



## Exploring the Impacts of Factors on Career Choice for Sustainable Career Development of Vietnamese Students

**Do Hong NHUNG**

National Economics University, Hanoi, Vietnam (NEU)

*Email: nhungdh@neu.edu.vn*

**Vu Nguyen Huong NHI, NEU**

*Email: 11206457@st.neu.edu.vn*

**Tran Hai ANH, NEU**

*Email: 11204520@st.neu.edu.vn*

**Nguyen Quynh CHAU, NEU**

*Email: 11200558@st.neu.edu.vn*

**Ha Mai CHI, NEU**

*Email: 11200577@st.neu.edu.vn*

**Nguyen Nhu Minh NGOC, NEU**

*Email: 11206350@st.neu.edu.vn*

### Abstract

*Career choice has always been one of the key factors to predict future sustainable development. This study investigates the impact of peer influence and cognitive influence on career choice in a sample of 3849 Vietnamese university and college students. Based on the Social Cognitive Career Theory model, the study reveals that both factors have a direct positive influence on vocational choice. In decreasing order, vocational outcome expectations have the strongest impact on career choice, followed by self-efficacy and peer influence. Additionally, the findings indicate a moderate correlation between self-efficacy and vocational outcome expectations. The partially mediated relationship between self-efficacy and career choice through vocational outcome expectations is also proved. The research contributes to the literature on career decision-making and provides useful recommendations for government, businesses, and students to help reduce the difficulties in choosing a vocation for students' sustainable development.*

**Keywords:** Career choice, Social cognitive career theory, Sustainable development, University students, Vietnam.

## Introduction

The public's interest in college student employment is growing, particularly concerning the long-term viability of individual careers. The future professional growth and contributions of higher education students to society cannot be disregarded, as they represent the primary reserve resources of the labor market of the future. A career is a means of living and has the power to alter one's personality, way of life, social status, income level, nature of work, *etc.* (Jones & Larke Jr., 2005). Consequently, choosing a career becomes more important in each person's personal growth. How can college students determine their future professional development and quickly adjust to the social development trend? They must be capable of making informed professional decisions and appreciating their own worth.

According to Brown (2002), Sue and Sue (1990) parents' careers, attitudes, and personal beliefs have a significant impact on their children's professional choices and can even influence them greater in socialist societies when deference and respect for parents are highly featured. Eckerman and Didow (1988) supported and added that peer influence occurs concurrently with parental influence.

Vocational decisions are also motivated by a person's cognitive nature (including outcome expectations and self-efficacy) or personal traits. If self-efficacy is the capacity for adaptation, expected outcomes are assessments of potential future events. In addition to socioeconomic, physical, and psychological considerations, personal determinants including gender, academic year, GPA, and region of residence have an immense effect on career choice. College students need to consider sustainable career development from a long-term perspective to make informed career choice and to secure employment (Kim & Kim, 2016).

Technological breakthroughs and social changes have created many new professions. The more society develops, the more people want to satisfy their desire for recognition. Job recruitment trends in Vietnam are also changing rapidly to adapt to an increasingly complex economic context. The competitive labor market, along with factors such as the economic environment, industry needs, and individual skills and qualifications, all influence post-graduation employment opportunities. According to the report of the Vietnam's General Statistics Office (2023), for the whole year, the rate of employed workers increased by 1.35% and the unemployment rate in the working age decreased by 0.06% compared to 2022. However, for the whole year 2023, the number of workers whose potential is not fully utilized remains high at 2.3 million people. Thus, the imbalance between supply and demand of the labor market still occurs and the situation of unemployed graduates is still a problem, causing a waste of young intellectuals and potential labor force for economic development of the country. Having recognized the urgency of selecting the proper vocation, the author group undertook the study on the issue of "Exploring the impacts of factors on career choice for sustainable career development of Vietnamese students" to analyze and evaluate the relevance of factors to career choice considering the rapid growth of the labor market and the prevailing integration trends.

By outlining the theoretical underpinnings of career choice and developing a model to assess the influence of various factors on the job choices of undergraduate students in Vietnam, the main objective is to assess the effects of peer influence, cognitive influence, and demographic factors on students' career choices. As a result, our study will be able to offer a realistic picture of the current situation of university and college students' career decision-making in Vietnam. Undergraduate students can utilize the research findings as a starting point for understanding and assessing additional variables that affect career choice, which in turn will help them avoid selecting the incorrect major or career, which can result in time, effort, and financial waste. Furthermore, relevant government departments have the ability to organize adaptable vocational training programs, implementing sensible employment regulations, addressing market demands, lowering unemployment rate, and boost productivity of the labor force.

By distributing online survey to university and college students through Google Forms, the use the quantitative methodologies to collect data and process the materials by using SPSS 26.0, SMARTPLS 4.0 and Microsoft Excel 2023 software to compile data. The process continues with evaluation scales and models and hypotheses testing.

The article comprises six primary sections. To begin with, the research team outlines some major facts regarding career choice. In the second section, we propose our hypothesis and integrate theories pertaining to career choice to explain the decision-making process. The materials and techniques used in the study are provided in the third section. Subsequently, the collected data and results after processing the data using statistical software are presented. Based on the results, the authors discuss and interpret the relationships between independent and dependent factors. The concluding section contains conclusion, recommendation and limitation of the research.

## **1. Literature review**

### ***1.1. Factors influencing career choice***

Career choice is one of the most concerning and challenging issues for students. It involves a cognitive process related to choosing a specific career or job for the future (Nguyen & Duong, 2022). Career is defined as the occupational, commercial, or industrial activity that a person may adopt during the whole educational life or in some other part or till the death (Geçikli, 2002). Individuals opted for career planning to achieve their professional goals, learn about impending possibilities, their outcomes, and their timely evaluations. Although regarded as the starting point of the job decision process, it is still of considerable significance (Ahmed *et al.*, 2017).

Originating from the foundational theory of Bandura's Social Cognitive Theory (SCT) (1986) and Krumboltz's Career Development Learning Theory (1976), Lent *et al.* (1994) drew upon these studies to investigate the process of career choice and career decision. Aligned with Bandura's model, the Social Cognitive Career Theory (SCCT) observes the interplay between Personal determinants and Environmental determinants

encompasses the entire context where career choices are made. The theory also monitors the relationship between Cognitive processes and Interpersonal factors. SCCT highlights certain experiential and learning or cognitive processes that can help to account for important.

Three primary influence groups consist of: (i) Cultural influences, (ii) Cognitive influences, and (iii) Contextual influences (Lent *et al.*, 1994). Pursuant to Bandura's model, these groups are analyzed as follows:

(i) Cultural influences include environmental factors, which are further subdivided into Personal inputs (innate tendencies, gender, ethnicity, personality, health status) and Affordances (context-based and environment-based capabilities).

