Attitudes toward teamwork: a study of Vietnamese university students

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ATTITUDES TOWARD TEAMWORK: A STUDY OF VIETNAMESE UNIVERSITY STUDENTS

Abstract

Teamwork is one of the soft skills that are very interested in employers. A better teamwork performance of employees could bring about a significant contribution to organizational performance. However, students' perspectives on teamwork seem to neglect over the years. The study examines attitudes on teamwork among university students in the context of a transitional economy. The study represents one of the first pieces of research employing a formal scale development to measure the attitudes of university students toward teamwork. It also addresses factors that influence Vietnamese university students' attitudes toward teamwork. Results offer deep insights into the relationships between university student attitudes towards teamwork and its predictors. We found that Vietnamese university students have a positive attitude toward teamwork. While environment facilities, teamwork evaluation, and collectivist culture positively affect teamwork attitudes, there is no significant relationship between teamwork and free-rider problems and perceptions of workload.

1. INTRODUCTION

This study examines the attitudes of undergraduate students toward teamwork in Vietnamese universities. In this context, teamwork refers to as "the activities of a group of people working toward a shared objective that requires communication, collaboration, and coordination; it is a process that involves interaction between people who share some common interests" (Jackson et al., 2015, p.29). In learning and the workplace, teamwork could increase collaborations, communication skills, ideas, and information, and improve problem-solving and decision making (Harris & Klein, 2002; Malone, Gallagher, & Long, 2001; Senior & Swailes, 2004). Besides, teamwork has faced challenges in the lack of official team training, systematic decision making, financial support, and opportunity for follow-up (Bahr et al., 1999; Welch & Tulbert, 2000; Whitten & Dieker, 1995; Ysseldyke et al., 1981).

The importance of teamwork is considered by academics and industries (De Vita, 2002; Gatfield, 1999; Olson-Buchanan et al., 2007), while training approaches and experiences on teamwork could influence an individual perception of working in teams (Malone & Gallagher, 2010). The student experiences at school have affected their attitude towards teamwork (Bacon et al., 1999; Ruiz Ulloa and Adams, 2003). Student attitudes play a potential role in teamwork success in education and practices (Volkov & Volkov, 2015). Ajzen & Fishbein (1975) developed the planned behavior theory to estimate influences on the behavior of individuals. This theory contains three elements which were attitudes toward behavior, perceived behavioral control, and subjective norm. Attitudes toward behavior measured the perceptions, emotions, behavior, and beliefs toward the events, objects, things, or people (Banaji & Heiphetz, 2010; Abun, Magallanes & Incarnacion, 2019). Attitudes could guide an individual behavior to a positive or negative reaction pattern (Lamsa et al., 2008). A better understanding of teamwork attitudes will help educators and employers behave appropriately and deal with problems in the teamwork process.

The cultural context could affect individuals' attitudes on teamwork. Culture has influenced teaching and learning's philosophy, teaching and learning styles and attitudes to knowledge. The Confucian culture on learning and teaching in Asia was different from Western culture (Vo, 2014). By the effects of Confucianism, Vietnamese learners more focus on the passive learning styles than students-centered learning that leads to a lack of teamwork effectiveness and problem solving skills (He et al., 2011). Individuals who were under the Confucian tradition learned via cooperation, contributing for the group goals and supporting team members. Vietnam was the collectivism

country with a high-power distance which means that it is prioritized hierarchical relationships. The Asian collectivistic culture reflected the close-knit, interdependent, and responsibility to each other. (Hofstede Vietnam, 2020). Vietnam is high collectivist country so that the behavior of individuals in territory education will be an interesting topic. The research discovered about young people under higher education because they need to develop proficient skills before they can enter the labor market. Another reason is that Vietnam's culture dignifies teamwork, but teamwork among individuals still consists the problems. Therefore, the present research will investigate the problem and give the suggestions for improving teamwork in educational environment.

The COVID-19 pandemic could influence the abilities to working in teams. A better understanding of attitudes toward teamwork and factors which impact student attitudes could help educators and businesses support an expedited workflow for people who are relative to COVID-19 working in teams. Educators and businesses would appreciate a swift reply to enable rapid support of how to increase teamwork performance.

The study examines the problems of teamwork among undergraduate students to see what is university students' attitudes on teamwork and its predictors. The paper represents as one of the first studies to examine predictors influencing attitudes of Vietnamese business students towards teamwork. Results serve to offer valuable information on teamwork attitudes that educators could apply to design better curriculum. Specifically, the research will help the universities and teachers enhance the education program. Future business staffs could find good solutions to deal with the teamwork problems to improve their teamwork skills that they should prepare for their future job and to increase the teamwork effectiveness. Business managers could benefit from the findings to improve training programs and working environment as employees' desires. The paper adds to the literature on teamwork understanding in the Asian culture. Research could also provide an interesting insight on attitudes towards teamwork in the Confucian context. Therefore, the study will answer research questions, as follows: (1) What is the perception of Vietnamese undergraduate students on teamwork? (2) Which factors influence the perception of undergraduate students towards teamwork?

