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STUDENTS' EVALUATION ON FIELD TRIPS AS A MEANS TO PREPARE GRADUATE EMPLOYABILITY AT A VIETNAMESE UNIVERSITY

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ABSTRACT

Field trips are regarded as significant extra-curricular activities to promote students' perceptions of preparedness for graduate employability. This study explored the effectiveness and satisfaction of field trips conducted in 2020 and 2021 by a Vietnamese public university from students' assessments. A total of 1,112 students who participated in thirteen trips were split into two groups: the first group of 70 respondents for the pilot survey questionnaire and 473 respondents for the structured survey questionnaire. The five-point Likert scales were utilized for two parts of the survey questionnaire. The first part was related to students' assessment of the field trips' organization, and the latter was designed to test seven hypotheses. The results showed that the participants highly valued preparing for the field trips and support from enterprises and the university. The scales of factors were reliable after implementing reliability analysis, and three components were extracted from the findings from Exploratory Factor Analysis. It was noticeable that motivation stimulation was the most significant predictor for the students' enjoyment of field trips, followed by identity capital and knowledge advancement. Based on the study findings, Vietnamese universities are suggested to foster relationships with enterprises to implement similar field trips for university undergraduates.

Contribution/Originality: The novelty of this study is the findings of the influence of motivation, identity capital, and knowledge on students' satisfaction when participating in field trips to prepare for graduate employability at a Vietnamese university.

1. INTRODUCTION

University graduates' unemployment has become a global issue from developed countries to developing countries, including China, the United States, India, and the United Kingdom (Mgaiwa, 2021). In Vietnam, university graduates' employment has been surveyed since 2017 after the Ministry of Education and Training (MOET) was given the national focal responsibility. Accordingly, MOET issues official documents every year, requiring higher education institutions (HEIs) to survey their graduates' employment status up to one year from graduation. Although universities' average employment rate was declared at a high rate of above 90% for employed graduates in 2018 and 2019 on their websites, HEIs in Vietnam still complained about "poor capability of universities in enhancing or equipping students with the knowledge and skills required by the employer" (Tran,

2019). This has raised concerns about the responsibility of HEIs in preparing and promoting employment opportunities for university undergraduates.

Graduate employability as one crucial factor affecting employment opportunities (Clarke, 2018) has attracted the attention of employers and HEIs because it is a so-called "plug and play" competency (Herbert, Rothwell, Glover, & Lambert, 2020). While employers want to appeal to ready work employees, higher education institutions are under tremendous pressure to fascinate learners by promising employment chances at graduation. However, it is complex to identify the employers' actual needs for graduates, so undergraduates can be ambiguous by what they are expected to show (Wilton, 2012). University-industry cooperation has identified graduate employability as a "personal formal relationship" between human resource suppliers and consumers (Ankrah & Omar, 2015). University and enterprise partnership has been recently documented in approved plans for the 2021-2025 period by the Vietnamese Ministry of Education and Training even though the HEIs' current cooperation links remain loose (Pham, 2019) and "remain rare" (Tran, 2019).

Many universities have implemented various strategic activities to enhance graduates' employable skills, including work-integrated learning (Jackson, 2017; Nguyen, 2022) or co-curricular activities (Jackson & Bridgstock, 2021). Higher education institutions have also focused on awareness-raising activities for their students from university entry until graduation. Their actions may include the first-year orientation, mentoring, and supporting final year students with CV and interview readiness. However, fostering the students' perceived graduate employability by encouraging them to take proactive parts in field trips has been less researched. Therefore, empirical exploration of the field trips is necessary to produce an informative insight into the literature on developing employability.

Field trips are one of the extra-curricular activities which are possibly separate from the formal curriculum. However, field trips are a complementary part of revising the students' previous understandings and facilitating their practical skills, which are unlikely to have enough time to be sharpened in the disciplinary curriculum (Tran, 2017). In addition, field trips can bring practical value for the students through obtaining novel experience, adding interest to learning, promoting cognitive skills, providing high motivation to school subjects, and facilitating social integration (Larsen, Walsh, Almond, & Myers, 2017). Larsen et al.'s most noticeable finding indicates that social capital is the highest value gained by first-year students. Additionally, their experimental study results reveal that field trips are a valuable addition to academic success and peer-to-peer relationship development, which are foundational to creating their future professional network.

