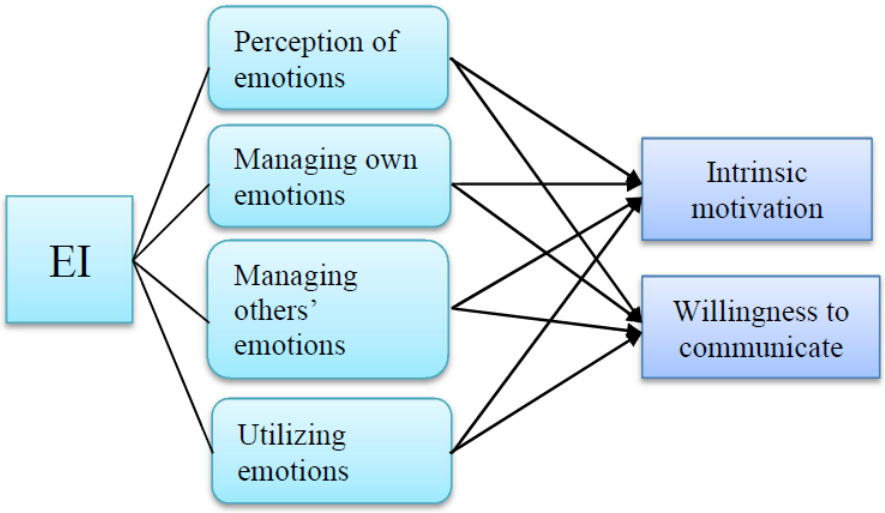


Figure 1: Conceptual Framework

## Methodology

### Research Design

The current work used an inferential quantitative research design employing an adapted questionnaire to collect data on the students' EI, learning IM, and WTC. These quantitative data were indispensable to examining the extent of the relationship between EI-IM and EI-WTC and whether EI subcomponents served as predictors for IM- and WTC-learning factors. Based on findings and available literature, the study then discusses its implications.

### Participants

Limited by financial and administrative problems, the subjects of this study were students from a single university enrolling at the Department of Foreign Languages. For an acceptable sample size and a similar level of WTC in the context of the study, the study preferred students in the same academic year as many as possible. Considering a balance between these two

requirements, the third-year students were the best choice as they had already enrolled in many foreign language courses, though only a few compared to the fourth-year ones, and outnumbered students in other years. Of the 96 candidates, 78 third-year students, 25 males (32.1%) and 53 females (67.9%), willingly participated in this study. Among them, 37 students (47.4%) majored in English, 18 (23.1%) in Japanese, and 23 (29.5%) in Korean. These students have just returned to the university for two months after more than half a year of learning their online courses at home due to the COVID-19 preventative regulation. The participants answered a questionnaire in the classroom with no time limitations. Before the students answered the questionnaire, the authors assured them that their responses would not affect the assessment of their learning courses and would be confidentially used only for research purposes. The researchers then confirmed they were voluntary once again. During the process, the authors also provided the participants with an explanation and clarification whenever needed.

**Instruments**

This study employed a questionnaire having three scales. The students rated themselves on the items using a five-point scale, ranging from 5 (strongly agree) to 1 (strongly disagree). The questionnaire has been translated into Vietnamese to ensure a clear understanding before being delivered to the participants. Cronbach's alpha showed the entire questionnaire to reach high-scale reliability, $\alpha = 0.888$. Details of the scales used in this work are as follows.

*Emotional Intelligence Scale:* The current work employed the Schutte Emotional Intelligence Scale (SEIS). There were two reasons. First, Fukuda et al. (2011) proved that this trait-EI measurement is valid in the Japanese culture, a Confucian heritage culture similar to the Vietnamese one. Second, SEIS contains only 33 items, not many for the student to become unfocused. Developed by Schutte et al. (1998) and factor structured by Ciarrochi et al. (2001), 04 subcomponents of SEIS and their number of items are as follows: Perception of Emotions (PE; 10 items), Managing Emotions in the Self (MES, also known as Managing Own Emotions; 09 items), Managing Others' Emotions (MOE, also known as Social Skills; 08 items), and Utilizing Emotions (UE, 06 items). The scale reliability of SEIS was $\alpha = 0.821$ in the present work. Appendix A shows the statements and obtained descriptive statistics.

