Professional Well-Being of Post-Retirement Rehired Teachers and Regular Serving

Teachers in Colleges in Nanchang, China

by

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Statement of Originality

I, Chen Se, hereby declare that I am the sole author of the thesis and the material presented in this thesis is my original work except those indicated in the acknowledgement. I further declare that I have followed the University's policies and regulations on Academic Honesty, Copyright and Plagiarism in writing the thesis and no material in this thesis has been submitted for a degree in this or other universities.

Abstract

Research theme: This thesis discusses themes in relation to the professional well-being of post-retirement rehired teachers and regular serving teachers in colleges in Nanchang, China.

Research questions: The current study's design is organised around three questions. First, what components comprise teachers' professional well-being (hereinafter, abbreviated as TPW) and how do these components manifest in the teachers' career experience? Second, how do rehired teachers differ from regular teachers in terms of their professional well-being? Third, how do certain demographic factors affect rehired teachers' and regular teachers' professional well-being?

Research Methods: The study employed a mixed-method design comprising two data-collection methods: a quantitative survey and qualitative interviews. The quantitative analysis of the survey responses was the current study's primary focus, while the qualitative part of the study served to augment the quantitative findings with information on what the teachers had learned from their personal career experiences.

Research participants: The survey questionnaire was completed by 388 teachers from 14 colleges. Of these, 319 valid questionnaires (120 from rehired teachers and 199 from regular teachers) were used for the analysis. The qualitative interviews involved 17 teachers—eight rehired teachers and nine regular teachers.

Findings from quantitative analyses: TPW mainly comprises seven components: professional competence, job satisfaction, aspiration, recognition, autonomy, support and relationships, and absence of burnout. Compared to regular teachers, rehired teachers had significantly higher self-reported level in TPW and higher levels in those factors that contributed most strongly to TPW. Two demographic factors—'health condition' and 'teaching years'—were found to affect rehired teachers and regular teachers differently

regarding their professional well-being.

Findings from qualitative analyses: Different sub-themes generalised from the interviewees' comments that aligned with the seven TPW components were used to describe the manifestation of these components in teachers' career experience. Among these sub-themes, 'recognition in terms of occupational identity', 'autonomy in arranging extracurricular time', 'self-perceived moral quality', and 'satisfaction with job stability' were unique to the current study. In general, the rehired teachers' comments related to the seven TPW components tended to be more optimistic than those of regular teachers.

Conclusion and implications: In the context of the current study, TPW is a concept that mainly comprises seven components. Rehired teachers have many unique characteristics that distinguish them from regular teachers in terms of the relationship between TPW and its components, the perception of TPW, the self-rated levels in TPW, and the effect of some demographic factors on TPW. The current study's findings can facilitate the development of measurement instruments for TPW in the future, shed some light on the characteristics of professional well-being for teachers in Mainland China—especially for rehired teachers, and contribute to the human resources development of the intellectual resources of retired professionals and the strategies for coping with population-ageing issues in Mainland China.

Keywords: Professional well-being, Post-retirement rehiring, College teacher

Acknowledgement

It is amazing how fast time flies. It feels as if I had just received my admission notice from EDUHK, but in a flash, so many years have passed by. Now, as my dissertation is about to be printed, I have thousands of thoughts, and it feels like I may not calm down for a long time.

For many people, the path to a doctorate might seem torturous and tough, but my feelings are completely different. Looking back on the past several years, it is without exaggeration to say that I am happy for every day, because I have been lucky to meet so many people eager to guide and help me at this beautiful university. Here, I would like to express my most sincere respect and gratitude to these people.

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I will turn this gratitude into motivation for my future study, life, and work. I will also apply the lessons I learned from my research participants, those older rehired teachers—that is, I will keep learning as my life forwards and strive to repay all who have helped me along the way.

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List of Abbreviations

TPW = Teachers' professional well-being

SRPW = Self-rated professional well-being

Rehired teacher = Post-retirement rehired teacher

Regular teacher = Regular serving teacher

CFA = Confirmatory factor analysis

EFA = Exploratory factor analysis

ANOVA = Analysis of Variance

TSSA = 'Test of simple slope' analysis

HRD = Human Resource Development

GS = Graduate School

EdUHK = The Education University of Hong Kong

RQ = Research question

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Chapter 1: Introduction

Chapter 1 begins by describing the thesis' organisation, in which it briefly introduces the content and contribution of each chapter section. Thereafter, the chapter discusses how the current study's initial research idea was inspired by and developed based on existing theories and previous studies.

Regarding the further development of the research idea into feasible research objectives and questions, the chapter then discusses the research background, focusing on the core concepts associated with the current study's research idea. These concepts include retirement, post-retirement reemployment, and professional well-being. Next, the chapter introduces the socio-demographic information of the current study's research site—Nanchang City, and illustrates the reasons for choosing this research site. Following that, the chapter discusses the current study's potential significance.

Finally, the chapter presents the research objectives and research questions (RQs) in more detail and describes the sub-questions for each RQ. In closing, the chapter sketches out the research process, key concepts, and major analysis approaches to be used in answering each RQ by means of a diagram.

1.1 Thesis Organisation

This thesis comprises six chapters: 1) Introduction, 2) Literature Review, 3) Research Methodology, 4) Results and Findings, 5) Discussion, and 6) Conclusions, Implications, and Limitations.

1.1.1 Chapter 1: Introduction.

Chapter 1 briefly introduces the entire thesis. It contains six sections.

- **Section 1.1.** This section briefly describes the content of and main contributions of each chapter section to the current study.

- **Section 1.2.** This section explains how the initial research idea was developed and illustrates which issues the current study sought to address and which concepts were involved in the study.

- **Section 1.3.** This section introduces the research background in terms of the concepts and issues related to the study. It also further discusses the need for the current study.

- **Section 1.4.** In this section, the author discusses the current study's potential significance.

- **Section 1.5.** Based on the discussion of research background and research significance, the researcher developed his initial research idea into more concrete research objectives and questions. This section presents and explains these objectives and questions.

- **Section 1.6.** This section presents a research process diagram to delineate the key concepts and approaches involved in answering the three research questions.

1.1.2 Chapter 2: Literature review.

Chapter 2 consists of the following seven sections.

- **Section 2.1** introduces the concept of well-being based on philosophical wisdom that has influenced human ideology for thousands of years, in particular that of Chinese Confucianism and Taoism and Western Eudaemonism and Hedonism.

- **Section 2.2** discusses the concept of teacher well-being, as well as three famous models of well-being that serve as the theoretical basis for most of the instruments used to measure teacher well-being today.

- **Section 2.3** discusses the concept, scope, and components of professional well-being suggested by the results produced by previous studies. Then, after integrating the discussion results of the previous two sections, the author hypothesises that teachers' professional well-being (TPW) mainly comprises seven components: professional competence, job satisfaction, aspirations, recognition, autonomy, support and relationships, and absence of burnout.

- **Section 2.4** introduces these seven factors' definition, indicators, and measurement instruments suggested by related literature. This section provides the theoretical basis for the construction of the hypothetical TPW structure in the current study.

- **Section 2.5** introduces the concepts of retirement and post-retirement reemployment, along with the different categories of reemployment and the demographic factors associated with post-retirement careers.

- **Section 2.6** discusses the socio-demographic factors frequently examined in studies of teacher well-being. Based on the discussion results of Sections 2.5 and 2.6, the author selected 14 demographic factors for investigation in terms of their relationship with TPW.

- **Section 2.7** synthesises the previous sections' discussion results and then presents the current study's two conceptual frameworks.

1.1.3 Chapter 3: Research methodology.

Chapter 3 describes how the conceptual framework instructed the research design and process. It contains the following five sections.

- **Section 3.1** introduces the study's research design, which employed an explanatory sequential mixed-method approach comprising the quantitative survey and the qualitative interviews. This section also explains why this research design was adopted and what philosophical paradigms were embodied in it.

- **Section 3.2** illustrates the way in which this research design facilitated answering the RQs.

- **Section 3.3** discussed the two pilot studies conducted before the formal data collection, along with the step-by-step manner in which the researcher formulated, tested, and revised the questionnaire based on the results of the pilot studies.

- **Sections 3.4** and **3.5** provide detailed information on the current study's data-collection instruments, participants, data-analysis methods, and analytical tools as used for the quantitative and qualitative studies, respectively.

1.1.4 Chapter 4: Results and findings.

Chapter 4 details the current study's analysis in the following five sections.

- **Section 4.1** reports the results of internal consistency tests and factor analyses (CFA) conducted to determine the hypothetical TPW structure's construct validity and reliability. The section then describes how the TPW structure was modified based on these test results.

- Next, **Sections 4.2**, **4.3**, and **4.4** present the quantitative findings that answered RQs 1, 2, and 3, respectively.

- **Section 4.5** then describes how the qualitative findings were used to augment the quantitative answers to RQs 1 and 2.

1.1.5 Chapter 5: Discussion.

Chapter 5 summarises the answers to the three RQs based on the discussion of the current study's findings and those presented in related studies. Chapter 5 comprises the following three sections.

