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Chapter 18

Person-Environment Fit: Implications for Vocational Students' Career in the Era of Crisis



Monica Wai Chun Choy and Alexander Seeshing Yeung

Abstract Person-environment fit theory (PE-fit) theory emphasises a match between a person's attribute (P) and the workplace environment (E). However, a differential predictions hypothesis emphasises the different contributions of personal and environmental inputs to outcomes. Higher education students in Hong Kong ($N = 380$) completed a survey on their personal interest (P) and the contemporary threatening environment (E) (fear of pandemic, social unrest, international disputes) related to tourism-related outcomes (intent to join tourism, lifelong commitment, leadership, and anxiety) during COVID-19. Structural equation modelling found that P strongly predicted Intent, Lifelong, and Leadership, whereas E strongly predicted Anxiety, supporting the differential predictions hypothesis. PE-fit ($P \times$ positive E) predicted Intent in addition to the prediction of P, supporting the PE-fit hypothesis. The findings imply the different merits of PE-fit and differential predictions hypotheses for various vocational outcomes, and the importance of reinforcing students' interest to launch their career in challenging times.

Keywords PE-fit · Differential predictions · Vocational education · Hospitality and tourism · Pandemic · Career choice · Hong Kong

18.1 Introduction

Higher education students' choice of vocational courses and their future career may be seriously impacted by unexpected and threatening events such as the recent COVID-19 pandemic, or social unrests, or international disputes and warfare. Higher education institutions, as a consequence, may need to respond to a mismatch between

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students' personal interest and the unfavourable vocational environment by adjusting their goals and strategies (Agasisti & Soncin, 2021; Eringfeld, 2021). Among various vocational disciplines, tourism and hospitality (labelled as tourism hereafter) is one of the most vulnerable. Higher education program providers in tourism have experienced immediate losses in enrolment in tourism courses (Edelheim, 2020). For students who are already enrolled in a tourism program, however, it is more about their career choice (e.g., intent to join the industry; commitment to the career), performance (e.g., leadership) and personal wellbeing issues (e.g., anxiety). An evidence-based understanding of how personal interest (P) in tourism and the vocational environment (E) may contribute to the new blood's choice, performance, and wellbeing is essential for higher education institutions to make informed decisions to maintain a healthy enrolment and a continual supply of employees in the tourism industry.

In the prediction of career choices and vocational outcomes, PE-fit theory (Lewin, 1935, 1951) has provided a strong evidence base showing that a match between one's personal attribute (P) and one's workplace environment (E) contributes to one's productivity, motivation, and personal wellbeing (also see Bowman & Denson, 2014; Rothmann et al., 2019; Suleman et al., 2018). However, another perspective is that P and E have different contributions to different outcome variables—a differential predictions hypothesis (e.g., Choy & Yeung, 2022; Parker et al., 2018; Rocconi et al., 2020). That is, P and E contributes distinctively to various vocational outcomes. Whether PE-fit adds to the discrete predictions of P and E separately has important theoretical and practical implications. During a time when E is in turmoil (such as the triple-whammy crisis in Hong Kong), one may speculate that whereas P pushes a tourism student to join the tourism industry, the threatening E pulls the student away from it. Under normal circumstances when E is positive and non-threatening, one may envisage that the joint contribution of P and E will further boost a positive vocational outcome (as would be hypothesised on the basis of PE-fit). The present study analysed survey data from students in a higher education institution in Hong Kong ($N = 380$). They were asked about their personal interest (P) and the contemporary threatening environment (E) (fear of pandemic, social unrest, international disputes) related to tourism, and a range of tourism-related vocational and career outcomes (e.g., intent to join tourism, lifelong commitment, leadership, and anxiety) during COVID-19. Using structural equation modelling, we tested whether P and E distinctly predict vocational outcomes (a differential predictions hypothesis), or P and E combined (i.e., an interaction of positive P \times positive E) would add to the prediction of the vocational outcomes (a PE-fit hypothesis).

18.2 Higher Education VPET Providers

The Hong Kong Government defines VPET as “vocational and professional education and training covering programs up to degree level with a high percentage of curriculum consisting of specialised contents in vocational skills or professional knowledge” (Education Bureau, 2015). For the tourism industry and institutions

running related VPET programs, the years from 2020 is not only an 'era of challenge and change' as Floyd (2021, p.1) puts it, but it is an era of crisis. COVID-19 has caused job losses in numerous industries worldwide, with tourism being one of the most devastated (Business Standard, 2021), despite continual manpower shortage prior to the pandemic outbreak (Vocational Training Council, 2018). Particularly overwhelmed is Hong Kong, which has been hit by the triple whammy of social unrest, collateral damage from the Sino-U.S. trade war, and the pandemic (Malone, 2020). Skyrocketing unemployment in tourism-related industries (10.6%) reached a 15-year high after the onslaught of SARS earlier (Census & Statistics Department, 2021). Upended employment climate and uncertain industry outlook have been disrupting school leavers' intention of pursuing further study in this discipline and joining the industry after graduation (Atitsogbe et al., 2018), sowing the seeds of manpower crisis that is envisaged to impede tourism industry revival. The current challenges call for a search for empirically tested theories that may enable informed practical considerations in VPET and the industry.