*Intrinsic Motivation Scale:* This study used an IM scale developed by Noels et al. (2003) and adopted by Wang and Lee (2019). This scale covers all three dimensions of IM with four items: intrinsic knowledge (01 item), intrinsic accomplishment (02 items), and intrinsic stimulation (01 items). The authors slightly modified by changing the word "English" to "Japanese" or "Korean" in the version delivered to JFL and KFL students, respectively. The current study obtained a Cronbach's alpha of $\alpha = 0.709$ for this scale, which shows acceptable scale reliability. Employed IM scale's structure, statements, item mean, and standard deviation are those in Appendix B.

*Willingness to Communicate Scale:* This study collected WTC data through a modified scale with 13 statements. The original scale, developed by Baghaei (2011) and known as WTC in a Foreign Language Scale (WTC-FLS), contained 20 items. To better suit the Vietnamese context, the authors reduced them by deleting statements 7, 8, 9, 10, 11, 12, and 20. Furthermore, the authors changed the expression "some native speakers of English" into "foreigners" in EFL, "Japanese" in JFL, and "Korean" in the KFL students' version. The word "English" was also

replaced by "Japanese" or "Korean" in the version delivered to JFL and KFL students, respectively. The modified 13-item WTC-FLS reached high-scale reliability, with $\alpha$ = 0.897. Appendix C presents the used scale's statements, item mean, and standard deviation.

### Analyses

The current research used descriptive statistics to describe the responses and conducted several necessary analyses, including Cronbach's alpha, Pearson's correlation, regression, and one-way ANOVA analysis. Cronbach's alpha was to check the scale reliability. While Pearson's correlation test examined whether correlations exist between EI and IM, and WTC, regression analysis examined which EI sub-components might play a predictive role for other questionnaire learning constructs. Finally, one-way ANOVA analyses examined if there is any significant difference in the target language towards WTC.

## Results

### Students' Emotional intelligence, Intrinsic Motivation, and Willingness to Communicate

Table 1 below shows the descriptive statistics of the participants' questionnaire responses.

Table1: The Descriptive Statistics of Follow-up Questionnaire Components and Subcomponents

| Scale/sub-scale [b] | Minimum | Maximum | M | SD |
|---|---|---|---|---|
| EI total [b] | 2.33 | 4.55 | 3.63 | .35 |
| PE | 2.20 | 4.60 | 3.46 | .43 |
| MES | 2.44 | 4.89 | 3.86 | .50 |
| MOE | 2.50 | 4.25 | 3.46 | .46 |
| UE | 2.33 | 4.83 | 3.81 | .52 |
| IM | 3.90 | 4.19 | 4.05 | .61 |
| WTC | 3.24 | 4.01 | 3.71 | .61 |

[a] N = 78; 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly agree.
[b] EI total: the whole emotional intelligence scale, PE: Perception of Emotions, MES: Managing Emotions in the Self, MOE: Managing Others' Emotions, UE: Utilizing Emotions, IM: Intrinsic motivation, and WTC: Willingness to communicate.
[c] Summed mean (score) 119.96, SD 11.71.

As shown in Table 1, the mean values of the student responses for EI, IM, and WTC were 3.5-4.4, reflecting favorable responses (Oxford & Burry-Stock, 1995).

### Relationship between Emotional Intelligence and Intrinsic Motivation and Willingness to Communicate

The current work performed Pearson's correlation analysis to examine the link between EI and its subcomponents with IM and WTC. Table 2 below presents the results of the correlation test.

Table 2: Pearson's Correlation Analysis Results

| | PE | MES | MOE | UE | EI total |
|---|---|---|---|---|---|
| IM | - | .429** | - | .271* | .338** |
| WTC | .232* | .517** | - | .254* | .405** |

**: Correlation is significant at the 0.01 level (2-tailed).
*: Correlation is significant at the 0.05 level (2-tailed).
- : Non-significant correlation with *p*-value > 0.05.