2. LITERATURE REVIEW

2.1. Attitudes towards teamwork

Team was seen as "a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable" (Katzenbach & Smith, 1993, p. 03). Jackson, Chuang, Harden and Jiang (2015, p.29) defined teamwork as "the activities of a group of people working toward a shared objective that requires communication, collaboration, and coordination; it is a process that involves interaction between people who share some common interests". Thus, when people interact with teammates, they also reflect their emotions about working in team.

Each member in team expressed different behaviors when working in teams. The study of Tucker and Abbasi (2016) found some individuals felt that working in team was exciting and delightful. In order words, people have a positive perception on working in team. They also showed that others have negative point of view on working in teams because of bad teamwork experiences. According to Hillyard, Gillespie and Littig (2010), the young people had positive attitudes towards working in teams when they have been created environment to making new friends. Hillyard, Gillespie & Littig (2010) found that there is a negative behavior on team project. When the team or group exists social loafing and management issues, people perception would be negative with teamwork (Lizzio & Wilson, 2005; Scott-Ladd & Chan, 2008).

According to Ajzen & Fishbein (1972) and Yakasai & Jusoh (2015), human behavior in Theory of Planned Behavior divided into three elements that included perception towards behavior, subjective norm and perceived behavioral control. Ferdous (2010) and Abun, Magallanes & Incarnacion (2019) mentioned that the perception has related to the assessment of behavior of individuals. Specifically, students' perception on education reflected through students' behavior on academic assignments (Abun, Magallanes & Incarnacion, 2019). The Theory of Planned Behavior is employed as a research framework for students' perception toward teamwork in previous studies (e.g., Pfaff & Huddleston, 2003; Beigi & Shirmohammadi, 2012). Therefore, the present research uses the Theory of Planned Behavior to conduct student perceptions toward teamwork.

Prior research has examined undergraduate students' attitudes among western contexts over the assessment of group work. For example, studies employed some variables in the preference or appraisal of the teamwork experience (Gottschall and García-Bayonas, 2008; Pfaff and Huddleston, 2003; Rudawska, 2017), motivation (Ibarra and Rodríguez, 2007; Järvelä et al., 2010), assessment and work environment (Beigi and Shirmohammadi, 2012) to predict student attitudes towards teamwork. These studies also assessed teamwork attitudes of business students using instruments that were self-developed rather than applying a recognized scale development. Those studies

investigated the impact of national culture on the student perception towards benefits of teamwork; however, most of investigates were conducted in western context with cross-major students.

Vietnamese university students' attitudes on teamwork research is very rare. Prior research has concentrated on specific topics such as virtual teamwork, hierarchy on teamwork interaction, roles of teamwork rather than a broader teamwork theme. For example, Hoang et al. (2020) examined MA-TESOL student perception on group work hierarchy and its impact on group work satisfaction and interaction. Results showed that the perception of hierarchy in group work happens often and this affects the equal and productive of group work. Pham and Nguyen (2018) studied the teamwork model and roles of individual and psychology in teamwork for the scientists in universities. Collins et al (2015) compared human aspects influencing virtual teams between Vietnam, Taiwan and Indonesia. They found the significant impacts of human factors (individual cultural intelligence, cultural openness and self-efficacy) on virtual team knowledge sharing of those three nations.

2.2. Research Hypothesis

2.2.1. Perception of Environmental Facilities

The educational environment plays an important role in the success of an educational program and students' success, achievement, satisfaction and motivation as well (Bakhshialiabad, Bakhshi & Hassanshahi (2015). The educational environment includes the perception of environmental facilities that are tools that the university supports its students studying. Environmental facilities were recognized as "everything that is happening in the classroom or department, faculty, or university and it refers to the diverse physical locations, contexts, and cultures in which students learn" (Bakhshialiabad, Bakhshi, & Hassanshahi, 2015, p. 195). The environmental facilities could provide students with learning environment that includes lighting, temperature, studying space, noise, classroom, faculty, university's departments, physically and psychologically institution (Leung & Fung, 2005; Jawaid, Raheel, Ahmed, & Aijaz, 2003). Robbins and Judge (2013, p. 166) defined perception as "a process by which individuals organize and interpret their sensory impressions in order to give meaning to their environment". Generally, the perceptions of environmental facilities are the sensory expression of students on the facilities of university. The students' perception on learning process was measured by the factors of learning outcomes such as

cognitive, affective or behavioral (Lizzio, Wilson & Simons, 2002). These three outcome factors related to the measurement about individual's reactions on the objects which were based on theory of Planned Behavior (Ajzen, 1993; Abun, Magallanes & Incarnacion, 2019). The cognitive element expressed the thinking, ideas or perception towards the object (Abun, Magallanes & Incarnacion, 2019).

