BANKING & FINANCE | RESEARCH ARTICLE

Career status, retirement readiness, and age differences: Empirical evidence from skilled immigrants in Thailand

Phaninee Naruetharadhol¹, Sasichakorn Wongsaichia¹, Martine Van Wouwe² and Chavis Ketkaew¹*  

Abstract: This research article attempts to analyze the relationship between career status and retirement readiness of skilled immigrants in Thailand’s educational sector. This article employed a sample of 319 skilled immigrants in the Northeast of Thailand and performed a statistical analysis utilizing the structural equation modeling (SEM) approach and using age as a moderator for the multi-group analysis (MGA). The empirical results revealed that career status was the primary construct affecting a skilled immigrant’s capacity to retire readily. It was recommended that skilled immigrants enhance their career status by maintaining salary, improving skills necessary for job tasks, and promptly responding to the labor market demand. The results suggested that career status was a crucial factor allowing skilled immigrants to prepare for retirement effectively. Additionally, career status affects retirement readiness for both immigrants age above and below 30. However, this impact is significantly higher for the older ones.

Subjects: Economics; Finance; Business, Management and Accounting

ABOUT THE AUTHORS

Phaninee Naruetharadhol is an assistant professor of management at the International College, Khon Kaen University, Thailand. Her research interests involve organizational behavior, human resource management, financial planning, and innovation management. She is the first author of this research project.

Sasichakorn Wongsaichia is a research assistant at the International College, Khon Kaen University, Thailand. Her research interests include business management and consumer behavior.

Martine Van Wouwe is a professor of statistics and economics at the Faculty of Business and Economics, University of Antwerp, Belgium.

Chavis Ketkaew is an assistant professor of management at the International College, Khon Kaen University, Thailand. His research interests include business management, behavioral economics, consumer research, market research, and business models. He is the principal investigator and corresponding author of this research project.

PUBLIC INTEREST STATEMENT

The relationship between a specific financial plan for retirement and an immigrant’s behavior in most studies emphasize the economic aspects, ignoring the effects of social psychology, especially work-related factors. This article explores factors influencing career status and the retirement readiness of skilled immigrants in Thailand. We found that impact of career status on retirement readiness was more for the immigrants older than 30 years old.
Keywords: Career status; retirement readiness; skilled immigrant; educational sector

1. Introduction
The past few decades have been a period of the rapid development of globalization across the world, and Thailand has remained one of the most open economies in Asia. In the countries that actively participate in international communication, a significant increase in investment, technology, trade, and tourism has been realized (Österle, 2007). As a lower-middle-income country, Thailand is considered the origin and destination of a large number of international migrants. Income disparities among states have generally widened, and this increases the urge to migrate, for instance, in search of employment opportunities (Ettner & Grzywacz, 2003). Some features of economic development in Thailand have stimulated international migration. Much of the manufacturing sector is funded by foreign direct investment, often spurred by tax incentives offered by the Board of Investment (BOI).

Thailand focuses on international tourism to develop and promote its economy, and in recent years, the industry has become the largest source of foreign exchange trades in the country. Every year, millions of people are encouraged to visit Thailand. The tourism infrastructure has gradually developed to the extent of attracting foreign experts in the hotel industry (Huguet, 2014). As of August 2019, there were 2,877,144 registered migrant workers in Thailand (Ministry of Labor, 2019). According to the data, the most substantial numbers of foreign nationals in Thailand are the Japanese, with a total of 23,060 work permits. Foreigners from China, India, the Philippines, the United Kingdom of Great Britain and Northern Ireland, and the United States of America are among the form spears with between 6800 to 8500 work permits per country. In industries, 30% of foreign work permits are in manufacturing, 16% in the education sector, and 54% in the tourism industry. In this context, because of the economic and social stability, Thailand has become a home to hundreds of thousands of asylum seekers and millions of migrant workers from other countries. The Thai government usually reacts quickly to changing immigration trends. For instance, the government recently took significant actions to regulate unauthorized immigration into the country.

The financial plan for retirement is a significant concern for the Thai government. Thailand’s pension system was entirely restructured in the late 1990s. Today, it includes old-age pension, and private-sector workers compensations, state pension plans, and government pension funds. The financial retirement plan is a unique set pay pension system for civil servants. An individual’s retirement planning behavior affects his or her financial goals (Ketkaew et al., 2020a). In psychology research, retirement is often conceptualized as a decision-making process, emphasizing that when workers decide to retire, they make a reasonable decision to reduce their mental commitment to work by quitting work-related activities. From the underlying cause, this concept assumes that after the workers decide to retire, their work activities should be monotonically reduced over time, and other living activities, such as family and community-related activities, will increase (Wang & Shultz, 2010). This concept also emphasizes the importance of retirement decision as a significant life event. It illustrates some of the normative reasons for retirement, such as health problems, family health needs, attitudes towards work, employers and careers, and desire for leisure activities (Chevalier et al., 2013; Shultz et al., 1998). Retirees are expected to get more social welfare benefits and social security, but the survey found that a large proportion of Thai retirees still had income below the upper-middle-income poverty line of 75.7 baht per day (Ketkaew et al., 2019a). For the retired staff who are government officials, the main issue that they are concerned with is the financial plan from the government’s subsidy after retirement because the pension has some effect on the retirement benefits and economic planning for the retired nationals. Besides, the study of the pension plan for migrants reveals insufficient data and needs further research (Ettner & Grzywacz, 2003). Many skilled immigrant workers in Thailand, especially in the educational sector, still lack supported scheme which help them effectively plan for their retirement. Hence, it is necessary that they plan for their retirement themselves.
The relationship between a specific financial plan for retirement and an immigrant’s behavior can be analyzed from multiple perspectives. Most studies emphasize the economic aspects, ignoring the effects of social psychology (O Rand, 2002). From an economic view, this relationship has aroused considerable interest because, in other respects, the medium-term and long-term pension system has been economically affected (Ketkaew et al., 2019b). From the sociological point of view, this relationship is worrying because it creates more difficulties for immigrants to develop their retirement plans economically (Bujaki et al., 2017). This is the reason why we try to find evidence from skilled immigrants in Thailand. This research paper explores factors influencing career status and the retirement readiness of skilled immigrants in Thailand. The study has two goals: First, to determine the factors that influence career status and observe the retirement readiness of skilled immigrants; and second, to prove the moderating effect of age on the relationship between career status and retirement readiness using skilled immigrants in Thailand as respondent. This study provides useful results to understand the participation of skilled immigrants in the financial retirement plan in Thailand.

2. Life-cycle hypothesis

The life-cycle hypothesis was founded as the main theory explaining the moderating role of age in this research. This theory indicates the consumption and saving behaviors of skilled immigrants throughout their lifetimes. A presumption underlying this economic theory is that individuals plan their spending over their lifetime regarding their anticipated future income from career status. Based on Figure 1, young skilled immigrants take on debt anticipating that future income will permit them to pay off the debt. In contrast, young skilled immigrants spend on consumption by either borrowing others or expending the properties succeed from their parents. During professional years, they consume less than the level of income earned and generate net positive savings. After the retirement age, they establish and proceed to dis-save; that is, they devour more than their revenue. This is because retired people sustain their consumption; nonetheless, decreasing in income earned.