As shown in Table 2, there was a positive correlation between whole EI and IM and whole EI and WTC. That means increasing one variable will cause an increase in the other. Moreover, the Pearson test also indicated that two of four subcomponents of EI, namely MES and UE, positively correlated to the IM construct, with the coefficients decreasing as MES < UE. MES also had a better significant level than UE. On the other hand, WTC showed similar relationships with three EI subcomponents, namely PE, MES, and UE, among which MES possessed the biggest correlational coefficient of 0.517 and a significant level of 0.01.

**Predictive Role of EI Subcomponents**

To explore the potential usefulness of EI in English language learning-teaching, this study focused on the possible role of EI subcomponents in predicting IM and WTC. To do so, the authors conducted stepwise regression analyses using the respondents' subcomponents of EI as predictors for IM and WTC. Table 3 below shows the results of this test.

As shown in Table 3, although two EI subcomponents correlated to the students' IM (see Table 2 above), only MES could predict this learning construct. This predictor accounted for 17.3% of the variance of IM. On the other hand, very similar to the case of IM, MES was a predictor of the FLL learners' WTC. The difference is that, in the case of WTC, MES accounted better for the variance of the dependent variable, 25.7%. Regression test results indicated that the entire EI could predict IM and WTC. However, the corresponding percentages of accounted variance were significantly lower than MES.

**Table 3: Stepwise Regression Using EI or Its Subcomponents as Predictors**

| | | B | □ | Adjusted R square | *p*-value | VIF |
|---|---|---|---|---|---|---|
| IM[a] | Constant | 2.038 | | | 0.000 | |
| | MES[b] | 0.521 | 0.429 | 0.173 | 0.000 | 1.000 |
| IM[a] | Constant | 1.947 | | | 0.005 | |
| | EI total | 0.578 | 0.338 | 0.102 | 0.002 | 1.000 |
| WTC[a] | Constant | 1.281 | | | 0.007 | |
| | MES[b] | 0.630 | 0.517 | 0.257 | 0.000 | 1.000 |
| WTC[a] | Constant | 1.184 | | | 0.076 | |
| | EI total | 0.696 | 0.405 | 0.153 | 0.000 | 1.000 |

[a] Dependent variable
[b] predictor

**The Difference in Language toward a willingness to communicate**

This research population consisted of EFL, JFL, and KFL students. As the English-speaking foreigners are overwhelming Japanese- and Korean-speaking in the Vietnamese context, fewer

opportunities for outside classroom communication for JFL and KFL learners might lead to a significant difference in target language towards the WTC construct compared with EFL counterparts. This fact concerned the authors greatly and forced them to conduct a one-way ANOVA analysis. However, the test result showed no statistically significant difference between groups, with *p-values* > 0.05, as shown in Table 4.

Table 4: One-way ANOVA Test Result[a]

| Language (I) | Language (J) | Mean Difference (I-J) | Std. Error | Sig. (*p*) | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| English | Japanese | -.09332 | .17711 | .600 | -.4461 | .2595 |
| | Korean | -.08180 | .16365 | .619 | -.4078 | .2442 |
| Japanese | English | .09332 | .17711 | .600 | -.2595 | .4461 |
| | Korean | .01152 | .19395 | .953 | -.3748 | .3979 |
| Korean | English | .08180 | .16365 | .619 | -.2442 | .4078 |
| | Japanese | -.01152 | .19395 | .953 | -.3979 | .3748 |

[a]Dependent variable: WTC

## Discussion

The relatively high mean of IM, 4.05, is encouraging since intrinsic motivation is more sustainable along the learning process (Deci & Ryan, 1985; Deci et al., 1991). However, the mean of WTC was 3.71, with a minimum of 3.24, indicating that some participants had a low intention to communicate in the Language they chose to learn. On the other hand, previous studies have claimed that a mental disorder might reduce the scores of overall EI and subcomponents MES and MOE (e.g., Coury, Duca, & Toledo Júnior, 2020). Thus, the students' EI responses probably need a closer look.