18.3 Literature Review

According to Person-Environment Fit (PE-fit) theory (Lewin, 1935, 1951), one's vocational behaviour is essentially determined by the interaction of one's personal attributes (P) and significant aspects of the work environment (E). An adequate fit between one's personal characteristics and the environment in which one works influences one's vocational choice, performance, and wellbeing. For instance, one's stress and anxiety may not be caused by separate forces (either of person or of environment), but the blend of the two. The joint forces of P and E emphasised by PE-fit theory are widely used to explain workplace outcomes. For example, a fit between tour members and the tour member-leader on a group package tour (Chang et al., 2020), or a fit between employee personality in hospitality (Doan et al., 2021) and the hotel branding as well as the applicants' customer orientation trait (Lin et al., 2018) contributes to favourable outcomes.

PE-fit theory measures individuals' self-perceptions on their own attributes. Analogously, self-concept theory features ones' self-perception in terms of cognitive and affective dimensions (Arens et al., 2011). Evidence suggests that affective self-concept (i.e., liking of the career in this case) is a stronger driver of academic and vocational choices (e.g., intent to join the industry; lifelong service in the industry) than other predictors (e.g., mastery motivation; cognitive sense of competence) (Choy & Yeung, 2022; Yeung et al., 2005). While these differential predictions seem to stand, it is unclear whether the PE-fit in a vocational education context would add value to the prediction for various vocational outcomes. It could be that while P and E predict different outcomes that are essential vocational outcomes for the individual and organisational success (Autin et al., 2020; Giousmpasoglou et al., 2021; Yeung et al., 2005), the interaction of P and E adds value to the predictions of the valuable

outcomes. In this paper, we have chosen four outcome variables: Intent (i.e., an aspiration to join a tourism career), Lifelong (willingness to remain in a tourism career as a life-time career), Leadership (readiness to be a leader in the tourism industry), and Anxiety (feeling anxious when things do not work out as expected). We examined whether the combined effect of P and E factors will have additional contribution to these vocational outcomes on top of either the P or E factor as a predictor.

18.3.1 Intent to Join the Career

Career aspirations can be immediate or long-term. Immediate aspiration is the intent to join the career after training (Yeung et al., 2011; Yeung et al., 2005). Research shows that a student's career intention is influenced by both intrinsic factors (e.g., career interest and expectation) (Atitsogbe et al., 2018; Choy & Yeung, 2022) and extrinsic factors (e.g., remuneration, job nature, and career prospect) (Choy & Kamoche, 2021; Choy et al., 2021). The effect of extrinsic factors has been demonstrated in studies revealing that Filipino (Benaraba et al., 2022) and Mainland Chinese tourism students (Birtch et al., 2021) doubt career prospects, undermining their intention to join the industry. The COVID-19 pandemic has further amplified the unfavourable job nature and employment vulnerability of tourism, and demotivate students and existing tourism practitioners to join or re-join the industry (Baum et al., 2020). Despite the attempts of scholars to identify the determinants of career intention, important factors appear to vary by sociodemographic background (Akosah-Twumasi et al., 2018; Kim et al., 2016). To our knowledge, little attention has been paid to examine how individual characteristics (P) and a cumulative threatening environment (E) may influence students' career intention in Hong Kong, hence the rationale of this study.

18.3.2 Lifelong Career Choice

Continual employment of staff is crucial for sustainable individual and organisational development. Staff members' desire to stay in the job is essential. An individual considers industry prospects, occupational interest, education opportunities and societal factors to determine how much they may exert themselves to strive in tourism (Choy & Kamoche, 2021). Research shows that one's interest in a particular study or a particular job has long-term effects on engagement (Kadir et al., 2017). For some students, tourism may be considered as a stepping stone. After launching their career in tourism, only a small percentage of them may make it a lifelong career (Atef & Al Balushi, 2017). This makes the development of the industry difficult and unsustainable. Hence it is essential to understand the factors that drive students to make a lifelong commitment.

18.3.3 Leadership

Effective leadership is the anchor for crisis handling and tourism organisation success (Giousmpasoglou et al., 2021). In this regard, organisations need to make continued efforts to identify, inspire and nurture future leaders. Extant studies maintain that vocational interests positively correlate with individuals' willingness to take up a role as leader and their self-perceived leadership success (Bergner et al., 2019; Chan et al., 2000). One study suggested an aggregate power of personality traits, vocational interests and cognitive ability are the strongest predictors for leadership and workplace success (Bergner, 2020). A number of studies have recognised the importance of embracing new leadership competencies in order to swiftly respond to changes in macro business environments during turbulent times (Dirani et al., 2020; Giousmpasoglou et al., 2021).

18.3.4 Anxiety

Anxiety could be caused by many reasons including negative career shock and precarious employment conditions due to unanticipated exogenous events that are perceived to be out of control (Akkermans et al., 2020). Studies have shown that a crisis such as COVID-19 has an adverse psychological effect on hospitality employees' mental health and lowers their intention to stay with the industry (e.g., Khawaja et al., 2021). An elevation of anxiety due to the scarring effects of the COVID-19 pandemic on the labour market has reduced job satisfaction and organisational commitment among hotel industry practitioners at all levels, from frontline to management (Wong et al., 2021). A Spanish study conducted during COVID-19 showed a significantly positive correlation between hotel employees' job insecurity and anxiety (Aguar-Quintana et al., 2021). In Hong Kong, social unrest on top of the pandemic and Sino-U.S. trade war lends uncertainty to Hong Kong economic outlook and reflects job vulnerability of the tourism industry. Hence, the fear of undesired exogenous events may trigger anxiety among tourism students in Hong Kong.