According to the life-cycle hypothesis, we presume an individual who anticipates living for another $T$ years and has a wealth of $W$. The individual also expects to acquire annual income $Y$ until he retires $R$ years from now. Thus, the individual's resources over his lifetime involve his initial wealth endowment ($W$) and his anticipated future income ($R$ times $Y$). Hence, the individual's consumption is stated to be a function of wealth ($W$) and anticipated future income ($R \times Y$).
3. Review of literature
This section discusses academic literature related to a skilled immigrant's career status and retirement readiness, which will then be utilized to enhance the proposed structural model. The literature and hypotheses were classified into different types: career status, salary, skilled, retirement readiness, saving plan, life satisfaction, health benefit, and age.

3.1. Career status (CS)
The quantity of knowledge and expertise an employee has accomplished from a college degree, and experiences may impact a higher professional status. The higher work position affects an employee’s higher salary and, thus, more competence to reserve for retirement (Nielsen et al., 2019). Employees with tertiary-level education and substantial salary are more committed and activated to reserve for retirement (Lusardi & Mitchell, 2007a). An employee with a graduate degree will be able to retire earlier than an individual without a higher education degree. Research in Thailand indicated that skilled workers with a bachelor degree or higher with professional competence are involuntary to pursue performing after the retirement period, although unskilled workers with a lower degree of pedagogy still requested for occupations after retirement (Ketkaew et al., 2019a, 2019b). Furthermore, the demand for the workforce market also influences a worker’s professional status. Documentation also reveals that persons with high professional status and good social connectedness or high remunerations arrange less for retirement (Lusardi & Mitchell, 2007b). This study hypothesizes that Salary(CS1), Skills(CS2), and Market Demand for a Job (CS3) positively influence Career Status (CS) indicated as follows.

3.1.1. Salary (CS1)
Salary refers to the remuneration for professionals in exchange for continuous work or service. Most employers evaluate individual performance to determine the pay decision, which is an important variable when considering salary increase or promotion (Asaari et al., 2019). Even if you apply for a new job, this information may be valuable to your prospective employer because it provides a better understanding of your abilities. Salary is the most basic income for people. Employees, clerks, managers, and employers generally agree that wages are central to the income of the vast majority of the labor force (Goda et al., 2014). Similarly, many pension plans are based on salary and motivation. In contrast, self-employed workers do not receive wages but sell labor directly in the market (Mueller & Kim, 2008). Property and business owners earn income from rents, dividends, and other financial instruments. Better pay and bonuses often motivate employees. These increase their productivity.

3.1.2. Skills (CS2)
There are evolving questions and tests to measure candidates’ qualifications and basic skills during a company’s hiring process. When an applicant is absorbed as an employee, these skills become essential in determining his competency (Lawong et al., 2019). Employees develop and utilize their existing set of skills and expand them to help employees perform their tasks more effectively (De Grip et al., 2020). Managers need to understand how each employee’s ability affects job performance to develop effective employee development programs (Saridakis et al., 2017).

3.1.3. Market demand for a job (CS3)
The population size often determines labor supply size, migration, and workforce participation about how many adults are working or actively seeking employment (Ketkaew & Naruethradhol, 2016a). The supply of labor may be affected by the rate at which workers enter the workforce. If the number of employees is many, the amount of work reduces, and as a result, salary decreases as well. A job with a high starting salary often attracts many applicants. However, such tasks are few in the market today (Säve-Söderbergh, 2019). During the recession, the labor demand curve would shift inwards. The sale of goods and services would fall, and business profits would reduce as well. As a result, many employers would not be able to sustain the salary requirement for many workers. The result is some redundancies in the labor force and a general decline in labor demand per salary rate (Lichter et al., 2015). In each of the surveyed sectors, the relative increase in demand for posts was consistent with
improved productivity and skills requirement and expected the overall balance of work and life in all industry areas to remain stable except for the consumer sector (Popov & Racholl, 2018).

3.2. Retirement readiness (RR)

Prior studies revealed that persons who were more financially literate were more likely to get ready for retirement compared to persons who were less financially literate (Hastings & Mitchell, 2020; Hung et al., 2009; Kim et al., 2005; Lusardi, 2008; Lusardi & Mitchell, 2011). Notably, some studies suggested that those who were more financially literate were more likely to have more retirement assets when they become retirees, as opposed to those who were less financially literate (Hastings & Mitchell, 2020; Lusardi & Mitchell, 2017). Other research papers recommended that those who were more economically literate had higher degrees of retirement confidence or were more assured that they would be preparing for retirement than those who were less financially literate (Kim et al., 2005). This study hypothesizes that Saving Plan (RR1), Life Satisfaction (RR2), and Health Benefits (RR3) positively influence Retirement Readiness (RR) indicated as follows.

3.2.1. Saving plan (RR1)

Many retirees will depend on their accumulated savings after retirement. Hence, the direct association between savings and retirement confidence (Helman et al., 2013; Kim et al., 2005) is understandable. Retirees with higher savings incline to have higher retirement confidence (Kim et al., 2005). Many people suggested that savings are the primary sources of retirement income (Russell & Stramoski, 2011); suitable planning during the pre-retirement period is crucial for secure retirement life. Those who do not save are typically anticipated to be in employment after retirement and rely on social security during their golden years, which may reach to poor retirement satisfaction (Russell & Stramoski, 2011).

3.2.2. Life satisfaction (RR2)

Retirement adjustment, described as the procedure of getting used to transform affiliated with the transition (Van Solinge & Henkens, 2008), is traditionally estimated via self-report of psychological comfort or satisfaction with retirement life (Wang et al., 2011). Life satisfaction is represented as the individual’s overall satisfaction with life (Diener et al., 1985). Moreover, life satisfaction has been related to diminishing death (Chida & Steptoe, 2008), decrease levels of both sleep disorders (Brand et al., 2010) and burnout (Haar & Roche, 2010), turn down turnover intentions (Rode et al., 2007), and escalate performance (Jones, 2006). Life satisfaction at the end of an individual’s profession and beginning of retirement appears a crucial session of life to scrutinize because it needs serious adaptation with suggestions for satisfaction with life throughout this life stage (Maurer & Chapman, 2018). Additionally, bridge employment has been indicated to be advantageous in the retirement adaptation procedure as it anticipates both retirement satisfaction and complete life satisfaction (Kim & Feldman, 2000). Bridge employees appear to have a smoother adjustment in that they encounter less adjustment in well-being than retirees without bridge careers (Wang, 2007). Bridge employment has been indicated to lessen the adverse effects of involuntary retirement on life satisfaction (Dingemans & Henkens, 2014).