As shown in Table 1, the five-point Likert mean of the entire EI was favorable, and the score (summed mean) of the total 33-item EI scale was 119.96. The 33-item self-report SEIS employed by the authors had a score spectrum from 33 to 165, with "higher scores indicating more characteristic emotional intelligence" (Schutte, Malouff, & Bhullar, 2009, p.120). As noted in Table 1, the score of the students reached 119.96 in this study. This score may consider characteristic because it is much higher than the neutral value, i.e., 99, of the score spectrum. In addition, this level of EI was comparable to similar data from previous studies in some countries before the COVID-19 pandemic (e. g., Thingujam & Ram, 2000; Brackett & Mayer, 2003; Pau & Croucher, 2003; Bastian, Burns, & Nettelbeck, 2005; Brown & Schutte, 2006). Therefore, the findings might imply that the EI of the participants suffered not at all or negligible detrimental impact from COVID-19. As there has been no report of an EI study concerning students in Vietnam before the COVID-19 pandemic, this research had no similar data to compare for a more convincing conclusion.

The positive correlation between the entire EI and IM in this study supports the findings of reported investigations (e.g., Tam et al., 2018; Trigueros et al., 2019; Arias et al., 2022; Chang & Tsai, 2022). Furthermore, the outcome of the Pearson test for EI subcomponents-IM correlation suggests that amongst four subcomponents of EI, MES, and UE had stronger influences on the students' IM and *vice versa*. Gardner (1983) conceptualized intrapersonal intelligence as the ability of a person to recognize one's own emotions and interpersonal intelligence as the ability to perceive others' emotions and intentions. The results of this study

revealed that only intrapersonal components, namely MES and UE, correlated to IM. Intrinsically motivated students learn the target language for their interest, enjoyment, and satisfaction in doing learning activities. Hence, IM is reasonably associated with intrapersonal subcomponents of EI.

A positive connection between overall EI and WTC found in the current work confirms the results of previous studies on EFL learners (Janfeshan & Nazeri, 2014; Ketabdar et al., 2014; Gohlami, 2015; Rahbar et al., 2016; Mehrpoor, & Soleimani, 2018; Mirzapour & Chamani, 2020). On the other hand, while Oz (2015) and Dastgoshadeh (2021) showed a positive correlation for all EI subcomponents, the present study revealed a similar one for PE, MES, and UE but MOE. The absence of MOE-WTC correlation in this investigation is understandable. Successful communication requires a student not only the ability to initiate but effectively maintain it as well. In other words, the involvement of both intrapersonal and interpersonal subcomponents of EI is necessary. Thus, the fact that only intrapersonal MES, UE, and PE but not interpersonal MOE positively correlated with WTC might imply that the participants probably considered how to start communication more important than keeping it going. They might think that when a conversation has already begun, everything will go well.

Self-determination theory assumes that humans possess three innate psychological needs, namely *autonomy, competence, and relatedness,* and are motivated to grow and change by seeking the satisfaction of these three needs (Ryan & Deci, 2017). The Heuristic model of L2 Use (MacIntyre et al. 1998) also proposes that personality and intergroup climate can affect the student's motivation, including interpersonal and intergroup. FLL student is not an exception. Thus, social context and personality factors influence the IM of FLL learners. In the present study, other predictors of IM, but PE-, UE- and MOE-subcomponents, may be among these factors.

MacIntyre et al. (1998) defined WTC as "a readiness to enter into discourse at a particular time with a specific person or persons using an L2" (p. 547). This "readiness" depends on FLL learners' psychological, social, and linguistic factors, among which communication apprehension and self-perceived linguistic competence are the two dominant variables (MacIntyre & Charos, 1996; MacIntyre et al., 1998). Based on the personal trait of emotions, the SEIS probably could not account for 100% variance of the WTC construct. For this work results, it is reasonable to argue that other predictors of the remaining percentage are those from the social environment and linguistic competence factors.

**Pedagogical implications**

Individual differences make it almost impossible to obtain all variables that affect foreign language teaching and learning. Thus, it usually challenges foreign language teachers to select an appropriate teaching method. The results of the present work may be worth the intention of foreign language teachers to use self-report tests of the FLL students' EI, IM, and WTC as one of the possible tools supporting an effective teaching-learning process. The current study showed that enhancing different subcomponents of EI resulted in increasing IM and WTC to a different extent. In addition, Schutte et al. (1998) suggested that measuring the students through the self-report SEIS can help reduce the risk of poor performance at the university. Therefore, the relationship between EI and IM, and WTC may help choose, for example, appropriate classroom activities.

