
ASSESS THE ROLE OF CAREER EXPLORATION IN EXPANDING SOCIAL COGNITIVE CAREER THEORY

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Abstract

The issue of career choice plays an important role in students' future. Researchers have conducted many studies to explain the career choice process. However, choosing the right career is still very difficult. This article examines the role of career exploration and determines how it works throughout social cognitive career theory. Data were collected using a questionnaire designed on Google Forms in June 2022. In addition, 340 Vietnamese students participated in this study. The research hypotheses were tested through SmartPLS 3. The results have once again confirmed the role of social cognitive career theory in explaining the career selection process. Another interesting finding was that environment exploration had a more substantial effect on the relationship between self-efficacy and career choice than self-exploration. Finally, the article further clarified the role of career exploration and helped universities devise tailored study programs to make the career choice process more efficient.

Key Words

Career choice; self-efficacy; outcome expectation; career exploration.

INTRODUCTION

Throughout life, an individual has to make many decisions that sometimes dramatically affect their entire life. Career choice plays a core role in forming related factors, such as career orientation or career development (Gati et al., 2019). Many studies have confirmed the important role of career choice (Alinea, 2022) in determining job satisfaction or enjoyment (Lamanauskas and Augienė, 2018), and Maree (2018) argues that choosing the right career helps students adapt more quickly to the working environment.

Choosing a satisfying career is always tricky. Regarding personal causes, individuals are less conscious of proactive career planning and often expect help (Preston and Biddle, 1994), or information disturbances cause hesitation (Udayar et al., 2018). Objective causes often include the disappearance of occupations (Hite and McDonald, 2020). In another aspect, an imbalance occurs due to the lack of highly qualified human resources, while unskilled labour is gradually replaced by machinery (Heinrich and Witko, 2021). As a result, many individuals experience job dissatisfaction (Kulcsár et al., 2020) because they cannot adapt to the environment or obtain low efficiency; consequently, regret and other negative emotions emerge (Li et al., 2015).

This article focuses on students because they are still at the early stage of discovering their abilities, values, and interests (Gati and Saka, 2001). In addition, despite having experience in part-time or freelance jobs, students were still unsatisfied with their choice. Therefore, to answer how to choose a career effectively, the process of forming professional behaviour needs to be considered and elaborated on in a general way. Therefore, this study focuses on examining the role of individuals and how they interact with the environment through career exploration to overcome the lack of information (Gati and Kulcsár, 2021) about the environment and the individual self. As stated by Betz and Vuyten (1997), Shea et al. (2007), and Chen et al. (2021), this research examines the role of career exploration and determines how it works throughout the career choice process.

LITERATURE REVIEW

Career choice

A career is defined as “the progress and development of the person in working life” (Kirpik and Yilmaz, 2020) or “the sequence of work experiences that evolves over the individual’s life course” (Van der Heijden and De Vos, 2015). Career choice is the process by which individuals “choose an occupation and the educational training involved, then a job and then whether to stay at a job or switch to another, what formal and informal advanced training to take” (Kulcsár et al., 2020). In addition, Manjooran et al. (2021) defined career choice as “the selection of a type of profession”.

Social cognitive career theory (SCCT)

Since it was developed by Lent et al. in 1994 based on Bandura's social cognitive theory (1986), SCCT has argued that career choice intentions and behaviours are governed by self-efficacy and outcome expectations. Due to its comprehensiveness, SCCT and related models are now widely used in academia, especially in career choice (Owusu et al., 2018; Tetteh et al., 2021; Hatane et al., 2020).

The definition of Outcome expectation was stated by Zhou et al. (2014): "one's judgement about the potential outcomes of a given behaviour". Tien et al. (2009) suggest that outcome expectations positively predict career choice behaviour. Kuthea Nguti et al. (2021) tested the role of outcome expectations on efficiency and individual satisfaction with the chosen profession. On the other hand, the statement of Lindley (2005) asserts that outcome expectations explain and motivate behavioural choice. Finally, Komarraju (2014) also supports the positive influence of outcome expectations on career choice:

H1: Outcome expectations positively influence career choice.