From the constructivist perspective, field trips as an experiential learning process include two steps. Initially, a direct experience is created by interacting between the student and the environment. Afterwards, the novel experience is made significant by integrating into the student's previous cognitive framework (Mortensen & Smart, 2007). Experiential learning in an outside classroom environment can be implemented successfully based on three contexts: "personal, sociocultural and physical" (p.1394). For the personal context, while the student's external motivation attracts classroom learning, experiential learning through field trips is driven by internal rewards.

Furthermore, social learning in field trips may be similar to museum learning, where the student can benefit from asking and answering questions with guides at the museum. During the field trip, the students can interact with the human resource division managers, heads of the manufacturing zone, technicians, and even workers. More importantly, the students can have rare chances to see actual natural phenomena or touch real objects (Morag & Tal, 2012). In the study's field trips, the student can observe assembling processes for a complete car/motorbike or feel textile products in the field trips.

Virtual field trips are getting familiar in the era of the 4.0 industrial revolution, but they "cannot convey the impressions of a real-life field trip location" (Putz, Treiblmaier, & Pfoser, 2018). Furthermore, simulations and computers can only provide students with made-simple versions of the natural world and restricted chances to communicate. It is argued that virtual field trips do not easily displace real ones due to their irreplaceable benefits

(Putz et al., 2018). For example, field trips in Hong Kong can equip students with opportunities to achieve practical learning experiences in various travel environments in the tourism sector. Whether the student's learning experience can be positive or not is much based on the teacher's roles or the journey head's duties or pre-the-trip, during-the-trip, and after-the-trip activities (DeWitt & Storksdieck, 2008). Pre-trip activities may include numerous mini-plans such as asking for permission to visit the field trip venue, selecting a reasonable time, negotiating transportation, seeking funds, considering safety in addition to selecting and designing evaluation tools for student engagement.

Additionally, the organizers are advised to implement a preparatory trip to confirm the field trip's content and plan before the trip. During the journey, lecturers' roles are emphasized (Morag & Tal, 2012). They act as facilitators ready to answer the students' questions to connect the on-the-trip experiences with their prior understandings. The lecturers are advised to utilize worksheets to drive the students' attention to the oriented objectives of the trips. A small group can complete the worksheets instead of each student because they push them to collaborate and exchange views on the obtained data and personal experiences (Mortensen & Smart, 2007). Post-trip activities are advantageous. They would be fantastic opportunities for the organizers to receive the students' feedback and make adjustments for more effective following trips.

Likewise, field trips to see living things in Turkey are fruitful for biology students (Ateskan & Lane, 2016). Ateskan & Lane developed the field trip programs for pre-service teachers. After graduation, their graduates were expected to apply their experiences to building and maintaining their simple and workable trips. The research findings showed that their programs brought about long-term impacts. Most respondents felt confident in planning and conducting the field trips for their students due to their interests in the previous pre-service field trips. In addition, more than half of respondents assured that their pre-service field trip experience was closely associated with increasing the number of field trips for their students.

The field trips were organized by a Vietnamese university based in Hanoi. It has a long history of 124 years. University A (pseudo name) has 1.500 lecturers and support staff to implement training and education for over 30.000 students at three levels, including vocational training, higher education, and postgraduate education. Identified as a central technical school of Vietnam, this higher education institution was paid visits by President Ho Chi Minh four times. In support of three HaUI-JICA projects, the 50ha-large university has promoted a close partnership with enterprises to provide high-quality graduates for Vietnam's national targets of becoming a developed country with high income before 2045 (Viet Nam News, 2021).

From 2020 November until 2021 April, the field trips to foster students' employability skills were proposed and approved for a trial phase at University A. Fourteen field trips were planned, out of which one was not implemented due to the effect of the COVID pandemic in the second week of December 2020 in Vietnam. Out of 1,190 registered students for fourteen trips, 1,112 students were involved in thirteen trips. They pursued 18 different disciplines shown in Appendix 1. Nearly 60% of venues for the trips were located in Hanoi, Vietnam's capital, with numerous industrial zones and commerce buildings. The remaining places were in northern Vietnam, which is 40 km (Vinh Phuc), 50 km (Bac Ninh), 65 km (Ha Nam), 95 km (Hai Duong), 115 km (Nam Dinh) far from University A. The trips were arranged more frequently in December 2020, January 2021, and April 2021. No trips were carried out in February 2021 when the Vietnamese traditional Lunar New Year was celebrated. A month after the Vietnamese lunar New Year was not a good time to visit enterprises.

Our paper explores the participants' evaluation of the organization of field trips and their satisfaction with the trips conducted in the academic year 2020-2021 by a Vietnamese public university. To examine the participants' satisfaction; seven hypotheses were proposed in terms of development of their knowledge, skill, attitude, career orientation, career network, motivation, and intention as follows:

H_1: Students' knowledge obtained from the field trip positively influences their satisfaction.

