



2023

## Development and validation of an instrument to measure Chinese post-secondary and part-time students' motivation to learn accounting in Hong Kong

Joe Pong

Ho Yin Cheung

Leung Hung

Follow this and additional works at: <https://repository.vtc.edu.hk/thei-fac-man-hos-sp>

---

**Thei**

Member of VTC Group  
VTC 機構成員

# Development and validation of an instrument to measure Chinese post-secondary and part-time students' motivation to learn accounting in Hong Kong

Journal of Adult and Continuing Education

2023, Vol. 0(0) 1–25

© The Author(s) 2023

Article reuse guidelines:

[sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)

DOI: 10.1177/14779714231169687

[journals.sagepub.com/home/ade](https://journals.sagepub.com/home/ade)



**Hok-Ko Pong** 

Technological and Higher Education Institute of Hong Kong, Hong Kong, China

**Chi Hung Leung**

The Education University of Hong Kong, Hong Kong, China

**Ho Yin Cheung**

The Education University of Hong Kong Faculty of Liberal Arts and Social Sciences, Hong Kong, China

## Abstract

In the current research, we developed and validated a questionnaire to measure Chinese working adults' motivation to study accounting on a path of lifelong learning in Hong Kong, China. We conducted individual in-depth interviews with adult learners ( $n = 30$ ) and professionals ( $n = 12$ ) in study 1 and study 2. Qualitative analysis showed six specific common themes for Chinese working adults' motivation to learn accounting. Based on these results and the research literature, we developed a list of 31 provisional items for the questionnaire. In Study 3, we administered the provisional questionnaire to students ( $N = 426$ ) from sub-degree, undergraduate, and graduate programs. These data were analyzed using quantitative analysis. Exploratory factor analysis showed a six-dimensional structure. Removal of redundant items resulted in a 17-item questionnaire. Confirmatory factor analysis provided evidence of the reliability and validity of this measure, which assesses six domains of adult learners' motivations for pursuing continuing education in accounting: development of knowledge and skills; family cohesion; reinforcement of social networking and communication; career

---

## Corresponding author:

Chi Hung Leung, the Education University of Hong Kong, 10 Lo Ping Road, Tai Po, New Territories, Hong Kong, China.

Email: [chhleung@eduhk.hk](mailto:chhleung@eduhk.hk)

development; enrichment of life; and self-development. This measure in the Chinese cultural context can be used for research purposes and for assessing students' motivation in accounting programs in Hong Kong.

### **Keywords**

learning motivation, accounting education, lifelong learning, adult learners

## **Introduction**

Motivation and satisfaction primarily determine how students engage in learning accounting, as observed by researchers in the past 30 years (De Lange, et al., 2003; Opdecam & Everaert, 2012). Scholars have contributed various studies on the motivation of adults in continuing education, (Mbagwu et al., 2020; Drewery et al., 2020), among which further learning in accounting is included (Byrne & Flood, 2005; Ulfah, et al., 2019). The existing literature consists of studies that have examined the learning motivation of adults in general. One such example is research conducted using the motivated strategies for learning questionnaire (MSLQ), which simply gauges the orientation of adult learners' motivation (Pintrich et al., 1993). Despite the emergence of such studies, however, research on the learning motivation of adults for lifelong education in accounting remains scant, especially in Asia.

## **Background**

With its humble beginnings in the 19th century as a small village, Hong Kong was a former British colony. By the 20th century, it has establishing itself as the Pearl of the Orient. After its return to China in 1997, it has continued to grow exponentially (Choi, 2019), thus becoming one of the most important international financial centers in the world (Pan et al., 2018). The financial services sector is responsible for 23.4% of Hong Kong's GDP, and the industry has also provided 276,200 jobs, or 7.5% of the total employment; with its strength and ability to generate huge amounts of income and employment, the financial services sector has established itself as one of the most essential economic pillars of the city (Legislative Council Secretariat of HKSAR, 2020). As such, the demand for talent in Hong Kong has risen given the city's focus on the Asian region, particularly in the development of the financial and accountancy sectors (Jacob et al., 2018).

Now more than ever, young professionals need to be more adaptable, skillful, and competent in their line of work (Pang et al., 2019). However, this trend also entails that professional qualifications cannot be achieved through a single discipline alone. The economy has developed into a knowledge-based one, which necessitates that people continue to enhance their skills and pursue further learning to advance in their profession and keep pace with the highly competitive job market.

The Census and Statistics Department of the Government of the Hong Kong Special Administrative Region (HKSAR) conducted a survey on continuing education among adults in 2018. The total number of participating employees consisted of the following: 14.3% aged 15–24, 21.4% aged 25–34, and 22.8% aged 35–44. With a sample size of 3,689,100 active members of the workforce, the survey revealed that less than 25% had undergone training/retraining courses organized by their employers. The overall participation rate was 20.4%, which is a satisfactory upgrade from the 14.6% participation rate in a similar 2002 survey ([Legislative Council Secretariat of HKSAR, 2020](#)).

The Government of the HKSAR started the Continuing Education Fund (CEF) in 2002 as a strategy to boost the continuing education of Hong Kong residents aged 18 to 70. Most people in the city do not take join training or re-training programmes in their place of work. Nevertheless, a growing number of professionals have returned to higher education since the CEF was created. The programme aims to financially assist adults who would like to pursue further education. As of April 1, 2019, eligible candidates could receive financial aid of up to HK \$20,000 (US \$2570).

The Office of the CEF disclosed the following as the courses that have been reimbursed the most in January 2021. A total of 259,291 students were enrolled in financial services, which include accounting, thus comprising 30.28% of all participants. This group is followed by business services, which had a total of 232,336 enrollees or 27.13% of all students. With Hong Kong being a global financial center, the number of students taking finance and business courses may have increased due to it.

## **Purpose of the study**

The present study highlights the factors that motivate adults to pursue continuing education in accounting using a questionnaire to identify and examine these aspects efficiently. The survey has been developed on the basis of comprehensive literature reviews and in-depth interviews with participants. Then, we determine the reliability and validity of our survey items to create the final questionnaire. This survey will be beneficial to researchers who seek to expand the studies on lifelong learning and to educators who seek to determine successful pedagogical methods for the continuing development of adults who would like to expand their accounting knowledge and skills.

## **Research questions**

The goal of the current study is to formulate and disseminate a questionnaire that would evaluate the reasons why young Chinese professionals in Hong Kong opt to study accounting as part of their lifelong learning. We thus ask the following research questions:

**Research Question 1:** What are the drivers for adult students (i.e., community college students, undergraduate students and graduate students) to take up various accounting programs?

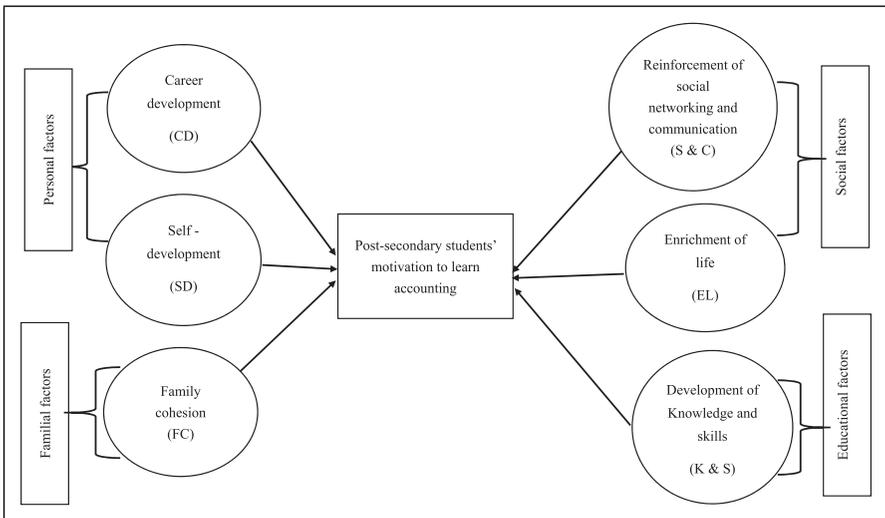
**Research Question 2:** Can a new instrument that aids in the evaluation of Chinese adult learners' motivations to learn accounting be feasible and credible enough for researchers and educators?