3.2.3. Health benefits (RR3)

Since 2001, the Thailand government has achieved universal minimum costs or free health care policies for all Thai nationals regardless of age. In particular, people over the age of 60 are eligible to enjoy open government medical services, exempt from the minimum costs initiated in 1992 (Kabisch et al., 2017). Without a legal visa and work permit, foreigners cannot get medical insurance in Thailand. This means that you must have access to private health insurance or other possibilities that must be paid at your own expense for all related medical costs (Aschwanden et al., 2019). For those who work in Thailand, public subsidies for social security can pay for medical bills (Kumam & Pongpullponsak, 2016). Thailand’s social security has different meanings as compared to Western countries because it is national health care and retirement plan and also serves as relevant legislation. The Social Security Act provides that any foreigner between 15–60 years old with a valid work permit and work visa complies with the Social Security
Ordinance. If you are a first applicant over the age of 60, then you are no longer eligible, but if you exceed your age limit and receive your Social Security Card before 60, you can renew your benefits (Kongtip et al., 2015).

After being employed, the Human Resource Department of the new company will register for social security as required and provide you with a list of existing hospitals within the social security system. Employers must withhold 4% (up to 750baht) from echo check and then contribute to social security (Brixi et al., 2012).

3.3. Age
Typically, population aging research is due to the burden of a retirement system (Kolodziej & García-Gómez, 2019). The growth of old-age retirement often measures population aging. The definition of the actual retirement age may vary, but the typical cut-off age is 65 years old. When the proportion of people aged 65 and over exceeds 8-10 percent, society is considered relatively old (United Nations, 2001). Thailand is often referred to as a population transition country. The transition is from high to low birth rates and death rates. The changes in fertility and mortality rates affect not only the elderly population but also the entire age structure (Atalay et al., 2019). The size of the change and the frequency of change occurring can be significant in that the proportion of the population expected to be affected by the socio-economic impact is the three main age groups, 0–14 years old, 15–59 years old, and above 60 years old. Therefore, providing material assistance to the elderly will continue to be difficult, based on the current situation (Ota et al., 2018). Similarly, given the higher probability that older people are more likely to have health problems than others, health facilities and service pressures will be significantly increased and improved (Han et al., 2018). In short, these demographic developments will have significant consequences for families and communities and the Thai society as a whole.

Therefore, taken into account the literature reviews, we hypothesized that an individual’s career status (derived from salary, professional skills, and market demand for jobs) influences retirement readiness (Derived from saving plan, life satisfaction, and health benefit). This relationship is moderated by age, using the cut-off of 30 years old (see Figure 2).

**Figure 2. Research framework.**

| Independent Variable | Dependent Variable |
|----------------------|--------------------|
| **Career Status**    |                    |
| • Salary             | • Saving Plan      |
| • Professional Skills| • Life Satisfaction|
| • Market Demand for Jobs | • Health Benefit |
| H1                   | Age                |
| **Moderating Variable** |                  |
**Hypothesis 1 (H1): Career Status □ Retirement Readiness**

4. Methodology

4.1. Survey items

The survey's objective was to understand the career status and retirement readiness of skilled immigrants; a questionnaire was created for this purpose. A questionnaire was adapted from Ketkaew et al. (2019b). The questions in this questionnaire were adapted to gather both nominal and ordinal scale variables. Most of the ordinal scale variables followed the structure of a five-point Likert-type scale, where 1 designates the lowest degree, and 5 specifies the highest degree. The questionnaire was divided into two sections. The first section comprised three questions associated with skilled immigrants’ demographic data such as age, educational status, and salary. The second section encompassed two constructs showing latent variables and their measures showing manifest variables (see Appendix).

4.2. Sampling and data collection

This research collected data from respondents who were foreign teachers at schools and universities in the Northeast of Thailand. It is suggested to have a minimum sample size of 200 for any SEM analysis (Kline, 2005; Weston & Gore, 2006). From the total population of 110,000 skilled professionals of international migration in the Northeastern region (National Statistical Office of Thailand, 2019), we decided to utilize the purposive sampling method to gather data from 319 foreign teachers’ respondents from the six most populated provinces in this region (Ketkaew & Naruetharadhol, 2016b). The purposive sampling approach was employed in data collection via a structured questionnaire and the acquired data were remained confidential.

Table 1 shows the descriptive statistics of demographic variables. The data were divided using age (30 years old) as a cut-off to facilitate the multi-group moderation analysis. For the age below

| Demographic Profile | Measure | Segmented by Age (N = 319) |
|---------------------|---------|---------------------------|
|                     |         | Below 30 (n = 174)        | Above 30 (n = 145) |
|                     |         | n  | %  | n  | %  |
| Gender              | Male    | 91 | 52.3 | 79 | 54.5 |
|                     | Female  | 83 | 47.7 | 66 | 45.5 |
| Education           | Primary School | 5  | 2.9  | 7  | 4.8  |
|                     | Secondary School | 1  | 0.6  | 10 | 6.9  |
|                     | High School | 18 | 10.3 | 16 | 11   |
|                     | Certificate/Diploma | 10 | 5.7  | 7  | 4.8  |
|                     | Bachelor  | 99 | 56.9 | 39 | 26.9 |
|                     | Master    | 41 | 23.6 | 48 | 33.1 |
|                     | Doctorate | -  | -    | 18 | 12.4 |
| Income              | Less than 10,000 | 5  | 2.9  | -  | -    |
|                     | 10,001–30,000 | 56 | 32.2 | 21 | 14.5 |
|                     | 30,001–50,000 | 56 | 32.2 | 48 | 33.1 |
|                     | 50,0001–80,000 | 39 | 22.4 | 38 | 26.2 |
|                     | More than 80,000 | 18 | 10.3 | 38 | 26.2 |
30, most of the participants are male, which accounted for 52.3%, 47.7% of them are female. The biggest educational background of the participants was a bachelor's degree with 56.9%, 23.6% had a master's degree, 10.3% of respondents were high school, 5.7% of participants were certificate or diploma, 2.9% of respondents were primary school and 0.6% of participants were secondary school. With monthly income, 2.9% have an income less than ฿10,000, 32.3% make ฿10,001—฿30,000, 32.3% make ฿30,001—฿50,000, 22.4% make ฿50,001—80,000 and 10.3% have an income more than ฿80,000. For the age above 30, most of the participants are male, which accounted for 54.5%, 45.5% of them are female. The biggest educational background of the participants was a master's degree with 33.1%, 26.9% had a bachelor's degree, 12.4% of respondents were doctorate, 11% of participants were high school, 6.9% of respondents were secondary school, and 4.8% of participants were primary school and certificate or diploma. With monthly income, 14.5% make ฿10,000–30,000, 33.1% make ฿30,001–50,000, 26.2% have an income ฿50,001–80,000 and more than ฿80,000.