## Limitations

The authors should note that the three scales used in the questionnaire were all self-report measures. Therefore, response bias was possible and, thus, an inevitable limitation of the current study. Other disadvantages are those that go with convenience sampling, the method used in this work. In addition, the relatively small sample size may be another weak spot. However, as not so many new students enter the Department of Foreign Languages each academic year, gaining more participants was almost impossible because the study design required a similar level of WTC and learning context. Last but not least, the numbers of JFL and KFL students were somewhat smaller than that of EFL students. Therefore, the validity of the result of the one-way ANOVA analysis might need to be revised.

## Recommendations

The practicable procedure might be as follows. First, the teacher in charge of a course, says English Speaking II, collects the course-enrolled students' emotional intelligence subcomponents, intrinsic motivation, and willingness to communicate through a questionnaire. A subsequent analysis then provides the necessary information, such as the relationship between these three factors and which one is the predictor. Based on the analytical result, the teacher may reach an effective teaching strategy for the course.

The present work focused on the relationship between the components of emotional intelligence, intrinsic motivation (IM), and willingness to communicate (WTC). Future investigations may extend to other affective variables instead of IM or/and WTC in searching for more applicable frameworks to improve foreign Language learning-teaching.

## Conclusion

This study reported quantitative data on FFL undergraduates' emotional intelligence, intrinsic motivation, and willingness to communicate. The means of these three constructs were positive. In addition, it offered the results of Pearson's correlation measurement and regression analysis to deepen understanding of the relationship between emotional intelligence, intrinsic motivation, and communicative willingness. The current work concludes that FFL students' emotional intelligence level measured by the Schutte Emotional Intelligence Scale was comparable to many studies conducted before the COVID-19 pandemic. Furthermore, one subcomponent of emotional intelligence strongly predicted intrinsic motivation and willingness to communicate. Therefore, during the English teaching-learning process, activities enhancing students' emotional intelligence exploitation may cause an improvement in their intrinsic motivation and, especially, intention to communicate in the target language. This improvement may remarkably contribute to the student's learning success.

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# Appendix A

**Descriptive Statistics of The Students' EI**

| Statement[a] | M[b] | S.D. |
|---|---|---|
| **1. Perception of Emotion (PE)** | | |
| (1) I find it hard to understand the non-verbal messages of other people.[c] | 2.99 | 1.026 |
| (2) I am aware of my emotions as I experience them. | 4.00 | .822 |
| (3) I am aware of the non-verbal messages I send to others. | 3.53 | .893 |
| (4) By looking at their facial expressions, I recognize the emotions people are experiencing. | 3.49 | .964 |
| (5) I know why my emotions change. | 3.88 | .939 |
| (6) I easily recognize my emotions as I experience them. | 3.95 | .851 |
| (7) I am aware of the non-verbal messages other people send. | 3.31 | .902 |
| (8) I know what other people feel just by looking at them. | 3.13 | .843 |
| (9) I can tell how people are feeling by listening to the tone of their voice. | 3.38 | .871 |
| (10) It is difficult for me to understand why people feel like they do.[c] | 2.99 | 1.145 |
| **2. Managing Emotions in the Self (MES, Managing Own Emotions)** | | |
| (11) When faced with obstacles, I remember times I faced similar obstacles and overcame them. | 3.95 | .896 |
| (12) I expect to do well in most things I try. | 3.83 | .763 |
| (13) I expect good things to happen. | 4.55 | .847 |
| (14) When I experience a positive emotion, I know how to make it last. | 3.21 | 1.049 |
| (15) I seek out activities that make me happy. | 4.17 | .828 |
| (16) I have control over my emotions. | 3.45 | .989 |
| (17) I motivate myself by imagining a good outcome for the tasks I take on | 3.79 | 1.011 |
| (18) When faced with a challenge, I give up because I believe I will fail.[c] | 3.83 | .973 |
| (19) I use good moods to help myself keep trying in the face of obstacles. | 3.95 | .820 |
| **3. Managing Others' Emotions (MOE, Social Skills)** | | |
| (20) I know when to speak about my problems to others. | 3.92 | .908 |
| (21) Other people find it easy to confide in me. | 3.10 | 1.027 |
| (22) I like to share my emotions with others. | 2.33 | .907 |
| (23) I arrange events others enjoy. | 3.59 | .946 |
| (24) I present myself in a way that makes a good impression on others. | 3.45 | .989 |
| (25) I compliment others when they have done something well. | 4.24 | .724 |
| (26) When another person tells me about an important event in their life, I almost feel like I have experienced it myself. | 3.32 | 1.038 |
| (27) I help other people feel better when they are down. | 3.74 | .763 |
| **4. Utilization of Emotion (UE)** | | |
| (28) Some of the major events of my life have led me to re-evaluate what is important and not important. | 4.36 | .683 |
| (29) When my mood changes, I see new possibilities. | 3.45 | 1.065 |
| (30) Emotions are one of the things that make my life worth living. | 3.91 | .900 |
| (31) When I am positive, solving problems is easy. | 4.10 | .920 |
| (32) I can develop new ideas When I am in a positive mood. | 3.96 | .904 |
| (33) I tend to develop new ideas When I feel a change in emotions. | 3.10 | .961 |