H_2: Students' skill obtained from the field trip positively influences their satisfaction.

H_5: Students' attitude after the field trip positively influences their satisfaction.

H_4: Students' career orientation from the field trip positively correlates with their satisfaction.

H_3: Students' career network development gained from the field trip positively affects their satisfaction.

H_6: Students' motivation after the field trip has a positive influence on their satisfaction

H_7: Students' intention after the field trip positively impacts their satisfaction.

The field trips were expected to help students understand better undergraduates' skills mismatch and preparedness for graduate employability. Therefore, the article hopes to bring a good example for Vietnamese higher education institutions to implement field trips for their students.

2. MATERIALS AND METHODS

In order to explore the participants' satisfaction with organizing the field trips, students were required to rate their response to preparatory activities on a Likert 5-point scale for the trips and support activities by University A and enterprises during the trips. To discover the answers to the second research issue, we exploited a correlational research design including a quantitative approach of an online survey questionnaire. The prediction-formed correlational research design was employed because it could help the researchers determine "variables that will positively predict an outcome or criterion" (Creswell, 2012).

Due to the outbreak of the COVID pandemic in Vietnam after the last field trip in April 2021, students have stayed at home for online learning. Therefore, an online survey questionnaire was employed to collect data because it could "access individuals in distant locations" (Wright, 2005). Google form was employed as the platform for collecting data for two reasons. Firstly, Google form accepts an unlimited number of respondents. In addition, the survey data and responses can immediately be converted into Google Spreadsheet (Ho et al., 2020). Our google form-based questionnaire consisted of three parts, involving students' assessment of the field trip's organization, the field trip's results, and general information of respondents. The Likert 5-point scale was selected because it was easy to apply and simple to evaluate the quality (Spooren, Mortelmans, & Denekens, 2007). The students rated their responses for each statement of the field trip's organization and the results by choosing 1 (Completely dissatisfied) or 2 (dissatisfied) or 3 (Neutral) or 4 (Satisfied) or 5 (Completely satisfied). The questionnaire was designed in Vietnamese and was translated into English, as seen in Appendix 2.

Table 1. Summary of participant characteristics.

Characteristics	Category	Overall (N=473)	
		N	%
Gender	Male	349	73.8
	Female	124	26.2
Year in school	First	39	8.2
	Second	233	49.3
	Third	143	30.2
	Final	58	12.3
Discipline	Information Technology	176	37.2
	Software Engineering	63	13.3
	Information Systems	50	10.6
	Garment Technology	40	8.5
	Electronic Engineering Technology	27	5.7
	Computer Science	27	5.7
	Mechatronic Engineering Technology	24	5.1
	Marketing	20	4.2
	Electrical engineering technology	18	3.8
	Automotive Engineering Technology	17	3.6
	Automation	8	1.7
	Mechanical engineering technology	2	0.4
	Fashion Design	1	0.2

The participants in thirteen field trips were 1,112 undergraduates. One hundred fifty-three students were invited to participate in the questionnaire pilot process, 70 participants responded with acceptable data. Their pilot survey results helped the authors adjust the contents and structures of the questionnaire. The official questionnaires were distributed to 959 students via their emails. The recipients of the official questionnaire excluded the sample for the pilot phase. After eleven days, 620 students replied. After the incomplete questionnaires were eliminated, 473 usable questionnaires were employed for data analysis. The representation of the survey findings is determined by the sample size, which exceeds the minimum size condition– 282 students (Adhikari, 2021). Table 1 summarizes participants' characteristics.

SPSS software (version 26) was used to analyze data. Descriptive statistics were performed for students' demographic information and their assessment of the field trip's organization and results. Regarding the field trip's outcomes, reliability analysis of the scales was executed before performing dimension reduction to identify principal components. Afterwards, a model was developed by running the linear regression.

3. RESULTS

Four hundred seventy-three respondents were involved in this study. Three hundred forty-nine respondents were male (73.8%), and one hundred twenty-four respondents were female (26.2%). The majority of the respondents were second-year students (49.3%), followed by third-year ones (30.2%). The first and last year students who attended the trips accounted for 8.2% and 12.3%, respectively. In terms of training majors, 37.2% of respondents studied Information Technology, followed by Software Engineering (13.3%) and Information Systems (10.6%). The rest respondents were students of Garment Technology (8.5%), Electronic Engineering Technology (5.7%), Computer Science (5.7%), Mechatronic Engineering Technology (5.1%), Marketing (4.2%), Electrical Engineering Technology (3.8%), Automotive Engineering Technology (3.6%), Automation (1.7%), Mechanical Engineering Technology (0.4), and Fashion Design (0.2%).