### Theoretical framework

Figure 1 demonstrated the hypothesized conceptual model used in this study, which is based on the model for lifelong education put forward by Chen and Liu (2019) and the observations of Lucianelli and Citro (2018), Karlsson and Noela (2022), and Ulfah et al. (2019) on the motivations for pursuing higher education in accounting. Chen and Liu (2019) observed that in China and the United States, the key factors that influence learning are individual, familial, social, and educational motivations. Meanwhile, Lucianelli and Citro (2018) and Karlsson and Noela (2022) determined that developing intelligence and attaining goals (intrinsic factors) and securing employment and monetary awards (extrinsic factors) are the main reasons why adults pursue further learning in accounting (Lucianelli & Citro, 2018; Karlsson & Noela, 2022).

### Motivation and learning motivation

Motivation sparks students' engagement in learning and achieving goals; thus, along with one's skills, motivation is essential for learning to be a success (Kasworm & Marienau, 1997). The motivations behind adult students' decision to continue their education have previously been examined using various theories. For instance, Sandau (2022) used expectancy-value theories, while Martin and Mulvihill (2019) applied self-efficacy theory



**Figure 1.** The hypothesized conceptual model.

(SET) in their study. In an earlier work, [Hackman and Knowlden \(2014\)](#) used the theory of reasoned action (TRA). However, for the current study, we take a close look at the perspectives of psychology examined by [Smith and Pourchot \(2013\)](#) and the social identity theory used by [Brown \(2000\)](#) to help in our analysis and discussion of adult motivation in learning. We follow [Gardner et al. \(2022\)](#) in sorting intrinsic and extrinsic factors, while we adopt [Chen and Liu's \(2019\)](#) categorization of personal, social, familial, and educational dimensions.

### *Motivation to pursue lifelong education and accounting programmes among adults*

[Chen and Liu \(2019\)](#) and [Mbagwu et al. \(2020\)](#) both asserted that when adults feel a sense of pleasure, inclination, contentment, and achievement from learning, they become intrinsically motivated to pursue further education. Meanwhile, [Drewery et al. \(2020\)](#) and [Sun and Kang \(2019\)](#) expressed that adults are extrinsically motivated to engage in learning if it helps them attain other their extrinsic goals, including receiving financial rewards, prizes, and recognition from others.

[Ulfah et al. \(2019\)](#) also suggested that accounting courses help professionals fulfil certain career qualifications which result in commendations and esteem from their peers. The researchers also provided the Continuing Professional Development (CPD) for Certified Public Accountants (CPAs) as an example. CPD is a course with a certain number of required hours that need to be completed every year. It helps accountants to improve and sustain their competencies to ensure their performance and duties through continuous study. This training demonstrates how continuing education reinforces social networks and improves the lives of professionals.

[Swain & Hammond \(2011\)](#) assert the value of intrinsic motivation, as it has more long-term influences on students than extrinsic motivation; as such, intrinsic motivation account for students' ability to understand and enjoy their education ([Donald, 1999](#)), especially in adult education. Moreover, [Henning et al. \(2014\)](#) observed that lifelong learners tend to have a stronger intrinsic motivation than extrinsic motivation. However, an earlier study by [Pintrich and García \(1991\)](#) reveals that learners primarily have a mix of intrinsic and extrinsic motivations, both of which are essential for learning to be a success.

### *Characteristics of adult learners*

Returning adult students have been found to have a high motivation to pursue their studies, as they are eager to acquire the necessary tools for their development ([Brookfield, 1986](#)). According to [Smith and Pourchot \(2013\)](#), adult learners perceive the need to adapt to shifting circumstances amidst the multifaceted roles and duties that they have to fulfil at work and in the household. In addition, [Darkenwald and Marriam \(1982\)](#) found that adults thrive in self-directed learning, thus being more active and responsible than children and adolescents. This finding echoes a much earlier study by [Knowles \(1984\)](#), who observed that adult learners are aware of their needs, thereby becoming more conscious of what they need in their plan of study.

*Chinese adult learners.* Confucianism has been largely influential on China's lifelong education (Kennedy, 2002). Scholars and highly educated people are regarded with much esteem in Chinese culture (Sheng, 2019). Common proverbs in Chinese culture even include "To be a scholar is to be at the top of society" and "Never stop learning." Hence, parents stress the importance for their children to receive a good education and study diligently (Kennedy, 2002).

Thompson and Gui (2000) observed that Chinese adult learners in Hong Kong have various motivations to pursue courses in business, namely, the acquisition of knowledge and skills, job opportunities and career development, the improvement of one's self and public image, social networking, and leisure. In particular, Kwong et al. (1997) determined five factors that motivate adults in Hong Kong to pursue higher education. Jones and Wallis (1992) also found that adult learners in Shandong returned to school primarily due to their interest in acquiring knowledge, desire to attain qualifications and professional recognition and the aspiration for future success. Thus, the above studies offer a basis and a preliminary conceptual framework for the research on the learning motivations of young Chinese adults in Hong Kong pursuing further education in accounting.

## Methodology

This study uses a mixed-method approach to collect and analyze data. This research has two phases. The first phase is further divided into two qualitative studies (Study 1 and study 2). These studies involve individual interviews with Chinese working adult students (i.e., part-time students) and accounting professionals. Then, the second phase includes a quantitative study and a field study (Study 3) that will develop and validate the questionnaire used in this research.

We obtained permission to conduct this study from the research ethics committee at the affiliated university of the first author. Participants joined voluntarily, and no incentives were given. Moreover, the participants were free to withdraw from the study at any point in time without punishment or prejudgment. All data are anonymous and confidential. In addition, the participants signed a consent before participating in the qualitative and quantitative studies.

### *Study 1 and Study 2: Individual In-Depth Interviews*

The first qualitative phase examines the various domains and relevant statement of learning motivation, which have been described by Chinese adult students and accounting professionals.

### *Participants*

Snowball sampling was applied in the study due to the availability and uniqueness of the subjects of the study. Moreover, the respondents underwent semi-structured, in-depth

interviews to collect their insights on the motivations of adult learners to pursue accounting courses.

The first set of participants consisted of 30 adult accounting students (i.e., working adults and part-time students) who were enrolled at three different universities, in graduate ( $n = 10$ ), undergraduate ( $n = 10$ ), and community college ( $n = 10$ ) programmes. Meanwhile, the second set of professional participants consisted of 12 specialists in the accounting field ( $n = 6$ ) and accounting education ( $n = 6$ ). We took multiple perspectives of the different stakeholders into consideration.

In the set with Chinese working adults, 53.3% of the respondents were male ( $n = 16$ ) and 46.7% were female ( $n = 14$ ). Their ages ranged from 22 to 35 years old. In addition, they were students of pursuing an associate-degree, a bachelor's degree, and a master's degree, with 10 participants in each category. Most of them had been working for more than 5 years.

Meanwhile, in the set with professional respondents, 50% were male ( $n = 6$ ), and their ages ranged from 33 to 58 years old. These respondents had 10 years' worth of industry experience and professional accounting qualifications. Those from academia had specialized in accounting education for more than 7 years.

### *Semi-structured interview*

The author who conducted the interviews had extensive experience in qualitative research. In addition, the author was supported by a research assistant throughout the study. The interviews were conducted between January 2020 and May 2020 through Zoom or Microsoft Teams for 60–90 minutes. The interviewees were briefed about the study and were asked to sign an online informed consent form. With their permission, all interviews were audio-recorded, and the identities of the participants were confidential. Moreover, no association was to be made between their identities and the recordings.