(ii) Cognitive influences comprise individual factors that seek to understand the origins of human behavior based on their instincts and motivations (Bandura, 1986). Lent *et al.* (1994) centralized analysis of two key factors: Self-efficacy and Outcome Expectations in the career choice process.

(iii) Contextual influences encompass behavioral factors, ranging from Interests to Choose Goals and Choice Actions based on goals will be presented. The achieved performance will impact future career orientation.

### **1.2. Peer influence**

Influence occurs when an individual acts and thinks based solely on the experiences of colleagues. Therefore, “peer influence” is when one person influences many people or is influenced by one or more people of the same age or status (Laursen & Veenstra, 2021).

When defining influence, the key element mentioned is changed: Individuals change relate to friends and colleagues. These changes can have both positive and negative aspects. Peer influence refers to activities such as sharing, advising, counseling, communicating, and learning from peers (Gokuladas, 2010). Additionally, peer influence can comprehend the emotions that influencers bring to participants. In short, someone can be influenced if they require information to interact and adjust to a specific circumstance. Lacking the necessary information, the person has to get it from others. The willingness to take the necessary information from others is a necessary component of influence (Parson, 1963).

Peer influence falls into a significant aspect of interpersonal relationships, which may impact how young people make decisions about their careers. Members of a youth group, who have close interpersonal relationships, hold each other to high expectations. A small number of the peer group's members occasionally take on the role of significant others (Cooley's looking glass self-theory), to whom their followers compare themselves in social situations. In this way, a person's behavior is influenced by their peer group when making a career choice (Howard *et al.*, 2009), (Cheung & Arnold, 2014).

Peer pressure and social comparison also have a significant impact on college students' career choices. College students often compare themselves to their peers in terms of academic qualifications, employment prospects, and emotional relationships (Yuyi, 2022). This comparison may cause anxiety, inferiority, and pressure to conform to certain career paths. Students may be altered by leaders and suffer from social contagion, where

recommendations from academically strong peers can limit information search and impact college choice (Bhayani, 2015). Furthermore, peer pressure can play a role in career decision-making, as students seek approval and support from their peers in choosing a career or course of study (Clauretech *et al.*, 2022). The gender can also affect college major choices, with males being more biased than females (Eric *et al.*, 2017). Students must learn to identify and manage peer pressure to make autonomous and self-assured career decisions.

Peers represent important agents in the social networks of individuals throughout their lives (Bukowski *et al.*, 1996). Peer attachment is a subset of the overarching theory of peer influence (Rubin, 2011), and it can be a source of emotional and social influence. Armsden and Greenberg (1987) proposed that research on peer attachment focuses on three dimensions: (1) Trust, (2) Communication, and (3) Alienation. Given these classification criteria, the higher trust or communication with close relationships, the more secure and confident the participants receive from their peers, and vice versa.

Research has shown that direct peer influence, such as pro-risk or anti-risk messages, can lead to changes in risk-taking behavior (McCoy & Natsuaki, 2018). Steinberg *et al.* (1994) supported the same in adolescents. Adolescents justified their behaviors by using their perception of their peers' participation in risky behaviors (Siraj *et al.*, 2021). Additionally, the size of the comparison group and social reference points can also influence risky decision-making, with larger reference groups leading to more polarized behavior (Wang *et al.*, 2016).

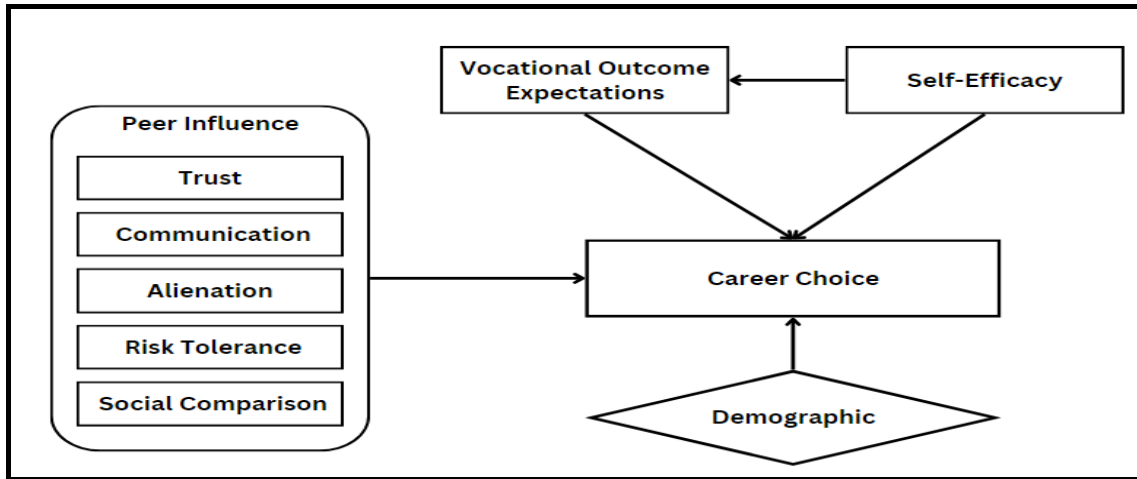
### ***Peer influence and the career choice process of students***

Peer influence is considered to impact career choice and is identified as the third crucial factor after parental and teacher influence. Falling under the interpersonal factors, peers influence the individual's choice through social comparison and peer approval (Gokuladas, 2010). Hashim and Embong (2015) argued that the peer group is the strongest source of influence on career choice. Salami (2006) pointed out that many youths make wrong career choices due to ignorance, inexperience, peer pressure, or because of reputation attached to certain jobs. On the contrary, potential friends and peers are possible sources of good interactions towards education, job search, and even joining a social or political organization, according to research by Han & Li (2009) and Zimmerman (2003). In short, peer influence has been acknowledged as an asset in shaping career opportunities and decision-making among youth (Naz *et al.*, 2014).

## ***1.3. Theoretical model and research hypothesis***

### ***1.3.1. Theoretical model***

Based on the SCT model of Bandura (1986) and the SCCT model of Lent *et al.* (1994), and inheriting the papers on peer pressure, the research team proposes a research model with three independent variables: (1) Vocational outcome expectations, (2) Self-efficacy, and (3) Peer influence. Additionally, the control variables in the Demographic section will be included in the model to examine whether students' career choice is directly affected by demographic factors. The research model is demonstrated in Figure 1 below.

**Figure 1: The proposed hypothetical model**

Source: Authors' compilation from literature review.