- **Section 5.1** discusses the current study's answer to RQ1, which relates to the TPW main components and the manifestation of these components in teachers' career experiences.

- **Section 5.2** focuses on answering RQ2. The discussion focuses on comparing the current study's qualitative and quantitative findings relevant to the difference between rehired teachers and regular teachers in terms of professional well-being.

- RQ3 concerns the relationship of work-related demographic factors to TPW. The question is addressed in **Section 5.3** based on the synthesis of the current study's quantitative analysis results and related findings from previous studies.

1.1.6 Chapter 6: Conclusions, implications, and limitations.

Chapter 6 contains the following three sections.

- **Section 6.1** offers brief conclusions regarding all research findings based on the discussions in Chapter 5.

- **Section 6.2** presents the current study's implications for future studies.

- **Section 6.3** discusses the main limitations of the current study's research. In this section, the author also recommends future studies that might remedy the current study's shortcomings.

1.2 Research Idea Development

The inspiration for the current study came from Atchley's continuity theory (Atchley, 1989). The theory claims that retirees who no longer engage in any formal work are likely to experience a sense of rolelessness that causes psychological stress. For retirees who once engaged in occupations that are fast-paced or that involve a high level of emotional investment, this sense of rolelessness might be even stronger.

Atchley's theory also suggests that, to mitigate this feeling of rolelessness, older people tend to engage in activities that extend the 'continuity' of the daily routines and life structure they once had. Atchley suggested that, to maintain this continuity, the current activities must meet two essential criteria. First, they must be 'valued activities', that is, the activities must be ones the retirees value highly. Second, the activities must involve 'social contact'—in other words, they should provide the retiree with opportunities to maintain a level of socialising similar to their pre-retirement level.

The current study's researcher is a college lecturer in Mainland China. At work, he sometimes gets the chance to collaborate with post-retirement rehired teachers, that is, the retired professionals who have been rehired as college teachers. As a result of this contact, the researcher has been interested in whether Atchley's theory applies to this group of people, given that post-retirement work may provide them conditions that maintain the work-life structure and social contact level they had before retirement. So, if the continuity theory works for this group of retirees, they might generally have good levels of well-being.

The researcher then reviewed the related literature and found that, although rare, some studies exist that discussed the effect of post-retirement activity on rehired employees' well-being. For example, Kim and Feldman (2000) conducted a study of retired university professors from the University of California (UC) system. Based on their analysis results,

they suggested that bridge employment is positively related to the retirement satisfaction and the life satisfaction of the rehired professors. Other studies on this topic are discussed in the literature review (Chapter 2).

One limitation of these previous studies is that they did not conduct in-depth investigations of the reasons for a positive relationship existing between reemployment activity and rehired employees' well-being. Is it because rehiring can provide rehired employees with material support (e.g., wages, bonuses, insurance)? Or is it because the employees get enjoyment from the work itself (e.g., from the meaningful nature of work, from workplace relationships, or from receiving recognition from others)? Or is it more complicated, that is, did the employees receive satisfaction from the material advantages of the work *and* the work itself?

The questions here, then, are threefold:

1) How do rehired employees view the material benefits provided by their work?

2) How do rehired employees perceive the work itself?

3) How do the previous two perceptions contribute to employees' post-retirement satisfaction?

Of these three questions, Question 2 drew the researcher's attention because few studies had investigated this question and because answering this question is indeed the basis for addressing Question 3 along with any follow-up questions regarding post-retirement career that may arise in the future. In addition, Question 2 is naturally more comprehensive because rehired employees' perception of post-retirement work may incorporate their views on the material benefits provided by the work. In other words, investigating Question 2 may also shed some light on Question 1.

With these thoughts in mind, the researcher chose Question 2 as his focus because he believes such an investigation will pave the way for future studies that aspire to

comprehensively delineate the linkage between post-retirement careers and individuals'
well-being for different professions in different world regions.

Specifically, the current study aimed to investigate Question 2 by asking these more
detailed questions:

- How do rehired employees in a certain profession feel about their post-retirement
  work?

- Which concept most suitably describes this feeling about work?

- What components comprise this concept, and how is this concept affected by certain
  work-related demographic factors that incorporate the material benefits offered by
  rehired employment?

As mentioned earlier, rehired college teachers were selected as the research participants
for the current study. The study's focus, then, is on the rehired teachers' perception of their
post-retirement work. Such perception is complicated and may involve work-related factors
such as job satisfaction, workplace interpersonal relationships, perceptions of self-efficacy
and professional competence, recognition from others, work aspirations, perceptions of work
autonomy, and the stress, fatigue, or even burnout caused by the work.

After reviewing the related literature, the researcher found one concept that is quite
suitable for encapsulating the essence of these factors: professional well-being. Professional
well-being is a relatively new concept, and its definition, scope, components, and
measurement are still controversial. Therefore, the first objective of the current study was to
identify which of the above-mentioned factors might comprise the main components of
professional well-being.

To judge whether the rehired teachers' levels of professional well-being were high or
low, the current study needed a reference for comparison purposes. Originally, the researcher
planned to source data from previous studies related to Chinese regular serving teachers'

professional well-being as the reference. However, related literature that might offer comparable results is scarce (as further explained in Section 1.4.2). Therefore, the current study also involved regular serving teachers in its investigation.

In addition, given that professional well-being is a work-related well-being, the researcher was also interested in the relationship between work-related demographic factors and professional well-being, especially how some demographic factors associated with post-retirement careers might affect the rehired teachers' well-being.

From this foundation, the rough idea of the current study was formulated. The following section, 'Study Background', focuses on illustrating how this initial research idea gradually developed into the current study's concrete and feasible research objectives and questions. In doing so, it provides background information on the study's core concepts and issues, as well as on the author's choice of research location. In order, these topics are 1) the nature and state of retirement and post-retirement employment in Mainland China, 2) the nature of professional well-being, and 3) the specific characteristics that made Nanchang City an attractive research site for the current study.

1.3 Study Background

1.3.1 Retirement, and post-retirement employment in China.

Laslett (1996) suggested that everyone's life has four stages. The third stage, which is more often referred to as 'the third age', is the period when people are free from work or family-related matters. According to Laslett, for most people, 'the third age' begins when they retire.

The current statutory retirement age in Mainland China is 60 for males, 55 for female cadres[1], and 50 for female workers. This statutory retirement policy was stipulated by two

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[1] 'Cadre' (干部) is a word introduced to China from Japan during the Republic of China era. At that time,

interim procedures promulgated by the State Council of China in 1978. In March 2015, during China's Third Session of the Twelfth National People's Congress, Yin Weimin, the Minister of China's Ministry of Human Resources and Social Security, remarked on China's current retirement policy. He indicated that, relatively speaking, China's statutory age for retirement is quite early. In October 2015, he added that, according to official statistical data, the Chinese people's average retirement age is around 54, which indicated that China has one of the earliest retirement ages among countries that stipulate retirement ages. Meanwhile, he also mentioned that the government was drawing up a 'Progressive Delay Retirement Scheme'. As of this writing (May 2020), the scheme has not been officially announced.

Zhao and Cheng (2016) claimed that, under China's current retirement policy, many Chinese employees retire at an age when they are still capable of and willing to work. Yao et al. (2011) also suggested that older individuals are still precious human resources, especially older professionals in intensely intellectual professions (e.g., doctors or teachers). Thus, it would be wasteful, both for individuals and society as a whole, if we simply drew an equal sign between retirement and complete withdrawal from the labour market.

As noted above, the main research participants of the current study were post-retirement rehired college teachers. In Mainland China, teacher reemployment occurs at all education levels but especially at the higher education level. Without a doubt, the rehired teachers are irreplaceable intellectual assets for schools and the entire society. They individuals are well-educated persons with specific expertise. They possess profound professional knowledge and have abundant experience with lecturing and in applying sophisticated pedagogy (Liu, 2009).

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people used this word to replace the word 'official' (官). Li (2005) suggested that today in Mainland China, the term cadre usually refers to 'governmental officials; military officers; and managers, professionals and intellectuals of state-owned or large private corporations' (p. 40). According to China's regulations, college teachers belong to the cadre group.

Gao and Zhao (2016) indicated that, along with the exacerbation of the aging population issue in China, there is a rising trend in the shortage of individuals with specific talents, and in specific professions in enterprises and public institutions. Therefore, post-retirement employment, as a promising countermeasure for the aging population issue, is a meaningful and significant topic for research.

China's National Commission on Ageing [中國老齡委員會] conducted 'The Fourth Sample Survey on the Living Conditions of China's Urban and Rural Older Persons' (TFSCOP) in 2015. The survey covered all regions in Mainland China. The survey participants totalled 222,700 people who were over 60, which is approximately 1‰ (the millesimal) of the entire older population in Mainland China. According to the survey report, in Mainland China, approximately 27% of the people who were over 60 were employed. Of these individuals, 61.38% were male and 38.62% were female. Considering that Mainland China had around 220 million people who were older than 60 in 2015, the number of older employed people (henceforth called 'aged workers') was about 59.57 million (Dang, 2018, p. 193-195).