Fisher (2001) found that color, air and temperature, noise and furniture impacted on teamwork among students in the university. For instance, colors have affected students' learning attitudes, behavior and absenteeism while air quality and temperature have impacted on students' achievement and behavior. Noise comes from other classrooms, transportation or the university's mechanical systems would have the influence on students' attitudes, stress and learning outcome (Fisher, 2001). Leung & Fung (2005) found the correlation between environmental facilities (lighting, temperature, studying space, noise, campus and classroom) and teamwork performance of students. Beigi & Shirmohammadi (2012) showed that perception of environmental facilities positively influences on Iran student attitudes towards teamwork. Based on these evidences, the first hypothesis is established.

H1: Perceptions of environmental facilities have a positive effect on Vietnamese student attitudes toward teamwork.

2.2.2. Teamwork Evaluation

The teamwork evaluation or peer-assessment is defined as "students are making assessment decisions on other students' work such as essays, reports, presentations, performances and practical work" (Race, 2001, p. 4). The Peer evaluation is called as the evaluation method that giving efficiency and effectiveness feedback to students' performance (Double, McGrane & Hopfenbeck, 2019). The teamwork evaluation plays a crucial part in measuring students' performance and knowledge mistakes (Double, McGrane, & Hopfenbeck, 2019). According to Willey and Gardner (2009), applying peer-evaluation due to working in teams could increase the motivation of students' performance and diminished students with poor performance. Moreover, what teamwork evaluation could develop students' skills such as professional skills, increased collaboration, learning commitment and team members' engagement (Willey & Gardner, 2009). However, the teamwork evaluation contained the negative aspect. Free-riding members in a team who didn't contribute

much to teamwork assignment might get at a lower grade as compared to other members. Therefore, grading equity in teamwork evaluation is what students concern about (Beigi & Shirmohammadi, 2012). They also found the negative relationship between the concerns about teamwork evaluation and attitudes toward teamwork.

H2: The concerns about teamwork evaluation have a negative effect on Vietnamese student attitudes toward teamwork.

2.2.3. Perceptions of workload

According to Bravo, Catalán, and Pina (2018, p.4), "workload is a clear determinant of attitudes toward teamwork: the higher the amount of work, the worse the whole experience will be". Kember (2004, p.166) defined "students' perceptions of workload are the manifestation of a perceived heavy workload is a feeling in the form of pressure or stress". The large amount of workload could lead to low performance, diminish studying motivation and negative attitudes such as depression, tension and burnout (Hernesniemi et al., 2017). Zhang and Ng (2012) argued that behavior could impact on the way how individuals and their intention to behave. They found that time-limits with excessive workload could diminish contribution and knowledge sharing of team members.

Kyndt, Dochy, Struyven, & Cascallar (2011a) showed that the large amount of perceived workload would have a negative correlation to students' learning. Specifically, the excessive workload could lead to the negative influence on students' learning (Kyndt, Dochy, Struyven, & Cascallar, 2011a). Student also thought that perceived a large amount of workload on the assignment would be better when they used class time to do it because they had the interaction with lecturers (Kyndt, Dochy, Struyven, & Cascallar, 2011b). Moreover, when the amount of workload reduced, it could also positively influence to students' perception on the assignment and workload. Pfaff and Huddleston (2003) established that too much workload has a positive impact to teamwork performance.

H3: Perceptions of workload has a positive impact on Vietnamese student attitudes toward teamwork.

2.2.4. Absence of a free-rider problem

Free-rider was defined as "the behavior of a team member who deliberately limits the work that he or she puts in, in the knowledge that they will nevertheless benefit from the efforts of the other members" (Levin, 2019, p.01). The free rider was considered as social loafing that drop down the effort of team performance (Lam, 2015). The free-rider problem was determined when the individual in the team was unfair of doing their workload (Prasad & Kumar, 2018; Brooks & Ammons, 2003). According to Hall and Buzwell (2012) social loafing diminished learning result of student in teamwork. However, the free-rider had a significant benefit to develop students' problem-solving skills and the method to deal with difficulties (Hall & Buzwell, 2012).

The research will also consider the Social Impact Theory of Latane (1981) to discover the free-rider as the independent variable in students' teamwork. According to Latane (1981), the Social Impact Theory related to "the great variety of changes in physiological states and subjective feelings, motives and emotions, cognitions and beliefs, values and behavior, that occur in an individual, human or animal, as a result of the real, implied, or imagined presence or actions of other individuals" (Latane, 1981, p. 343). The theory supposed that the free-rider was the result when an individual in a team assessed other members and was evaluated by other individuals in the team. When the team existed free-rider problem, the other team members would suffer a large amount of work and the free-rider would contribute a minimum of work (Prasad & Kumar, 2018). The issues from free-rider would rise the conflict among members and diminish their effort or positive attitude in teamwork. Base on the discussion, the research conducts the third hypothesis.