Career exploration is how individuals improve their knowledge about careers and related information (Heymann et al., 2022). Chan (2018) defines career exploration as collecting information about selectable occupations to make more effective decisions. Chen et al. (2021) believe that career exploration is the beginning of sustainable career development. Self-exploration helps individuals increase their understanding of their abilities, personalities or interests, thereby eliminating careers they consider unsuitable. On the other hand, environment exploration helps gather more objective information from which individuals can assess whether the environment is suitable. Specifically, self-exploration allows choosing a career that matches the individual's abilities. Exploring the environment enhances adaptability to a new job. In addition, evidence suggests a strong link between effective career exploration and career choice (Presbitero and Teng-Calleja, 2022; Railey and Spector, 2022). Based on the above argument, the following hypothesis is proposed:

H2: Self-exploration positively influences career choice.

H3: Environmental exploration positively influences career choice.

Self-efficacy is a subjective assessment of an individual's ability to perform a behaviour (Zulkosky, 2009). On the other hand, Landino and Owen (1988) claim individuals' confidence in using their abilities to perform or control behaviour (Çalli and Kartal, 2021). However, considering the relationship between self-efficacy and career exploration, Chan (2018) argues that self-efficacy will increase individual engagement in the career exploration process. On the other hand, high self-efficacy incentivises individuals to participate in career exploration as a form of preparation for making career decisions (Tsai et al., 2017).

In particular, the stronger the belief in self-efficacy, the more individuals want to learn about themselves to verify their beliefs. In addition, individuals will also promote environment exploration to ensure more effective career choice behaviour. Self-efficacy helps guide the process of better career exploration. At the same time, self-efficacy makes individuals more proactive when reducing mental or cognitive difficulties during career exploration (Storme and Celik, 2018; Glessner et al., 2017). This positive relationship is also demonstrated in many studies, such as Gushue et al. (2006) and Penn and Lent (2019). From the above arguments, this study proposes the following hypothesis:

H4: Self-efficacy positively influences self-exploration.

H5: Self-efficacy positively influences environmental exploration.

According to SCCT, self-efficacy strongly influences and explains outcome expectations (Lent et al., 1994). In other words, self-efficacy indicates outcome expectations (Baglama and Uzunboylu, 2017; Brown and Cinamon, 2016). Specifically, Alexander et al. (2011) explain that a firmer belief in an ability to perform a behaviour will lead to "more hopeful of benefiting in a meaningful way from the positive outcomes". According to Jiang and Zhang (2012), self-efficacy for the performance of the behaviour enhances the individual's positivity in assessing the expected outcome. This view of this positive relationship, as well as its role in practical career choice, has also been demonstrated by Nguti et al. (2021), DeFreitas (2012), Sawitri (2015), and Dickinson et al. (2017). From the above arguments, the following hypothesis is established:

H6: Self-efficacy positively influences outcome expectations.

RESULTS

Career exploration adopts the scale of eleven observed variables from the study of Stumpf et al. (1983). Two variables of SCCT are measured based on eight observed variables from the scale of Betz et al. (1996) for self-efficacy and the ten observed variables for outcome expectation (Metheny and Mcwhirter, 2013). Finally, this research uses a scale including six observed variables to measure career choice in the study of Mu (1998). The data were collected by questionnaire via Google Forms with 340 valid samples. The proportion of women accounted for 70.9%, men accounted for 29.1%, and most were in the "economics - administration" category (69.7%). Data were analysed using SPSS version 20 and SmartPLS 3.0 software to verify the research results.

Table 1: Descriptive statistics

Classification	Categories	Frequency	Percentage
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Gender	Male	99	29.1
	Female	241	70.9
Major	Economics - Administration	237	69.7
	Social Sciences - Humanities	74	21.8
	Natural Science-Engineering	29	8.5

Measurement model assessment

Data were analysed by measurement model assessment. According to Hair et al. (2017), scale reliability requires composite reliability (CR) and Cronbach’s α (CA) greater than 0.7. Table 2 shows that the minimum CA value is 0.854, and the minimum CR value is 0.895. All scales have outer loading coefficients all over 0.7, and an AVE index greater than 0.5 indicates that the observed variables of the scale can explain more than 50% of the variance of the concept it represents (Henseler et al., 2015). It is concluded that the scale achieves the required reliability and convergence and does not experience multicollinearity ($VIF < 5$) (Hair et al., 2014).