The relevant literature was the basis for the semi-structured interviews. Interview guidelines were delineated to guarantee that all the participants were given the same set of information and questions. One example of the questions asked is “What are learning motivations of Chinese adult learners, and what drives them to pursue lifelong learning in the field of?”

### *Individual interviews with current adult students*

Each adult was asked to explain his/her motivations behind learning accounting and his/her opinions on his/her motivation to pursue the path of lifelong learning. Some examples of the questions asked are “What are your learning motivations in pursuing an accounting program?” and “Why did you opt to spend your spare time on continuing your studies in accounting?”

### *Individual interviews with professionals*

Each professional was invited to share his/her thoughts, opinions and knowledge on why adult students are motivated to learn accounting. Hence, the perspectives of specialists (e.g., industry practitioners and academic educators) were collected. The following sample questions were asked: “What are the main reasons for adult students to study accounting?” and “Why do adult students choose to study accounting in their spare time?”

## **Results**

### *Themes identified in the interviews*

Transcripts from the interviews were encoded using a framework analysis to produce themes from a comparison within and between different cases (Parkinson et al., 2016) and thematic analysis to extract common themes, which include topics, ideas, and patterns (DeSantis & Ugarriza, 2000). Some examples of repeatedly recurring themes were “earning more money” and “gaining additional monetary rewards” from the interviewees’ responses. These responses were sorted into extrinsic, personal, and career-related factors. They refer to Question 20 and 21 in Table 1. Meanwhile, comments such as “acquiring more knowledge,” “being updated with skills and standards” and “improving intellectual ability” were classified as intrinsic and educational factors. They refer to Question 28 and 30 in Table 1.

The following reasons for learning motivation came from the responses of professionals and students: cognitive development, family harmony, career enrichment, life challenges, knowledge enhancement, social skills, techniques upgrade, family prosperity, social connections, communication skills, job satisfaction, self-exploration and self-actualization, and exploration of habits. These motivations formed 13 categories, which ultimately resulted in six basic themes.

### *Themes from interviews with current adult students and professionals*

The interviews with adult student and professional respondents consistently revealed the following domains: (1) development of knowledge and skills; (2) reinforcement of social networking and communication; (3) family cohesion; (4) career development; (5) enrichment of life; and (6) self-development. Notably, these dimensions matched the categories that were extracted from the literature reviews, with exception of themes of “escape” and “social welfare” in other studies. Statement items for the six domains were subsequently created.

### *Provisional questionnaire items*

On the basis of the interviews and pertinent research, a set of questionnaire items was generated. As shown in Table 1, the original list of 31 provisional items, which was based

**Table 1.** Provisional 31 items from which final 17 items were drawn.

No.	Statement
Q1	I would like to participate in more social activities
Q2	I would like to have more opportunities to understand myself
Q3	I would like to learn more about communication skills
Q4	I would like to have more chances to make new friends
Q5	I would like to enhance my skills in interpersonal relations
Q6	I would like to have more common topics to talk with my family
Q7	I would like to learn more about how to deal with different people
Q8	I would like to discover more about my potentials
Q9	I would like to have personal development and achievement
Q10	I would like to enrich my life in my spare time
Q11	I would like to achieve higher academic qualifications for my family
Q12	I would like to help my family members' work
Q13	I would like to be a role-model for my family
Q14	I find my life boring
Q15	I would like to participate in more activities with my family members
Q16	My family members encourage me to further study in this area
Q17	Learning can help me to get a promotion in my job
Q18	Learning can help me to improve my social status
Q19	I would like to have more and different challenges and tests in life
Q20	It can help me to increase my earning power
Q21	It can help for my career plans
Q22	It can help me to get a job that gives me better job satisfaction
Q23	It can enhance my employment opportunities
Q24	I can acquire more knowledge in the subject areas
Q25	I want to improve my self-esteem and confidence
Q26	It could provide me with an opportunity to upgrade my knowledge
Q27	It can help me to improve my skills for my current job
Q28	I would like to keep up with the latest development in my field
Q29	I would like to develop my mind and intellectual ability
Q30	I would like to put what I have learned into practice
Q31	I would like to make good use of my free time

on the interviews and the relevant literature, comprised the six areas of adult students' motivations to pursue continuing education in the field of accounting.

### *Expert panel's review and evaluation of themes and provisional items*

We also consulted with an expert panel of four experienced specialists to hear their feedback on the suitability and precision of six categories. We also asked them to evaluate the validity of the statements and review the preliminary items. Among the members of the panel, two academic specialists had doctorates and professional qualifications in

accounting. Moreover, they have spent over 20 years in the accounting field and accounting education. Meanwhile, the other two industry leaders in accounting had more than 30 years of experience.

### *Modification of the new scale and instrument*

The expert panel rated each item as “clearly representative,” “somewhat representative,” or “not representative.” Then, items that were unanimously rated clearly or somewhat representative were retained in the questionnaire. The items were then evaluated several times through an iterative process. A total of 31 items were retained in the final set.

After the validity checks, review, and discussion of the results, minor changes were made to the items. Of the 31 statements, no question was omitted.

### *Study 3: A field study*

The interviews and qualitative analysis in Study 1 and Study 2 were the basis for the development and validation of the questionnaire in the quantitative analysis in Study 3.

### *Administration of provisional questionnaire*

The questionnaire had two parts. The first part consisted of personal and demographic information, such as gender and age. The second part consisted of a new instrument—CSMTLA. The instrument was in English and Chinese and was used to analyze the motivation of Chinese adult students to pursue a path of lifelong in accounting. This study was for Chinese only. It was shown on the front page of the questionnaire. The participants were expected to be Chinese. Then, a six-point Likert-type scale was used for the 31 questionnaire items in six specific domains. The scores ranged from 1 (very disagree) to 6 (very agree). The questionnaire could be completed in approximately 15 minutes.

We also used snowball sampling for the study. Emails with a link to the questionnaire along with the informed consent form were forwarded to the prospective participants with the assistance of the lecturers, educational administrators, and programme leaders from the three higher institutions. Respondents were recruited from June 2020 to Oct 2020. University X, University Y, and University Z, the pseudonyms we used for this study, offer accounting programmes at different levels. Moreover, these universities were all located in Kowloon, Hong Kong, China and they had the largest student population and the longest-running institutions in accounting at the associate, baccalaureate, and graduate levels, respectively, in terms of. As such, the participants from these three universities are highly representative.

Reminder emails were disseminated after 3 weeks. The emails contained a short outline of the research. A total of 426 respondents accomplished the survey. Adults above 18 years old who were employed and enrolled as part-time students in accounting programmes, including sub-degree, bachelor’s degree, or master’s degree programmes, met the criteria for the sample.

## Participants

The 426 participants in the formal study were adult accounting students who balancing work and study. These students were recruited from three universities. Table 2 presents the demographics of the sample. In particular, 40.1% were male, and the participants' ages ranged between 20 and 35 years. Moreover, 35.2% were pursuing associate-degree programmes, 34.5% were finishing bachelor's degree programmes, and 30.3% were taking up master's degree programmes.

Table 2 shows that the T-test analysis revealed substantial gender differences in terms of learning motives categories, with the exception of life enrichment (EL). Female adult learners were more motivated better than male adult learners. However, the one-way ANOVA analysis demonstrated no significant difference in all categories of learning motivation in terms of age, university, level of accounting programme, and occupation or designation. The one-way ANOVA analysis also showed a significant disparity only in EL between the participants' work experiences. However, the same analysis indicated substantial differences in the domains of learning motivations, except for EL, in terms of the monthly salaries of participants.