### 1.3.2. Research hypothesis

Previous studies indicated that peer influence is a substantial factor correlating with career choice. Gardner and Steinberg (2005) found that peer influence has negative effects on career choice while Kaur (2020) showed both positive and negative effects. There is also a potential positive influence that students might have from potential positive peers and friends (Zimmerman, 2003). According to a recent study conducted in Kenya, students' decisions about their careers were significantly influenced by peer pressure (Ogutu *et al.*, 2017). Therefore, the following hypothesis is proposed:

*H1: Peer influence has a positive relationship with career choice.*

The fundamental concept of self-efficacy, defined as an individual's belief in their ability to complete a task or behavior (Bandura *et al.*, 2001), plays a crucial role in positing a key factor in determining future career choices. Jo *et al.* (2016) further emphasized the critical influence of career decision self-efficacy on various aspects of career development, including interests, goals, choices, experiences, and performance. Baharudin and Chin (2023) found self-efficacy, specifically physiological and emotional reactions, strongly contributes to students' vocational decisions. Similarly, Zammitti *et al.* (2023) confirmed that self-efficacy has a positive relationship with life satisfaction and access to decent work. These findings indicated that the higher the level of self-efficacy, the more alliance of career choice to goals and values. Therefore, self-efficacy plays a crucial role in the career decision-making process and hence, the hypothesis is as follows:

*H2: Self-efficacy has a positive relationship with career choice.*

Individuals' beliefs about the long-term success of their career choices are captured by the concept of vocational outcome expectancy. Coined by Betz and Vuyten in 1997, this term essentially refers to the expected consequences of pursuing a particular career path. More broadly, outcome expectations, as defined by Bandura (1986, 2001), are an individual's

perceived likelihood of achieving positive results through specific actions. This concept holds relevance across various life domains, influencing everything from personal health and well-being to career self-determination (Schwarzer et al., 2016). Numerous research works on organizational behavior have demonstrated the significance of outcome expectancies in motivating behavior (Vroom, 1964). According to Lent *et al.* (1994), this is especially important for career development because, in broad work situations, performance quality is rarely directly correlated with outcomes. Therefore, it is hypothesized as follows:

*H3: Vocational outcome expectations have a positive relationship with career choice.*

Self-efficacy beliefs involve psychological processes, which play an important role in acquiring or changing behaviors. These processes are also effective in personal competence expectancies (Bandura, 1986). The relationship between self-efficacy and vocational outcome expectations has been widely studied in various fields. A positive relationship between self-efficacy and outcome expectations was found by Pajares (1996), specifically, the positive relationship between self-efficacy and academic achievement. This study found that there is a positive correlation between students' self-efficacy and their academic performance in each subject. There appears to be a relationship of interaction between outcome expectations and self-efficacy. It is suggested that effectively concentrating on objectives could reinforce self-efficacy beliefs and outcome expectations in a positive cycle. Therefore, the following hypothesis is proposed:

*H4: Self-efficacy has a positive relationship with vocational outcome expectations.*

*Control variable: Demographic.*

*Gender:* According to previous study by Tang (2016), gender was used as a control variable when examining the factors influencing the student's choice of accounting as a major in Cambodia. Gender roles are socialized through conceptions of what defines suitable employment for males and females (Osipow, 1983), and career choice involves aligning one's self-concept to one's occupational self-concept (Super, 1957).

*Academic year:* In a market economy where laborers feel free to make changes, it shows that an individual will consider factors before deciding on a suitable place to work in a city or in the hometown. A model of labor migration (Todato, 1969) emphasized two important factors that attract people to urban areas to find work: non-agricultural employment opportunities and higher wages.

*Region:* Watts (1996) concluded that developing countries direct their students into careers according to the country's needs. The student's perception of their surroundings and how that influences their profession choice follows.

*GPA:* GPAs have been one of several major factors used by colleges, postsecondary programs, and employers to assess a student's overall academic record. Arthur and Rousseau (1996) also investigated that individuals with better academic performance can make better judgements about themselves.

**2. Data and methods**

**2.1. Participants**

The study involved 4407 university students in Vietnam and a total of 3849 valid responses was collected. The respondents composed of 3248 (84.38%) females, and 589 (15.3%) males and 12 (0.31%) other type of gender. Structuring the data based on academic years, it shows that the number of sophomore and junior students accounts for the majority with a total vote of 1,349 and 1,639, respectively. Regarding GPA, it is apparent that the number of students with scores from 2.50 - 3.20 accounts for the majority at 48.95%, with 1884 responses. Furthermore, participants from the Southeast region predominated at 35.70%. The specific information is shown in Table 1.

**Table 1: General description**

Factor	Characteristics	Rate (%)	Frequency
<b>Gender (GNDR)</b>	Male	15.3%	589
	Female	84.38%	3248
	Others	0.31%	12
<b>TOTAL</b>		100%	3,849
<b>Academic Year (AY)</b>	Year 1	5.09%	196
	Year 2	35.05%	1,349
	Year 3	42.58%	1,639
	Year 4	16.65%	641
	Year 5	0.36%	14
	Others	0.26%	10
<b>TOTAL</b>		100%	3,849
<b>Grade Point Average (GPA)</b>	Under 1.00	1.17%	45
	1.00 - 2.00	2.81%	108
	2.00 - 2.50	18.19%	700
	2.50 - 3.20	48.95%	1,884
	3.20 - 3.60	21.1%	812
	3.60 - 4.00	7.79%	300
<b>TOTAL</b>		100%	3,849
<b>Region of residence (LTN)</b>	Northern midlands and mountainous region	7.82%	301
	Red River Delta Region	20.39%	785
	North Central region and Central coastal region	22.4%	862

	Central Highlands region	5.01%	193
	Southeast region	35.7%	1,374
	Mekong River Delta region	8.68%	334
<b>TOTAL</b>		100%	3,849

*Source:* Authors' testing results (2023).

## 2.2. Instruments

The research team constructed a questionnaire consisting of two parts, 46 items in total. The first part is the demographic questions and respondents choose answers that are most relevant to them. Participants completed demographic information items about gender, academic year, grade point average and living location.

In terms of the second part, respondents express to what extent they agreed with each item using a Likert 5-point scale (1 = strongly disagree to 5 = strongly agree). Instruments from early authors in the questionnaire include:

Peer trust communication and alienation was assessed using a factor of the *Inventory of Parent and Peer Attachment (IPPA)* (Armsden & Greenberg, 1987). Meanwhile, the risk tolerance and social comparison were measured with the scale suggested in early research by An et al. (2022). In total, the Peer Influence factor includes 22-item self-report questionnaire.

The self-efficacy factor was measured with the General Self-Efficacy Scale (GSE) (Schwarzer, 1995), a 10-item self-report instrument designed to assess an individual's perceived level of confidence in their ability to choose their career. Outcome expectations were assessed with the Career Outcome Expectancy Scale (COE) (Springer *et al.*, 2001). Additionally, career choice was measured with the scale suggested by Hartung (1995), which helped researchers understand the complexity of career indecision and choice status.