18.3.5 P (Personal Interest)

A person's intrinsic motivation in a specific domain is probably the strongest driving force for that person to engage in it and thrive. Interest in studying a specific domain constitutes the affective component of a person's self-concept, the other component being a sense of competence, which is the cognitive component (Kadir & Yeung, 2017). Vocational interest and satisfaction in a challenging job are motivators that may counter structural barriers in the industry (e.g., low pay, anti-social working hours, and vulnerability to external environments) that could prevent an individual

from joining the workforce or staying within it (Choy & Kamoche, 2021; Su, 2020). Hence, we would expect that students who find interest in a VPET tourism program intend to join the industry and to stay there.

18.3.6 E (A Threatening Environment)

Negatively affecting one's career aspiration and vocational outcomes are numerous factors, some of which are out of one's control. While the current pandemic situation is one of these factors, other barriers include social unrest, violence, war, international disputes, political instability, economic crisis and natural disaster, etc. In Hong Kong, the social unrest that started from 2019 (Shek, 2020), followed by COVID-19 in 2020, has left Hong Kong 'living in uncertainty' (Jung et al., 2021, p. 107). COVID-19 has affected all aspects of Hong Kong society, including the higher education sector. For Hong Kong, any international affair may have an impact on the city. The South China Sea dispute (Regilme, 2018), and the ongoing trade war between the USA and China which has impacted global economy (Boylan et al., 2021), are inevitably affecting Hong Kong as part of China. While the pandemic has led to drastic changes around the globe in terms of employment, career development, and workers' mental health (Autin et al., 2020), studies have reported mixed views and attitudes of career intention in tourism industry. For example, career intention among Indian and Ecuadorian tourism students remained positive in face of COVID-19 (Shad et al., 2020; Zurita & Soler, 2021) while New Zealanders have temporarily halted their career plans for the long run (Reichenberger & Raymond, 2021). Conversely, a Mainland China study about the implication of COVID-19 maintained that hospitality students' future career intention was significantly linked to negative emotions but moderated by self-efficacy, intrinsic/extrinsic factors and the individual's passion for the industry (Birtch et al., 2021). To our knowledge, no study has scrutinised the impact of a threatening environment on the career choice among tourism students in Hong Kong. We therefore investigate whether tourism students in Hong Kong have a similar sense of pessimism as their counterparts in Mainland China.

18.4 The Present Investigation

The main goal of the current study is to examine the relationship between person-environment fit (PE-fit) and four selected vocational behaviours (i.e., intent to join tourism industry, lifelong commitment, leadership, and anxiety) among tourism students. In this study, we seek to determine whether P and E distinctly, or jointly, predict the four vocational outcomes. Specifically, the present study attempts to answer two research questions (RQs):

- RQ1: Do Person (P) and Environment (negative E) factors distinctly predict four vocational outcomes (Intent, Lifelong, Leadership, and Anxiety)?
 Rationale: Distinct predictions will support a differential predictions hypothesis.
- RQ2: Does PE-fit (i.e., positive P \times positive E) add value to the predictions in addition to the discrete predictions of P and E on the four vocational outcomes?
 Rationale: A significant predictive path from PE-fit to an outcome will support a PE-fit prediction of that specific vocational outcome.

18.5 Research Design and Measures

The student population for tourism-related programs in Hong Kong is around 7,700 (CSPE, 2020). Students who were studying tourism-related local full-time undergraduate and sub-degree programs in VPET institutions in Hong Kong were invited to complete an online bilingual (English-Chinese) survey (paper copies were provided instead if requested) between January and September, 2021 when the triple whammy affecting Hong Kong's economy was prevalent owing to COVID-19 following months of social unrest and continuing Sino-U.S. tensions. Purposive sampling was used to select participants who possessed relevant knowledge and experience to achieve the objectives of the research (Jennings, 2010). A self-administered survey was developed after reviewing relevant measurement scales from the existing literature. Subsequently, we consulted two professors to ensure content validity and modified the survey questions to suit the purpose of the study. The survey was pilot tested before the actual study to assess validity and reliability of the survey questions, followed by improvement of the survey to address identified problems.