## Results

### Exploratory factor analysis

This research used SPSS Version 26 for the analyses. To determine the reliability and validity of the scale further, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were utilized. The EFA initially examined the suitability of the accounting students' ratings of the 31 items in presenting the six domains of motivation. Then, two tests were examined to check the suitability of the factor analysis. The Kaiser–Meyer–Okin value was .909, thus exceeding the minimum expected value of .6 (Kaiser, 1974). Meanwhile, Bartlett's test of sphericity (Bartlett, 1954) was statistically significant for all students, ( $\chi^2 (N = 465) = 11,154, p < .001$ ). Hence, the outcomes suggested the suitability to conduct EFA in this data set.

Results of the EFA identified six factors with eigenvalues that exceeded 1.0. These six factors listed explained, respectively, 14.50%, 14.05%, 13.01%, 12.59%, 10.18%, and 8.44% of the variance. The items that were loaded on each factor were as follows:

1. Development of knowledge and skills (K & S): Q24, Q26, Q27, Q28, Q29, and Q30;
2. Family cohesion (FC): Q6, Q11, Q12, Q13, Q15, and Q16;
3. Reinforcement of social networking and communication (S & C): Q1, Q2, Q3, Q4, Q5, and Q7;
4. Career development (CD): Q17, Q18, Q20, Q21, Q22, and Q23;
5. Enrichment of life (EL): Q10, Q14, Q19 and, Q31; and
6. Self-development (SD): Q8, Q9, and Q25.

**Table 2.** Descriptive Statistics: Participants' Demographics and their Relationship with Chinese post-secondary students' motivation to learn accounting (CSMTLA) (N = 426).

Factors	N (%)	K&S		FC		S&C		CD		EL		SD	
		M	(SD)	M	(SD)	M	(SD)	M	(SD)	M	(SD)	M	(SD)
All	426 (100%)	4.16 (0.91)		4.42 (0.98)		4.71 (0.85)		4.33 (0.78)		4.33 (0.93)		4.23 (0.91)	
Gender													
(1) Male	171 (40.1%)	4.11 (1.16)		4.18 (1.19)		4.42 (1.02)		4.32 (0.95)		4.27 (1.03)		4.09 (1.18)	
(2) Female	255 (59.9%)	4.19 (0.70)	$t = -0.91^b$	4.59 (0.77)	$t = -4.30^b$	4.90 (0.64)	$t = -6.08^b$	4.33 (0.64)	$t = -0.10^b$	4.37 (0.85)	$t = -1.09$	4.32 (0.67)	$t = -2.62^b$
Age													
(1) Below 23	63 (14.8%)	4.19 (0.76)		4.30 (0.82)		4.85 (0.63)		4.34 (0.61)		4.26 (0.85)		4.33 (0.74)	
(2) 23-26 years old	208 (48.8%)	4.18 (1.00)		4.44 (1.02)		4.74 (0.90)		4.33 (0.82)		4.37 (0.93)		4.24 (0.95)	
(3) 27 - 29 years old	43 (10.1%)	4.26 (0.64)		4.54 (0.85)		4.49 (0.76)		4.55 (0.58)		4.39 (0.97)		4.17 (0.97)	
(4) 30 - 32 years old	96 (22.5%)	4.06 (0.86)		4.43 (0.96)		4.70 (0.83)		4.22 (0.80)		4.22 (0.90)		4.13 (0.87)	
(5) 33 - 35 years old	16 (3.8%)	4.16 (1.26)		4.40 (1.48)		4.44 (1.05)		4.28 (1.04)		4.41 (1.24)		4.35 (1.11)	
		$F(4, 425) = 0.47$		$F(4, 425) = 0.42$		$F(4, 425) = 1.63$		$F(4, 425) = 1.32$		$F(4, 425) = 0.61$		$F(4, 425) = 0.62$	
Work experience													
(1) Less than 1 year	31 (7.3%)	4.07 (0.77)		4.33 (0.92)		4.74 (0.90)		4.21 (0.76)		3.92 (0.97)		4.30 (0.90)	
(2) 1 year to less than 3 years	162 (38%)	4.23 (0.99)		4.44 (0.96)		4.83 (0.80)		4.45 (0.74)		4.47 (0.83)		4.29 (0.94)	
(3) 3 years to less than 7 years	136 (31.9%)	4.17 (0.80)		4.39 (0.97)		4.64 (0.82)		4.26 (0.75)		4.29 (0.95)		4.20 (0.86)	
(4) 7 years to less than 10 years	88 (20.7%)	4.07 (0.94)		4.51 (1.04)		4.62 (0.90)		4.25 (0.82)		4.26 (0.96)		4.13 (0.90)	
(5) 10 years or above	9 (2.1%)	3.89 (1.27)		4.19 (1.30)		4.30 (1.18)		4.19 (1.22)		4.28 (1.35)		4.19 (1.32)	
		$F(4, 425) = 0.74$		$F(4, 425) = 0.44$		$F(4, 425) = 1.95$		$F(4, 425) = 1.84$		$F(4, 425) = 2.74^a$		$F(4, 425) = 0.55$	
Monthly Salaries													
(1) Less than HK\$12,000	127 (29.8%)	4.06 (0.88)		4.34 (1.00)		4.61 (0.83)		4.24 (0.78)		4.20 (1.05)		4.09 (0.88)	
(2) HK\$12,000-HK\$18,000	16 (3.8%)	3.61 (1.09)		3.77 (1.32)		4.02 (1.16)		3.79 (1.07)		4.09 (1.03)		3.71 (1.06)	
(3) HK\$18,001-HK\$26,000	242 (56.8%)	4.25 (0.92)		4.51 (0.94)		4.79 (0.81)		4.41 (0.74)		4.44 (0.83)		4.31 (0.90)	
(4) HK\$26,001-HK\$32,000	30 (7%)	4.12 (0.92)		4.36 (1.01)		4.81 (0.97)		4.25 (0.82)		4.18 (1.02)		4.22 (1.00)	
(5) HK\$32,001-HK\$38,000	3 (0.7%)	5.17 (0.29)		5.22 (0.69)		4.89 (0.19)		4.83 (0.29)		4.67 (0.58)		5.00 (0.33)	
	8 (1.9%)	4.03 (0.28)		4.42 (0.73)		4.79 (0.47)		4.25 (0.44)		3.88 (0.83)		4.6 (0.40)	

(continued)