## 2.3. Procedure

The research team used a convenient sampling method to collect information. The questionnaire was distributed to university students in Vietnam via an online survey and only the responses of the students who were accessible and willing to participate were selected. Every participant was informed about the study goal and data was gathered anonymously. Due to the flexibility of the sampling method, the number of valid responses received exceeded initial expectation.

## 2.4. Quantitative analysis

### 2.4.1. Preliminary analysis

Several preliminary analyses were performed in the study including eliminating one-answer responses from start to finish and those that are outside the scope of the study using Microsoft Excel 2023. Then, the author group used Cronbach's Alpha to test for the scale reliability and eliminate variables with low total correlation coefficients.

#### 2.4.2. Measurement Model

The Exploratory Factor Analysis (EFA) was executed using SPSS 26.0 software. The observed variables that loaded on factors or variables with inappropriate factor loadings (<0.5) were eliminated. The results showed the convergent and discriminant values of observed variables and factors. The EFA was performed twice with the Principal Components Factoring (PCF) extraction method, Promax rotation, and factor loading greater than 0.5. Seven factor groups were estimated; however, two observed variables of alienation and risk tolerance were eliminated due to the irrelevant factor loading. Based on the magnitude of the factor loading in the second EFA, all items of the communication factor group and trust factor group are combined into one group, creating a new factor group: Trust and communication. In addition, we performed analyses of measurement model of the low-order and higher-order variable structural model. Finally, variance inflation factor (VIF) index was measured to test whether the association between predictor factors violates the assumption of multicollinearity.

#### 2.4.3. Structural model

To test the research model, the data was analyzed with the structural equation modeling (SEM) method using SmartPLS 4.0. The procedure included two steps. In the first stage, we tested the structural model to examine the relationships between the constructs hypothesized. In the second step, we tested the direct and indirect relationship between self-efficacy to career choice through vocational outcome expectations.

#### 2.4.4. Significant differences among demographic factors

A One-way ANOVA test was conducted to assess the career choices of university and college students in Vietnam and whether there are differences among gender, academic year, GPA, and region of residence.

### 3. Results

#### 3.1. Preliminary Analysis

All factors in the model have Cronbach's Alpha coefficients greater than 0.7, and 42/42 observed variables have total variable correlation coefficients greater than 0.3 with the smallest value being 0.42. Therefore, the above results have proven the reliability of the observed variables (Nurosis, 1994)

#### 3.2. Measurement model

Proceeding with the EFA, the research team produced the test results as shown in the following table:

**Table 2: KMO and Bartlett's Test**

<b>KMO and Bartlett's Test</b>		
<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		0.954
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	119,041.254
	df	780
	Sig.	0.000

*Source: Authors' testing results (2023).*

The results presented a KMO coefficient = 0.921 ( $> 0.5$ ) which met the analysis requirements. The value of Bartlett's test with significance level Sig = 0.000  $< 0.05$  proved that the factors were consistent, and the observed variables correlated. The results also showed that there were 7 factor groups with Eigenvalues greater than 1, therefore, these factor groups best summarized the information of the 40 observed variables. The total Variance Explained by the large test reached 72.81% ( $> 50\%$ ), so the EFA model was appropriate and reflects 72.82% of the variation of the included observed variables. There were no observed variables having a loading factor of less than 0.5 or loading on several factors at the same time. Hence, the factors ensured convergent and discriminant validity.

The results suggested that the observed variables converged in the same concept as follows:

**Table 3: Observed variables**

<b>Representative Factors</b>	<b>Abbreviation</b>	<b>Observed variables</b>
Career Choice	CC	CC1, CC2, CC3, CC4, CC5, CC6
Trust and Communication	PITC	PITC1, PITC2, PITC3, PITC4, PITC5, PITC6, PITC7, PITC8, PITC9
Alienation	PIA	PIA1, PIA3, PIA4, PIA5
Risk Tolerance	PIR	PIR2, PIR3, PIR4
Social Comparison	PISC	PISC1, PISC2, PISC3, PISC4
Vocational Outcome Expectations	OE	OE1, OE2, OE3, OE4, OE5, OE6, OE7, OE8
Self-Efficacy	SE	SE1, SE2, SE3, SE4, SE5, SE6

*Source: Authors' testing results (2023).*

- *Analysis of measurement model of the low-order variable structural model*

To evaluate the reliability of the scale, the study used the composite reliability coefficient CR, the total variance extracted AVE, and the outer loading factor. The scale's reliability assessment table shows that all factor structures have good reliability when Cronbach's Alpha reliability coefficient and CR composite reliability coefficient met the requirements. The results suggested that all factor structures ensure convergence when the AVE indexes all reached 0.5 or higher.

**Table 4: The reliability test result**

	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
CC	0.926	0.942	0.731
OE	0.952	0.96	0.75
PIA	0.868	0.91	0.716
PIR	0.81	0.887	0.725
PISC	0.861	0.906	0.706
PITC	0.942	0.951	0.685
SE	0.936	0.949	0.757

Source: Authors' testing results (2023).

The method of evaluating discrimination using the Fornell and Larcker table will be guaranteed when the square root of the AVE index of a factor is greater than all correlation coefficients of that factor with other factors in the model. The results indicated that all factors in the model ensure discrimination when no correlation coefficient of any pair of factors was greater than 2 square root values AVE of that pair of factors.

**Table 5: Fornell and Larcker results**

	OE	PIA	PIR	PISC	PITC	SE
OE	<b>0.866</b>					
PIA	0.163	<b>0.846</b>				
PIR	0.336	0.398	<b>0.851</b>			
PISC	0.285	0.453	0.452	<b>0.840</b>		
PITC	0.477	0.169	0.486	0.286	<b>0.828</b>	
SE	0.349	0.136	0.253	0.189	0.289	<b>0.870</b>

Source: Authors' testing results (2023).

- *Analysis of measurement model of higher-order variable structural model*

To evaluate the model with the quadratic variable PI, the team used a table to compare the quality of observed variables based on outer weights.

**Table 6: Results of the subscale's impact on Peer Influence variables**

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
PIA -> PI	-0.070	-0.071	0.036	1.927	0.054
PIR -> PI	0.110	0.110	0.042	2.611	0.009
PISC -> PI	0.436	0.437	0.037	11.738	0.000
PITC -> PI	0.734	0.732	0.031	23.489	0.000

Source: Authors' testing results (2023).

If the outer loading coefficient is less than 0.5, that variable should be removed. The outer loadings coefficient of the PIA variable was 0.293 ( $< 0.5$ ), therefore, the observed variable had no statistical meaning.