4.3. Data analysis

The study's data analysis utilized the Structural Equation Modeling (SEM) technique. SEM encompasses such diverse statistical methods such as path analysis, confirmatory factor analysis (CFA), and casual modeling with latent variables. This technique allows us to analyze the structural relationship between measured variables and latent constructs. Furthermore, SEM estimates multiple and interrelated dependence in a single analysis. This approach is more acceptable for this study than a regression analysis that is employed to speculate a continuous dependent variable from several independent variables but cannot represent outcomes as latent variables with multiple indicators (Bollen & Pearl, 2013; Byrne, 2016). The SEM approach was applied to explore the model's assessment in two steps (Anderson & Gerbing, 1988). Step 1 is to prove the outer CFA model to estimate the relationship between each construct and its variables, whether it is valid and reliable. This step requires the assessment of the goodness of fit (GOF), convergent validity, and discriminant validity. Step 2 is to appraise the structural model to estimate whether the proposed model is reliable, comprising the examination of GOF. Next, to examine the moderating effect of age on the structural relationship recommended by the life-cycle hypothesis theory, we utilized multi-group analysis (MGA), which is Step 3 in this technique. This step conducts a measurement invariance (MI) analysis employing age as a moderator, dividing the sample into two categories (below and above 30 years old). Note that we determine the age of 30 as a cut-off for multi-group analysis because most skilled immigrants start to save and prepare for retirement around this age (Ketkaew et al., 2019b). The findings of the statistical analysis are described in detail below.

5. Results

There are two main steps in conducting a statistical test on SEM: measurement model (CFA) and structural model (Anderson & Gerbing, 1988). Next, MGA is performed as the final step.

5.1. Step 1: measurement model (CFA)

The measurement model was tested utilizing CFA. In this context, the model was estimated for international consistency, reliability, convergent validity, and discriminant validity. CFA was conducted by attaching all constructs with covariances (Hair et al., 1998). All constructs must require their manifest variables before testing. Covariances among errors within the same construct were allowed to develop the GOF of the whole relationship.

GOF. Table 2 illustrates the GOF measures and their thresholds. The results were quite acceptable in that the majority of the measures passed the recommended thresholds. CMIN/df (2.554), comparative fit index (CFI; 0.986), incremental fit index (IFI; 0.987), and root mean square error of approximation (RMSEA; 0.070) passed the designated thresholds (Browne & Cudeck, 1992; Hu & Bentler, 1999).
Table 2. The goodness of fit of the measurement model

| Fit Indices | Value    | Threshold | Assessment |
|-------------|----------|-----------|------------|
| p-value     | 0        |           |            |
| CMIN/DF     | 2.554    | <3.00     | Passed     |
| GFI         | 0.990    | >0.90     | Passed     |
| CFI         | 0.986    | >0.90     | Passed     |
| IFI         | 0.987    | >0.90     | Passed     |
| RMSEA       | 0.070    | <0.08     | Passed     |

Source: Data adapted from authors, 2020

Convergent validity. This is scrutinized by comparing the model results with the fit index thresholds. AVE stands for average variance extracted (Fornell & Larcker, 1981), and CR stands for composite reliability (Hair et al., 1998). According to Table 3, the recommended thresholds of the convergent validity measures and the calculated indicators are as follows.

According to Table 3, the career status variable very well passed the convergent validity criteria when comparing the calculated measures with their thresholds. As for salary, professional skills, and market demand for jobs were above the thresholds (CR > 0.70). Even though all indicators were statistically significant at the < 0.001 level, the AVE of 0.527 was above the threshold (AVE > 0.50). For the retirement readiness, the CR values are all above 0.7, which means that all the indicators in this measurement model passed convergent validity criteria. Nonetheless, the AVE of 0.535 was above the threshold (AVE > 0.50). Moreover, all indicators were statistically significant at the < 0.001 level.

Discriminant validity. Discriminant validity is the degree to which two or more conceptually similar constructs are different. This section is assessed by comparing the square root AVEs (on diagonal) with the correlations in the associated matrices (Fornell & Larcker, 1981). According to Table 3, the square root of each AVE in bold was higher than the off-diagonal correlation coefficients, indicating all the constructs could measure the different constructs theoretically, and this result was acceptable.

5.2. Step 2: structural model
After accomplishing the prerequisite for reliability and the dimensionality of the measurement scales, we continue to perform the SEM analysis. As illustrated in Figure 3 and Table 4, this structural model was supported by the majority of the goodness of fit criteria, as suggested by Hu and Bentler (1999). CMIN/df (2.544) was less than 3.00. GFI (0.990) and CFI (0.986) were both greater than 0.90. IFI (0.987) was more than 0.90. RMSEA (0.070) was less than 0.08. The GOF indices were satisfied in this respect (Browne & Cudeck, 1992; Hu & Bentler, 1999).

5.3. Step 3: multi-group moderation analysis
MI is the technique to estimate whether the measurement model is not statistically different between the two groups (Steenkamp & Baumgartner, 1998). In other words, MI helps us evaluate whether respondents between the two groups (below and above 30 years old) acknowledge the questions underlying the latent constructs from the questionnaire in the same way. Under the multi-group confirmatory factor analysis framework, a simplified but regularly operated version of MI analyses can be executed by testing three models with hierarchical orders across groups: (a) initiating configural invariance (unconstrained model), (b) initiating metric invariance (equal factor loadings), (c) initiating scalar invariance (equal intercepts). If only configural invariance and metric invariance are contented, partial MI is supported, permitting one to compare factor loadings between two groups. Table 6 exhibits the assessment of MI consecutively administered after the CFA model.
| Variable Construct         | Indicator                          | Convergent Validity | Discriminant Validity |
|----------------------------|------------------------------------|---------------------|-----------------------|
|                            |                                    | Loading  | P-value | AVE   | CR    | Career Status | Retirement Readiness |
| Career Status              | Salary                             | 0.620    | ***     | 0.527 | 0.759 | 0.726         |                       |
|                            | Professional Skills                | 0.943    | ***     |       |       |               |                       |
|                            | Market Demand for Jobs             | 0.554    | ***     |       |       |               |                       |
| Retirement Readiness       | Saving Plan                        | 0.864    | ***     | 0.535 | 0.770 | 0.592         | 0.731                 |
|                            | Life Satisfaction                  | 0.577    | ***     |       |       |               |                       |
|                            | Health Benefits                    | 0.724    | ***     |       |       |               |                       |

Source: Data adapted from authors, 2020
According to Table 6, GFIs of the configural invariance and metric invariance models were above the threshold of 0.90 (0.973 and 0.952, respectively). CFIIs of the configural invariance and metric invariance models were above the threshold of 0.90 (0.959 and 0.919). IFIs of the configural invariance and metric invariance models were above the threshold of 0.90 (0.960 and 0.922). Thus, partial MI was established, allowing us to perform further analysis in the next section.