H4: Absence of a free-rider problem has a positive impact on Vietnamese student attitudes toward teamwork.

2.2.5. Collectivism

The definition of collectivism was "the degree to which an individual values interdependence and attaches importance to group over individual goals" (Mustafa, Glavee-Geo, & Rice, 2017, p.2). Collectivism was interpreted as the group of "a set of feelings, beliefs, behavioral intentions, and behaviors related to solidarity and concern for others" (Lo, So, & Zhang, 2010, p. 11). The study of McAtavey and Nikolovska (2010) claimed that collectivism is important for team effectiveness and the right way for teamwork orientation. Collectivists believed that the group purposes and benefits were more crucial than interests of individuals which the collectivists could give up their

own interests to contribute for the group advantages (Gundlach, Zivnuska, & Stoner, 2006). Additionally, Eby and Dobbins (1998) researched that collectivist people had tendency to engage more in team assignments, increase motivation to work together, pay more effort to contribute in team and focus on team goals.

In the 1970s, Henri Tajfel explored the Social Identity theory which evaluated teamwork about social perception and social issues-oriented that related to discrimination, prejudice and societal conflict (Tajfel & Turner, 1979; see Hogg M., 2016). Social identity was seen as the collective identity or group identity which existed when individuals identified themselves as the team member. According to Tajfel & Turner (1986; see Gundlach, 2006), when the team exist social identification, the team members' emotion and behaviors will be based on the group's benefits instead of the individuals' interests. Besides the Social identity theory, the theory of Planned Behavior also used behavior element from attitudes toward behavior to measure the collectivist culture in students' teamwork.

According to Walumbwa, Lawler & Avolio (2007, members who were collectivist would put more effort to contribute on team's goals and have high cooperation. Another investigation about collectivist members is that these members would have high cooperation which increased team effectiveness and high level of team support (Kirkman & Shapiro, 2001). Collectivism positively influenced on attitudes toward teamwork through cooperation rather than competition (Leung, 2008). Moreover, when team members cooperated to achieve the team goals, the team member might have positive attitudes through team work (Mathieu, Maynard, Rapp , & Gilson, 2008). Therefore, the research concludes the five hypothesis.

H5: **Collectivism** *has a positive impact on Vietnamese student attitudes toward teamwork.*
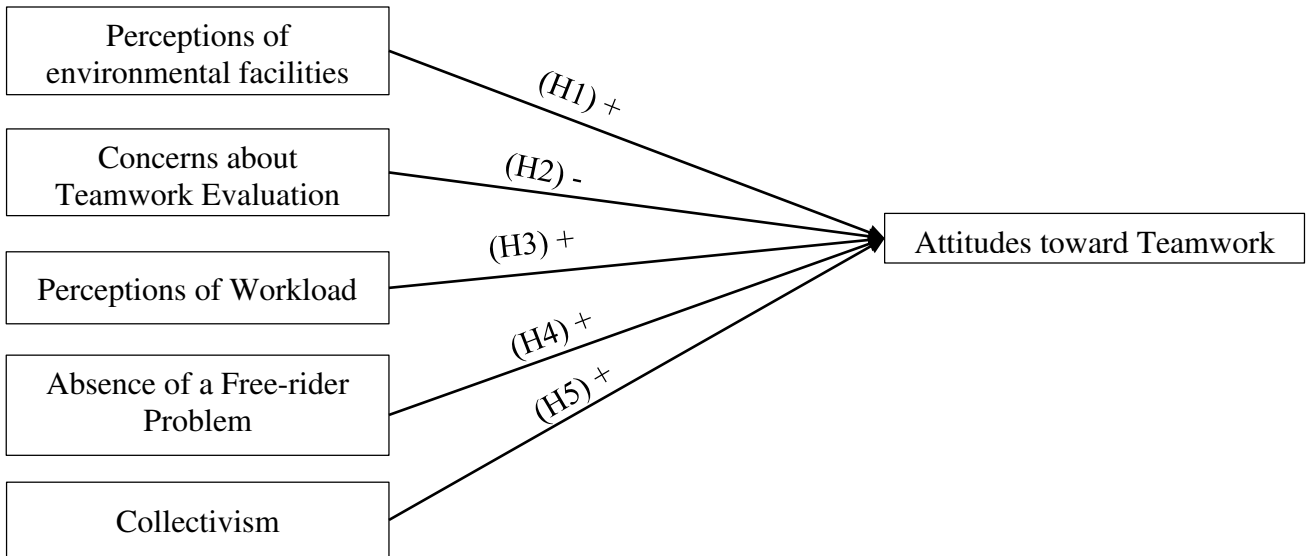
Research framework