**Table 2.** (continued)

Factors	N (%)	K&S		FC		S&C		CD		EL		SD	
		M	(SD)	M	(SD)	M	(SD)	M	(SD)	M	(SD)	M	(SD)
(6) HK\$38,001-HK\$45,000	123 (28.9%)	F (5, 425) = 2.77 <sup>a</sup>	F (5, 425) = 2.46 <sup>a</sup>	F (5, 425) = 3.09 <sup>a</sup>	F (5, 425) = 2.79 <sup>a</sup>	F (5, 425) = 2.02	F (5, 425) = 2.84 <sup>a</sup>						
Occupation/position													
(1) Professional/manager/ executive	151 (35.4%)	4.21 (0.93)	4.36 (0.92)	4.80 (0.80)	4.34 (0.73)	4.35 (0.89)	4.23 (0.93)						
(2) Trader/proprietor	84 (19.7%)	4.18 (0.94)	4.51 (1.01)	4.69 (0.91)	4.38 (0.80)	4.40 (0.93)	4.27 (0.92)						
(3) Office: Skilled	36 (8.5%)	4.09 (0.82)	4.40 (0.91)	4.63 (0.69)	4.33 (0.72)	4.19 (0.98)	4.16 (0.88)						
(4) Office: Unskilled	32 (7.5%)	4.24 (1.07)	4.54 (1.18)	4.69 (1.02)	4.25 (0.96)	4.26 (0.99)	4.13 (0.98)						
(5) Factory/shop/outdoor: Skilled	3.98 (0.84)	F (4, 425) = 0.61	F (4, 425) = 0.86	F (4, 425) = 0.58	F (4, 425) = 0.82	F (4, 425) = 0.79	F (4, 425) = 0.33						
Levels of accounting programs													
(1) Sub degree	150 (35.2%)	4.20 (0.90)	4.42 (0.90)	4.75 (0.82)	4.36 (0.73)	4.35 (0.89)	4.22 (0.93)						
(2) Bachelor's degree	147 (34.5%)	4.16 (0.95)	4.44 (1.02)	4.71 (0.88)	4.34 (0.80)	4.36 (0.96)	4.25 (0.91)						
(3) Postgraduate degree	129 (30.3%)	4.11 (0.89)	4.42 (1.03)	4.67 (0.84)	4.27 (0.81)	4.26 (0.94)	4.21 (0.89)						
Universities		F (2, 425) = 0.36	F (2, 425) = 0.20	F (2, 425) = 0.28	F (2, 425) = 0.51	F (2, 425) = 0.52	F (2, 425) = 0.10						
University X	166 (39%)	4.11 (0.94)	4.32 (0.97)	4.63 (0.83)	4.33 (0.76)	4.28 (0.94)	4.27 (0.85)						
University Y	147 (34.5%)	4.21 (0.94)	4.51 (0.97)	4.76 (0.86)	4.34 (0.81)	4.42 (0.92)	4.20 (0.96)						
University Z	113 (26.5%)	4.18 (0.85)	4.46 (1.01)	4.75 (0.85)	4.30 (0.76)	4.27 (0.91)	4.20 (0.94)						
		F (2, 425) = 0.54	F (2, 425) = 1.50	F (2, 425) = 1.08	F (2, 425) = 0.09	F (2, 425) = 1.07	F (2, 425) = 0.30						

Notes: N = 426, US\$1 = HK\$7.8, The CSMTLA subscales are, K&S = Development of knowledge and skills, FC = Family cohesion, S&C = Reinforcement of social networking and communication, CD = Career development, EL = Enrichment of life, SD = Self-development.

<sup>a</sup>p < .05;

<sup>b</sup>p < .001.

### Confirmatory factor analyses

Confirmatory factor analysis (CFA) with maximum likelihood estimation was used to verify the six-factor model identified in EFA. A preliminary analysis showed that of the 31 provisional items, 14 items (Q1, 2, 6, 7, 10, 14, 15, 16, 22, 23, 24, 26, 27, and 29) were possibly redundant based on modification indices greater than 10 (Bagozzi & Yi, 1988). A closer scrutiny of phrasing of these items also revealed that some items should be omitted. We retained items that complied with the modification indices and fulfilled the item wording check. Meanwhile, we omitted items that did not comply and failed the item wording check. Table 3 presents the 31 items (including the 14 possibly redundant items), along with the reasons why each item was retained or omitted. Then CFA was conducted on the remaining 17 out provisional items. Table 4 presents the standardized factor loadings, the average variance extracted (AVE), Cronbach's alpha, and composite reliability based on these 17 items. Results showed that the AVE was greater than .5 for all the constructs. Meanwhile, all the Cronbach's alpha and composite reliability values were higher than .7. All items had a factor loading larger than .7, with exception of Q25, which had a value of .659. The factor loading for the question items were between .6 and .9. Some authors such as Hair et al. (1995) have recommended the acceptability of minimum factor loadings of .45 when the sample size is larger than 150. In addition, MacCallum et al. (2001) believed that a factor loading of .6 is sufficient. Hair et al. (2006) later asserted that a factor loading of .3 is permissible for a sample size of 350 or higher. Hence, our sample size of  $N = 426$  participant matched this suggested criterion. Table 5 shows the correlations among the six factors. The values on the diagonal line are the square roots of the AVEs of the corresponding constructs. Values on the diagonal that are greater than all the off-diagonal correlations on the corresponding row and column indicate high discriminant validity. The table further demonstrates that most of the factors (K&S, FC, S&C, and EL) met this criterion. However, other factors require additional study to determine their discriminant validity (CD and SD). The goodness-of-fit indices for the model in Figure 2 are presented in Table 6. The six-factor model of CSMTLA statistically suited the samples. The values were as follows: with  $\chi^2 = 149.21$ ,  $df = 126$ , and  $p > .05$ . The indexes of the model conceptually matched the Standardized Root Mean Square Residual (SRMR) = 0.0549 and the Tucker Lewis index (TLI) > .90.

### General Discussion

As a positive and continuous process, lifelong learning highlights adult learners' freedom and self-directed learning (Barker et al., 1998). We analyzed young Chinese adult learners' reasons for pursuing lifelong learning in the field of accounting. The questionnaire created in this study was effective in terms of its validity and reliability. The questionnaire created in this study was effective in terms of its validity and reliability. Furthermore, adult students enrolled in various accounting programmes in associate's, bachelor's, or master's degrees) showed no substantial disparities in their motivation to pursue higher education.

**Table 3.** Descriptive statistics of all items organized by domain, their modification indices, and reasons for retention or removal (N = 426).

Factor	Item	Mean	Standard deviation	Standardized factor loading	Modification index	Reasons to retain or remove	Decision to remove
Development of knowledge and skills (K&S)	Q28	4.07	1.09	0.752	<10	These two items summarize the main knowledge, skills, and abilities required by the Chinese adult learners. Also, the two questions broadly contain the meanings and inferences of other question items in this domain.	Retained
	Q30	4.33	1.10	0.768	<10		Retained
	Q24	4.43	0.86	0.751	21.68	These four items are closely similar to Q28 and Q30.	Removed
	Q26	4.22	1.01	0.825	15.71		Removed
	Q27	3.89	1.20	0.807	15.80		Removed
Q29	4.25	0.98	0.828	15.73	Removed		
Family cohesion (F.C.)	Q11	4.22	1.15	0.765	<10	These three items represent the pursuits of family harmony and togetherness. Moreover, these three items generally cover the implications and interpretations of other items in this domain.	Retained
	Q12	4.88	1.01	0.646	<10		Retained
	Q13	4.18	1.28	0.852	<10		Retained
	Q6	4.48	1.18	0.715	25.62		Removed
Reinforcement of social networking and communication (S&C)	Q15	4.14	1.16	0.813	15.23	These three items are closely similar to and have comparable functions as Q11, Q12, and Q13.	Removed
	Q16	3.80	1.28	0.742	25.12		Removed
	Q3	4.60	0.95	0.667	<10		Retained
	Q4	4.81	1.03	0.862	<10	These three items represent the main aptitudes needed by the young Chinese lifelong learners. Besides, these three items encompass the components and meaning of other items in this domain.	Retained
	Q5	4.72	0.97	0.771	<10		Retained
	Q1	4.58	1.02	0.774	29.12		Removed
Career development (CD)	Q7	4.79	1.09	0.751	28.25	These two items have equivalent meanings to Q3, Q4, and Q5.	Removed
	Q2	4.65	0.99	0.833	25.45		Removed
	Q17	4.51	0.85	0.706	<10	This item involves the identification and judgment of personal self-worth, resulting in a bias of objectivity.	Retained
	Q18	4.36	0.90	0.743	<10		Retained
	Q20	4.27	0.96	0.65	<10		Retained
	Q21	4.16	1.10	0.782	<10		Retained
	Q22	4.23	1.07	0.874	26.34	These two items are strongly alike and have the same purpose as Q17, Q18, Q20, and Q21.	Removed
	Q23	4.08	1.08	0.827	26.34		Removed

(continued)

**Table 3.** (continued)

Factor	Item	Mean	Standard deviation	Standardized factor loading	Modification index	Reasons to retain or remove	Decision to remove
Enrichment of life (EL)	Q19	4.32	0.91	0.956	<10	These two items represent the young Chinese lifelong learners' key desires to have an enriched life. Also, these two items principally comprise the meaning of other questions in this domain.	Removed
	Q31	4.33	0.98	0.968	<10		
Self-development (SD)	Q10	3.85	1.10	0.712	28.45	These two items are closely related to and have similar meanings to Q19 and Q31.	Removed
	Q14	3.85	1.19	0.562	35.60		
	Q8	4.40	1.16	0.803	<10	These three items represent what the young Chinese adult learners want to achieve in their personal development in the domain of S.D.	Removed
	Q9	4.26	1.01	0.742	<10		
	Q25	4.02	1.08	0.694	<10		

Note: modification indices greater than 10 would suggest possible redundancy with the items and also need further inspection of their wordings for removal. Based on the modification indices and review of the wordings, the final decision would be made in the last column.