3.1. Students' Assessment on Organizing the Field Trips

As seen from Table 2, the field trips were well prepared. The respondents were clear about schedules (M=4.43, SD=0.658) and were satisfied with selecting the firms for the trips (M = 4.42, SD = 0.682). They had enough time to adjust their plans to partake in the University A's trips (M = 4.43, SD = 0.692). The information about trips was sent to the students at least one week before the due date. The timely announcement was crucial because the formal educational activities were time-consuming. Vietnamese students seemed to have little time left for extra-curricular activities (Tran, 2017), especially for some students who took part-time jobs to make ends meet.

Table 2. Students' assessment of preparation and implementation activities for the field trip.

No.	Statements	Mean	Std. Deviation
	Preparation for the field trip		
1	I was informed about the contents and plans of field trip	4.43	0.658
2	The field trip date was informed timely and suitable for my timetable	4.43	0.692
3	The enterprise for my field trip was ideal for my training major	4.42	0.682
	Support activities of university and enterprise		
1	Lecturers answered all my questions convincingly during the trip	4.25	0.745
2	University staff organized interesting activities on the coach to help me get more information about the trip	3.99	0.891
3	Enterprise introduced me the field trip's content	4.42	0.659
4	Enterprise told me about the skills required at work	4.38	0.682
5	Enterprise let me know their regulations, procedure of production/business, and requirement of labor safety	4.31	0.744
6	Enterprise guided and answered me during the trip	4.38	0.676

Additionally, the field trips were fruitful for the respondents because of good support from enterprises and University A. The enterprises made the respondents appealing because they provided the respondents with overall plans (M = 4.42, SD = 0.659), employable skills (M = 4.38, SD = 0.682), their actual requirements of working conditions (M = 4.31, SD = 0.744) and rapid response for the participants' questions (M = 4.38, SD = 0.676). It was noticeable that on-the-coach activities could not be diverse and plentiful enough to make the participants relaxed and get more official news and instructions for the trips (M = 3.99, SD = 0.891). However, the respondents highly appreciated the lecturers' support (M = 4.23, SD = 0.745). The lecturers are likely to comprehend the enterprises' business domain, so they were friendly and ready to interact with their students.

3.2. Students' Assessment of the Field Trip's Results

3.2.1. Reliability Analysis of Scales

The consistency of all scales in this study is presented in Table 3. Eight scales, including knowledge, skill, attitude, career orientation, career network development, motivation, intention, and satisfaction, are found reliable. Cronbach's alpha values are more than 0.7, Cronbach's alpha values if item deleted for four items are higher than 0.6, and the values for corrected item-total correlation are more than 0.3.

Table 3. Consistency of scales.

No.	Scale	N	Cronbach Alpha (# items)	Items	Cronbach's alpha if item deleted for four items	Corrected item-total correlation
1	Knowledge (KL)	473	0.792 (4)	KL1	0.712	0.661
				KL2	0.728	0.627
				KL3	0.727	0.632
				KL4	0.789	0.496
2	Skill (SK)	473	0.892 (4)	SK1	0.850	0.790
				SK2	0.868	0.742
				SK3	0.864	0.754
				SK4	0.860	0.763
3	Attitude (AT)	473	0.844 (4)	AT1	0.849	0.585
				AT2	0.775	0.739
				AT3	0.773	0.750
				AT4	0.809	0.664
4	Career orientation (OR)	473	0.839 (4)	OR1	0.827	0.600
				OR2	0.805	0.657
				OR3	0.769	0.732
				OR4	0.780	0.710
5	Career network development (NE)	473	0.880 (4)	NE1	0.827	0.600
				NE2	0.805	0.657
				NE3	0.769	0.732
				NE4	0.780	0.710
6	Motivation (MO)	473	0.816 (4)	MO1	0.737	0.712
				MO2	0.746	0.697
				MO3	0.859	0.481
				MO4	0.735	0.710
7	Intention (IN)	473	0.856 (4)	IN1	0.737	0.712
				IN2	0.746	0.697
				IN3	0.859	0.481
				IN4	0.735	0.710
8	Satisfaction (SA)	473	0.901 (4)	SA1	0.881	0.756
				SA2	0.867	0.793
				SA3	0.870	0.784
				SA4	0.872	0.782

3.2.2. Dimension Reduction

To analyze exploratory factors, we employed principal component analysis to refine the selection of variables. For the dependent variable "satisfaction", KMO = 0.854, Bartlett's test had statistical significance (sig = 0.000 < 0.05) and Eigenvalue loading > 1.0. The result showed a model with one factor of construct, which accounted for 82.191% of the variance. For the seven independent variables, as seen from Table 4, exploratory factor analysis was also used. The KMO test value was 0.959 > 0.6, implying that the 28 items were adequately divided into three principal components.