[a] Developed by Schutte, Malouff, Hall, Haggerty, Cooper, Golden, and Dornheim (1998).
[b] N = 163; 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly agree.
[c] These statements are reverse scored.

## Appendix B

**Students' Perceptions towards intrinsic motivation**

| **Statement**: I am motivated to learn English when… | **M**[b] | **S.D.** |
|---|---|---|
| **Intrinsic-knowledge** | | |
| (1) I enjoy acquiring knowledge about the English community and their way of life. | 4.08 | .769 |
| **Intrinsic-stimulation** | | |
| (2) I enjoy hearing the English language spoken by English. | 4.19 | .740 |
| **Intrinsic-accomplishment** | | |
| (3) I experience the satisfaction of accomplishing difficult exercises in the English language. | 3.90 | .975 |
| (4) I enjoy surpassing my previous limits in my English language studies. | 4.03 | .821 |

[a] Modified statement of those developed by Noels, Pelletier, Clement, and Vallerand (2003) and adopted by Wang and Lee (2019). The word "English" was changed to "Japanese" when used for JFL and "Korean" for KFL students.
[b] N = 163; 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly agree.

## Appendix C

**Descriptive statistics of the students' WTC**

| **Statement** | **M**[b] | **S.D.** |
|---|---|---|
| (1) If I encountered some foreigners, I hoped they would have an opportunity to talk to me. | 3.82 | .950 |
| (2) If I encountered some foreigners, I would find an excuse and talk to them. | 3.24 | .942 |
| (3) If I encountered some foreigners facing problems in my country because of not knowing our Language, I would take advantage of this opportunity and talk to them. | 3.97 | .821 |
| (4) I am willing to accompany some foreigners and be their tour guide for a day free of charge. | 3.71 | .995 |
| (5) I am willing to talk with foreigners. | 3.83 | .903 |
| (6) If someone introduced me to a foreigner, I would like to try my abilities to communicate with them in English. | 4.01 | .798 |
| (7) To practice my English, I am willing to talk in English with my classmates outside the class. | 3.77 | .882 |
| (8) I am willing to ask questions in English in the classes at the university. | 3.69 | .795 |
| (9) I am willing to talk and express my opinions in English when all my classmates listen. | 3.62 | .943 |
| (10) I am willing to have pair and group activities in the class to talk in English with my classmates. | 3.76 | .996 |
| (11) To practice my English, I am willing to talk in English with my professors outside the class. | 3.45 | .949 |
| (12) I am willing to give a presentation in English to my classmates. | 3.78 | .949 |
| (13) In group work activities in the class, I am willing to speak in English. | 3.62 | .886 |

[a] Modified those developed by Baghaei (2011). The word "foreigner(s)" and "English" were also replaced by "Japanese" or "Korean" in the version delivered to JFL and KFL students, respectively.

# Appendix C

**Descriptive statistics of the students' WTC**

| Statement | M[b] | S.D. |
|---|---|---|

[b] N = 163; 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly agree.