In terms of the data for aged workers in the urban area, according to the 'Data Analysis of the Sampling Survey of the Aged Population in Urban/Rural China', in 2010, 7.2% of people over 60 in urban areas were engaged in post-retirement employment (Wu et al., 2014). This figure is consistent with the investigation results of the 'China Health and Retirement Longitudinal Study' (CHARLS) launched by Peking University in 2013, which found that 7.59% of people over 60 were engaged in non-agricultural work.

In addition, the data analysis results of the TFSCOP also suggested that in 2015, among the entire aged worker population in Mainland China, the people working in the education industry comprised 0.28% of the population (Dang, 2018, p. 210). As mentioned, China had

59.57 million aged workers in 2015. Therefore, by calculation, in that year there were approximately 166,796 older employees working in the education industry in China.

1.3.2 Research history of the professional well-being concept.

Professional well-being is a relatively new term, and the literature has yet to provide a clear definition for it. Perhaps for this reason, there has been considerable, sometimes contentious debate in the literature over what professional well-being comprises. For example, Yildirim (2015) suggested that a teacher's professional well-being is 'the perception about his or her level of possessing the qualities needed for professional tasks' (p. 59). Butt and Retallick (2002) described teachers' professional well-being as a sense of confidence that empowers teachers to adjust to the ups and downs of professional work and confront new challenges to their professional development. Solomon (2016) considered professional well-being to be a state of wholeness that results from bringing life, work, people, and money into balance.

Through his review of the related literature, the researcher found that, although the term 'professional well-being' showed up in studies regarding employee workplace satisfaction and well-being at times, few studies systematically discussed the definition, scope, construct, or components of this concept. Some researchers simply used one or two work-related factors—for example, job satisfaction or absence of burnout—to conceptualise the term (Lauermann & Konig, 2016; Maggiori et al., 2013). Other researchers claimed that professional well-being was a sub-dimension of occupational well-being (Van Horn et al., 2004) as opposed to those who viewed professional well-being as a synonym for occupational well-being (Matteucci, Guglielmi, & Lauermann, 2017; Soini, Pyhaltö & Pietarinen, 2010). In addition, the Chinese literature contains very few mentions or

discussions of Chinese teachers' professional well-being due to the translation issue discussed later in Section 1.4.2.

In Chapter 2, the thesis discusses more theories and studies associated with professional well-being, but, generally speaking, there is a shortage of studies regarding the academic meaning and structure of this concept. This is why the current study's first objective was to determine what factors might serve as the main components of TPW, as the author deem this task as the prerequisite of conducting subsequent analyses in terms of rehired teachers' professional well-being.

To summarise, the current study focused on teachers' professional well-being as its main theme for three reasons:

- First, the concept of well-being is quite general and broad and incorporates many dimensions. Therefore, to make the current study's topic concrete and precise, the researcher needed to concentrate on one specific dimension of well-being—in this case, the well-being specifically related to teachers' perception of their professional work.

- Second, as mentioned earlier, from his literature review, the researcher found that, compared to other work-related concepts of teachers' well-being such as occupational well-being, professional well-being is still a relatively immature concept. Thus, the need exists for theoretical investigations of it.

- Third, the current study's target population—rehired teachers—is somewhat different from regular serving teachers in terms of their working pattern and employment mode. Through the pilot studies described above, the researcher found that rehired teachers' working patterns were diverse: some teachers only worked part-time and had only a few lectures each week; some teachers gave lectures at different institutes; some teachers worked full-time with teaching as their only task;

and some teachers engaged in different types of professional work (e.g., research, administration) in addition to teaching. Therefore, the researcher believed that, compared to studying the teachers' broad and general perception of all the factors relating to being a 'teacher' (e.g., occupational well-being, teachers' general well-being), it might be better to focus on their attitude toward the specific professional work and tasks they engage in, which makes professional well-being a concept that is more suitable to encapsulating the mindset of rehired teachers.

1.3.3 The research site: Nanchang City.

China is a quite big country, and the state of education varies widely across its different regions. Therefore, to avoid over-generalisation issues, the researcher chose to launch the current study by sampling several universities in a single city, one with a median level of educational development and social and economic conditions. One justification for this sampling method was that, due to China's highly-centralised mode of educational administration, the education system in Mainland China has a high level of uniformity (Bray & Jiang, 2016). This uniformity is manifested in each school's policy, management system, and even their curriculum arrangements (Sun, 2003). Therefore, even a study that just samples several universities from one city may produce findings that shed some light on the general application of the study's conclusions to Higher Education Institutions (HEIs) in Mainland China.

In China, a city's level of educational development is largely influenced by its level of economic development. Therefore, as mentioned, to mitigate the confounding effect from socioeconomic factors, the current study chose for its research site a city with a median economic development level: Nanchang City.

Nanchang is the capital city of Jiangxi Province, China. As of December 2016, the city's resident population was 5.22 million, with 854,000 people over 60 (Jiangxi Radio and Television Station, 2016). According to China's 'Financial Report of the 21st Century', in 2017, among the 26 provincial capital cities in Mainland China, Nanchang's GDP level ranked 16th. Therefore, Nanchang has a roughly median level of economic development among the provincial capital cities.

Results from 'the Fourth Sample Survey on the Living Conditions of China's Urban and Rural Older Persons' that carried out in 2015 showed that the province in which Nanchang City is located, Jiangxi Province, had quite a high employment rate in terms of the older population. In 2015, 13.83% of the people in Jiangxi Province who were over 60 were still employed, which put Jiangxi province third out of the 31 provinces and municipalities in Mainland China in this regard (Dang, 2018, p. 201). According to the data released by Jiangxi Statistical Yearbook, in 2015 Jiangxi Province has a population of around 45.54 million, of which 13.88% are aged over 60. By calculation, in that year Jiangxi Province has approximately 874,188 aged workers (calculated by 45.54 million * 13.88% * 13.83%).

In 2015, among the entire aged worker population in whole China, the people working in the education industry comprised 0.28% of the population, which is approximately 166,796 people (Dang, 2018, p. 210). However, no official data was found regarding individual provinces or cities in terms of the number of older employees working in the education industry, so yet the researcher was not able to estimate the number of rehired teachers in Nanchang City or in Jiangxi Province.

In the current study's context, the word 'college' refers to 'ordinary higher education institutions' (Ordinary HEIs). The 'Data of Educational Statistics' released by the Education Department of the Jiangxi Provincial Government showed that, in 2016, Nanchang City had 54 ordinary HEIs, with a teaching staff that numbered 31,999.

According to the 'Provisional Regulation on the Setting up of Ordinary Higher Education Institutions' issued by the Ministry of Education of China in 1986, 'Ordinary HEIs' include universities, colleges[2] and advanced vocational schools. The student bodies of ordinary HEIs primarily comprise high-school graduates who have passed the specific entrance examination prescribed by the national government (usually referred to as the 'college entrance examination [高考]'). Among the Ordinary HEIs, universities and colleges mainly provide undergraduate and graduate-level education. The advanced vocational schools mainly provide vocational education in which students can earn advanced diplomas.

Also, according to the 'Provisional Regulation', the Ordinary HEIs are called 'ordinary' because China has another type of HEI, namely the 'Adult HEIs'. Adult HEIs refer to the colleges that recruit in-service adult employees as their students. Adult HEIs offer off-the-job and part-time education programmes in forms such as correspondence courses, night-school courses and online courses.

The current study did not include teachers from Adult HEIs in its research sample, that is, all its participants were teachers working in Ordinary HEIs. Specifically, the current study's participants were from three categories of Ordinary HEIs: public colleges, private colleges, and the independent schools of public colleges (hereinafter 'independent schools').

The three categories of Ordinary HEIs are defined as follows:

1. Private colleges.

According to the 'Provisional Regulation on the Setting Up of Private Colleges' issued by the Ministry of Education of China in 1993, private colleges are educational institutions

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[2] According to the 'Provisional Regulation on the Setting Up of Ordinary Undergraduate-Level Colleges' promulgated by the Ministry of Education in 2006, the term 'universities' refers to colleges that meet certain criteria such as funding, number of students, physical facility, faculty members with doctoral degrees and research achievements. Colleges may change their title to 'university' when they successfully pass an evaluation organized by the local government's educational department.

set up by individual citizens or social organizations other than government-sector or state-owned enterprises or institutions. Private colleges are operated with self-raised funds.

The 'Promotion Law for Non-Government Funded Education' promulgated by the Ministry of Education of China in 2003 emphasised that private colleges have the same legal status as public colleges and that the Chinese government guarantees the autonomy of private colleges in running and operating their businesses. The 'Promotion Law' also states that the education services offered by private colleges also serve for the public welfare, which is an integral part of Chinese educational undertakings.