6. Main discussions

Consequently, the test results from Table 5 revealed that the results were consistent with the established hypotheses. The hypothesis test results supported H1 at the significance level of 0.01, which indicated that career status influenced retirement readiness. This study indicated that career status positively affected an individual’s readiness for retirement with a standardized loading of 0.592. The results suggested that the better the profession, the more stimulated an employee would save for retirement (Lusardi & Mitchell, 2007a). Moreover, these skilled immigrants have tertiary-level education from higher education institutions from their home countries. Hence, these people are more likely to commit to reserve for retirement, consistent with a previous study by Lusardi and Mitchell (2007a). Explicitly, salary also plays an important role in retirement because many pension plans are based on salary. This finding supports the study by

---

**Table 4. The goodness of fit of the structural model**

| Fit Indices | Value  | Threshold | Assessment |
|-------------|--------|-----------|------------|
| p-value     | 0      |           | Acceptable |
| CMIN/DF     | 2.554  | <3.00     | Passed     |
| GFI         | 0.990  | >0.90     | Passed     |
| CFI         | 0.986  | >0.90     | Passed     |
| IFI         | 0.987  | >0.90     | Passed     |
| RMSEA       | 0.070  | <0.08     | Passed     |

Source: Data adapted from authors, 2020

**Table 5. Test results from the structural model**

| Hypothesis | Exogenous Variable | Endogenous Variable | Standardized Estimate | P    | Result          |
|------------|--------------------|---------------------|-----------------------|------|-----------------|
| H1         | Career Status      | Retirement Readiness| 0.592                 | ***  | Supported       |

Source: Data adapted from authors, 2020

Figure 3. Structural model assessment.
Mueller and Kim (2008). Retirement savings partly deducted from regular income, in addition to the deduction for rent or mortgage, utility bills, short and long-term debt, would reduce an individual’s sense of financial insecurity (Ketkaew et al., 2020b). Besides, expatriate teachers develop and employ their existing skills and expand them to perform their tasks more effectively (Phonthanukitithaworn et al., 2017; Saridakis et al., 2017). Therefore, most administrators or employers will assess individual performance to determine the pay decisions and consider increasing salary or promotion (Asaari et al., 2019). Also, employees with essential skills often attract many employers and can start with a high salary from the beginning of work (Säve-Söderbergh, 2019).

Furthermore, better career status would significantly improve an individual’s readiness for his or her retirement. The finding supports the study by Lusardi et al. (2013). This implies that career status significantly impacts financial retirement. At an early stage in the working career, most organizations may provide financial literacy training for their employees to prepare for retirement savings. Explicitly, skilled immigrants who were more financially literate were more likely to get ready for retirement compared to persons who were less financially literate, which consistent with Hastings and Mitchell (2020), Hung et al. (2009), Kim et al. (2005), Lusardi (2008), and Lusardi and Mitchell (2011). Retirees who have enough money after retirement become to satisfy their retirement transitions. They also prepare health benefit plans, such as health insurance, when they need health care treatments. For example, a foreign teacher (promising career) who makes a high wage (salary), has high skills (skilled) and fulfills the demand of learning English (market demand for a job) would likely be prepared himself or herself ready for retirement (retirement readiness). To be ready for retirement (retirement readiness), a foreign teacher needs to save money (saving plan), design a lifestyle after retirement (life satisfaction), and reserve money for a health condition (health benefit).

According to Table 7, the result (H1) supported the life-cycle hypothesis theory recommended by Modigliani and Ando (1957). For skilled immigrants with young age (below 30), career status has a positive effect (loading = 0.351) in determining their retirement readiness. Furthermore, most young skilled immigrants prepare for retirement. Young adults tend to save money for early retirement. Moreover, they are preparing themselves for a retirement savings plan while pursuing career paths. Hence, young skilled immigrants still need to develop their professional skills and perform their tasks well to increase salary or get promotions. Additionally, young immigrants must consider their long-term goals for retirement. When they work and live in another country, they probably cannot receive state pensions from their home countries anymore. For a person age above 30, career status can positively influence his retirement readiness at a higher magnitude than a younger one (loading = 0.604). When a career is progressively more secured, a skilled immigrant could be more ready for retirement. This is the time when people start to save money for retirement and plan for their health benefits. In their 30s, after they have graduated from

| Table 6. Measurement invariance |
|---------------------------------|
| **Fit indices** | **Configural Invariance (Unconstrained Model)** | **Metric Invariance (Equal Factor Loadings)** | **Scalar Invariance (Equal Intercepts)** | **Threshold** |
| p-value | 0.000 | 0.000 | 0.000 | |
| GFI | 0.973 | 0.952 | 0.911 | >0.90 |
| CFI | 0.959 | 0.919 | 0.817 | >0.90 |
| IFI | 0.960 | 0.922 | 0.822 | >0.90 |
| Assessment | Pass | Pass | Fail | |

*Source: Data adapted from authors, 2020*
| Path | Exogenous Variable | Endogenous Variable | Below 30 years | Above 30 years | Critical Ratio Difference | Threshold |
|------|-------------------|---------------------|----------------|----------------|--------------------------|-----------|
|      |                   |                     | Standardized Loading | Test Result | Standardized Loading | Test Result |          |
| H1   | Career Status     | Retirement Readiness | 0.351           | Supported     | 0.604                    | Supported  | -2.563 |

Source: Data adapted from authors, 2020
university and settled into a stable career. They will have time to explore other hobbies and skills. Also, they can start to develop additional income streams and have enough money for retirement savings.

7. Research implications
The research findings proposed recommendations to two main stakeholders, including skilled immigrants in the educational sector and education administrators in Thailand.

As the findings from this study demonstrated that skilled immigrants’ career status influences their retirement readiness, they were suggested to continue enhancing their professional skills to enhance their career status. This could help raise the salary, get promoted, and respond to the current job market demand. As a result, a skilled immigrant would prepare and be ready for retirement. It was recommended that skilled immigrants save money for health benefits and the cost of living after retirement. Typically, there are no retirement benefits or social security for foreign teachers teaching English in Thailand. Hence, if they desire to stay permanently after retirement, they have to prepare their retirement savings. Besides, they should arrange appropriate health insurance to cover overall health policies. Incredibly, many skilled immigrants tend to attempt medical treatments in private hospitals because staff can speak English, which is very convenient for foreign patients. However, to enhance a long-term goal for the retirement period, they should accumulate wealth via various methods such as investing in financial assets and making an extra income from a side hustle. Moreover, skilled immigrants may pay taxes in their home nations to receive a state pension from their home nations. To accumulate wealth more productively, highly skilled immigrants need to attain financial literacy and understand investment restrictions for securities and mutual funds in Thailand. Furthermore, skilled immigrants can earn extra income from outside educational institutions by being private tutors, translators and interpreters, and business consultants.

Education administrators should offer retirement schemes beneficial for their expatriate teachers to help save for a comfortable life after retirement. Moreover, administrators may reinforce their expatriate teachers’ health with different plans. Physical well-being is via health benefit plans such as proper health insurance and annual health checkup.

8. Research limitations and future research
This research has several limitations, which also provide possible ways for future research. First, this study focuses on only skilled immigrants. Therefore, the findings may be apprehended more significantly when utilizing another sample group, for instance, unskilled immigrants and expatriates from other sectors. Second, sampling and data collection was limited to Thailand’s northeastern region, and thus this research provides a limited empirical practice. Hence, future research should use another sample in other locations within Thailand and internally. Moreover, the questionnaire could be redesigned to produce more meaningful results. For instance, professional skills, market demand for jobs, savings plans, life satisfaction and health benefits could be presented as latent constructs.