In this paper, we conceptualise vocational education students' interest in a tourism-related career as the P factor. During the recent consecutive occurrences of multiple crises in Hong Kong, for the sample of Hong Kong vocational education students, we considered a construct of threatening extraneous events as a negative workplace E. The survey comprised of 18 items and focused on seven constructs: P (personal interest), E (a threatening vocational environment related to tourism—fear of pandemic, social unrest, international disputes), and short- and long-term outcomes (Career intention; Lifelong career choice; Leadership, and Anxiety). All survey items were measured by a 6-point Likert type scale ranging from 1 (Disagree strongly) to 6 (Agree strongly). Person (P) was adopted from Yeung et al. (2012) to measure students' interest on tourism discipline using three items. Measurement items of Environment (E) were developed by the authors to assess the extent to which tourism students fear about unanticipated challenges to the industry. Three items were designed to include infectious diseases, international disputes, social unrest and violence, and any global issues that can damage the economy. Three items to measure career intention were adapted from Yeung et al. (2005) and Yeung et al. (2011) with two adjustments: (1) the items were directly relevant to tourism, and (2) the items referred to choosing to enter the workforce as a fresh staff member. The

scale to measure students' propensity of choosing the industry as a lifelong career preference was also adapted from Yeung et al. (2005) and Yeung et al. (2011). Three items were used to refer to remaining in the industry as long as possible. Items to measure students' leadership was adapted from Tsai et al. (2006). Three items were used to measure students' readiness to be a leader in the tourism industry. The scale to access students' anxiety was adapted from Martin (2001, 2009) with modification to align with the context of the study. Three items were used to measure students' feelings of tension and apprehension over undesired event(s) and situation(s) that could happen in the future. The survey also collected respondents' demographic data (i.e., gender, age, program level, and major program) (See Appendix).

To enable easy interpretation of PE-fit and its impact on vocational outcomes, we generated a PE-fit measure by juxtaposing P and E and created a positive PE-fit construct. Because E in the survey was a negative construct representation unfavourable circumstances in the industry, we first reverse coded the scores for E to make it a positive measure representing favourable workplace circumstances. The PE-fit construct was an interaction term ($P \times E$) which represents a combination of positive P and positive E (i.e., favourable personal attribute coupled with positive vocational environment). However, because the PE-fit construct is dependent upon the P and E constructs, SEM models using the P, E, and PE-fit measures are unlikely to be properly identified, we used standardised scores of P and E to generate the PE-fit measure (i.e., $PE\text{-fit} = zP \times zE$).

18.6 Data Analysis

Data analysis started with preliminary analysis including descriptive statistics and reliability analysis (Cronbach's alpha). A series of confirmatory factor analyses (CFA) and structural equation modelling (SEM) were conducted using the statistical package of Mplus (Version 7.11) (Muthén & Muthén, 2013). We first tested the factor structure of the hypothesised three predictors (P, E, and PE-fit) and each of the four vocational outcomes (Intent, Lifelong, Leadership, and Anxiety) respectively in four CFA models (Models 1 to 4 each with three predictors predicting one outcome variable). When each of the four models provided a reasonable model fit, we examined the paths from the three predictors to each vocational outcome in respective SEM models. As the model fit would be identical to each respective CFA model, we report only the model fit for CFA models to avoid redundancy.

Model fit was accessed by multiple indices: Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and comparative fit index (CFI). The chi-square test statistics are also reported. In general, for TLI and CFI, values equal to or larger than 0.90 are considered acceptable (Byrne, 2012). For RMSEA, values ranging between 0.05 and 0.08 are generally accepted as a close fit to a fair fit (Bowen & Guo, 2012). Factor loadings and latent factor correlations were then examined to provide further support for the structural validity of the tested model. Factor loadings show the relations of each underlying construct with each of the

observed variables (i.e., the survey items). The latent factor correlations show the associations of the latent constructs, which should be clearly smaller than 1 so as to be distinguishable from each other.

The models would enable us to answer the RQs. By examining the paths from P and E to each outcome variable, we would be able to answer RQ1: 'Do P and E distinctly predict the vocational outcomes?' By examining the path from $P \times E$ to each outcome, we would be able to answer RQ2: 'Does PE-fit add value to the predictions?'

18.7 Results

18.7.1 Descriptive Statistics and Reliabilities

A total of 380 completed surveys were analysed. The sample was made up of 72% females and 28% male. While students' age was from under 20 to over 50, the majority of respondents were aged between 20 and 29 (52%), followed by those who were under 20 (47%). Of the respondents, 70% were undertaking hospitality-orientated programs (i.e., Hotel, Food and Beverages) and the rest were from tourism-oriented program (e.g., Theme park, MICE, Cruise and Aviation). Students from sub-degree levels have the highest number of respondents (41%), followed by undergraduate degree (38%) and certificate (21%).

Table 18.1 summarises the means, standard deviations, and reliabilities of the constructs. The Cronbach's alphas (ranging between 0.61 and 0.90 across seven constructs) suggest a reasonable internal consistency for each factor. Most of the convergent validity requirements were satisfied, except that Cronbach's alpha of Anxiety was below 0.70. Extant studies measuring affective constructs (e.g., attitude and anxiety) accepted a wider range of alpha values from 0.45 to 0.98 to demonstrate the constructed tests and scales are fit for the purpose (Taber, 2018). The highest means were observed in the Environment ($M = 4.31$) and Person ($M = 4.24$) constructs, well above the mid-point of a 1–6 scale. The high mean scores imply that the current sample of students had high personal interest (P) but also perceived high fear of extraneous barriers due to unexpected and uncontrollable events in the vocational environment (E).