2. Public colleges.

In China's academic circles, the definition of 'Public College' has been plagued by controversy. This is because China has no official documentation that clearly distinguishes public colleges from private colleges. Some scholars suggest using 'source of funds' as the distinguishing standard. However, the opponents of this proposal point out that some private colleges can obtain considerable public funding and public colleges may receive substantial private donations such as those from alumni. For the same reason, it is not useful to distinguish the two types of colleges according to 'whether the college property belongs to public or private ownership'. The sources of funds for a college may come from multiple channels, which means the college's ownership structure may incorporate public and private parties.

Therefore, the current study chose to adopt Wei's (1994) viewpoint of distinguishing public colleges from private colleges by using 'Legislatively Confirmed Original Registrant' as the dividing standard. Specifically, colleges set up by public authorities such as the sectors of the central or provincial governments in accordance with legal procedures are categorized as public colleges, and colleges set up by private individuals or private legal persons such as

private enterprises and institutions and nongovernment-funded organizations fall into the category of private colleges.

3. Independent schools of public colleges.

According to 'Measures for the Setting Up and Management of Independent Schools' promulgated by the Ministry of Education of China in 2008, an 'Independent School' is a higher education institution that is jointly set up by a public college and a nongovernment-funded organization(s) or individual(s) using nongovernment funds. The independent schools normally only offer an undergraduate-level education.

In a sense, an independent school can be viewed as part public college and part private college—specifically, a private college affiliated with a public college. The 'Measures' also state that all independent schools are entitled to enjoy the incentives and support policies stipulated in the 'Promotion Law for Non-Government Funded Education', which suggests that the Ministry of Education views independent schools as a special type of private college.

The birth of the independent school has been seen as a great innovation in China's education reform. These schools can make full use of the education resources (especially teaching resources) of the public college to which they are attached but at the same time have great autonomy regarding policymaking, teaching administration, student enrolment, financing and staff recruitment (Que, 2016; Yang, 2009).

1.4 Significance of Current Study's Research

The researcher chose college rehired teachers' and regular teachers' professional well-being for the current study's research theme because he believes this topic has unique practical significance as well as theoretical significance for the education and gerontology fields, as explained below.

1.4.1 Practical significance

The Chinese society is aging (Yuan & Gao, 2017), and with the exacerbation of the population aging issue in Mainland China, many industries in the country are experiencing growing shortages of skilled, experienced employees. To respond to the labour force shortage issues associated with population aging, the Chinese government has put forward many plans and implemented numerous measures. For example, the State Council of China promulgated 'The 13th Five-Year Plan for the Development of National Aging Cause and the Construction of Pension System' in March 2017. In particular, the plan mentioned that China will 'strengthen the human resource development for older people', 'encourage professionals to extend their length of employment', and 'reward older people who are continuingly productive'. As another example, to take full advantage of the outstanding retired teachers' professional competence and alleviate the shortage of intellectual resources in poorer regions in the country, the Ministry of Education of China launched the 'Silver Age Program [銀齡講學計畫]' in 2018. The program is designed to recruit approximately 10,000 outstanding retired teachers and school principals from across the country from 2018 to 2020 and then allocate these rehired professionals to serve in the under-resourced schools in China's poorer regions.

Given these and other plans and measures, it is clear that teacher rehiring will become an increasingly common activity for the national authority and various education institutions. Consequently, the proportion of rehired teachers in the entire teacher population will keep rising.

Regarding the topic 'aging, retirement, and HRD of older people', there is one subject that previous studies seldom reference but the researcher of the current study considers to be important: the relationship of the various components of a post-retirement career to rehired employees' professional well-being. The researcher believes this subject is meaningful because, even though the public today has generally acknowledged the value of HRD

programmes for older people, such programmes will be hard to implement and sustain over the long term if the programme participants—the rehired professionals—are dissatisfied with their post-retirement career.

In the current study, the researcher incorporated rehired teachers as research subjects and investigated the characteristics of rehired teachers' professional well-being, the main components of such well-being, and the effect of certain demographic factors on that well-being. The study's findings, then, have practical significance for the future operation and administration of these HRD programmes. For example, the programme administrators may consider the characteristics of rehired teachers' well-being identified by the current study when designing their incentive policy for recruiting and managing their rehired staffs.

1.4.2 Theoretical significance

In addition to the current study's practical significance discussed above, the study is also theoretically significant in the following ways.

1. Exploring the application of TPW theories in China

When reviewing the Chinese literature, the researcher found that it was quite difficult to find studies on teachers' professional well-being. In the Chinese language, the words 'occupation' and 'profession' can be translated into the same phrase: zhiye, [職業]. Therefore, when a Chinese study discusses teachers' 'zhiye' well-being, it is hard to distinguish whether it refers to occupational well-being or professional well-being. Also, for this reason, it is exceedingly rare to find empirical studies that investigate Chinese teachers' professional well-being. By sampling rehired college teachers and regular serving teachers in China, the current study has completed an initial investigation of TPW unique to college teachers in Mainland China. Therefore, the current study will serve as a modest spur to induce more

researchers to come forward with valuable contributions that help fill the research gap regarding the professional well-being of Chinese teachers.

2. Investigating the characteristics of rehired teachers' professional well-being

Previous studies have found that, compared to full retirement, post-retirement employment practices such as bridge employment, partial retirement, and phased retirement are positively correlated with elders' well-being (Beehr & Bennett, 2015; Wang, 2007; Zhan et al., 2009; Kim & Feldman, 2000). However, little is known regarding rehired college teachers' well-being as specifically related to their professional work since being rehired. More specifically, little is known about the composition and structure of such well-being, the differences in rehired teachers' well-being compared to that of regular serving teachers, or how this well-being is influenced by work-related demographic factors. Through its analysis of the professional well-being of rehired teachers, the current study has begun to close this theoretical gap.

Section 6.2 'Current Study Implications' further discussed the potential contributions of the current study based on its research findings.

1.5 Research Objectives and Research Questions

After synthesising the initial research idea described above based on the researched background information, the researcher developed the following three research objectives:

1) Explore the main components of teachers' professional well-being, as well as how each of these components manifests in the teachers' career experience.

2) Determine which aspects of the rehired teachers' professional well-being differ from those of regular serving teachers and search for clues for interpreting such differences based on teachers' career experience.

3) Investigate whether the level of teachers' professional well-being is related to certain work-related demographic factors and, if so, test whether this relationship differ significantly for rehired and regular teachers.

As research questions (hereinafter referred to as RQs) are necessary to create an approach for realising research objectives and for guiding research design (Clough & Nutbrown, 2002; Merriam, 2009; Maxwell; 2013), the researcher developed the following three multi-part RQs from the three research objectives.

RQ1: What are the main components of teachers' professional well-being? How does each of these factors contribute to the well-being, and how does each factor manifest in the teachers' career experience?

RQ1 is a prerequisite for the other RQs. To date, no consensus exists regarding the components and measurement of professional well-being (Yildirim, 2015). Thus, there is a need to explore the main components of this concept in a manner that facilitates subsequent analyses. In addition, by answering RQ1, the current study might help fill the research gaps regarding the structure of TPW in Mainland China's social context.

RQ1 contains three sub-questions:

1) What are the main components of teachers' professional well-being?

2) How does each factor contribute to the well-being?

3) How does each factor manifest in teachers' career experience?

These three questions are progressive. The first sub-question aims to explore the basic constitution of TPW and so gives rise to more detailed questions as follows:

- Given that many factors have been suggested by previous studies as being associated with TPW, which of these factors should be selected as the 'main' components of TPW and examined by the current study?

- In designing the questionnaire, what items/questions should be employed to measure the theoretically suggested TPW components?

- In the context of the current study, will the theoretically-suggested TPW structure constructed from the selected factors and items fit the collected data? If not, how should the structure be modified?

The second sub-question of RQ1 aims to further explore which factors have the strongest effects on TPW. Answering this question could offer more information on the TPW structure in terms of the relative impact on and importance of each factor to the overall structure.

The third sub-question looks to learn more about the substance of each TPW component by substantiating each component with the teachers' perceptions of their professional work and their career experience, thus adding concrete examples to the abstract meaning of each TPW component. The key approach to answering this sub-question, then, involves designing a feasible qualitative tool (e.g., an interview protocol with open-ended questions) that could facilitate collecting the perceptions and experiences needed by the current study from the participants.

RQ2: Does the professional well-being of rehired teachers differ from that of regular teachers and, if so, in which aspects?

RQ2 looks to explore the characteristics of rehired teachers' professional well-being by using regular serving teachers as the reference. RQ2 consists of two sequential sub-questions. The logic in designing these two questions was this: asking the teacher to give an overall

rating of his or her feeling regarding the professional work and then delving deeper into the different facets of that feeling.