9. Conclusion
The article discusses the career status and retirement readiness of skilled immigrants in Thailand. In the article, we applied SEM and MGA to study and analyze the outcomes. This article aims to describe the relationship between career status and retirement readiness of skilled immigrants. In the course of analysis, we found that a skilled immigrant with a developing career status could significantly enhance his retirement readiness. We found that a skilled immigrant with a high salary could better prepare retirement savings funds. Developing professional skills would indeed boost a skilled immigrant’s capability to save money for retirement. Additionally, a skilled immigrant with a high demand for the job market could generate a better capacity to get ready for a retirement saving plan. It was also found that age played a moderating role in the relationship between career status and retirement readiness. This study indicated that the older skilled
immigrant’s career status significantly influences retirement readiness than the younger ones. Hence, skilled immigrants need to prepare themselves to be ready for retirement.

Acknowledgements
This work was financially supported by the International College, Khon Kaen University, Thailand.

Funding
This work was supported by the International College, Khon Kaen University [KKUIC Research Grant].

Author details
Phaninee Naruetharadhol 1
E-mail: phaninee@kku.ac.th
ORCID ID: http://orcid.org/0000-0001-7158-0581

Sasichakorn Wongsaicha 1
E-mail: sasichamild@gmail.com
Martine Van Wouwe 2
E-mail: martine.vanwouwe@uantwerpen.be
E-mail: chaket@kku.ac.th

ORCID ID: http://orcid.org/0000-0003-3506-3725

1 International College, Khon Kaen University, Khon Kaen, Thailand.

2 Faculty of Business and Economics, University of Antwerp, Antwerp, Belgium.

Citation information
Cite this article as: Career status, retirement readiness, and age differences: Empirical evidence from skilled immigrants in Thailand, Phaninee Naruetharadhol, Sasichakorn Wongsaicha, Martine Van Wouwe & Chovis Ketkaew, Cogent Business & Management (2021), 8: 1885572.

References
Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103(3), 411. https://doi.org/10.1037/0033-2909.103.3.411

Asaari, M. H. A. H., Desa, N. M., & Subramaniam, L. (2019). Influence of salary, promotion, and recognition toward work motivation among government trade agency employees. International Journal of Business and Management, 14(4), 48-59. https://doi.org/10.5539/ijbm.v14n4p48

Aschwanden, D., Gerend, M. A., Luchetti, M., Stephan, Y., Sutin, A. R., & Terracciano, A. (2019). Personality traits and preventive cancer screenings in the Health Retirement Study. Preventive Medicine, 126, 105763. https://doi.org/10.1016/j.ypmed.2019.105763

Atalay, K., Barrett, G. F., & Staneva, A. (2019). The effect of retirement on elderly cognitive functioning. Journal of Health and Social Behavior, 66, 37-53. https://doi.org/10.1016/j.jheUBE.2019.04.006

Bollen, K. A., & Pearl, J. (2013). Eight myths about causality and structural equation models in S. L. Morgan (Ed.), Handbook of causal analysis for social research (pp. 301–328). Springer Netherlands. https://doi.org/10.1007/978-94-007-6094-3_15

Brand, S., Beck, J., Hatzinger, M., Harbaugh, A., Ruch, W., & Holsoo-Brachsel, E. (2010). Associations between satisfaction with life, burnout-related emotional and physical exhaustion, and sleep complaints. The World Journal of Biological Psychiatry, 11(5), 744–754. https://doi.org/10.3109/15622970103624205

Brixi, H., Jitsuchon, S., Skoufas, E., Sondergaard, L. M., Tansanguanwong, P., & Wiener, M. (2012). Reducing elderly poverty in Thailand: The role of Thailand’s pension and social assistance programs (No. 80527, pp. 1–48). The World Bank.

Brown, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. Sociological Methods & Research, 21(2), 230–258. https://doi.org/10.1177/0049124192021002005

Bujoki, M. L., Gaudet, S., & Juliano, R. M. (2017). Governmentality and identity construction through 50 years of personal income tax returns: The case of an immigrant couple in Canada. Critical Perspectives on Accounting, 46, 54–74. https://doi.org/10.1016/j.cpa.2017.02.005

Byrne, B. M. (2016). Structural equation modeling with AMOS: Basic concepts, applications, and programming (2nd ed.). Multivariate Applications Series. 1.

Chevrier, S., Fouquereau, E., Gillet, N., & Demuller, V. (2013). Development of the reasons for entrepreneurs’ retirement decision inventory (RERDI) and preliminary evidence of its psychometric properties in a French sample. Journal of Career Assessment, 21(4), 572–586. https://doi.org/10.1080/1069072712475288

Chida, Y., & Steptoe, A. (2008). Positive psychological well-being and mortality: A quantitative review of prospective observational studies. Psychosomatic Medicine, 70(7), 741–756. https://doi.org/10.1097/PSY.0b013e31818105ba

de Grip, A., Fouarge, D., Montizaan, R., & Schreurs, B. (2020). Train to retain: Training opportunities, positive reciprocity, and expected retirement age. Journal of Vocational Behavior, 117, 103332. https://doi.org/10.1016/j.jvb.2019.103332

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. Journal of Personality Assessment, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13

Dingemans, E., & Henkens, K. (2016). Involuntary retirement, bridge employment, and satisfaction with life: A longitudinal investigation. Journal of Organizational Behavior, 35(4), 575–591. https://doi.org/10.1002/job.1914

Ettner, S. L., & Grzywacz, J. G. (2003). Socio-economic status and health among Californians: An examination of multiple pathways. American Journal of Public Health, 93(3), 441–444. https://doi.org/10.2105/AJPH.93.3.441

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error. Algebra and statistics.

Goda, G. S., Manchester, C. F., & Sajouer, J. A. (2016). What will my account really be worth? Experimental evidence on how retirement income projections affect saving. Journal of Public Economics, 119, 80–92. https://doi.org/10.1016/j.jpubeco.2014.08.005

Haar, J. M., & Roche, M. A. (2010). Family supportive organization perceptions and employee outcomes: The mediating effects of life satisfaction. The International Journal of Human Resource Management, 21(7), 999–1014. https://doi.org/10.1080/09585191003783462

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). Multivariate data analysis (Vol. 3). Prentice hall. No. 3.