Table 18.1 Descriptive statistics and alpha reliabilities

	Person(P)	Enviro(E)	PE-fit	Intent	Lifelong	Leader	Anxiety
Alpha	0.90	0.80	0.77	0.86	0.88	0.83	0.61
Mean	4.24	4.31	-0.13	3.88	3.17	3.95	4.00
SD	(0.98)	(1.11)	(0.85)	(1.02)	(1.12)	(0.99)	(0.85)

Table 18.2 Models

<i>N</i> = 380, Person(P), Environment(E), P × E with Dependent Variable	χ^2	<i>df</i>	CFI	TLI	RMSEA
Model 1. Intent	130.957	48	0.962	0.947	0.067
Model 2. Lifelong	113.338	48	0.969	0.957	0.060
Model 3. Leadership	94.503	48	0.975	0.966	0.050
Model 4. Anxiety	110.543	48	0.962	0.948	0.059

Table 18.3 Factors loadings

	Person(P)	Enviro(E)	PE-fit	Intent	Lifelong	Leader	Anxiety
Item 1	0.82**	0.70**	0.69**	0.91**	0.85**	0.76**	0.56**
Item 2	0.88**	0.80**	0.78**	0.66**	0.82**	0.75**	0.66**
Item 3	0.88**	0.76**	0.72**	0.92**	0.87**	0.85**	0.52**

N = 380. **p* < 0.05. ***p* < 0.001. *r* between P and E = 0.22; *r* between P and PE-fit = -0.14; *r* between E and PE-fit = 0.10

18.7.2 CFA

A series of CFA models were tested (see Table 18.2). Model 1 to Model 4, testing a 4-factor model (3 predictors and 1 outcome), each showed an acceptable fit supporting the hypothesised predictors and outcome structure (weakest CFI = 0.962, weakest TLI = 0.962, weakest RMSEA = 0.067; all acceptable).

The factor loadings for each of the seven variables are summarised in Table 18.3. All the factor loadings were statistically significant (all > 0.50), ranging from 0.52 to 0.92. The latent factor correlations were all clearly smaller than 1, indicating that they were clearly differentiable from each other (*r* < 1). The PE-fit measure, operationalised as the standardised interaction between P and a positively coded E, had small correlations with P (*r* = -0.14) and E (*r* = 0.10), respectively (Table 18.3). These low correlations among the predictors have avoided difficulties in interpreting the effects of PE-fit. Interestingly, between P and E, the correlation was significantly positive (*r* = 0.22), showing that E, which is presumably a negative and devastating force, did not seem to be in direct conflict with personal interest.

18.7.3 SEM

The SEM fit indices were identical to the CFA solutions (Table 18.2) and are therefore not replicated in the report on SEM results. The paths from the three predictors to each tested vocational outcome are presented in Fig. 18.1. Model 1, an SEM with paths from three predictors to Intent, found that the path from P was significantly positive ($\beta = 0.61$) whereas the path from E was small and not statistically significant

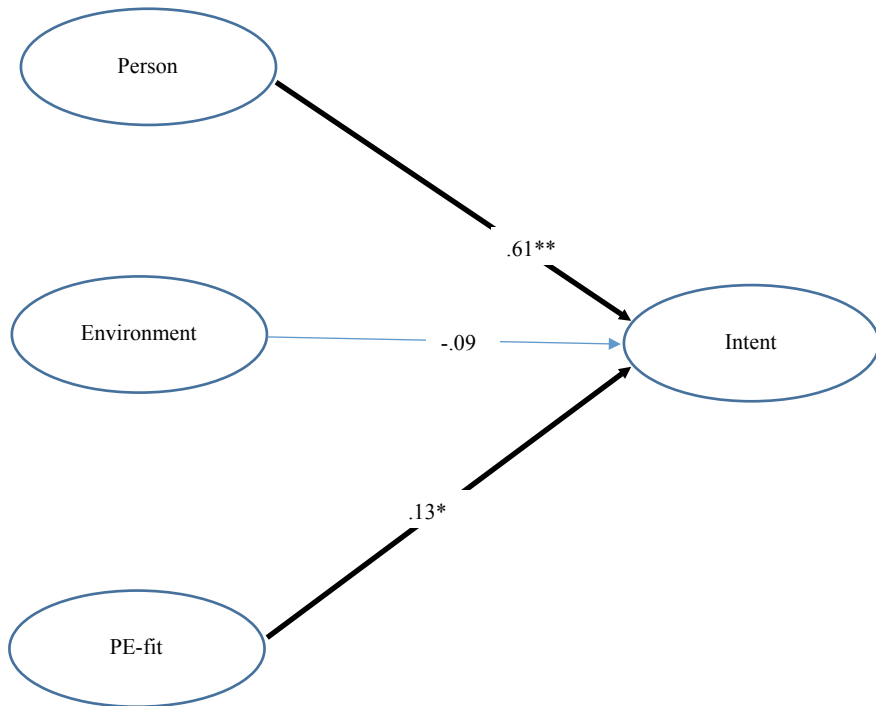


Fig. 18.1 Model 1 Paths to Intent (* $p < 0.05$. ** $p < 0.001$)

($\beta = -0.09$). The path from PE-fit to Intent was significantly positive ($\beta = -0.13$), indicating that a match between P and E would have a significant impact on the intent to join the tourism industry (Fig. 18.1: Intent).

Model 2, an SEM with paths from three predictors to Lifelong, found that the path from P was significantly positive ($\beta = 0.52$) and the positive path from E was also statistically significant ($\beta = 0.17$). The path from PE-fit to Lifelong was small and not statistically significant ($\beta = 0.06$), indicating that a match between P and E would have almost no impact on the lifelong commitment to tourism (Fig. 18.2: Lifelong).