The first sub-question concerned whether the rehired teachers differed from regular teachers in terms of professional well-being. One key issue involved in answering this question is, given that a teacher's professional well-being strongly relates to the exact type of professional work in which he or she engages and given that the types of professional work that college teachers engage in are diverse, which types of professional work should be considered in the current study? To address this issue, the current study mainly looked at the participants' self-rated professional well-being (hereinafter referred to as SRPW) in terms of four types of professional work: teaching, research, administrative work, and overall professional work. Correspondingly, the SRPW associated with these four types of professional work were named 'SRPW in teaching', 'SRPW in research', 'SRPW in administrative work', and 'general SRPW', respectively.

The second sub-question concerns identifying which aspects of the rehired teachers' professional well-being differ from those of regular teachers. The word '**aspect**' is the key to answering this sub-question. As used in the current study, it had the following two layers of meaning:

- The first layer concerned the differences between rehired teachers and regular teachers regarding the self-reported level for some of the theoretically suggested TPW components, that is, did the two types of teacher have significant differences in terms of, for example, their level of perceived autonomy, burnout, job satisfaction, or professional competence.

- The second layer concerned the difference between rehired teachers and regular teachers in terms of the relationship between TPW and its components. More specifically, this layer paid special attention to whether any difference existed

between rehired teachers and regular teachers in terms of, for example, the role that the teachers' perceived autonomy, workplace relationship, or burnout plays in their general SRPW level.

In addition, as mentioned earlier, the existing literature rarely discusses the characteristics of rehired teachers' professional well-being in comparison to that of regular teachers. Thus, it was difficult for the researcher to source comparable findings from past work to look for potential interpretations for the current study's analysis results in terms of RQ2. Therefore, in the current study, like RQ1, RQ2 was also designed to be answered using quantitative and qualitative approaches. The quantitative approaches such as t-tests were employed to detect the potential differences between rehired and regular teachers, and the qualitative approaches served to explore for clues that might explain such differences.

Specifically, the qualitative analyses were mainly conducted on data drawn from two sources. The first source was the comparison of how often rehired teachers and regular teachers made positive and negative comments on each of the seven TPW components. The second source was the rehired teacher interviewees' perceptions regarding the differences between their pre- and post-retirement career experience. The discussion of RQ2, then, focused on drawing conclusions from a comparison of the current study's qualitative and quantitative findings.

RQ3: What is the relationship between work-related demographic factors and teachers' professional well-being and does this relationship affect the rehired teachers and regular teachers differently?

RQ3 stretches RQ1 and RQ2 to unearth more details regarding the answers to the previous two RQs.

RQ3 consists of two sequential sub-questions. The first aims to study whether the TPW level was related to certain work-related demographic factors. Regarding these demographic factors, many previous studies have discussed their relationship with other types of teacher well-being—for example, teachers' general well-being or occupational well-being. Therefore, in terms of answering RQ3 by comparing the current study's findings to those of previous studies, the researcher could further discuss the characteristics of professional well-being that differed from other types of teacher well-being.

The second sub-question asks, if the statistical analysis results suggested that some demographic factors were significantly related to the TPW level, whether these relationships affect rehired teachers and regular teachers differently? This sub-question was an extension of RQ2. Its purpose was to extract more knowledge regarding the characteristics of rehired teachers' professional well-being, as well as to give the theoretical results obtained from answering RQ2 a more practice-oriented use given that the demographic factors selected by the current study are strongly related to teachers' working practice.

RQ3 was designed to be answered purely using quantitative approaches for the following three reasons.

First, RQ3 mainly concerned the potential correlation relationship, prediction effect, and/or moderation effect that might exist between or among certain variables. Thus, answering this question is more appropriately done through statistical measures.

Second, answering RQ3 involved the analysis of the relationships between TPW and tens of demographic factors, which makes it hard for an open-ended interview to cover all the factors. Even if the researcher managed to do so, the breadth and depth of the discussions during the interview meetings could not be guaranteed.

Third, as noted above, unlike RQ2, the findings of which are difficult to be directly compared to past work given the scarcity of previous studies, for RQ3, the demographic

factors used were selected from the related literature and thus the analysis results regarding RQ3 could be compared to the research outcomes from past work. Therefore, the researcher presumed there was no need to search for interpretations of the quantitative results for RQ3 using qualitative data, that is, it was more efficient to look for interpretations that could be drawn from comparing the current study's results to those of related studies.

Chapter 3 discusses in detail how these three RQs were addressed via a research process underpinned by a mixed-method design. In the ending part of the current chapter, the thesis briefly introduces this research process with a diagram.

1.6 The research process

***Figure 1.1*:** The research process diagram
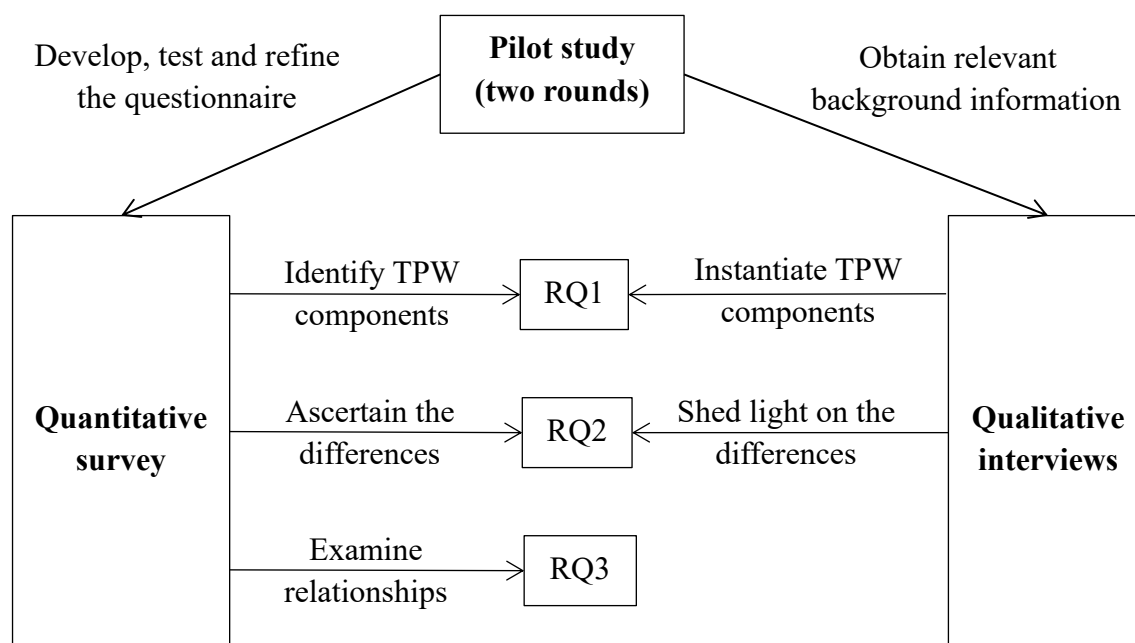
Note: 'TPW' is the abbreviation of 'teachers' professional well-being'

As shown in Figure 1.1:

- Two pilot studies were performed to develop, test, and refine the questionnaire for the quantitative survey and to obtain background information including aspects such as cultural context, local education policy, and school management system for the subsequent qualitative interviews.

- A quantitative survey was conducted to facilitate the answering of all three RQs. Specifically, its first objective is to explore the main components of TPW as well as to identify how each of these components contributes to TPW (RQ1). Its second objective is to test the means differences between rehired teachers and regular teachers in terms of the different dimensions of their professional well-being (RQ2). The third objective of the survey is to identify the relationship between demographic factors and TPW for rehired teachers and regular teachers, respectively (RQ3).

- Qualitative interviews were conducted to look for the manifestation of the TPW components in teachers' career experience (RQ1), and to help explain the differences between rehired teachers and regular teachers in terms of their professional well-being as revealed in the quantitative data analyses (RQ2). In general, results from the subsequent qualitative analyses provided supplementary knowledge for analysing the quantitative results.

Summary of Chapter 1

The researcher conceived his initial research idea based on, and inspired by, Atchley's continuity theory. The researcher chose rehired college teachers to be the main research subjects and professional well-being as the current study's thematic focus. For comparison purposes, regular serving teachers were also incorporated into the study to play the role of a reference case for analysing the characteristics of rehired teachers' professional well-being.

By synthesising the background information regarding the issues and concepts involved in this research idea, the researcher developed three research objectives and then three research questions in accord with the objectives. RQ1 looks to explore the main components of TPW through quantitative approaches and then investigate the manifestation of such components in teachers' career experience through qualitative interviews. RQ2 focuses on determining the differences between rehired teachers and regular teachers in terms of professional well-being. Again, this question was designed with a logic that involved using statistical tools to detect potential differences and then searching for explanations for such differences through open-ended discussions with the interviewees. RQ3 was developed to analyse the relationship between participants' level of professional well-being and certain work-related demographic factors using only a quantitative approach. In closing, a research process diagram was used to delineate the key concepts and research approaches involved in answering the RQs.

Chapter 2: Literature Review

Chapter 2 focuses on how the current study's conceptual frameworks were developed after a thorough review of the literature related to the key concepts in the study.