The first factor involves twelve items NE1, NE2, NE3, NE4, SK1, SK2, SK3, SK4, OR3, OR4, AT1, MO3, of which loading values are higher than 0.5. Identity capital may be the factor that comprises the above items. Therefore, we proposed to ren the first factor as identity capital as suggested by Cote (1996), which can be formed by sharpening technical skills in numerous domains (SK1 and SK2) and social skills (SK3 and SK4). It can help make long-term connections with critical communal and professional networks (NE1, NE2, NE3, and NE4). Besides, identity capital can contribute to psychosocial development (OR3, OR4, and MO3) and constitute a plentiful source of the best behavior (AT1).

Table 4. Results from exploratory factor analysis for independent variables.

Item	Factor 1	Factor 2	Factor 3
NE4	0.803		
NE2	0.801		
NE1	0.736		
NE3	0.714		
SK3	0.709		
SK4	0.708		
OR4	0.699		
SK1	0.669		
SK2	0.629		
MO3	0.593		
OR3	0.553		
AT1	0.550		
MO1		0.821	
MO2		0.802	
IN1		0.774	
AT3		0.764	
AT4		0.758	
MO4		0.746	
AT2		0.599	
KL4		0.591	
IN2		0.570	
KL1			0.722
KL2			0.672
KL3			0.586
OR1			0.521
KMO test value			0.959
Eigenvalue	12.589	2.394	1.055
Total variance explained	50.356	59.931	64.152
Bartlett's test	Chi-Square		8547.890
	Df		300.000
	Sig.		0.000

Note: Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations.
KL = knowledge, SK = skill, AT=attitude, OR = career orientation, NE = career network development, MO = motivation, IN = intention.
OR2, IN3 and IN4 were eliminated because IN4's loading value was below 0.5. After removing IN4 from the factor analysis, IN3 and OR2's loading values were below 0.5. We continued to eliminate the IN3, OR2 from factor analysis.

The second factor covers three items MO1, MO2, and MO4 of "motivation", three items AT2, AT3, AT4 of "Attitude", two items IN1, IN2 of "intention," and one item KL4 of "Knowledge" in Table 3. They are put into one category of "motivation" for the following reasons. Firstly, AT2 "I learned the spirit of curiosity to improve myself after the field trip.", AT3 "I felt more proactive in accessing information about the enterprise.", AT4 "I felt it necessary to work harder for the remaining study time at the university.", and KL4 "The field trip helped me understand the enterprise's working culture." appeared to belong to the internal motivation respondents. They are driven to participate in the trip to explore new relationships or seek things of personal curiosity. Such engagement in the field trip for the virtues of the discovery or the mastery of something new was defined as internal motivation (Covington, 2000). Secondly, IN1 "I want to join the next field trip." and IN2 "I will share the field trip results with the students of the next grade." presented the participants' high motivation. They were satisfied with the trips' results and actively promoted the trips.

The third factor, which included three items KL1, KL2, KL3 of "knowledge" and one item OR1 of "orientation", can be categorized into the factor of "knowledge".

Therefore, the previous hypotheses can be restated into three following ones:

H_{1n}: Students' identity capital achieved from the field trip positively affects their satisfaction.

H_{2n}: Students' motivation achieved from the field trip positively impacts their satisfaction.

H_{3n}: Students' knowledge achieved from the field trip positively influences their satisfaction.

3.2.3. Multiple Regression Model

We performed multiple linear regression with independent variables: F_identitycapital (12 items), F_motivation (9 items), and F_knowledge (4 items) and the dependent variable of satisfaction (4 items). The finding from Table 5 indicates the adjusted R^2 = 0.693, which means three factors (F_identitycapital, F_motivation, and F_knowledge) can explain 69.3 % for changes in the participants' satisfaction according to the model of Y = 0.517*F_motivation+0.298*F_identitycapital+0.107*F_knowledge + Ɛ with the p < 5% significance level.