Model 3, with paths from three predictors to Leadership, found the path from P significantly positive ($\beta = 0.61$) but the path from E ($\beta = 0.01$) and from PE-fit ($\beta = -0.03$) to Lifelong was small and not statistically significant, indicating that P was the only prevalent predictor whereas PE-fit had no additional impact (Fig. 18.3: Leadership).

Model 4 with paths from three predictors to Anxiety found that the path from P was not statistically significant ($\beta = -0.05$). The path from E ($\beta = 0.82$) was positive and statistically significant. The path from PE-fit ($\beta = 0.09$) to Anxiety was not statistically significant, indicating that E was the only prevalent predictor whereas PE-fit had no impact (Fig. 18.4: Anxiety).

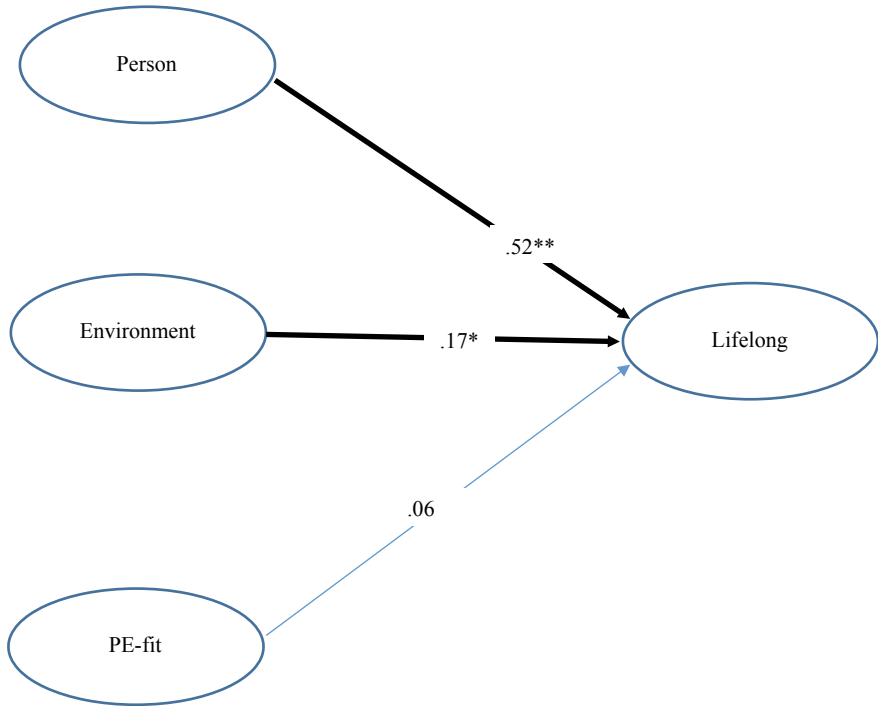


Fig. 18.2 Model 2 Paths to Lifelong (* $p < 0.05$. ** $p < 0.001$)

As the key issue to investigate was the effect of PE-fit on vocational outcomes, an inspection of the paths from PE-fit to outcomes would be essential. As found in the models above, PE-fit had a significantly positive path to Intent ($\beta = 0.13$), indicating that a match between one’s personal interest and an unthreatening work environment would facilitate one’s intent to join the industry after graduating from the tourism program in higher education. However, this was the only significant prediction of any of the vocational outcomes. The other paths were not statistically significant (β s = 0.05, -0.01 , 0.04, and 0.09 respectively for Lifelong, Leadership, Resilience, and Anxiety).

18.8 Discussion

This study attempts to provide empirical evidence for PE-fit theory to make connection between personal characteristics (P), Environment (E) and the selected vocational behavioural outcomes (i.e., intent to join tourism industry, lifelong commitment, leadership, and anxiety) among tourism students in Hong Kong.