This chapter begins by discussing the concept of well-being from the perspective of philosophies such as Confucianism, Taoism, Hedonism, and Eudaemonism. This is followed by the introduction of the connotation of teachers' well-being, as well as three classic models that have served as the theoretical basis for most measurement instruments of teachers' well-being, namely, Diener's Subjective Well-being (SWB) model, Ryff's Psychology Well-being (SWB) model, and Maslach's burnout model.

Next, the chapter discusses the concept of professional well-being, the factors that have been suggested as contributors to professional well-being in previous research, which of those factors were selected as the current study's hypothetical TPW components, and why these factors were selected. Also discussed is the definition, scope, and measurement instruments used for each selected factor as suggested by previous studies.

The chapter then introduces the socio-demographic factors that may relate to teachers' well-being, as well as the demographic factors commonly used to conceptualise the post-retirement careers of rehired employees. The researcher then discusses which of these demographic factors were selected in the current study.

At last, this chapter presents two conceptual frameworks for the quantitative part and the qualitative part of the current study.

Figure 2.1 briefly introduces the content of each section in Chapter 2, as well as the role that each section plays in the construction of conceptual frameworks.

Figure 2.1: Role of each section in the construction of conceptual frameworks
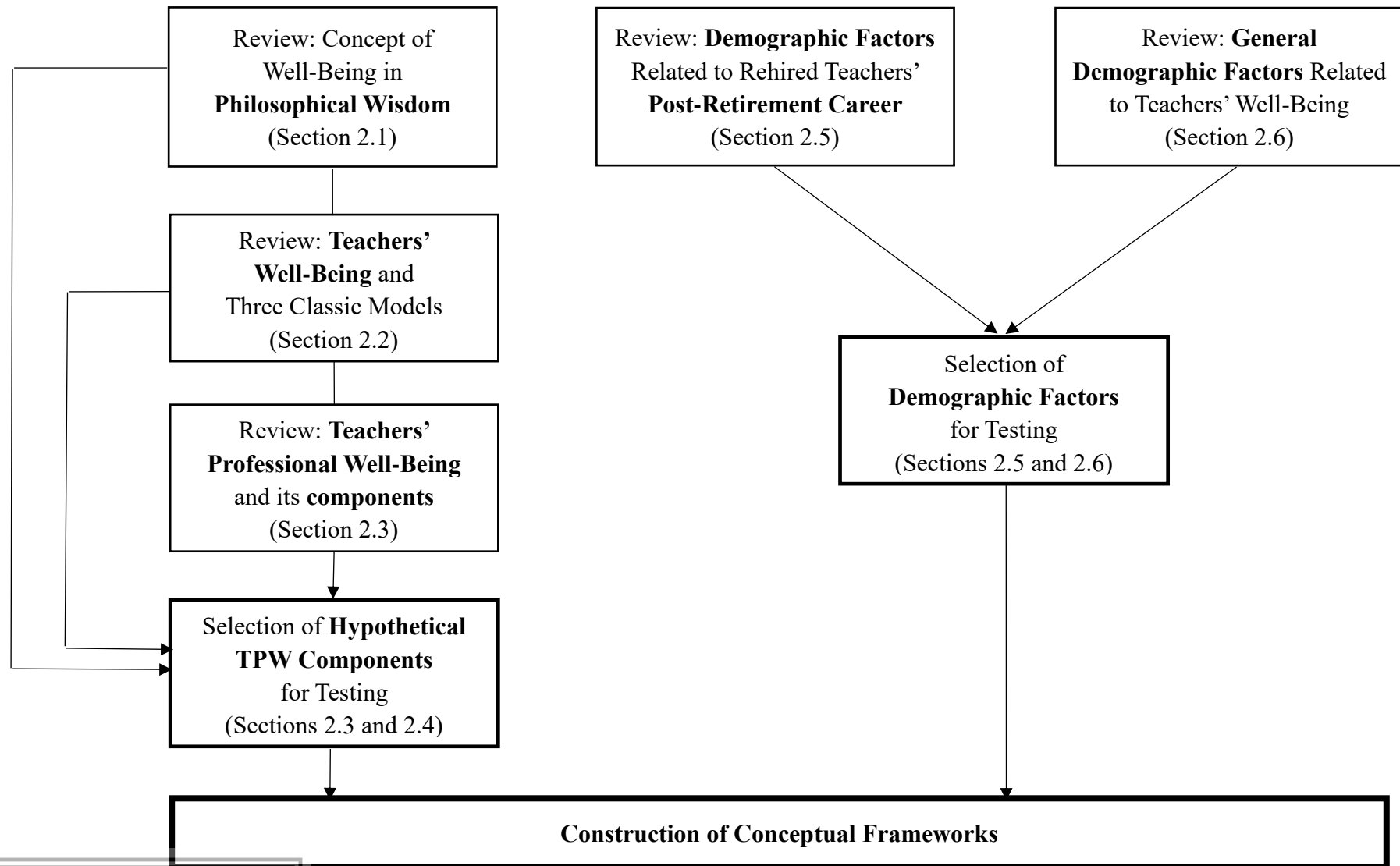
2.1 The Concept of Well-Being in Philosophical Wisdom

As shown in Figure 2.1, this chapter begins with a discussion of it from the perspective of classical philosophy, as such wisdom has been imprinted into our social cultures (Mason, 2014). Indeed, variances in culture play a significant role in influencing people's thinking, resulting in 'different views and understandings by people from diverse cultural backgrounds' (p. 565; Tam, 2017). They also shape the varying ways in which people view well-being (Zeng & Guo, 2012).

The American Heritage Dictionary (2001) suggests that 'well-being' is the situation of being healthy, happy, or prosperous. However, opinions vary when it comes to defining the concept of well-being, and it is hard to identify a unified one. The pursuit of well-being has been going on since the advent of human civilisation, occurring throughout human history in our philosophy, religion, etiquette, music, visual arts, and performing arts (Estes & Sirgy, 2017).

Estes and Sirgy (2017) claimed that 'though it has been undertaken under different names—life satisfaction, quality of life, happiness—the pursuit of well-being has been one of the most enduring quests of human civilisation' (p. 7), suggesting that, in traditional philosophy, theories regarding happiness or the satisfaction with life can all be considered as part of 'the study of well-being.'

The current study's research site was located in Mainland China and all participants were local residents. Therefore, in reviewing the concept of well-being from traditional wisdom, the author first looked at two ancient Chinese philosophies that have had a long-lasting influence on the Chinese view of well-being: Confucianism and Taoism. A brief review of how these philosophies define well-being will help readers better understand the study findings discussed in Chapters 4 and 5.

In addition to the Chinese traditional wisdom, the current study also discusses two

Ancient Greek philosophies that have had a far-reaching influence on the 'well-being' research done in modern Western society: Hedonism and Eudaemonism. The reason for reviewing these philosophies is that the construction of the current study's conceptual framework has been greatly influenced by many classic Western theories on human well-being. When designing the survey questionnaire and interview protocol that respectively served as the current study's quantitative and qualitative data collection instrument, the author largely borrowed questions from related scales, inventories, and interview protocol that mostly developed and used in a Western social context. Again, the researcher believes that this review of the classical philosophies of well-being from Western society will help readers better understand the different notions of 'well-being' and 'happiness' and better comprehend the theoretical basis of the current study.

2.1.1 'Well-being' in Chinese traditional philosophy.

In the Chinese language, the term that most aligns with the meaning of 'well-being' is 'Xing Fu [幸福]'. In the Collins Learner's English-Chinese Dictionary and the Oxford Advanced Learner's English-Chinese Dictionary, the word 'well-being' is translated as 'Xing Fu'.

In addition, in reviewing the related literature in the China National Knowledge Infrastructure (CNKI), which is the most extensive research literature database in Mainland China, the author discovered that most studies regarding 'Xing Fu' translated this word into 'well-being' in their English titles or abstracts. Only in a small portion of studies was 'Xing Fu' translated as 'Happiness'. Therefore, in the current study, in all data-collection instruments (e.g. the questionnaire and the interview questions), the term 'Xing Fu' was considered to stand for 'well-being'.

2.1.1.1 The concept of well-being from Confucianism.

Confucianism, mainly represented by Confucius, Mencius and Xuncius, is a mainstream cultural ideology, philosophy and religious system originating in China and spreading to other surrounding East Asian countries (Taylor & Arbuckle, 1995; Lai, 2018; Cline, 2018). Park and Chesla (2007) indicated that Confucianism is the "central philosophic background for much of the culture in East Asia" (p.293).

The view of well-being in Confucianism is embodied everywhere in the theories and works by its representatives. Confucius put forward the philosophy of life with 'Benevolence' as the core. Confucius believed that the reason why human has humanity was because they have 'benevolence', the highest criterion of life and well-being as Confucius suggested (Guo et al., 2012). The essence of 'benevolence' is to keep others at heart, think for others, and 'concern' for others (Huang, 2007). This 'concern' begins with the feelings of each person towards his or her family, which will gradually expand outward and develop into a kind of 'love' for others (that other than his or her family), and finally for the whole natural world. In this way, the concept 'benevolence' goes beyond the human perceptual level and has universal interpersonal and cosmic concerns (Feng, 1988; Lee & Jones, 2017). Confucius said, those who are without virtue cannot for long endure poverty and hardship, nor can they for long abide prosperity and enjoyment (Confucius, 2016). That is to say, only the 'benevolent' people can enjoy the long-term happiness.