The authors continued to assess multicollinearity in the measurement model using the VIF coefficient. The model did not violate the multicollinearity phenomenon ( $VIF < 5$ ) (Hair *et al.*, 2011) according to the results:

**Table 7: Multicollinearity results**

	VIF
PIR	1.520
PISC	1.265
PITC	1.319

*Source: Authors' testing results (2023).*

### 3.3. Structural Model

In PLS-SEM analysis, the explanatory power of the structural model is evaluated by the path coefficients and  $R^2$  coefficient of the dependent variable. The analysis results showed that the adjusted  $R^2$  value of the career choice model and the vocational outcome expectations model are 0.411 and 0.122 respectively. Therefore, it can be concluded that the influence of factors on Career Choice and Vocational Outcome Expectations had a weak endogenous structure. To evaluate the effectiveness of the impact of each independent variable on the dependent variable, the authors used the Effect Size F-squared coefficient. The results suggested the impact of the independent variables on the dependent variable was extremely small or small.

#### 3.3.1. Testing the significance of direct impact relationships in the model

The results suggested that all variables are statistically significant due to P-value  $< 0.05$ . The Original Sample path coefficient had a positive sign, indicating that the variables had a positive effect.

**Table 8: Results of the direct impact of the relationship**

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
OE → CC	0.487	0.488	0.019	25.839	0.000
PI → CC	0.201	0.202	0.016	12.465	0.000
SE → CC	0.074	0.074	0.016	4.679	0.000
SE → OE	0.349	0.350	0.019	18.748	0.000

*Source: Authors' testing results (2023).*

The impact coefficient of these variables on the dependent variable Career Choice in descending order was as follows: Vocational Outcome Expectations ( $\beta = 0.487$ ), Peer Influence ( $\beta = 0.201$ ), Self-efficacy ( $\beta = 0.074$ ). The degree of impact of the independent variable Self-efficacy on the intermediate variable Vocational Outcome Expectations result was  $\beta = 0.349$ .

3.3.2. Testing the significance of indirect impact relationships in the model

**Table 9: Results of the indirect impact of the relationship**

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
SE → OE → CC	0.170	0.171	0.012	14.424	0.000

Source: Authors’ testing results (2023).

There was a partially mediated relationship between self-efficacy and career choice due to the direct association of self-efficacy with career choice variable. With P-value < 0.05, the indirect relationship between self-efficacy, vocational outcome expectations, and career choice is significant. The standard impact coefficient of the relationship reached 0.170 with a standard deviation of 0.012. The result supported the indirect effect, suggesting vocational outcome expectations had an intermediate role in the impact relationship from self-efficacy to career choice.

3.4. One-way ANOVA results

The following is the table of assessment results:

**Table 10: One-way Anova results**

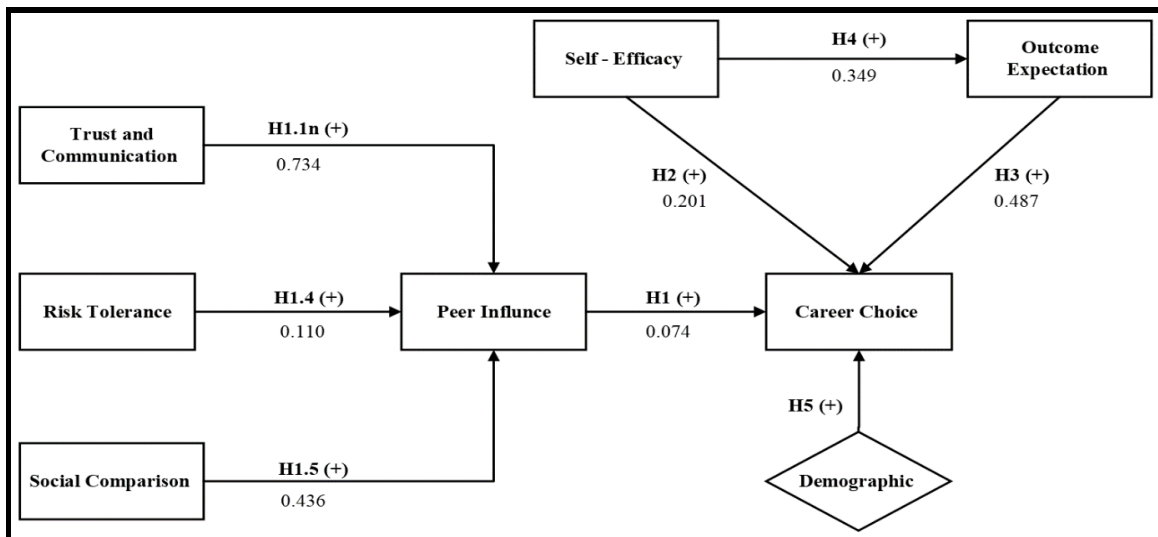
	Hypothesis	Sig. (Levene test)	Sig. (ANOVA test)	Sig. (Robust test)	Conclusion
Ha	The degree of influence of factors on the career decision of students varies among GNDR	0.013	0.011	0.052	There was no statistically significant difference in the degree to which factors influenced career choice among GNDR
Hb	The degree of influence of factors on the career decision of students varies among AY	0.010	0.004	0.189	There was no statistically significant difference in the degree to which factors influenced career choice among AY

Hc	The degree of influence of factors on the career decision of students varies among GPA	0.001	0.001	0.001	There were statistically significant differences in the degree to which factors influenced career choice among GPA
Hd	The degree of influence of factors on the career decision of students varies among LTN	0.000	0.000	0.000	There were statistically significant differences in the degree to which factors influenced career choice among LTN

Source: Authors' testing results (2023).

Through the results of hypothesis testing, the adjusted model is as shown in Figure 2:

**Figure 2: Hypotheses model after conducting analysis**



Source: Authors' testing results (2023).

**4. Discussion**

Corresponding to the proposed hypothesis, our findings support the main hypotheses H1, H2, H3, H4, meaning vocational outcome expectations, self-efficacy, and peer influence all have a direct positive influence on career choice. When comparing the impact of factors on career choice in decreasing order, vocational outcome expectations have the strongest impact on career choice, followed by self-efficacy, and the last is peer influence.

Kaur (2020) and Naz *et al.* (2014) indicated there is a significant relationship between career decisions and peer pressure, which correlates with our results. However, the finding represents a contradiction to prior study by Nguyen and Luong (2018) which proved students' career choices are not influenced by their peers. Peer influence may affect career choice due to the experience and success of their friends. It may cause others to see

them as role models, thereby encouraging others to pursue the same career, aligned with previous studies by Bosma *et al.* (2012), Dohse *et al.* (2012), Van Auken *et al.* (2006). This phenomenon can also be partly explained by Furnham's research, stating that friendship with conational, who have similar cultural backgrounds, provides social support to sojourning students.