**Table 4.** Factor analysis and convergent validity after removal of redundant items.

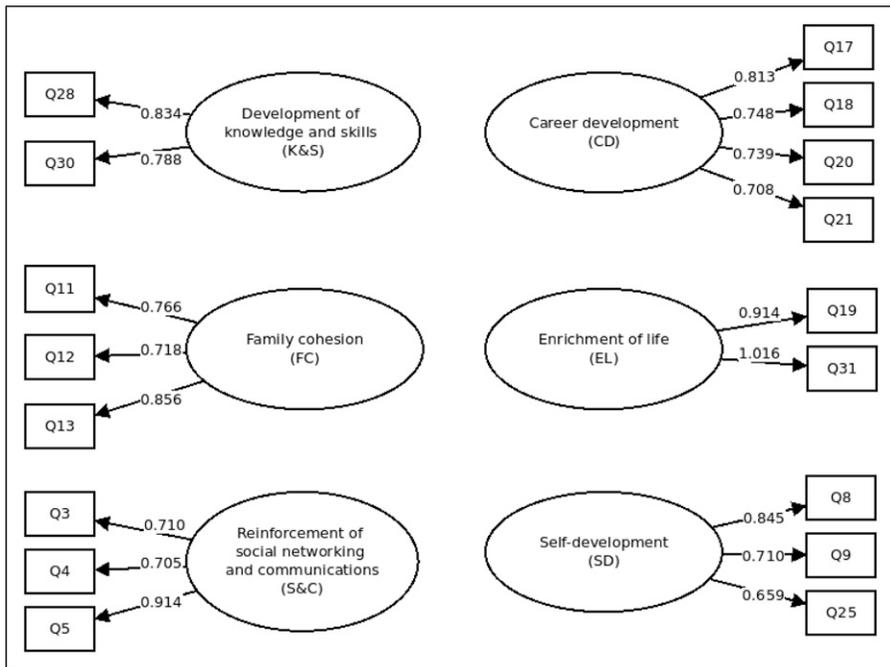
Factor	Indicator	Standardized factor loading	AVE	Cronbach's Alpha	Composite Reliability
Development of knowledge and skills (K&S)	Q28	0.834	0.659	0.794	0.794
	Q30	0.788			
Family cohesion (FC)	Q11	0.766	0.612	0.819	0.832
	Q12	0.718			
	Q13	0.856			
Reinforcement of social networking and communication (S&C)	Q3	0.710	0.612	0.818	0.821
	Q4	0.705			
	Q5	0.914			
Career development (CD)	Q17	0.813	0.567	0.828	0.834
	Q18	0.748			
	Q20	0.739			
	Q21	0.708			
Enrichment of life (EL)	Q19	0.914	0.934	0.962	0.969
	Q31	1.016			
Self-development (SD)	Q8	0.845	0.551	0.794	0.789
	Q9	0.710			
	Q25	0.659			

**Table 5.** Correlations among factors, with square root of each construct's average variance extracted on the diagonal.

	K&S	FC	S&C	CD	EL	SD
K&S	<b>0.812</b>					
FC	0.472	<b>0.782</b>				
S&C	0.450	0.735	<b>0.782</b>			
CD	0.557	0.670	0.751	<b>0.753</b>		
EL	0.449	0.367	0.449	0.603	<b>0.966</b>	
SD	0.497	0.649	0.738	0.779	0.404	<b>0.742</b>

### *Validation of the new questionnaire—Chinese post-secondary and part-time students' motivation to learn accounting*

The test development confirmed the validity of the questionnaire's contents. Well-established conceptual foundations, including intrinsic and extrinsic motivation (Pintrich & García, 1991), the empirical findings on lifelong education (Chen & Liu, 2019) and the motivations to study accounting in higher education (Lucianelli & Citro, 2018; Karlsson & Noela, 2022; Ulfah et al., 2019) aided in the development of the questionnaire items. Qualitative analysis of in-depth interviews with accounting professionals and adult students also helped fine-tune the topics covered in the questionnaire. Feedback from the respondents validated relevant coverage of the questionnaire for understanding adult students' motivations to return to school.



**Figure 2.** Graphical representation of the resulting 17-item model.

**Table 6.** Goodness-of-Fit Measurements.

Fit index	Criterion	Value
SRMR	<0.08 (Hu & Bentler, 1999)	0.0549
$\chi^2$	>0.05 (Awang, 2014);	0.1512
CFI	>0.90 (Klem, 2000)	0.914

The relevant tools from earlier studies for adult learning motivation in lifelong learning and continuous education were also used as the constructs as demonstrated in Figure 1. This new scale, the CSMTLA, is suitable for examining young Chinese adults in this era and is also an improvement over these prior instruments.

The questionnaire also demonstrated various additional aspects of validity. Corresponding with our theoretical model of learning motivation in accounting as a multi-dimensional construct, the findings of the EFA of 31 provisional items revealed that the items could be grouped into six concise scales. This six-factor structure was validated after the duplicate items were removed using the CFA of the remaining 17 questions. Convergent validity was established, whereas discriminant validity needs further improvement.

The CSMTLA is a solid basis for future investigations. The scale provides a practical way to gather data on the important aspects of young Chinese adult students' learning motivation in accounting on the path of lifelong learning. Thus, it would be highly beneficial to other researchers. Universities can also benefit from this easy-to-access data to entice adults who intend to pursue continuing education. Meanwhile, accounting teachers can use the scale as a basis for planning and developing their curricular, exams, and pedagogies to suit the learning motivation of adult students.

### *Chinese adult students' motivations for studying accounting*

Part-time adult learners have varying degrees of motivation at different phases of their learning (Feinstein et al., 2007). In the same way, Chinese adult learners have various and complex reasons for continuing to study accounting. These findings are in line with those of Chen and Liu (2019) and Chen (2018) research, which suggested factors such as individual willpower, family values, face, peer support, and curiosity must be taken into account to have a clear picture of the motivation of Chinese learners, particularly within the prevailing Confucian ideals of Chinese culture.

According to the findings, adults have six different motivations to pursue further studies in accounting.

*Development of knowledge and skills.* The items that demonstrated the adult learners' motivation to develop knowledge and skills were "keeping up with the latest development in my field" and "putting what I have learned into practice." They reflected the aspirations of Chinese adult learners to acquire knowledge, skills, and abilities, which were in line with the findings of existing research that the enhancement of knowledge and skills is a top motivation among lifelong learners (Karlsson & Noela, 2022; Ulfah et al., 2019). This motivation was also observed in a study in Ireland on university accounting students. The students in the said study reported that career development and enhancement of knowledge and skill were their primary drivers (Byrne & Flood, 2005). This aspect is particularly important, as knowledge and skills are necessary for in-depth learning, which consequently predicts lifelong learning (Mbagwu et al., 2020).

*Family cohesion.* Items that represent motivations that enhance family harmony and closeness include "being a role-model for my family" and "helping my family members' work." Other research pointed out that family wellbeing, such as aspiring for children's development and the quality of relationships with partners, is a crucial motivator for adult learners (Chen & Liu, 2019). Ho et al. (2012) observed that family values were drivers of lifelong learning among Chinese adults within the context of traditional Confucian culture. Later, Chen (2018) also found that social factors, including one's family background, were closely associated with the motivations of adult learners in Hong Kong.