Figure 1: Research Model

3. RESEARCH METHODOLOGY

3.1. Sample

The survey will be delivered to students who have studied in universities located in Southern Vietnam. The data was collected from 267 students who studied undergraduate and already participated in teamwork. There were 101 (37.8%) males and 166 (62.2%) females joined in the survey. These students included 103 (38.6%) 20-22 years old and 164 (61.4%) over 22 years old. There are 124 (46.4%) third-year students and 143 (53.6%) final-year students. Students concentrate on four majors that involve 179 (67.0%) business administration students, 53 (19.9%) engineer students, 25 (9.4%) science students and 10 (3.7%) social students.

Table I. Demographic information

Criteria	Frequency	Percentage (%)
Gender		
Male	101	37.8
Female	166	62.2

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Age		
20-22 years old	103	38.6
Over 22 years old	164	61.4
Major		
Business Administration	179	67.0
Engineer	53	19.9
Science	25	9.4
Others	10	3.7
Have you been participated working in groups at the university or not?		
Yes	267	100.0

3.2. Measures

The research used quantitative approach to collect the data through online survey questions with Likert-scale question responses of one (Strongly Disagree) to five (Strongly agree). Perception toward to teamwork was measured by a six-item scale that was developed by Mendo-Lázaro et al. (2017). The instrument was included academic and social dimensions to measure attitudes toward teamwork in the university environment. However, Vietnamese students care much more about whom they can work with and establish social interaction rather than academic achievement after working in team. The study will therefore apply six items of the social and affective attitudes instrument to measure for attitudes toward teamwork. Mendo-Lázaro et al. (2017) also emphasized that the social and affective attitudes had clearly relation to students' perceptions toward teamwork. Three items were used to measure the perceptions of environmental facilities and four terms measure concerns about teamwork evaluation (Beigi & Shirmohammadi, 2012). Absence of a free-rider problem (eight items) and perceptions of workload (three items) (Pfaff & Huddleston, 2003). The fifth independent variable is collectivism which will be mearsured by four items from Zhao, Lee & Moon (2019).

4. DATA ANALYSIS

4.1. Factor Analysis

The results of exploratory factor analysis show principle components factor analysis using a varimax rotation for factors with a total of 68.4 % of the variance. Table II presents The rotated values had factor loadings are higher than 0.4 and Cronbach alpha of all variables. Factor loadings with a value are lower than 0.4 will be deleted (Churchill, 1979). Specifically, Attitude toward teamwork are included AT1, AT2, AT3, AT4, AT5, AT6 and α=.794. Collectivism is comprised CT1, CT2, CT3, CT4 and α=.827. Absense of a free-rider problem, concerns about teamwork evaluation, Perceptions of environmental facility and perceptions of workload are involved (FR4, FR6, FR8 and α=.829), (TE1, TE2, TE3, TE4 and α=.726), (EF1, EF2 and α=.744) and perceptions of workload (PW1, PW2 and α=.665) respectively.

Table II. EFA and *Cronbach's Alpha*

Items	Cronbach's Alpha (α)	N of Items
Attitudes toward teamwork (AT)	0.794	6
Perceptions of Environmental Facilities (EF)	0.744	2
Concerns about Teamwork Evaluation (TE)	0.726	4
Perceptions of workload (PW)	0.665	2
Absence of a Free-rider Problem (FR)	0.829	3
Collectivism (CT)	0.827	4

4.2.Correlation

Table III shows the correlation result between attitudes toward teamwork and 5 independent variables (perceptions of environmental facilities, concern about teamwork evaluation, perceptions of workload, absence of a free-rider problem and collectivism). The Pearson Correlation (r) of AT with independents variables is positive include EF (0.194), TE (0.009), PW (0.525), FR (0.033) and CT (0.218). There was a correlation between attitude toward teamwork and independent variables at $p \leq 0.05$, including EF (p=0.001), PW (p=0.000) and CT (p$\leq$.000). However, AT didn't have the correlation with TE and FR at $p < 0.05$.

Table III. Correlation

Factors	1	2	3	4	5	6
1. AT	1	.194**	.009	.525**	.033	.218**
		.001	.881	.000	.586	.000
2. EF		1	.000	.000	.000	.000
			1.000	1.000	1.000	1.000
3. TE			1	.000	.000	.000
				1.000	1.000	1.000
4. PW				1	.000	.000
					1.000	1.000
5. FR					1	.000
						1.000
6. CT						1

**p<0.05

4.3.Regression

Table IV shows the adjusted R square of the model summary reflects the impact of independent variables on dependent variable. Specifically, the adjusted R square of attitudes toward teamwork is 0.350 which means that there are 35.0% the influence of 5 independents on attitudes toward teamwork.