Factors affecting Peer Influence comprise Trust, Communication, Alienation, Risk Tolerance, and Social Comparison. After estimating the model and comparing it to the research results by Armsden *et al.* (1987), and An *et al.* (2022), the research team noted that sub-scales Trust and Communication, Risk Tolerance, and Social Comparison are the only ones that have an impact on the variable Peer Influence. The relationship between social comparison and peer influence can be partly explained by Social Comparison theory, which holds that people often compare themselves to others to judge themselves.

Besides an opposing viewpoint from Lanero *et al.* (2016) that outcome expectations are not relevant to the choice of a business career of entrepreneurs, there are assertions that vocational outcome expectations are particularly relevant in predicting the career decision-making of Ali *et al.* (2005), Lent *et al.* (1994), and Morrow *et al.* (1996). Additionally, despite the limitation of empirical research on predictors of career outcome expectations (Fouad & Guillen, 2006), aspects of identity and social support have been found to influence the development of outcome expectations related to future careers (Gushue & Whitson, 2006). Lent *et al.* (1994) also agreed with the association of self-efficacy and career choice. Hirschi *et al.* (2013) revealed that the self-efficacy to choose a career motivates graduates to develop adaptability and related proactive behaviors for positive career development.

The findings revealed a moderate correlation in the relationship between self-efficacy and vocational outcome expectations. The current study is consistent with previous research by Lent *et al.* (1994), and Cunningham *et al.* (2005) which supports the notion that self-efficacy is an important predictor of vocational outcome expectations.

According to Bandura *et al.* (2001) and Ferry *et al.* (2000), an individual's environment, life circumstances, and academic achievement exert an influence on career choice. The research results show that the demographic variables including GPA and region of residence have statistically significant differences in the influence of factors on the career decisions of Vietnamese university and college students. Specifically, the group of students scoring from 3.60 - 4.00 and the Southeast region have a higher impact than other groups. Research by Leong *et al.* (1995) and Gim (1992) have reported that students' surroundings, society, family, *etc.* influenced career choice significantly. Depending on the culture, a person's profession may or may not be accepted, which can affect their decision. The study of Siregar (2018) also shows that the impact of GPA on career opportunities for accounting students in Medan, Indonesia is significantly different. For gender, there were some early studies conducted by Ahmad *et al.* (2014) and Sugahara *et al.* (2009) in Malaysia and Japan stating that gender does not affect students' career choices, which correlates with our results.

## 5. Conclusion and policy implications

### 5.1. Conclusion

As discussed above, the findings of the research contribute to prior knowledge and comprehension of career decision-making. First, the study provides evidence about how perception variables and peer variables affect vocational choices. All the proposed hypotheses are supported under the data processing. The influence of friends, vocational outcomes expectations, and self-efficacy on Vietnamese students' career choices are proved through the result of the PLS-SEM structural model test. Considering the Peer Influence factor, the results prove the relationship between peer influence and career choice, despite contradicting the previous study of Kazi and Akhlaq (2017), the research team has assumed the reason based on the role model and the similar cultural backgrounds.

Second, the study examines the formative variables of Peer Influence on Vietnamese university students. The research team has incorporated the Peer Influence factor, which is not included in the SCCT model, to expand the research questions. Thus, the result indicates that friends have huge influence on college student's career intentions, which suit with the study of Zhu *et al.* (2019). In Vietnam, when entering the phrase "Peer Influence", nearly every Google results come up with "Peer Pressure". This makes sense since the natives frequently center only on the bad qualities of peers, hence, the phrase 'Peer Influence' is not well defined. Due to the formative measurement model, the observed variables are assumed to create the latent variable through a linear association, and no correlation is required between them. They represent separate components of the latent variable, which is presented in the EFA results, thus the observed variables cannot exchange roles. The authors noted the Peer Trust and Peer Communication variables in the previous study of Armsden *et al.* (1987) are combined into one factor and the Peer Alienation variable is rejected from the model.

Third, by substituting Contextual Influences with Career Choice and Background Contextual Influences/ Affordances with Peer Influence, the study concretizes the SCCT model. Accordingly, new hypotheses have been proposed and expanded aspects in previous studies based on the model. With the understanding of career decision-making, the research team attempted to include the Peer Influence factor. The proposed research question has been expanded upon the current theoretical foundation through the examination of the Peer variable as Contextual factors influencing Career Choice. Study reveals that there is a positive correlation between Peer Influence and the career path to take.

### 5.2. Implications

The government can use the insights from the research to tailor educational strategies that focus on strengthening vocational outcome expectations, self-efficacy, and peer influence, which present a direct positive influence on career choice to involve curriculum adjustments, career counseling programs, and workshops to empower students in making informed career decisions. Recognizing the influence of demographic variables like GPA and LTN on career decisions, the government can implement necessary educational support and policies to mitigate regional disparities.

The research can serve as a reference for educators who directly influence students on their careers. Given the proven influence of vocational outcome expectations, self-efficacy, and peer influence on career choices, universities should prioritize and enhance career counseling services. This could involve providing personalized guidance, workshops, and resources to help students navigate these factors effectively.

Given that the research focused on students as its subjects, businesses can leverage this data to assess and identify the characteristics that students may desire when choosing employment. Consequently, when recruiting, businesses can specify job requirements or job offers based on the factors presented by the research group. This also helps businesses improve the quality of recruitment and the quality of their employees, mitigating frequent job turnover, which affects work progress and the company's reputation.

Recently, the employment of college students has been growing, particularly the sustainable development of individual's occupations. As representing the primary reserve resources of the future labor market, the professional growth and contributions college students to society cannot be disregarded. Hence, learners should be able to make career decisions and recognize their values in doing this process.

The research is particularly appropriate for freshmen to seniors to refer to accurate research and choose their careers. Acknowledging the influence of background contextual factors, students can assess how their context aligns with their career choices. Since all the factors our group utilized in the study, particularly Peer Influence, are related to students, future researchers can rely on our study to identify and assess the factors that can directly influence career choice.

### **5.3. Limitations and further research**

This study has several limitations. First, the sample size was small compared to the total number of university and college students in Vietnam. The study group solely looks at the possibility that influencing factors could affect a college's student career choice; thus, we only examine at the perceived value of entrepreneurship as a potential mechanism behind the association between factors and career intentions. Second, data collection was limited to a relatively short three-month period, from August to October 2023. Third, the study did not examine regional differences in the influence of peers and one's thoughts on career choice in detail. This may limit our understanding of the factors influencing the vocational choices of Vietnamese students in different regions.

Future research should address these impediments by surveying a more diverse sample of students. Since this is a single study, our results are inconclusive. To provide a more complete picture of the factors impacting professional choice, future studies could employ longitudinal data and multiple techniques of data collection such as in-depth interviews to gain deeper insights into the career decision-making process. In addition, future research could explore the regional differences in peer influence and cognitive influence on career decisions. This would facilitate a better understanding of the regional variations in these factors throughout Vietnam.