Confucius also pointed out that from outside, a good emperor should be able to run the family in unison, manage the nation in order, and regulate the world; while from inward, the emperor should be able to self-cultivate the good moral character (Confucius, 2016). In other words, In Confucius's perspective, a life with well-being should be virtuous, positive, and enterprising, and the highest state of life was to have an ideal personality (Lee & Jones, 2017).

Another core idea in Confucianism that closely related to its view of well-being is 'Honesty'. The 'Honesty' in Confucianism contains two meanings: one is not to deceive oneself; the another is not to deceive others (Feng, 1988). Many of Mencius' expositions involve his views on the relationship between 'Honesty' and 'Happiness'. For example, Mencius said, everyone should return to their hearts and realise their inner honesty, and once the honesty was realised, the greatest happiness would be obtained (Mencius, 2017). 'Honesty' is the prerequisite of the 'Realm' of unity for truth, goodness, and beauty. Mencius believed that with this 'Realm,' a person can be in harmony with the natural law everywhere and be free in all respects of the world, thus obtaining happiness (Lau, 1970; Zhang, He & Cheng, 2011).

In addition, Zeng and Guo (2012) pointed out that the Confucian 'happiness' had two levels of meaning: one was the happiness under the basic material satisfaction; the other was the rational happiness (or happiness with reason). The happiness that obtained by satisfying material and emotional needs in the secular life is the low-level happiness (Cheng & Zhang, 2010). Confucianism held that the true well-being was a kind of 'rational happiness,' which not only related to the current and objective state of life, but also covered the inner, subjective, and experiential psychological feelings (Li & Li, 2008; Cheng & Zhang, 2010). This high-level 'happiness' was not limited by material shortage, it was a kind of 'realm happiness' of non-material gratification, and could alleviate the actual worries and frustration that caused by material shortage or difficult situation (Zeng & Guo, 2012).

To sum up, the 'sense of well-being' in Confucianism is a kind of emotional feeling that comes from the 'heart' and can be acquired through continuous transcendence and cultivation of individual's mind. Only when the subjectivity and transcendence of the mind play its role, can individuals enjoy the possible 'happiness' (Lee & Jones, 2017; Zeng & Guo, 2012; Park & Chesla, 2007). At the same time, Confucianism also emphasised the common well-being of

the whole society, believing that it was better to be happy with others than to be alone (Zhang et al., 2011; Legge, 2013).

2.1.1.2 The concept of well-being from Taoism.

The ideally happy life from Taoism is quite different from that of Confucianism. Lao Tzu and Chuang Tzu, representatives of Taoism, advocated a life that went with the flow, avoided the secular world, and returned to the natural world (Bao, 2009).

Lao Tzu advocated the Doctrine of 'No-Desire' when discussing the relationship between 'desire satisfaction', 'well-being', and 'morality'. Lao Tzu said, all kinds of temptations from the outside would do harm to people's self-cultivation. To be a saint, a people needs to abandon the external enjoyment, so as to pursue the truth and self-cultivation. If people regard the satisfaction of their desires as the source of happiness, it will hinder the realisation of the true happiness (Lao Tzu, 2014). Yang & Wang (2008) claimed that Lao Tzu's 'No-Desire' Doctrine was not requesting people to totally give up all desires, but only required people to reduce their desires to the minimum level, like stoicism. Lin (2016) suggested that in Lao Tzu's perspective, people's basic needs should be met, but pursuing luxurious life would damage their moral character, so that they could not enjoy the real happy life. In other words, 'contentment' is the key to 'happiness'.

The core word of Lao Tzu's view of well-being is 'Wu Wei' (Bao, 2009). The literal meaning of 'Wu Wei' corresponds to 'Inaction' in English, but in fact, it does not advocate that nothing should be done, but refers to what people do should be letting things take their own course, abiding by natural laws, and living a natural life. In this way, the world will be in great order and all people will live a happy life (Kwak, Palmer, & Ramsay, 1993; Wang & Lou, 2016).

Chuang Tzu's thought and Lao Tzu's are in one continuous line, but Chuang Tzu's

theory put more emphasis on the importance of 'Freedom' (Gaskins, 1998; Wang, 2009). In 'A Happy Excursion [逍遙遊]', one of Chuang Tzu's masterpiece, he claimed, if a person coveted fame and wealth, he would finally lose his freedom and fall into a cage (Chuang Tzu, 2015). Without freedom, happiness can never be achieved. In Chuang Tzu's perspective, the substance of well-being is the happiness based on freedom and harmony (Wang, 2001).

In sum, Taoism does not value human's subjective efforts and endeavors, instead, it appreciates the life which allows the nature to take its own course (Hodous, 1946). In Taoism, enjoy the natural life and be far away from the secular world is the road to the highest level of well-being. This road is totally contrary to the ideal realm of life that advocated by Confucianism, which encouraged people to zealously seek merit and fame in the secular world, and to pursue self-transcendence (Bao, 2009; Zhu, Xiao, & Cao, 2018). For thousands of years, the ideal personality of Taoism and Confucianism, constitutes the contradiction but dialectical unity of Chinese people's life values (Wang & Lou, 2016; Zhu et al., 2018).

Zeng and Guo (2012) claimed that Taoism had a far-reaching impact on the values of modern Chinese people in terms of the pursuit of well-being. They cited the research findings of Diener and Diener (1995), and Gao, Zheng and Yan (2010), which suggested that college students from Mainland China were less aware of well-being than American and Australian students. Compared with Americans, Chinese people think less about whether their lives are happy or not. According to these findings, Zeng and Guo (2012) held the view that Chinese people might not take happiness or well-being as the most important thing in life, because Chinese people had long been influenced by Taoism which believes in the doctrine: fortune and misfortune are two buckets in the same well. Misfortune, that is where happiness depends; happiness, that is where misfortune underlies (Lao Tzu, 2014).

2.1.2 'Well-being' in Western traditional philosophy.

Since the time of Ancient Greece, the pursuit of well-being by Western ideologists has never stopped (Estes & Sirgy, 2017). Western classical philosophical thoughts about 'well-being' or 'life quality' can be roughly divided into two schools: 'Hedonism' (or the hedonic view) and 'Eudaemonism' (or the eudaimonic view) (Ryan & Deci, 2001).

Hedonism views well-being as a subjective feeling that mainly consists of pleasure or sensory happiness. Pleasure has an 'absolute' value. Other things have value only because they can manifest a certain level of pleasure (Kahneman, Diener, & Schwarz, 1999). In contrast, Eudaemonism claims that the concept of well-being incorporates not only pleasure but also the actualisation of human potential (Waterman, 1993). In the eudaimonic view, the objective development of all aspects of an individual's social life is the 'absolute good', regardless of whether it produces a feeling of pleasure or not (Paulsen & Thilly, 1899).

Huta (2015) suggested that these two schools of thought have been influencing humans' theoretical progress in terms of understanding well-being in all historical ages. Indeed, 'much of the current psychology research on well-being similarly addresses hedonia and/or eudaimonia, making the hedonic-eudaimonic distinction a central concept in positive psychology' (p. 159).

2.1.2.1 The concept of well-being from Eudaemonism.

Eudaimonic view in ancient Greece is mainly advocated by Socrates, Plato and Aristotle (Ryan & Deci, 2001).

Socrates put forward the famous proposition that 'virtue is knowledge and virtue is teachable' (Rudebusch, 2009; White, 2006). His idea of well-being was that morality depends on knowledge, knowledge is the base of virtuous behavior, and morality is the prerequisite for a person to obtain well-being (Kleinman, 2013; Gao et al., 2010). Socrates also believed

that only by constantly improving self-awareness, can the people induce and learn the knowledge of charity in human nature, and have the ability to make reasonable judgment of what is good and what is evil. Through this way, the person can attain knowledge, charity, virtue, and finally achieve well-being (Schoch, 2006; Holowchak, 2004).

Plato believed that pleasure gained from physical and sensory enjoyment did not constitute real happiness (Nussbaum, 2001). He claimed that human sensibilities, desires, and physical needs were related to low-level happiness and that rational thinking was the way to achieve high-level happiness (Gao et al., 2010). Therefore, from Plato's perspective, to attain well-being, a person must learn to use reason to control his or her emotions, sensibilities, and desires. In other words, they should not lust after sensual pleasures but instead should pursue justice, moral good, and spiritual enrichment (Ficino, 2014; McMahon, 2006).