In ANOVA of attitudes toward teamwork, the sig. F equals to 0.000 which was smaller than 0.005 that is acceptable (sig. <0.05) and the F value was 29.641.

The coefficient in table 4 reveals the significance of EF, PW and CT was acceptable with values at 0.000 (p<0.05) while . Additionally, the Standardized Coefficients (Beta) of PW is 0.525 which reflected the strongest influences on AT. The VIF value of AT coefficient is smaller than 2.00 which doesn't exist the multi-collinearity problem.

Model	β	p-value	T-value

Dependent variable: Attitudes toward teamwork (AT)

Adjusted R²=0.350, F=29.641

Independent variables

Perceptions of Environmental Facilities (EF)

	0.194	0.000*	3.926
Perceptions of workload (PW)	0.525	0.000*	10.620
Collectivism (CT)	0.218	0.000*	4.418

Table IV: Regression Model

*p<0.01

5. DISCUSSION

The study aims to examine the perception of teamwork among Vietnamese university students. In order to answer the first research question "*What is the perception of Vietnamese undergraduate students toward teamwork*", one-sample t-test was employed to identify the means of perception toward teamwork. All of items from AT1 to AT6 have positively been perceived by Vietnamese undergraduate students on teamwork. The table V shows the results reflect that Vietnamese undergraduate students have a positive perception toward teamwork with the high range of average scores ($4.07 \leq \mu \leq 4.54$). Interestingly, students score very high in the important role of teamwork on helping to make better decisions ($\mu_{AT6} = 4.54$). The finding on positive attitude toward homework is similar to the literature (e.g., Hillyard, Gillespie & Littig, 2010; Tucker & Abbasi, 2016). It could be explained that Vietnamese students may enjoy working in groups that help them extent knowledge to complete the large projects as well as build up social network with their students. Students may believe that working in teams can give them a sense of how to deal with real working environment (Gottschall and García-Bayonas, 2008). Moreover, positive attitudes would reflect team members' contribution efforts, empathy and commitment to the goals (Watson, Johnson, & Merritt, 1998).

Table V: One Sample T-test:

Code	Items	Mean

AT1	I feel useful and appreciated by my teammates	4.07
AT 2	I feel comfortable working with my classmates on team activities	4.06
AT 3	Teamwork favors friendly relations	4.24
AT 4	I am confident that my teammates will fulfill their share of the work	3.94
AT 5	Teamwork helps me to know my classmates better	4.40
AT 6	Consensus among the team members helps to make better decisions	4.54

Note: Attitudes toward teamwork (AT)

The research also attempts to uncover factors that influence the perception of teamwork among Vietnamese undergraduate students. The results reveal that the perceptions of environmental facility, perceptions of workload and collectivism have a positive influence on Vietnamese undergraduate student attitudes toward teamwork (β_{PE}= 0.194, $0.00<p<0.05$; β_{PW}= 0.525, $0.00<p<0.05$; β_{CT} = 0.218, $0.00<p<0.05$ respectively). As table 3 shows, the positive relationships mirror these found in previous studies (e.g., Beigi & Shirmohammadi, 2012; Lawler & Avolio, 2007; & Leung, 2008). This may be students may enjoy whatever facilities and workload that universities provide for students and believe that these help them to learn better in universities. For example, the environmental facility supports students studying progress, creates the interaction between students which lead to higher level of engagement in team. Therefore, the team members contribute more into the team assignment and lower exist of free-rider. Hypotheses 1 and 3 are therefore supported. The positive result between attitudes toward teamwork and collectivism could be explained that the Vietnamese society is highly collectivist which put the effort of the collective over the individual's benefits. So that, students work with team will have the tendency to contribute in teamwork and it diminishes the team free-rider to the lowest impact. Hypotheses 5 is therefore supported. Results also show that, there are insignificant relationships between attitude toward teamwork and concerns about teamwork evaluation and absence of a free-rider problem ($p> 0.05$). Hence, hypotheses 2 and 4 are unsupported.

6. IMPLICATIONS

The results show that the university students have positive attitudes toward teamwork; and three

factors (perception on environment facilities, concerns on teamwork evaluation, and collectivist culture) impact that positive. Therefore, universities can boost the teamwork skill of students by improving curricular and providing some subjects that may create better opportunities for students developing their interpersonal skills. Regardless of Vietnam hold the collectivist culture which affects the perception of university students toward teamwork, educators should design appropriate program to encourage team members keeping up the supportive of each other, listening to others, sharing knowledge, supporting teammates and setting the general team goals. To increase the teamwork effectiveness, educators also push up the motivation or effort of team members to contribute teamwork through establish some better environment facilities and flexible teamwork evaluation. Instructors could provide more assignments or in-class activities that contain the interaction between students with their teammates. As a result, undergraduate students can also increase the critical thinking, collaboration, or problem solving among teamwork problems.