Table 2: Convergent validity and multicollinearity test

	CA	CR	AVE	Outer Loading		VIF	
				Min	Max	Min	Max
Career Choice	0.898	0.922	0.662	0.782	0.814	1.903	2.491
Environment exploration	0.888	0.915	0.643	0.736	0.870	1.711	2.885
Outcome expectations	0.913	0.928	0.562	0.703	0.814	1.802	2.491
Self-exploration	0.854	0.895	0.631	0.758	0.831	1.614	2.046
Self-efficacy	0.899	0.919	0.587	0.727	0.797	1.761	2.156

Table 3 presents the discriminant validity, which represents the extent to which the factors are distinct and uncorrelated. This value was evaluated by comparing the square root of the AVE of each construct and its intercorrelation with other constructs (Fornell and Larcker, 1981). Thus, it can be seen that this coefficient (bold numbers) is greater than other intercorrelations satisfying the Fornell–Larcker criteria (Henseler et al., 2015).

Table 3: Discriminant validity

	Career choice	Environment exploration	Outcome expectations	Self-exploration	Self-efficacy
Career choice	0.814				
Environment exploration	0.656	0.802			
Outcome expectations	0.746	0.631	0.750		
Self-exploration	0.603	0.655	0.594	0.795	
Self-efficacy	0.688	0.645	0.715	0.625	0.766

Structural model assessment

Hair et al. (2017) prioritise the evaluation of the structural model to test through the coefficient of determination (R^2). According to the standards of Hair et al. (2011), the analysis results (Table 4) show that the concepts in the model have the smallest R^2 value of 0.39, and all values reach the average predictive level.

Table 4: Results of determination R^2 , predictive capacity Q^2

	R Square	Q Square
Career Choice	0.624	0.406
Environment exploration	0.416	0.263
Outcome expectations	0.511	0.282
Self-exploration	0.390	0.241

The study carried out a bootstrapping test (N=5000) to examine the relationships between the factors in the model. In Table 5, all hypotheses have statistical significance (P value < 0.05). Next, the path coefficients (β) are all positive, proving that Hypotheses H1, H2, H3, H4, H5, and H6 are supported (Figure 1).

Table 5: Hypothesis assessment

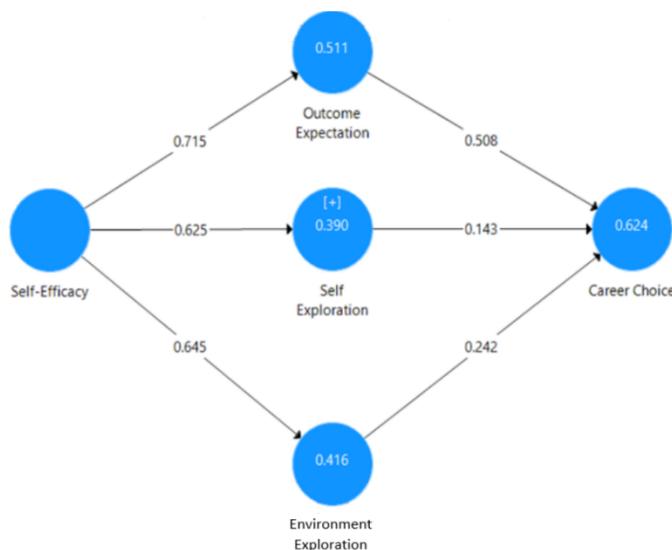
Hypothesis	β	Standard Deviation	t value	p value
Environment exploration → Career Choice	0.242	0.063	3.871	0.000