## References

- Ahmad, Z., Ismail, H. and Anantharaman, R.N. (2014). "To be or not to be: an investigation of accounting students' career intentions". *Education + Training*, 57(3), 360-376.
- Ahmed, K., Ahmad, N., & Sharif, N. (2017). "Factors Influencing Students' Career Choices: Empirical Evidence from Business Students". *Journal of Southeast Asian Research*, 3.
- Ali, S., McWhirter, E., & Chronister, K. (2005). "Self-Efficacy and Vocational Outcome Expectations for Adolescents of Lower Socioeconomic Status: A Pilot Study". *Journal of Career Assessment*, 40-58.
- An, T. P., Chi, T. T., Hà, N. T., Anh, N. T., & Mạnh, Đ. H. (2022). "The influence of peer pressure on students' decision to choose a university" [in Vietnamese]. *Economy and Forecast Review*, 74-78.
- Armsden, G.C. & Greenberg, M.T. (1987). "The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence". *J Youth Adolescence*, 16(5), 427-454.
- Arthur, M. B., & Rousseau, D. M. (1996). "Career lexicon for the 21st Century". *The Academy of Management Executive*, 28-39.
- Bandura, A. (1986). "Social foundations of thought and action: A social cognitive theory". Englewood Cliffs: Prentice Hall.
- Bandura, A. (2001). "Social cognitive theory: An agentic perspective". *Annual Review of Psychology*, 52, 1-26.
- Bandura, A. (2012). "On the Functional Properties of Perceived Self-Efficacy Revisited". *Journal of Management*, 9-11.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). "Self-efficacy beliefs as shapers of children's aspirations and career trajectories". *Child development*, 187-206.
- Betz, N. E., & Vuyten, K. K. (1997). "Efficacy and outcome expectation influence career exploration". *The Career Development Quarterly*, 46(2): 179-189.
- Bhayani, A. (2015). "Social and peer influences in college choice". *International Conference on Economics and Business Market Management* (pp. 1-20). Trieste, Italy: World Academy of Science, Engineering and Technology.
- Bosma, N. H. (2012). "Entrepreneurship and role models". *Journal of Economic Psychology*, 33(2), 410-424.
- Brown, D. (2002). "The role of work and cultural values in occupational choice, satisfaction, and success: A theoretical statement". *Journal of Counseling and Development*, 48-56.

- Bukowski W. M., Noll R. B., Vannatta K., Koontz K., Kalinyak K., Davies W. H. (1996). "Peer Relationships and Emotional Well-Being of Youngsters with Sickle Cell Diseases". Society for Research in Child Development.
- Cunningham, G. B., Bruening, J., Sartore, M. L., Sagas, M., & Fink, J. S. (2005). "The Application of Social Cognitive Career Theory to Sport and Leisure Career Choices". *Journal of Career Development*, 32(2), 122-138.
- Cheung, R., & Arnold, J. (2014). "The Impact of Career Exploration on Career Development Among Hong Kong Chinese University Students". *Journal of College Student Development*, 732–748.
- Dohse, D., & Walter, S. G. (2012). "Knowledge context and entrepreneurial intentions among students". *Small Business Economics*, 39(4), 877–895.
- Eckerman, C. O., & Didow, S. W. (1988). "Lessons drawn from observing young peers together". *Acta Paediatrica Scandinavica*, 55-70.
- Eric, D., Deemer, Laura, R., Marks, Karen, A., & Miller. (2017). "Peer Science Self-Efficacy: A Proximal Contextual Support for College Students' Science Career Intentions". *Journal of Career Assessment*.
- Ferry, T. R., Fouad, N., & Smith, P. L. (2000). "The Role of Family Context in a Social Cognitive Model for Career-Related Choice Behavior: A Math and Science Perspective". *Journal of Vocational Behavior*, 348-364.
- Fouad, N. A., & Guillen, A. (2006). "Outcome Expectations: Looking to the Past and Potential Future". *Journal of Career Assessment*, 130 - 142.
- Furnham, A. (1997). "The experience of being an overseas student". *Overseas Students in Higher Education*. London: Routledge, 13-29.
- Gardner, M., & Steinberg, L. (2005). "Peer Influence on Risk Taking, Risk Preference, and Risky Decision Making in Adolescence and Adulthood: An Experimental Study". *Developmental Psychology*, 41(4), 625–635.
- Geçikli, F. (2002). "Bireysel Kariyer Planlama ve Geliştirmede İmajın Rolü" [The role of image in individual career planning and development]. *Istanbul University Faculty of Communication Journal*, 337-354.
- General Statistics Office of Vietnam (2023). "Statistical Yearbook of Vietnam 2023". Hanoi.
- Gushue, G. V., & Whitson, M. L. (2006). "The Relationship Among Support, Ethnic Identity, Career Decision Self-Efficacy, and Outcome Expectations in African American High School Students: Applying Social Cognitive Career Theory.". *Journal of Career Development*, 112–124.
- Gim, R. H. (1992). "Cross cultural comparison of factors that influence career choice. In F. T. L. Leong (Ed.)". *Career development and vocational behavior of racial and ethnic minorities*, 213.

- Han, L., & Li, T. (2009). "The gender difference of peer influence in higher education". *Economics of Education Review*, 129-134.
- Hartung, P. J. (1995). "Assessing Career Certainty and Choice Status". ERIC Digests.
- Hashim, H. M., & Embong, A. M. (2015). "Parental and Peer Influences upon Accounting as a Subject and Accountancy as a Career". *Journal of Economics, Business and Management*, 3(2), 252-256.
- Hirschi, A., Lee, B., Porfeli, E. J., & Vondracek, F. W. (2013). "Proactive motivation and engagement in career behaviors: Investigating direct, mediated, and moderated effects". *Journal of Vocational Behavior*, 83, 31-40.
- Howard, K. A. S.; Ferrari, L.; Nota, L.; Solberg, V. S. H.; Soresi, S. (2009). "The relation of cultural context and social relationships to career development in middle school". *Journal of Vocational Behavior*, 100–108.
- Jo, H., Ra, Y. A., Lee, J., & Kim, W. H. (2016). "Impact of dysfunctional career thoughts on career decision self-efficacy and vocational identity". *The Career Development Quarterly*, 64(4): 333-344.
- Jones, W. A., & Larke Jr., A. (2005). "Enhancing the Quality of Life for Hispanic Individuals Through Career Preparation". *Journal of Hispanic Higher Education*, 5-18.
- Kaur, A. (2020). "Peer Pressure as Predictor of Career Decision making among adolescents". *International Journal of Research and Analytical Reviews*, 7(1), 72-77.
- Kazi, A. S., & Akhlaq, A. (2017). "Factors Affecting Students' Career Choice". *Journal of Research and Reflections in Education*, 187-196.
- Kim, S. H., & Kim, M. J. (2016). "The Effect of Career Preparation Program on Self-esteem, Self-efficacy related career decision-making and Career Development Readiness in University Students". *Journal of Digital Convergence*, 14(4), 407-418.
- Krumboltz, J. D. (1996). "A learning theory of career counseling". In M. L. Savickas, & W. B. Walsh, *Handbook of career counseling theory and practice* (pp. 55–80). Davies-Black Publishing.
- Lanero, A., Vázquez, J. L., & Aza, C. L. (2016). "Social cognitive determinants of entrepreneurial career choice in university students". *International Small Business Journal*, 34(8), 1053-1075.
- Laursen, B., & Veenstra, R. (2021). "Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research.". *Journal of Research on Adolescence*, 31(4), 889-907.
- Lent, R. W., Hackett, G., & Brown, S. D. (1994). "Toward a Unifying Social Cognitive Theory of Career and Academic Interest, Choice, and Performance". *Journal of Vocational Behavior*, 45(1), 79-122.