The Durbin-Watson statistic value is seen 1.997 (approximately 2), which indicates that no autocorrelation occurs. The standard deviation is approximate 1 (Std. Dev. = 0.997), and the mean is close to 0 (mean = 7.06E-15) means that the residual has a nearly standardized distribution. The range for VIF values which is 1< VIF (range from 2.059 to 2.567) < 5, presents that the variables can be slightly correlated. "No problem collinearity" occurs when the small values of VIF (1<VIF<5) equivalent to the variables are found (Hair, Black, Babin, & Anderson, 2009).

Moreover, the three factors (identity capital, motivation and knowledge) are, as illustrated in Table 5, positively connected with the students' satisfaction. The hypotheses given in the article are supported Table 6. The positive effect of field trips on knowledge in this study is similar to the findings from (Putz et al., 2018). It was noteworthy that motivation may be the most crucial predictor (β = 0.517, sig = 0.000 < 0.005) in comparison with identity capital (β = 0.298, sig = 0.000 < 0.005) and knowledge (β = 0.107, sig = 0.009 < 0.005). In the context of New Zealand, Seifan, Dada, and Berenjian (2020) shared the same view that the vast number of students in their study were motivated to pursue their careers, thanks to the direct effect of authentic field trips (Seifan et al., 2020).

Table 5. Result of multiple regression analysis.

Variables	Beta (Standardized Coefficients)	Sig.	VIF
F_knowledge	0.107	0.009	2.567
F_Identity capital	0.298	0.000	2.527
F_motivation	0.517	0.000	2.059
R value		0.695	
Adjusted R value		0.693	
Durbin-Watson		1.851	

Table 6. Results of hypothesis analysis.

Hypothesis	Recoded Variable	Result
H_{1n}: Students' identity capital achieved from the field trip positively affects their satisfaction.	F_identity capital	Supported
H_{2n}: Students' motivation achieved from the field trip positively impacts their satisfaction.	F_motivation	Supported
H_{3n}: Students' knowledge from the field trip positively influences their satisfaction.	F_knowledge	Supported

4. DISCUSSION

The results of the study indicated that the field trips were well prepared since plans were widely advertised to the students before the trips. The field trips as extra-curricular activities appeared to be seldom held at Vietnamese higher education institutions because students were often occupied with learning the formal curriculum (Tran, 2018). However, at University A, extra-curricular activities, including field trips, seemed to attract more concerns. Some possible explanation could be drawn for this matter. First, the Center for Enterprise Partnership was the focal point division in close relationships with academic faculties to build implementation plans. Second, University A was ready to pay car rental and transport safety fees for most field trips. So, enterprises and students were willing to cooperate with University A. Another important finding was that the field trips were rewarding for the respondents because of good support from University A and enterprises. Time for the field trips was short, so the quick answers to the students' curiosity could broaden their views. In some enterprises, students could not bring their cameras for photos. The lecturers' in-time explanation and guide could create first-hand knowledge. However, it seemed unlikely to make lecturers enjoyable to accompany crowds of noisy students on industrial field trips. In this case, it was not just "additional responsibility" placed on the lecturers' shoulders (Frimpong & Effah, 2021), heavy work could make them feel tired. From the current study's findings, University A in Vietnam organized the field trips for higher education students because it helped them stimulate positive motivation. This finding agrees with Lau, Lee, and Ho's (2019) findings which showed Malaysian students' commitment from extrinsic to intrinsic motivation. Intrinsic motivation can support the students to achieve transferable learning outcomes through experiential learning activities to accumulate for other courses and workplaces. In addition, positive motivation as the result of field trips encourages students to become active participants and progress in learning in their university and be ready to work in the industry. Based on the results obtained, University A in Vietnam organized the field trips for higher education students because it was willing to help them develop identity capital. The identity capital identifies what students "invest" in "who they are" (Yu & To, 2019). Students spend their time, efforts, and trade-off benefits on their field trips because their trips can be favorable conditions to cultivate work experiences and networks for shaping different types of capital (Bourdieu, 1986). In the context of increasing employment-related worry for Vietnam undergraduates, identity capital resources, as ascertained by Côté and Schwartz (2002), can equip students with cognitive and behavioral capacities to overcome the various obstacles throughout life. Based on the experiment's findings, University A in Vietnam organized the field trips for higher education students because was willing to help them gain added knowledge. Industry 4.0 requires that expected graduates achieve "new skills, knowledge and competencies" outside the classical education environment (Mingaleva & Vukovic, 2020). The on-campus students can interact with production practice experience involving new technologies through their field trip. For example, when students observe modern automatic producing system by Honda Ltd. Co. in Vinh Phuc, Vietnam, they perceived that their future work position will need technical knowledge on automation systems and industrial quality control. The field trips have not been widely implemented at Vietnamese universities to our best knowledge. It might be because university and enterprise links seem to be loose in preparing ready-to-work human resources for the employment market (Tran, 2014). Our paper results act as the proposal for the Vietnamese higher education institutions to enhance solid partnership with enterprises to implement field trips. Like in the case of University A, other Vietnamese universities could organize experiential

learning programs via field trips to foster the students' direct awareness of necessary employability skills for their graduate employment.