The findings also provide for businesses an overview of student's perception on teamwork to analyze skills of graduate students. Specifically, businesses could create suitable strategies to recruit graduate students and maintain talent employees. Our findings also offer important implications for planning tasks and working activities that contribute to improving environment facilities with respect to teamwork. We believe that business could build up the conditions which could support positive attitudes in working in teams.

7. CONCLUSION

The study examines the influence of Vietnamese undergraduate students' attitudes on teamwork. The analysis of dataset shows that perceptions of workload and cooperation had positive impact on perception of young people toward working in groups. perceptions of workload had the strongest impact on perceptions of young people towards teamwork.

The study addresses a set of predictors from different papers that permits for a comprehensive comparison of previous results in the literature. The study indicates factors influencing teamwork attitudes that could improve teamwork performance due to the whole world has faced with a big challenge in online working in teams. This study also offers academic and practical implications for educators and practitioners.

Besides, this research still contains limitations. Due to the scope of the research, this study identified five potential independent variables while there may have more independent variables

impacting attitudes toward teamwork based on different context, across cultures, perception about teamwork, teamwork experience, teamwork behavior or level of education. It is suggested that the later research could expand the theme in across nations and different cultures. Additionally, the future research could extent the independent variables which may affect attitudes on teamwork such as leadership and teamwork conflict that identify problems of teamwork and directly solve problems.

REFERENCES

Abun, D., Magallanes, T., and Incarnacion, M. (2019), "College students' cognitive and affective attitude toward higher education and their academic engagement", *International Journal of English, Literature and Social Sciences*, Vol. 4 No. 5, pp. 1494-1507.

Ajzen, I., and Fishbein, M. (1972), "Attitudes and normative beliefs as factors influencing behavioral intentions", *Journal of Personality and Social Psychology*, Vol. 21 No. 1, pp.1–9.

Ajzen, I., and Fishbein, M. A. (1975), *Belief, attitude, intention and behaviour: An introduction to theory and research,* Addison-Wesley, Reading, MA.

Banaji , M. R., and Heiphetz , L. (2010), "Attitudes", Fiske, S. T, Gilbert, D. T. and Lindzey, G., (Ed.), *Handbook of social psychology*, John Wiley & Sons, Hoboken, NJ, pp. 353-393.

Bravo, R., Catalán, S., and Pina, J. M. (2018), "Analysing teamwork in higher education: an empirical study on the antecedents and consequences of team cohesiveness", *Studies in Higher Education*, Vol. 44 No. 7, pp. 1–13.

Evans, W. R., and Carson, C. M. (2005), "A social capital explanation of the relationship between functional diversity and group performance", *Team Performance Management*, Vol. 11 No. 7/8, pp.302–315.

Ferdous, A. S. (2010), "Applying the theory of planned behavior to explain marketing managers' perspectives on sustainable marketing", *Journal of International Consumer Marketing*, Vol. 22 No. 44, pp.313–325.

Hall , D., and Buzwell, S. (2012), "The problem of free-riding in group projects: Looking beyond social loafing as reason for non-contribution", *Active Learning in Higher Education*, Vol. 11 No. 1, pp. 37–49.

Hernesniemi, E., Raty, H., Kasanen, K., Cheng, X., Hong, J., and Kuittinen, M. (2017), "Perception of workload and its relation to perceived teaching and learning environments among Finnish and Chinese university students", *International Journal of Higher Education*, Vol. 6 No. 5 pp. 42-55.

"Higher education statistics for the academic year 2018 - 2019", Available at: https://moet.gov.vn/thong-ke/Pages/thong-ko-giao-duc-dai-hoc.aspx?ItemID=6636 (accessed 1 April 2022).

Hillyard, C., Gillespie, D., and Littig, P. (2010), "University students' attitudes about learning in small groups after frequent participation", *Active Learning in Higher Education*, Vol. 11 No. 1, pp.9–20.

"Hofstede Vietnam". (2021), Available at: https://www.hofstede-insights.com/country/vietnam/.

Jackson, S. E., Chuang, C.-H., Harden, E. E., & and Jiang, Y. (2015). "Toward developing human resource management systems for knowledge-intensive teamwork", *Research in Personnel and Human Resources Management*, Vol. 25, pp. 27–70.

Johnson, D. W., and Johnson, R. (1989), *Cooperation and competition: Theory and research*, Interaction Book Company, Edina, MN.

Katzenbach, J. R., and Smith, D. K. (1993), *The wisdom of teams: Creating the high-performance organization*, Wiley, New York, NY.

Kyndt, E., Dochy, F., Struyven, K., and Cascallar, E. (2011a), "The direct and indirect effect of motivation for learning on students' approaches to learning through the perceptions of workload and task complexity", *Higher Education Research & Development*, Vol. 30, pp. 135–150.