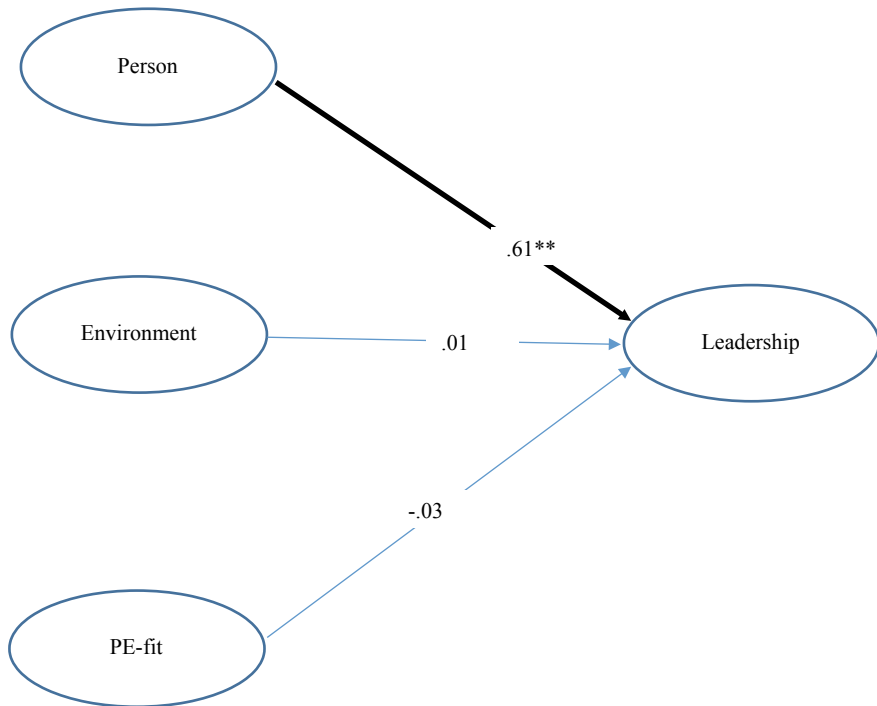


Fig. 18.3 Model 3 Paths to Leadership (* $p < 0.05$. ** $p < 0.001$)

Personal interest and a threatening environment were operationalised as personal characteristics (P) and exogenous environmental impacts (E) respectively.

Answering the RQs

RQ1. Do P and E factors distinctly predict vocational outcomes?

The analysis found that the distinct predictions of P and E on the various outcomes supported the differential predictions hypothesis (Models 1 to 4). Hence P and E each tends to have a distinct contribution to each career outcome.

RQ2. Does PE-fit (i.e., positive P \times positive E) add value to the predictions?

The answer is 'yes' for the intent to join the industry. The significant predictive path from PE-fit to Intent (Model 1) supported the PE-fit prediction of that specific vocational outcome.

Overall, our analysis attempted to distinguish the difference between P and E in predicting vocational and career outcomes while testing the combined effects of a positive match between P and E. Our findings revealed that personal interest had the strongest prediction on three of the four outcome variables (i.e., intent to join tourism industry, lifelong commitment, and leadership). Hence personal interest in the career tends to be the strongest driver of a person's intent to join tourism, willingness to

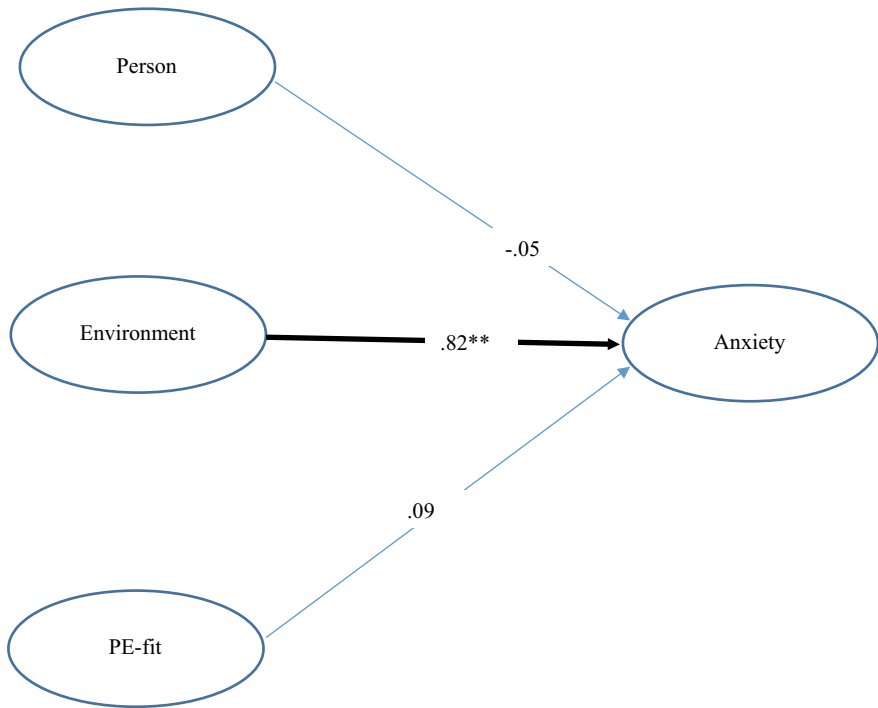


Fig. 18.4 Model 4 Paths to Anxiety (* $p < 0.05$. ** $p < 0.001$)

choose tourism as a lifelong career, and readiness to be a leader in the industry. These results appear to be in line with the findings of Choy and Yeung (2022), Su (2020); Atitsogbe et al. (2018); and Kadir et al. (2017) who suggested that career interest is a powerful motivator of career choice that can counter unfavourable job natures. Our findings also support the findings of Yeung et al. (2012) and Choy and Kamoche (2021), showing that positive affect leads to long-term career engagement. Nevertheless, the results contradicted the findings of Atef and Al Balushi (2017) who indicated that a tourism job only serves as a stepping stone into another industry. Our results tie well with previous studies wherein vocational interests positively correlate with individuals' eagerness and confidence to take up the leadership role (Bergner et al., 2019; Chan et al., 2000).