- Leong, F. T., & Gim-Chung, R. H. (1995). "Career assessment and intervention with Asian Americans". *Career development and vocational behaviour of racial and ethnic minorities*, 193-226.
- McCoy, S., & Natsuaki, M. (2018). "For better or for worse: Social influences on risk-taking". *The Journal of Social Psychology*, 158:2, 139-151.
- Morrow, S. L. (1996). "The application of a sociocognitive framework to the career development of lesbian women and gay men". *Journal of Vocational Behavior*, 136-148.
- Mosqueda, C. B., Garcia, L. L., & Decano, R. S. (2022). "Peer pressure and career decision making of technical livelihood students under office strands". *EPR international journal of environmental, economics, commerce and educational management*.
- Naz, A., Saeed, G., Khan, W., Khan, N., Sheikh, I., & Khan, N. (2014). "Peer and Friends and Career Decision Making: A Critical Analysis". *Middle-East Journal of Scientific Research*, 22(8), 1193-1197.
- Nurosis, M. (1994). "Statistical Data Analysis". Chicago: SPSS Inc.
- Nguyen, T. K. (2008). "Evaluating factors affecting the career orientation of high school students in Nghe An". [in Vietnamese], *Vietnam Journal of Education*, 27-31.
- Nguyen, T., & Duong, H. T. (2022). "An assessment of factors influencing career choices among fresh graduates: a survey of students majoring in business and economics". *Journal of International Economics and Management*, 79-80.
- Ogutu, J., Odera, P., & Maragia, S. (2017). "The Effectiveness of Peer Pressure on Student' Career Decision Making in Secondary School in Kenya". *International Journal of Humanities and Social Studies*, 16-32.
- Osipow, S. (1983). "Theories of career development. A comparison of the theories". Englewood Cliffs: Prentice-Hall, Inc.
- Pajares, F. (1996). "Self-efficacy beliefs in academic settings.". *Review of Educational Research*, 543-578.
- Parson, T. (1963). "On the Concept of Influence". *Public Opinion Quarterly* 27, 37-62.
- Rubin, K. H. (2011). "Handbook of Peer Interactions, Relationships, and Groups, First Edition". In K. H. Rubin, *Handbook of Peer Interactions, Relationships, and Groups, First Edition* (p. 8).
- Salami, S. (2006). "Influence of culture, family and individual difference on choice of gender-dominated". *Journal of Gender and Behaviour*, 814-833.
- Schwarzer, R., & Jerusalem, M. (1995). "Measures in Health Psychology: A User's Portfolio. Causal and Control Beliefs". *Causal and control beliefs*, 35-37.

- Schwarzer, R., & Luszczynska, A. (2016). "Self-efficacy and outcome expectancies.". In M. J. Y. Benyamini, Psychological assessment- Science and Practice. Assessment in Health Psychology (pp. pp. 31-44). Boston, MA: US: Hogrefe Publishing.
- Siraj, R., Najam, B., & Ghazal, S. (2021). "Sensation Seeking, Peer Influence, and Risk-Taking Behavior in Adolescents". Education Research International, 2021, 1-8.
- Siregar, R. (2018). "The Influence of Grade Point Average (GPA) and Career". Palembang: IOSR Journal of Economics and Finance.
- Siti, Nor, Teo, Yeong, C., & Amira, B. (2023). "Self Efficacy and Career Choice Consideration among Undergraduate Students in A Private University in Malaysia". International Journal of Academic Research in Progressive Education and Development.
- Springer, S. H., Larson, L. M., Tilley, B. P., Gasser, C. E., & Quinn, A. C. (2001). "The Development of an Educational and Career Outcome Expectancy Scale". San Francisco: ERIC.
- Steinberg, L. L. (1994). "Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families.". Child Development, 65(3), 754–770.
- Sue, D. W., & Sue, D. (1990). "Counseling the Culturally Different". New York: Wiley.
- Sugahara, S.K.H. and Boland, G. (2009). "The factors influencing accounting school students' career intention to become a certified public accountant in Japan". Asian Review of Accounting, 17(1), 5-22.
- Super, D. (1957). "The psychology of careers". New York: Harper and Row Publishers.
- Tang, L. C., & Seng, C. (2016). "Factors influence students' choice of accounting major in Cambodian universities". Asian Review of Accounting, 231-251.
- Todato, P. (1969). "A model of labor migration and urban unemployment in less developed countries". The American Economic Review, 138-148.
- Van Auken, H., Fry, F. L. and Stephens, P. (2006). "The influence of role models on entrepreneurial intentions". Journal of Developmental Entrepreneurship, 11(2), 157-167.
- Vroom, V. (1964). "Work and motivation". New York: Wiley.
- Wang, D., Zhu, L., Maguire, P., Liu, Y., Pang, K., Li, Z., & Hu, Y. (2016). "The Influence of Social Comparison and Peer Group Size on Risky Decision-Making". Sec. Cognitive Science.

- Yuyi, L. (2022). "A Survey of the Causes and Effects of Peer Pressure in College Students". *Advances in Social Science, Education and Humanities Research*, 670, 428-432.
- Zammitti, A., Moreno-Morilla, C., Romero-Rodríguez, S., Magnano, P., & Marcionetti, J. (2023). "Relationships between Self-Efficacy, Job Instability, Decent Work, and Life Satisfaction in A Sample of Italian, Swiss, and Spanish Students". *European Journal of Investigation in Health, Psychology and Education*, 13(2), 306-316.
- Zhu, F., Fan, S. X., & Zhao, L. (2019). "Having Entrepreneurial Friends and Following Them? The Role of Friend's Displayed Emotions of Student's Career Choice Intentions". *Journal of Enterprising Culture*, 445-470.
- Zimmerman, D. (2003). "Peer effects in academic outcomes: Evidence from a natural experiments". *The Review of Economics and Statistics*, 9-23.

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