Kyndt, E., Dochy, F., Struyven, K., and Cascallar, E. (2011b). "The perception of workload and task complexity and its influence on student's approaches to learning", *European Journal of Psychology of Education*, Vol. 26, pp.393–415.

Lam, C. (2015). "The role of communication and cohesion in reducing social loafing in group projects", *Business and Professional Communication Quarterly*, Vol. 78 No. 4, pp. 454–475.

Leung, A. S. (2008), "Matching ethical work climate to in-role and extra-role behaviors in a collectivist work setting, *Journal of Business Ethics*, Vol. 79 No. 1-2, pp. 43–55.

Lizzio, A., Wilson, K., and Simons, R. (2002), "University students' perceptions of the learning environment and academic outcomes: implications for theory and practice", *Studies in Higher Education*, Vol. 27 No. 1, pp. 27–52.

Marks, M. B., and O'Connor, A. H. (2013), "Understanding students' attitudes about group work: what does this suggest for instructors of business?" *Journal of Education for Business*, Vol. 88 No. 3, pp. 147–158.

Mathieu, J., Maynard, M. T., Rapp , T., and Gilson, L. (2008), "Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future", *Journal of Management*, Vol. 34, pp. 410–476.

Mendo-Lázaro, S., Polo-del-Río, M. I., Iglesias-Gallego, D., Felipe-Castaño, E., and León-del-Barco, B. (2017), "Construction and validation of a measurement instrument for attitudes towards teamwork", *Frontiers in Psychology*, pp. 1-10.

Milton, L. P., and Westphal, J. D. (2005), "Identity confirmation networks and cooperation in work groups", *Academy of Management Journal*, Vol. 48 No. 2, pp. 191–212.

Mutch, A. (1998). Employability or learning? Groupwork in higher education. *Education + Training*, Vol. 40 No. 2, pp. 50–56.

Pfaff, E., and Huddleston, P. (2003). Does it matter if i hate teamwork? What Impacts Student Attitudes toward Teamwork. *Journal of Marketing Education*, Vol. 25 No. 1, pp. 37-45.

Prasad, N., and Kumar, N. (2018). "Fair grade allocation to unfair students: an application of the shapley value to solve the free-rider problem", *E-Journal of Business Education & Scholarship of Teaching*, Vol. 12 No. 1, pp. 102-111.

Puck, J., and Pregernig, U. (2014). "The effect of task conflict and cooperation on performance of teams: Are the results similar for different task types?" *European Management Journal*, Vol. 32, pp. 870–878.

Scott-Ladd, B., and Chan, C. C. (2008). "Using action research to teach students to manage team learning and improve teamwork satisfaction", *Active Learning in Higher Education*, Vol. 9 No. 3, pp. 231–248.

Tian, L., Li, Y., Li, P. P., and Bodlaa, A. A. (2015), "Leader–member skill distance, team cooperation, and team performance: A cross-culture study in a context of sport teams", *International Journal of Intercultural Relations*, Vol. 49, pp. 183–197.

Tran, N. L. (2018), "The skills gap of Vietnamese graduates and final year university students", *Journal of Education and Work*, Vol. 31 No. 7-8, pp. 1-16.

Tran, T. Q., and Swierczek, F. W. (2009), "Skills development in higher education in Vietnam", *Asia Pacific Business Review*, Vol. 15 No. 4, pp. 565–586.

Tucker, R., and Abbasi, N. (2016), "Bad attitudes: Why design students dislike teamwork", *Journal of Learning Design*, Vol. 9 No. 1, pp. 1-20.

Vo , Y. T. (2014), "Cultural differences: a barrier to native english teachers in english as a foreign language contexts", *VNU Journal of Foreign Studies*, Vol. 30 No. 1, pp. 63-72.

Wageman, R. (1995), "Interdependence and group effectiveness", *Administrative Science Quarterly*, Vol. 40 No. 1, pp. 1-37.

Watson, W. E., Johnson, L., and Merritt, D. (1998), "Team orientation, self-orientation, and diversity in task groups", *Group & Organization Management*, Vol. 23 No. 2, pp. 161–188.

Yakasai, A. B., and Jusoh, W. J. (2015). "Testing the theory of planned behavior in determining intention to use digital coupon among university students", *Procedia Economics and Finance*, Vol. 31, pp. 186–193.

Yazici, H. J. (2005), "A study of collaborative learning style and team learning performance", *Education + Training*, Vol. 47 No. 3, pp. 216–229.

Yu, K. Y., and Cable, D. M. (2011), "Unpacking cooperation in diverse teams: Incorporating long-term orientation and civic virtue in the study of informational diversity", *Team Performance Management*, Vol. 17 No. 1/2, pp. 63–82.