In line with previous studies (e.g., Aguiar-Quintana et al., 2021; Khawaja et al., 2021), the threatening extraneous events were found to be a strong driver of anxiety. Hence a negative, threatening environment can be detrimental to one's wellbeing. Despite the presumably negative effect of a threatening environment on vocational outcomes, the effect was negligible for most of the outcome variables. Also, surprisingly, the effect of a negative Environment on Lifelong was significant positive, reflected that tourism students are optimistic about their career prospects in the industry in the long run. A similar finding was reported in a New Zealand study

(Reichenberger & Raymond, 2021) but our result goes beyond previous reports in the Philippines (Benaraba et al., 2022), Mainland China (Birtch et al., 2021), United States (Wong et al., 2021) and Pakistan (Khawaja et al., 2021), which suggest that challenges and uncertainties caused by COVID-19 are a destabilising factor of career intention and job change. Inconsistent findings imply that tourism students' attitude towards career choice are probably culture specific (Akosah-Twumasi et al., 2018; Kim et al., 2016). Further research is required to examine driving forces and barriers for making initial career decisions in different countries.

As for the joint effect of P and E, it was only for the outcome of Intent that the PE-fit construct had a significantly positive contribution, out of all predictors. That is, whereas P had a significantly positive drive to facilitate career intention, and a negative E (threatening crises) had a weak and nonsignificant effect, PE-fit (i.e., a positive personal interest together with a nonthreatening work prospect) had a significantly positive contribution to Intent on top of the Person and Environment effects. Hence for this sample and within this context, PE-fit seems to have specific but little contribution to the other desirable outcomes overall. However, given the practical significance of the contribution to new recruits' intent to join the tourism industry, the merit of PE-fit should not be undermined, theoretically and practically.

18.9 Practical Implications

One of the key pillars of Hong Kong's economy that creates enormous job opportunities is tourism, which has been hit by the triple whammy of social unrest, collateral damage from Sino-U.S. trade war and the pandemic. Our findings highlight the importance of enhancing students' personal career interest (P) for making a career choice and enhancing leadership development. Educators may need to revisit their curriculum and pedagogies to focus on enhancing students' occupational interests and competencies at an early stage of year 1 in higher education. Once a student has developed a strong passion for the occupation, the intrinsic motivation may outweigh the fear for extraneous events (E) that cause hardship and anxiety. Ongoing engagement with students is expected to boost their interest, hope and decisiveness of study and career aspiration in tourism (Zhong et al., 2021). To boost a positive workplace environment, for VPET, voices from industry practitioners may have paramount contributions as they carry equal, or sometimes stronger, credibility than those from academia (Van Hoek et al., 2011). Guest speakers from the industry are more able to share their real-world experience and insight about industry prospects in current situations. Policy makers will also need to consider ways to reduce the concerns of tourism workers about extraneous factors. In essence, with Government support, tourism educators and industry practitioners may need to modify their approaches to rebuild students' confidence and interest to launch their career after graduation.

18.10 Strengths, Limitations, and Future Research

The present study extends our knowledge of applying PE-fit theory of a differential predictions approach to achieve relevant career outcomes. By examining the predictive power of a single dimension (P or E), or PE-fit emphasising the strength of the combined effects of P and E on a range of vocational outcome variables, we will be able to target vital productivity, motivation, and wellbeing outcomes to facilitate tourism students' future career and the industry's revival and success. The contribution of this study has been to support the notion of PE-fit theory for career choice and the notion of differential predictions for other vocational outcomes. This research lays the groundwork for further research on other tourism-related industries and elsewhere. Our finding showing the strengthen of affective self-concept in driving vocational choices (Choy & Yeung, 2022; Yeung et al., 2005) is of particular importance as it highlights the need for education providers and tourism organisation management to promote personal interest (P) as a strong motivating factor to counter any fear of extraneous factors (E) to outweigh any perceived extraneous threats to a tourism career in future.

Despite the strengths, due to the cross-sectional nature of the study design, this study cannot determine causal inferences. A longitudinal study will be useful to test causal relations of identified variables. Also, because the study was conducted in Hong Kong, the findings may not be generalised to other cultures or tourism markets. Given tourism in Mainland China is recovering swiftly from COVID-19 with its domestic demand, researchers may consider to replicate the present study in Mainland China or conduct a comparative study in other industries and socio-geographic settings. Further investigation using a broader range of motivational and behavioural constructs could shed more light on the application of PE-fit theory and differential predictions to test their theoretical and practical implications.

18.11 Geolocation Information

The research was conducted in Hong Kong.

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Appendix: Variables and Sample Items

Construct		Sample Items
Person	P1	I am liking my preferred hospitality discipline
	P2	Interested in my preferred hospitality discipline
	P3	I am enjoying my preferred hospitality discipline
Environment	E1	I fear that any infectious disease can suddenly destroy the economy
	E2	I fear that people may suddenly lose their jobs when international disputes occur (e.g., political fights, trade war)
	E3	I fear that social unrest and violence may happen any time causing economic crisis (e.g., anti-government protests)
PE-fit	P1 x E1r	zscore of P1 × zscore of reverse-scored E1
	P2 x E2r	zscore of P2 × zscore of reverse-scored E2
	P3 x E3r	zscore of P3 × zscore of reverse-scored E3
Intent		I will join the hospitality workforce after graduation
		I am ready to become a staff member in the hospitality industry
Lifelong		I am willing to be in the hospitality industry till I retire from work
		I will not leave the hospitality profession if I don't need to
Leadership		I am a good leader in the hospitality and tourism sector
		I am confident to lead a team
Anxiety		I worry about my career prospect in hospitality industry
		I tend to get anxious about my duties serving my customers

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