*Reinforcement of social networking and communications.* Items such as "developing communication skills" and "making new friends" represented the motivations for improving social networking and communication. Similarly, Guan & James (2020) found that guanxi

(a Chinese term for cordial relationships and social networking) is a crucial factor for the learning motivations of adult learners in Chinese higher education. Mishra (2020) also concluded that the possibility of forming new friendships and networks in professional organizations is a motivation for adult learners to pursue higher education.

*Career development.* Items such as “gaining a promotion in my job” and “having earning power” reflected adult students’ desire for career development. Some researchers have also suggested that lifelong learners have a clear motivation to attain career-related rewards (Chen & Liu, 2019; Drewery et al., 2020). Studies in Ireland (Byrne & Flood, 2005), the US (Paolillo & Estes, 1982), Australia (Samsuri et al., 2016), and New Zealand (Ahmed, et al., 1997) in previous decades have reported that several aspects of career development, including monetary rewards, job availability, job security, opportunities for promotion, and flexible career options, are important drivers of students’ decision to pursue accounting. This notion is especially true for part-time graduate students (Ho et al., 2012). In a similar way, Chen and Liu (2019) asserted that the most important motivator for Chinese adults to pursue learning is the possibility of acquiring better qualifications, which would subsequently increase chances for promotion, opportunities for social mobility and salary increases.

*Enrichment of life.* Items such as “experiencing more and different challenges and tests in life” and “making good use of my free time” represented the young Chinese lifelong learners’ aspiration toward an enriched and colorful life. Byrne & Flood (2005) observed that adult accounting students hoped to increase their self-confidence and self-esteem. In addition, Swain & Hammond (2011) revealed that joy, wellbeing, and happiness were among their part-time adult students’ motivations in continuing education.

*Self-development.* Items such as “discovering more about my potential” and “improving my self- esteem” reflected young Chinese adult learners’ aspiration for personal development. The findings of Ho et al., (2012) also supported this outcome. They demonstrated that Chinese adult learners’ motivation to seek higher education for of their self-realization and self-cultivation, as well as for the satisfaction of their interests.

## Conclusion

The findings of the study answered the first question of the study, suggesting (1) development of knowledge and skills, (2) enhancement of social networks and communication, (3) family cohesion, (4) career development, (5) life enrichment, and (6) self-development are the driving forces for part-time adult students (including community college students, undergraduate, and graduate students) to take accounting courses. Also, the results of the study showed evidence for the reliability and validity of this measure (CSMTLA) in six domains of Chinese adult learners’ motivations to learn accounting. CSMTLA is a culturally sensitive questionnaire using qualitative and quantitative methods. The measure has potential application for both research and education.

Despite the potential contributions of the study, it has three limitations. Firstly, we used both qualitative and quantitative methods, and the sample included adult learners at various educational levels. However, we could not confirm the generalizability of our results due to the single sample (Chinese part-time adult students only). Hence, future studies can use our methods to examine different samples as well as other cultural contexts. Secondly, our study only has partial evidence of discriminant validity. Hence, the items in the questionnaire should be revised and added to more effectively distinguish among the six types of motivations in this research. As such, tests of predictive ability are also needed in future research. As such, tests of predictive ability are also needed in future research. Thirdly, the questionnaire is self-reported. Therefore, the participants' responses may have answered the questionnaire based on social desirability rather than on their real experiences.

### Declaration of conflicting interests

The author(s) declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

### ORCID iD

Hok-Ko Pong  <https://orcid.org/0000-0003-2187-2679>

### References

- Ahmed, K., Alam, K. F., & Alam, M. (1997). An empirical study of factors affecting accounting students' career choice in New Zealand. *Accounting Education*, 6(4), 325–335. <https://doi.org/10.1080/096392897331398>
- Awang, Z. (2014). *Research Methodology and Data Analysis* (2nd ed.). Universiti Teknologi Mara, UiTM Press.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/bf02723327>
- Barker, P., Schaik, P. V., & Hudson, S. (1998). Mental models and lifelong learning. *Innovations in Education and Training International*, 35(4), 310–318. <https://doi.org/10.1080/1355800980350406>
- Bartlett, M. S. (1954). A note on the multiplying factors for various  $\chi^2$  approximations. *Journal of the Royal Statistical Society: Series B (Methodological)*, 16(2), 296–298. <https://doi.org/10.1111/j.2517-6161.1954.tb00174.x>
- Brookfield, S. (1986). *Understanding and facilitating adult learning: A comprehensive analysis of principles and effective practices (The Jossey-Bass management series)*. Jossey-Bass.

- Brown, R. (2000). Social identity theory: Past achievements, current problems and future challenges. *European Journal of Social psychology*, 30(6), 745–778. <https://doi.org/10.1080/03098770500103176>.
- Byrne, M., & Flood, B. (2005). A study of accounting students' motives, expectations and preparedness for higher education. *Journal of Further and Higher Education*, 29(2), 111–124. <https://doi.org/10.1080/03098770500103176>
- Chen, J. A. (2018). A study on the development of Chinese lifelong education system from the perspective of cultural confidence. *Education Journal*, 7(5), 127–131. <https://doi.org/10.11648/j.edu.20180705.14>
- Chen, Z., & Liu, Y. (2019). The different style of lifelong learning in China and the USA based on influencing motivations and factors. *International Journal of Educational Research*, 95, 13–25. <https://doi.org/10.1016/j.ijer.2019.03.005>.
- Choi, M. C. (2019). Analysis of the reasons contributing to Hong Kong's economic development. *International Journal of Innovation, Creativity and Change*, 7(4), 316–328. [https://ijicc.net/images/vol7iss4/7425\\_Choi\\_2019\\_E\\_R.pdf](https://ijicc.net/images/vol7iss4/7425_Choi_2019_E_R.pdf).
- Darkenwald, G. G., & Merriam, S. B. (1982). *Adult education: Foundations of practice*. Ty Crowell Co.
- De Lange, P., Suwardy, T., & Mavondo, F. (2003). Integrating a virtual learning environment into an introductory accounting course: Determinants of student motivation. *Accounting Education*, 12(1), 1–14. <https://doi.org/10.1080/0963928032000064567>
- DeSantis, L., & Ugarriza, D. N. (2000). The concept of theme as used in qualitative nursing research. *Western Journal of Nursing Research*, 22(3), 351–372. <https://doi.org/10.1177/019394590002200308>
- Donald, J. G. (1999). Motivation for higher-order learning. *New Directions for Teaching and Learning*, 1999(78), 27–35. <https://doi.org/10.1002/tl.7803>
- Drewery, D. W., Sproule, R., & Pretti, T. J. (2020). Lifelong learning mindset and career success: Evidence from the field of accounting and finance. *Higher Education, Skills and Work-Based Learning*, 10(3), 567–580. <https://doi.org/10.1108/heswbl-03-2019-0041>
- Feinstein, L., Anderson, T. M., Hammond, C., Jamieson, A., & Woodley, A. (2007). *The social and economic benefits of part-time, mature study at Birkbeck College and the Open University: Project report*. The Open University.
- Gardner, A. C., Maietta, H. N., Gardner, P. D., & Perkins, N. (2022). Postsecondary adult learner motivation: An analysis of credentialing patterns and decision making within higher education programs. *Adult Learning*, 33(1), 15–31. <https://doi.org/10.1177/1045159520988361>
- Guan, S., & James, F. (2020). Staying afloat via guanxi: Student networks, social capital and inequality in Chinese adult higher education. *British Journal of Educational Studies*, 68(3), 349–364. <https://doi.org/10.1080/00071005.2019.1618788>
- Hackman, C. L., & Knowlden, A. P. (2014). Theory of reasoned action and theory of planned behavior-based dietary interventions in adolescents and young adults: A systematic review. *Adolescent Health, Medicine and Therapeutics*, 5, 101–114. <https://doi.org/10.2147/AHMT.S56207>.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis* (4th ed.). Prentice Hall.

- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6). Pearson Prentice Hall.
- Henning, M. A., Krägeloh, C. U., & Wong-Toi, G. (Eds), (2014). *Student motivation and quality of life in higher education*. Routledge.
- Ho, A., Kember, D., & Hong, C. (2012). What motivates an ever increasing number of students to enroll in part-time taught postgraduate awards? *Studies in Continuing Education*, 34(3), 319–338. <https://doi.org/10.1080/0158037x.2011.646979>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling. a multidisciplinary journal*, 6(1), 1–55.
- Jacob, W. J., Mok, K. H., Cheng, S. Y., & Xiong, W. (2018). Changes in Chinese higher education: Financial trends in China, Hong Kong and Taiwan. *International Journal of Educational Development*, 58, 64–85. <https://doi.org/10.1016/j.ijedudev.2017.03.006>.
- Jones, D., & Wallis, J. (1992). Adult education in China: An enquiry into reasons for attending. *International Journal of Lifelong Education*, 11(1), 25–40. <https://doi.org/10.1080/0260137920110104>
- Kaiser, H. F. (1974). An Index of factorial simplicity. *Psychometrika*, 39(1), 31–36. <https://doi.org/10.1007/bf02291575>
- Karlsson, P., & Noela, M. (2022). Beliefs influencing students' career choices in Sweden and reasons for not choosing the accounting profession. *Journal of Accounting Education*, 58, 100756. <https://doi.org/10.1016/j.jaccedu.2021.100756>.
- Kasworm, C. E., & Marienau, C. A. (1997). Principles for assessment of adult learning. *New Directions for Adult and Continuing Education*, 1997(75), 5–16. <https://doi.org/10.1002/ace.7501>
- Kennedy, P. (2002). Learning cultures and learning styles: Myth-understandings about adult (Hong Kong) Chinese learners. *International Journal of Lifelong Education*, 21(5), 430–445. <https://doi.org/10.1080/02601370210156745>
- Klem, L. (2000). Structural equation modeling. In L. G. Grimm, & P. R. Yarnold (Eds.), *Reading and understanding more multivariate statistics* (pp. 227–260). Washington DC: American Psychology Association.
- Knowles, M. (1984). *The adult learner: A neglected species* (3rd ed.). Gulf Publishing.
- Kwong, T. M., Mok, Y. F., & Kwong, M. L. (1997). Social factors and adult learners' motivations in re-entering higher education. *International Journal of Lifelong Education*, 16(6), 518–534. <https://doi.org/10.1080/0260137970160605>
- Legislative Council Secretariat (2020). *Research brief issue No. 2: Global competition for talent*. Legislative Council Secretariat. LC Paper No. RB02/19-20.
- Lucianelli, G., & Citro, F. (2018). Accounting education for professional accountants: Evidence from Italy. *International Journal of Business and Management*, 13(8), 1–15. <https://doi.org/10.5539/ijbm.v13n8p1>
- MacCallum, R. C., Widaman, K. F., Preacher, K. J., & Hong, S. (2001). Sample size in factor analysis: The role of model error. *Multivariate Behavioral Research*, 36(4), 611–637. [https://doi.org/10.1207/S15327906MBR3604\\_06](https://doi.org/10.1207/S15327906MBR3604_06)
- Martin, L. E., & Mulvihill, T. M. (2019). Voices in education: Teacher self-efficacy in education. *The Teacher Educator*, 54(3), 195–205. <https://doi.org/10.1080/08878730.2019.1615030>

- Mbagwu, F. O., Chukwuedo, S. O., & Ogbuanya, T. C. (2020). Promoting lifelong learning propensity and intentions for vocational training among adult and vocational educational undergraduates. *Vocations and Learning, 13*(3), 419–437. <https://doi.org/10.1007/s12186-020-09245-1>
- Mishra, S. (2020). Social networks, social capital, social support and academic success in higher education: A systematic review with a special focus on ‘underrepresented’ students. *Educational Research Review, 29*, 100307. <https://doi.org/10.1016/j.edurev.2019.100307>.
- Opdecam, E., & Everaert, P. (2012). Improving student satisfaction in a first-year undergraduate accounting course by team learning. *Issues in Accounting Education, 27*(1), 53–82. <https://doi.org/10.2308/iace-10217>
- Pan, F., He, Z., Sigler, T., Martinus, K., & Derudder, B. (2018). How Chinese financial centers integrate into global financial center networks: An empirical study based on overseas expansion of Chinese financial service firms. *Chinese Geographical Science, 28*(2), 217–230. <https://doi.org/10.1007/s11769-017-0913-7>
- Pang, E., Wong, M., Leung, C. H., & Coombes, J. (2019). Competencies for fresh graduates’ success at work: Perspectives of employers. *Industry and Higher Education, 33*(1), 55–65. <https://doi.org/10.1177/0950422218792333>
- Paolillo, J., & Estes, R. (1982). An empirical analysis of career choice factors among accountants, attorneys, engineers, and physicians. *The Accounting Review, 57*(4), 785–793. <https://www.jstor.org/stable/247413>.
- Parkinson, S., Eatough, V., Holmes, J., Stapley, E., & Midgley, N. (2016). Framework analysis: A worked example of a study exploring young people’s experiences of depression. *Qualitative Research in Psychology, 13*(2), 109–129. <https://doi.org/10.1080/14780887.2015.1119228>
- Pintrich, P. R., & García, T. (1991). Student goal orientation and self-regulation in the college classroom. In M. L. Maehr, & P. R. Pintrich (Eds.), *Advances in motivation and achievement: Goals and self-regulatory processes* (7, pp. 371–402). JAI.
- Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the motivated strategies for learning questionnaire (MSLQ). *Educational and Psychological Measurement, 53*(3), 801–813. <https://doi.org/10.1177/0013164493053003024>
- Samsuri, A. S. B., Arifin, T. R. B. T., & Hussin, S. B. (2016). Perception of undergraduate accounting students towards professional accounting career. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 6*(3), 78–88. <https://doi.org/10.6007/ijarafms/v6-i3/2173>
- Sandau, M. (2022). The long-term effects of school education on further education: A longitudinal view on motivation and behaviour in youth and adulthood. *Longitudinal and Life Course Studies: International Journal, 13*(4), 527–550. <https://doi.org/10.1332/175795921X16608162829933>
- Sheng, X. (2019). Confucian home education in China. *Educational Review, 71*(6), 712–729. <https://doi.org/10.1080/00131911.2018.1471665>
- Smith, M. C., & Pourchot, T. (2013). *Adult learning and development: Perspectives from educational psychology*. Routledge.
- Sun, Q., & Kang, H. (2019). The new vistas of adult and continuing education for change in Asian context: Themes and implications. *New Directions for Adult and Continuing Education, 2019*(162), 139–152. <https://doi.org/10.1080/02601370.2011.579736>

- Swain, J., & Hammond, C. (2011). The motivations and outcomes of studying for part-time mature students in higher education. *International Journal of Lifelong Education*, 30(5), 591–612. <https://doi.org/10.1080/02601370.2011.579736>
- Thompson, E. R., & Gui, Q. (2000). Hong Kong executive business students' motivations for pursuing an MBA. *Journal of Education for Business*, 75(4), 236–240. <https://doi.org/10.1080/08832320009599021>
- Ulfah, R., Jaharadak, A. A., & Khatibi, A. A. (2019). Motivational factors influencing MSU accounting students to become a certified public accountant (CPA). *Management Science Letters*, 9(10), 1675–1684. <https://doi.org/10.5267/j.msl.2019.5.020>