5. CONCLUSION

The current paper explores the students' assessment of thirteen field trips and their satisfaction with the trips organized in the academic year 2020-2021 by a Vietnamese Hanoi-based public university. The field trips were highly rated for careful preparation and effective implementation. Seven hypotheses were tested with 473 participants through structured questionnaires. The study findings indicate three factors, including motivation, knowledge, and identity capital, positively affect the students' satisfaction. A multiple regression model is also shaped by performing SPSS software (version 26). This study has three main limitations, which are suggestions for further studies. Firstly, we used the SPSS software to test the scales and perform factor analysis. However, visually presenting links among variables was restricted. Therefore, future studies could fill in the gap by exploiting PLS-SEM to show causal relationships vividly among the variables. Secondly, 67% of participants in our research studied four computer-related majors; the rest belonged to separate training majors. Thus, further research could test satisfaction differences in the participants' training majors if the following field trips could involve more technology-majored or economic-majored students. Lastly, the multiple regression model explored in this study accounted for 69.3% movement in the participants' satisfaction. It means that 30.7% stays unexplained. Thus, other factors such as gender or cultural features need to be considered in future research directions.

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Appendix 1. A list of field trips in academic year 2020-2021 held by University A.

No.	Host enterprise *(Province)*	Business domain	The trip date (dd/mm/yyyy)	Students' major	Students' quantity
1	Hyundai KEFICO *(Hai Duong)*	Automotive electronic management system	27/11/2020	(#2) (#10), (#11), (#12), (#13), (#14), (#15)	61
2	Suntory PepsiCo Vietnam Beverage *(Bac Ninh)*	Beverage industry	02/12/2020	(#10), (#11), (#12), (#13), (#14)	43
3	Duc Minh manufacturing and import-export Co. Ltd. *(Hanoi)*	Manufacturing plywood, veneers, and other thin boards	19/01/2021	(#8)	29
4	Bao Minh Textile J.S.C. *(Nam Dinh)*	Weaving, yarn dye and piece dye	23/01/2021	(#7)	37
5	Garment Corporation 10 *(Hanoi)*	Making clothes	26/01/2021	(#6), (#7)	87
6	Hanoi Textile and Garment J.S.C *(Ha Nam)*	Textile, garment	09/04/2021	(#5), (#7)	85
7	Nissan Automotive Technology Vietnam *(Hanoi)*	Automotive research and design	23/04/2021	(#1), (#10) (#14)	28
8	MISA Joint Stock Company *(Hanoi)*	Software and connection services	23/04/2021	(#3)	100
9	FPT Software Co., Ltd *(Hanoi)*	Technology and IT services	26/04/2021	(#1), (#3)	359
10	AhaMove of Instant Service Joint Stock Company *(Hanoi)*	Inner city shipping	27/4/2021	(#9)	29
11	Honda Ltd Co. Vietnam *(Vinh Phi)*	Producing motorbike and car	27/4/2021	(#3), (#11), (#12), (#13), (#14), (#15)	74
12	Gameloft, Hanoi Studio Co. Ltd. (Hanoi)	Development and publishing games	28/4/2021	(#4)	80
13	VTI group (Hanoi)	Application development for businesses	28,29/4/2021	(#2), (#3)	100
	13 enterprises			15 majors	1.112

APPENDIX 2

Survey on students' field trips in academic year 2020-2021

In 2020-2021, University A had organized 13 field trips for students. To evaluate the effectiveness and improve the organization of the field trips, we have designed the following questionnaire. Please take 5 minutes to finish.

Your assessment will help the University organize a valuable and practical field trip for you in the next academic year. Your personal information will be kept confidential.

QGEN0: Student ID

QGEN1. Please select the field trip you attended in the academic year 2020-2021.