Han, A. R., Park, S. A., & Ahn, B. E. (2018). Reduced stress and improved physical functional ability in elderly with mental health problems following a horticultural therapy program. Complementary Therapies in Medicine, 38, 19–23. https://doi.org/10.1016/j.ctim.2018.06.011

Hastings, J., & Mitchell, O. S. (2020). How financial literacy and impatience shape retirement wealth and
investment behaviors. Journal of Pension Economics & Finance, 19(1), 1–20. https://doi.org/10.1017/S1547472180000227

Helman, R., Adams, N., Copeland, C., & VanDerhei, J. (2013). The 2013 retirement confidence survey: Perceived savings needs outpace reality for many. (Working Paper Number 386, pp. 5–35). Washington, DC: Employee Benefit Research Institute. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2238015

Hui, L. T., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal, 6(1), 1–55. https://doi.org/10.1080/10705519909540118

Huguet, J. W. (2016). Thailand Migration Report, Chapter 1: Thailand Migration Profile. Bangkok, Thailand: United Nations Thematic Working Group on Migration in Thailand. https://thailand.iom.int/sites/default/files/document/publications/EN%20-%20Thailand%20Migration%20Report%202014.pdf#page=25

Hung, A., Meier, E., Mihaly, K., & Yoong, J. (2009). Building up, spending down: Financial literacy, retirement savings, and decumulation. (Working Paper No. WR-712). Santa Monica, CA: RAND Corporation. https://www.rand.org/content/dam/rand/pubs/work- ing_papers/2009/RAND_WR712.pdf

Jones, M. D. (2006). Which is a better predictor of job performance: Job satisfaction or life satisfaction? Journal of Behavioral & Applied Management, 8(1), 20-42. https://jbam.scholasticahq.com/article/16696.pdf

Kabisch, N., van den Bosch, M., & Lafortezza, R. (2017). The health benefits of nature-based solutions to urbanization challenges for children and the elderly—A systematic review. Environmental Research, 159, 362–373. https://doi.org/10.1016/j.envres.2017.08.004

Ketkow, C., Manglakakeeree, O., Naruetheradhol, P., & Amanmahw-Aromo, J. (2020). The interrelationships of work-related factors, person-environment fit, and employee turnover intention. Cogent Business & Management, 7(1), 1823580. https://doi.org/10.1080/23311975.2020.1823580

Ketkow, C., & Naruetheradhol, P. (2016a). Gender differences in attitudes toward migrant workers in Thailand: Evidence from Khon Kaen City. The International Journal of Interdisciplinary Global Studies, 11(3), 25–33. https://doi.org/10.18848/2324-755X/CGP/v11i03/25-33

Ketkow, C., & Naruetheradhol, P. (2016b). Ethnicity and job satisfaction: Perspectives of foreign educators on compensations in Khon Kaen City, Thailand. The International Journal of Organizational Diversity, 16 (2), 13–21. https://doi.org/10.1084/81328-6261/CGP/v16i02/13-21

Ketkow, C., Sukitprapanon, C., Naruetheradhol, P., & McMillon, D. (2020a). Association between retirement behavior and financial goals: A comparison between urban and rural citizens in China. Cogent Business & Management, 7(1), 1739495. https://doi.org/10.1080/23311975.2020.1739495

Ketkow, C., Van Wouwe, M., & Vichitthamaros, P. (2019b). Perceptions of working versus becoming a societal burden after retirement: Demographic analyses of industrial workers in Thailand. Organizational Cultures: An International Journal, 19 (1), 23–42. https://doi.org/10.1084/81327-8013/CGP/v19i01/23-42

Ketkow, C., Wouwe, M. V., Vichitthamaros, P., & Teerawananvat, D. (2019b). The effect of expected income on wealth accumulation and retirement contribution of Thai workers: SAGE Open. https://doi.org/10.1177/2053951719858247

Kim, J., Kwon, J., & Anderson, E. A. (2005). Factors related to retirement confidence: Retirement preparation and workplace financial education. Financial Counseling and Planning, 16(2), 77–89. http://citeeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.10.7882

Kim, S., & Feldman, D. C. (2000). Working in retirement: The antecedents of bridge employment and its consequences for quality of life in retirement. Academy of Management Journal, 43(6), 1195–1210. https://pdfs.semanticscholar.org/17e8e7bb4e- f0e5e614021de5150e9092db01193.pdf

Kline, R. B. (2005). Methodology in the social sciences Principles and practice of structural equation modeling. Guilford publications.

Kolodziej, I. W., & García-Gómez, P. (2019). Saved by retirement: Beyond the mean effect on mental health. Social Science & Medicine, 225, 85–97. https://doi.org/10.1016/j.socscimed.2019.02.003

Kongtip, P., Nankongnab, N., Chalikitiporn, C., Laohaudomchok, W., Woskie, S., & Slatin, C. (2015). Informal workers in Thailand: Occupational health and social security disparities. New Solutions: A Journal of Environmental and Occupational Health Policy, 25(2), 189–211. https://doi.org/10.1177/1048291115586036

Kumam, W., & Pongpulpornsak, A. (2016). Optimization for estimation to medical service value of informal workers social security office in Thailand. Journal of Information and Optimization Sciences, 37(1), 125–154. https://doi.org/10.1108/CDI-01-2019-0007

Lawong, D., Ferris, G. R., Hochwarter, W., & Maher, L. (2019). Recruiter political skill and organization reputation effects on job applicant attraction in the recruitment process. Career Development International, 24(6), 278–296. https://doi.org/10.1108/CDI-01-2019-0007

Lichter, A., Peichl, A., & Siegloch, S. (2015). The own-wage elasticity of labor demand: A meta-regression analysis. European Economic Review, 80, 94–119. https://doi.org/10.1016/j.eurocorev.2015.08.007

Lusardi, A. (2006). Financial literacy: An essential tool for informed consumer choice? (No. w14084). National Bureau of Economic Research.

Lusardi, A., Michaud, P. C., & Mitchell, O. S. (2013). Optimal financial knowledge and wealth inequality (No. w18669). National Bureau of Economic Research.

Lusardi, A., & Mitchell, O. S. (2007a). Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. Journal of Monetary Economics, 54(1), 205–224. https://doi.org/10.1016/j.jmoneco.2006.12.001

Lusardi, A., & Mitchell, O. S. (2007b). Financial literacy and retirement preparedness: Evidence and implications for financial education. Business Economics, 42(1), 35–44. https://doi.org/10.2146/0701014

Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States (No. w17108). National Bureau of Economic Research.

Lusardi, A., & Mitchell, O. S. (2017). How ordinary consumers make complex economic decisions: Financial literacy and retirement readiness. Quarterly Journal of Finance, 7(3), 1750008. https://doi.org/10.1142/S2010139217500082
Maurer, T. J., & Chapman, E. F. (2018). Relationship of proactive personality with life satisfaction during late career and early retirement. Journal of Career Development, 45(6), 345–360. https://doi.org/10.1177/08948453177697381

Ministry of Labor. (2019). Migrant workers in Thailand. Ministry of labor. Department of Public Relations MOL. https://www.mol.go.th/en/MinistryofLabor

Modigliani, F., & Ando, A. K. (1957). Tests of the life cycle hypothesis of savings: Comments and suggestions. 1. Bulletin of the Oxford University Institute of Economics & Statistics, 19(2), 99–124. https://doi.org/10.1093/bulstat/19.2.99.x

Mueller, C. W., & Kim, S. W. (2008). The contented female worker: Still a paradox. Justice: Advances in Group Processes, 25, 117–150. https://doi.org/10.1016/S0882-6145(08)25006-X