Outcome expectations→Career Choice	0.508	0.063	8.064	0.000
Self-exploration→Career Choice	0.143	0.063	2.286	0.022
Self-efficacy→Environment exploration	0.645	0.041	15.601	0.000
Self-efficacy→Outcome expectations	0.715	0.037	19.250	0.000
Self-efficacy→Environment exploration	0.625	0.048	12.928	0.000

DISCUSSION

This study examined the relationship among the SCCT backgrounds (self-efficacy, outcome expectations), career exploration, and career choices of Vietnamese students. The results showed that all proposed hypotheses were supported. First, self-efficacy has a positive effect on outcome expectation ($\beta=0.715$), self-exploration ($\beta=0.625$), and environment exploration ($\beta=0.645$). This result suggests that self-efficacy is the basis for building outcome expectations. In detail, individuals own their capacities, which leads to different prospects about the behaviour results. In addition, this shows the role of personal capacity and the correct perception of individuals about the skills they possess to make appropriate assessments. In addition, similar to the result of Rogers and Creed (2011), career exploration is positively affected by self-efficacy, which means that the higher the self-efficacy, the more efficient the exploration. Based on self-efficacy, students can be more confident in discovering their skills and comparing themselves to the explored information. Finally, after understanding self-efficacy, they can choose a suitable career environment.

Figure 1: Model analysis



Next, the impact of career exploration on career choice includes self-exploration ($\beta=0.143$) and environment exploration ($\beta=0.242$) (Table 4). This result shows that students must explore themselves to understand their interests, strengths or limitations. When combined with environment exploration, individuals create a strong connection between themselves and the professional environment, which is the basis for making effective career choices, thereby adapting their careers and developing better. Finally, the factor that has the most decisive influence on career choice is outcome expectation ($\beta=0.508$). It is inferred that outcome expectations will change career choice behaviour based on individuals' evaluations of what they will receive in return if they choose that career. In other words, Lent et al. (1994) declared that outcome expectations describe what individuals receive after performing the expected behaviour.

CONCLUSIONS

This study contributes to the theoretical system in two ways. First, applying SCCT explains the formation of career choice more comprehensively. The combination of SCCT and career exploration helps to strengthen the relationship between the individual and the environment more effectively. The second contribution, the independent testing of the role of self-exploration and environmental exploration, is a prominent advantage compared with previous studies, such as Chen et al. (2021) or Heymann et al. (2022). Most previous research only referred to career exploration as a simple information search. Meanwhile, exploration is essential for career orientation and goals (Presbitero and Teng-Calleja, 2022). Therefore, concretising the role of each form of career exploration helps to more comprehensively reflect the nature of career behaviour.

The outcome expectation of a person with the essential mediator role strengthens the relationship between self-efficacy and career choice. For example, if an individual has a high career outcome expectation, self-efficacy will cause them to develop a tendency to choose that career (Lent and Brown, 2013). Therefore, universities need to be equipped with practical knowledge about jobs to make it easier for students to choose a career that can achieve their expectations.

The results also show that environment exploration has a more decisive role than self-exploration in shaping career choice trends. Surprisingly, this result is in contrast to the study of Gross-Spector and Cinamon (2018). Vietnamese students belong to a collective culture, so self-discovery receives little attention. Giving students more opportunities to explore the professional environment through business semesters, seminars, or the faculty's experience will help them become more confident in their career choices.

This study has some limitations. First, the study did not consider the interference between other occupational theories but only built a research model based on the SCCT context. This limit may cause partiality in drawing

relevant or misleading conclusions in different contexts. Second, the model focuses on building factors positively related to career choice, but it is also necessary to consider answering the question, "How can students overcome barriers in career choice?"

Regarding research for the future, in addition to looking at the process or ways of choosing a career, examining the change or comparing the difference in career choice behaviour among many subjects, such as social roles or age, should also be considered (student–student-worker). Next, differences between national or regional cultures can also be an idea when researching career choices or related fields. Finally, longitudinal research can be applied to observe the overall change in career choice throughout career development. On the other hand, future studies also need to examine the mechanism of barriers in the career choice process to obtain a more comprehensive view of career choice.

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