1. Hyundai KEFICO (27/11/2020)
2. Suntory PepsiCo Vietnam Beverage (02/12/2020)
3. Duc Minh manufacturing and import export Co. Ltd (19/01/2021)
4. Bao Minh Textile J.S.C. (23/01/2021)
5. Garment Corporation 10 (26/01/2021)
6. Hanoi Textile and Garment J.S.C (09/04/2021)
7. Nissan Automotive Technology Vietnam (23/04/2021)
8. MISA Joint Stock Company (23/04/2021)
9. FPT Software Co., Ltd (26/04/2021)
10. AhaMove of Instant Service Joint Stock Company (27/4/2021)
11. Honda Ltd Co. Vietnam (27/4/2021)
12. Gameloft, Hanoi Studio Co. Ltd. (28/4/2021)
13. VTI group (28,29/4/2021).

QAS1. Please rate the organization of the field trip by selecting 1 (Completely dissatisfied) or 2 (dissatisfied) or 3 (Neutral) or 4 (Satisfied) or 5 (Completely satisfied).

No.	Statement	1	2	3	4	5
Preparation for the field trip						
B1	I was informed about the contents and plans of field trip					
B2	The field trip date was informed timely and suitable for my timetable.					
B3	The enterprise for my field trip was ideal for my training major.					
Support activities of university and enterprise						
D1	Lecturers answered all my questions convincingly during the trip					
D2	University staff organized interesting activities on the coach to help me get more information about the trip.					
D3	Enterprise introduced me the field trip's content.					
D4	Enterprise told me about the skills required at work					
D5	Enterprise let me know their regulations, procedure of production/business, and requirement of labor safety.					
D6	Enterprise guided and answered me during the trip.					

QAS2. Please rate the following statements about the results of your field trip by selecting 1 (Completely disagree) or 2 (disagree) or 3 (Neutral) or 4 (Agree) or 5 (Completely agree).

No.	Statements	1	2	3	4	5
KL	**Knowledge**					
KL1	The field trip helped me have a broader view of my field of study.					
KL2	I had a better understanding of the knowledge taught at school thanks to the field trip.					
KL3	The field trip helped me identify my knowledge gaps.					
KL4	The field trip helped me understand the enterprise's working culture.					
	Skills					
SK1	My information processing skills increased after the field trip.					
SK2	My observation skill increased after the field trip.					
SK3	My teamwork skills are better after the field trip.					
SK4	My communication skills are better after the field trip.					
	Attitude					
AT1	I learned discipline after the field trip.					
AT2	I learned the spirit of curiosity to improve myself after the field trip.					
AT3	I felt more proactive in accessing information about the enterprise.					
AT4	I felt it necessary to work harder for the remaining study time at the university.					
	Career orientation					
OR1	The field trip helped me become more confident in my training major.					
OR2	The field trip helped me adjust my study plan to the actual job requirements at the enterprise.					
OR3	The field trip helped me identify suitable job positions.					
OR4	The field trip helped me determine where I would apply for a job in the future.					
	Career network development					
NE1	The field trip helped me become engaged with the lecturer.					
NE2	The field trip helped me make new friends.					
NE3	The field trip helped me know and connect with my university's employment support unit.					
NE4	The field trip helped me get acquainted and connect with persons at the department of human resources at the enterprise.					
	Motivation					
MO1	I felt it necessary to learn more to enhance practical understanding.					
MO2	I thought it essential to improve more skills to be employable right after graduation.					
MO3	I wanted to change the learning environment.					
MO4	I wanted to have many new experiences during the field trip.					
	Intention					
IN1	I want to join the next field trip.					
IN2	I will share the field trip results with the students of the next grade.					
IN3	I will change my study method after the field trip.					
IN4	I will contact more friends and lecturers.					
	Satisfaction					
SA1	I am satisfied with what I learned after the field trip					
SA2	I find the acquired skills very useful					
SA3	I am satisfied with the preparation of the university.					
SA4	I am satisfied with the enterprise's exchanging and sharing.					

QGEN2. Name: ……

QGEN3. Gender: Male Female

QGEN4. Email: ……..

QGEN5. When you participated in your field trip, what grade were you in?

A. The first year
B. The second year
C. The third year
D. The final year

QGEN6. Please choose your training major.

A. Information Technology	F. Fashion Design	K. Mechatronics engineering technology
B. Computer Science	G. Textile material technology	L. Electricity engineering technology
C. Software Engineering	H. Business Administration	M. Automation
D. Information Systems	I. Marketing	N. Electronics engineering technology
E. Garment Technology	J. Mechanics engineering technology	O. Automobile engineering technology