National Statistical Office of Thailand. (2019). Ministry of Information and Communication Technology. http://web.nso.go.th/

Nielson, L., Wiles, J., & Anderson, A. (2018). Social exclusion and community in an urban retirement village. Journal of Aging Studies, 49, 25–30. https://doi.org/10.1016/j.jaging.2018.03.003

Österle, A. (2007). Health care across borders: Austria and its new EU neighbours. Journal of European Social Policy, 17(2), 112–124. https://doi.org/10.1177/0958928707075195

Ota, T., Kakinaka, M., & Kotani, K. (2018). Demographic effects on residential electricity and city gas consumption in the aging society of Japan. Energy Policy, 115, 503–513. https://doi.org/10.1016/j.enpol.2018.01.016

Phonthanukiththaworn, C., Naruetheradhol, P., & Ketkaew, C. (2017). Skill development and job satisfaction: Workers' perspectives in Thailand's industrial sector. Knowledge Management: An International Journal, 17(2), 1–10. https://doi.org/10.18848/2327-7998/CGP/v17i02/10

Popov, A., & Rochall, J. (2018). Do credit shocks affect labor demand? Evidence for employment and wages during the financial crisis. Journal of Financial Intermediation, 36, 16–27. https://doi.org/10.1016/j.jfi.2016.10.002

Rand, O. (2002). Cumulative advantage and gerontological theory. Annual Review of Gerontology and Geriatrics, 22, 14–30.

Rode, J. C., Rehg, M. T., Near, J. P., & Underhill, J. R. (2007). The effect of work/family conflict on intention to quit: The mediating roles of job and life satisfaction. Applied Research in Quality of Life, 2(2), 65–82. https://doi.org/10.1007/s11482-007-9030-6

Russell, K., & Stramowski, S. (2011). Financial management practices and attitudes of dental hygienists: A descriptive study. American Dental Hygienists’ Association, 85(4), 340–347. https://jdhd.adha.org/content/jdenthyg/85A/340.full.pdf

Saridakis, G., Lai, Y., & Cooper, C. L. (2017). Exploring the relationship between HRM and firm performance: A meta-analysis of longitudinal studies. Human Resource Management Review, 27(1), 87–96. https://doi.org/10.1016/j.hrmr.2016.09.005

Söve-Söderbergh, J. (2019). Gender gaps in salary negotiations: Salary requests and starting salaries in the field. Journal of Economic Behavior & Organization, 161, 35–51. https://doi.org/10.1016/j.jebo.2019.01.019

Shultz, K. S., Morton, K. R., & Weckerle, J. R. (1999). The influence of push and pull factors on voluntary and involuntary early retirees’ retirement decision and adjustment. Journal of Vocational Behavior, 53(1), 45–57. https://doi.org/10.1006/jvbe.1997.1610

Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. Journal of Consumer Research, 25(1), 78–90. https://doi.org/10.1086/209528

United Nations. (2001). World population prospects: The 2000 revision.

Van Solinge, H., & Henkens, K. (2008). Adjustment to and satisfaction with retirement: Two of a kind? Psychology and Aging, 23(2), 422. https://doi.org/10.1037/0882-7974.23.2.422

Wang, M. (2007). Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees’ psychological well-being. Journal of Applied Psychology, 92(2), 455. https://doi.org/10.1037/0021-9010.92.2.455

Wang, M., Henkens, K., & van Solinge, H. (2011). Retirement adjustment: A review of theoretical and empirical advancements. American Psychologist, 66(3), 204. https://doi.org/10.1037/a0022416

Wang, M., & Shultz, K. S. (2010). Employee retirement: A review and recommendations for future investigation. Journal of Management, 36(1), 172–206. https://doi.org/10.1177/0149206309347957

Weston, R., & Gore, P. A., Jr. (2006). A brief guide to structural equation modeling. The Counseling Psychologist, 34(5), 719–751. https://doi.org/10.1177/001100006286345
Appendix

Part 1

How old are you?
□ Below 20 years
□ 20–29 years
□ 30–39 years
□ 40–49 years
□ 50 years or above

What is your educational status?
□ Primary school
□ Secondary school
□ High school
□ Certificate/Diploma
□ Bachelor
□ Master
□ Doctorate

How much is your income (per month)?
□ Baht 10,000 or less
□ Baht 10,001–30,000
□ Baht 30,001–50,000
□ Baht 50,001–80,000
□ More than Baht 80,001

Part 2

Note: All the questions in this questionnaire is in the form of a 5-point Likert scale. 1 = lowest and 5 = highest

Career Status (CS) adapted from Ketkaew et al. (2019b).

I believe that my job offers high pay when compared with other jobs.
1. 2. 3. 4. 5.

I believe that my current job requires an educational degree and expertise.
1. 2. 3. 4. 5.

I believe that my current job is secure.
1. 2. 3. 4. 5.

Salary (CS1) adapted from Ketkaew et al. (2019b).

I believe that my income enough for retirement.
1. 2. 3. 4. 5.

I believe that my income is suitable for my current role.

1. 2. 3. 4. 5.

I believe that my income is suitable for my skills.

1. 2. 3. 4. 5.

**Professional skills (CS2)** adapted from Ketkaew et al. (2019).

I believe that my teaching materials and activities can motivate students to learn.

1. 2. 3. 4. 5.

I believe that my teaching experiences can motivate a student to learn.

1. 2. 3. 4. 5.

I believe that my assessment procedures can motivate students to understand the lesson.

1. 2. 3. 4. 5.

**Market Demand for Jobs (CS3)** adapted from Ketkaew et al. (2019b).

I believe that my current job in demand.

1. 2. 3. 4. 5.

I believe that my job can make a change for students and educational institutions.

1. 2. 3. 4. 5.

I believe that my current role requires a big responsibility.

1. 2. 3. 4. 5.

**Retirement Readiness (RR)** adapted from Ketkaew et al. (2019b).

I am prepared monthly fixed income after retirement.

1. 2. 3. 4. 5.

I am prepared for retirement accounts.

1. 2. 3. 4. 5.

I am considered future medical costs and estimated my retirement expenses.

1. 2. 3. 4. 5.

**Saving plans (RR1)** adapted from Ketkaew et al. (2019b).

I am prepared to set up a savings account.
1. 2. 3. 4. 5.

I am prepared to meet the daily/weekly budget.

1. 2. 3. 4. 5.

I am prepared to spend an annual vacation.

1. 2. 3. 4. 5.

**Life satisfaction (RR2)** adapted from Ketkaew et al. (2019b).

I am satisfied with my social circle at work.

1. 2. 3. 4. 5.

I am satisfied with my relationship with friends and family.

1. 2. 3. 4. 5.

I am satisfied with the activities of daily living.

1. 2. 3. 4. 5.

**Health benefits (RR3)** adapted from Ketkaew et al. (2019b).

I am prepared for health benefit plans such as health insurance.

1. 2. 3. 4. 5.

I am prepared for long-term care for myself.

1. 2. 3. 4. 5.

I am prepared for additional short-term disability coverage.

1. 2. 3. 4. 5.