Aristotle viewed happiness as the spiritual activity corresponding to virtue (Yu, 2011; Yu et al., 2014). From his perspective, moral virtue, as 'a habit that enables a human being to live according to reason' (Velasquez, 2011, p. 125), is the key to well-being. In addition, Aristotle claimed that there were two extremes in human emotions and actions: the 'vice of excess' and the 'vice of deficiency'. Virtue can help human beings avoid these vices. Only by cultivating virtue can a person find a reasonable compromise between excess and deficiency and thus make the reasonable choices that contribute to well-being (Jowett, 1991; Holowchak, 2004; Velasquez, 2011).

In summary, it can be found from Socrates, Plato and Aristotle's thought that Eudaemonism upholds the rational power of human beings and believes that human beings have the ability to weigh the risks and interests (Wu, 2003). It also advocates that human beings should set up valuable goals and focus on moral sense and virtuous behaviors, so as to pursue moral perfection, self-achievement and self-realisation, rather than totally immersing into personal sensory pleasure (Bauer, McAdams, & Sakaeda, 2005; Fowers, Mollica, &

Procacci, 2010). In addition, in the perspectives of Eudaimonists, well-being should be the holistic development of human beings, including the full play of human's potential, full affirmation of human's integrity of personality, and human's self-actualisation and self-realisation (Holowchak, 2004).

2.1.2.2 The concept of well-being from Hedonism.

Hedonism regards 'seeking pleasure and avoiding suffering' as the code of conduct, attributes well-being to sensory happiness and soul pleasure after the human desires are satisfied, and holds that human is born to pursue 'pleasure', and 'pleasure' is the real charity (Peking University, 1982). Huta (2015) claimed that a hedonic orientation mainly involves 'seeking happiness, positive affect, life satisfaction, and reduced negative affect' (p.159).

Hedonic view in ancient Greece is mainly advocated by Democritus, Aristippus and Epicurus (Feng, 2011). Rowe and Schofield (2000) suggested that Democritus was the earliest philosopher in record who embraced a happiness view from hedonistic philosophy. Democritus claimed that 'joy and sorrow are the distinguishing mark of things beneficial and harmful' (p. 125, Rowe & Schofield, 2000), and held the view that the supreme goals of life were contentment and cheerfulness.

Unlike Plato, Aristippus, another disciple of Socrates, is a staunch supporter of Hedonism. The related theories of Cyrenaic School, headed by him, had a great influence on the development of Hedonic View in later generations (Keefe, 2013). The Cyrenian School regarded 'feeling' as the only source of well-being, believing that people had feelings and that feelings were a part of the objective fact. People have nothing to feel except for pleasure and pain. Well-being is the supremacy of pleasure on the physical level. Therefore, pleasure, and the process of pursuing pleasure, are the greatest well-being (Lampe, 2015; Feng, 2011).

Epicurus characterised well-being from the Hedonic view, which proposed that 'the

highest good was pleasure' and 'pleasure was the first charity we were born with'. He also held that the start and end points of human choices were always pleasure (Lobel, 2017). Epicurus emphasised that physical and sensory pleasure was the origin and basis of all pleasure, although he also opined that psychological pleasure was higher in value than physical pleasure (Klein, 2018). Regarding the relationship between pleasure, virtue, and well-being, Epicurus believed that, although virtue was essential to a person's well-being, it was not the goal. Rather it served only as a means to achieve well-being (Feng, 2011, Tang, 2000). That said, Epicurus also thought that not all pleasures were worth pursuing and that people should abandon pleasures that might cause more pains and endure the pains that would bring more pleasures (Annas, 1987).

A special theoretical system in Hedonic view is utilitarianism. Compared with the thoughts of the ancient Greek philosophers of Hedonism that noted above, utilitarian theory emphasises not only the pursuit of individual interests and pleasure, but also the pursuit of public interests and well-being for every member of society (Velasquez, 2011).

Jeremy Bentham, founder of utilitarianism, raised the 'Greatest Happiness Principle' (Dimmock & Fisher, 2017). According to this principle, 'when one seeks to maximise those satisfactions which are the effects of economic courses, then one is maximizing a part of happiness' (p8, Little, 1950).

Different from previous hedonist's argument, in Bentham's utilitarianism, the 'happiness' does not mean the personal happiness of the individual who takes an action, instead, it refers to the 'collective happiness' of all involved people who are affected by this action. The consequence of the action is used for an evaluation. If the action increased the 'collective happiness' of all related persons, then it would be seen as a good action, and vice versa. Individuals who can successfully decrease the 'unhappiness value' and meanwhile increase the 'happiness value' are the morally good people. (Simmons, 1982; Tang, 2000).

John Stuart Mill inherited and supplemented Bentham's happiness view (Crisp, 1997). He argued that some pleasures have higher values than others do, so when considering the values of the consequence of an action, not only the quantity but also the quality of pleasure should be considered (Brink, 1992; Tang, 2000). He also believes the well-being of society is indeed more important than that of individual, therefore, he advocated the virtue of personal sacrifice, that is, the personal interests and pleasure had to be sacrificed in order to ensure the interests of the majority and the society's overall well-being when there was a contradiction between the social interest and individual's interest (Macleod & Miller, 2016; Tang, 2000).

In short, utilitarianism considers well-being as the greatest happiness of the great majority of people (Binmore, 2009). Given in utilitarianism, 'happiness' is still the criterion for judging whether an action is right and wrong, therefore, utilitarianism is still categorised as a subset of hedonism (Mill & Sher, 2001; White, 2006; Xu, 2013;).

It is difficult to comment on the merits and demerits of Hedonism and Eudaemonism. Huta (2015) cited the study findings from Huta and Ryan (2010) and Peterson, Park, and Seligman (2005) and claimed that people who adhere to both hedonia and eudaimonia at the same time are more likely to achieve 'higher degrees of various well-being outcomes' (p. 163) than those who simply pursue only one or the other. Meanwhile, Huta (2015) suggested that generally speaking, hedonic activity is closely related to the short-term and immediate well-being, while eudaimonic activity is more related to the long-term and lasting well-being.

As teachers are the research subjects of the current study, next, the thesis discusses the connotation of teacher' well-being based on Holmes (2005)'s theory, as well as three classic models that have served as the theoretical basis for most measurement instruments of teachers' well-being, namely, Diener's Subjective Well-being (SWB) model, Ryff's Psychology Well-being (PWB) model, and Maslach's burnout model.

2.2 Teachers' Well-Being: Classic Models and Measurements

Holmes (2005) considered teacher's well-being comprised four sub-dimensions: physical well-being; emotional well-being; spiritual well-being; and mental and intellectual well-being. Physical well-being includes 'all aspects of our physical being' (p. 8). It depends on individuals' health condition, daily diet, physical exercise, etc. Emotional well-being is associated with teachers' personal affect as well as their perceived emotions from other people around them. Therefore, emotional well-being is largely influenced by the teachers' workplace relationship. Spiritual well-being is related to those experiences that 'beyond the material world' (p. 13). It enables teacher to slip the leash of material conditions and provides teachers with 'purpose, meaning, courage and peace' (p.14). Mental and intellectual well-being is largely influenced by the teachers' professional work, school leadership, management system and policy, and learning and training opportunities at work. It plays an important role in teachers' professional development and personal growth.

When it comes to measuring teacher's well-being or teachers' occupational well-being, there are many scales, inventories, and questionnaires available. The author's review of the related literature revealed several classic conceptual models that are frequently used as the theoretical basis for such instruments. These models reflect the modern Western philosophical views of well-being.

As described above, in traditional Western philosophy, the schools of thought on well-being can be roughly divided into two categories: Hedonism and Eudaemonism. Likewise, the research on human well-being in modern times can be placed into two categories or paradigms. The first one, which carries on the hedonic view, usually applies the terms 'subjective well-being' or 'happiness' to describe the concept of well-being. The relevant research that adopted this perspective mainly uses happiness or its synonym as the

outcome variable. This perspective roughly equates the concept of well-being to the happiness or pleasure composed of personal feelings such as emotions (positive/negative) and life satisfaction (Bradburn, 1969; Diener et al., 1999; Wilson, 1967; Strack, Argyle, & Schwarz, 1991).

The second paradigm, which adopted the eudaimonic view, considers well-being and happiness (especially sensory happiness) to be two different concepts. It emphasises the significance of human growth and an individual's perceived achievement and self-actualisation. Specifically, this view claims that the key component of well-being is 'actualisation' and that the measurement instrument for well-being should incorporate components such as personal growth, purpose in life, self-acceptance and actualisation, environmental mastery, positive interpersonal relationships, and autonomy (Ryff, 1995; Van Dierendonck, 2004; Cheng & Chan, 2015; Homan, 2016).

In this thesis, the author mainly introduced three classic theoretical models for well-being, as these models have served as the theoretical basis for most measurement instruments of teachers' well-being. The first is Diener's Subjective Well-Being Model (SWB), which follows the subjective well-being paradigm. The second is Ryff's Psychological Well-Being Model (PWB), which is a representative model of the psychological well-being paradigm. The third model is Maslach's Job Burnout Model. Although the latter are not directly associated with the concept of well-being, it has greatly influenced the studies that have adopted a negative psychology perspective in their research on teachers' well-being.

2.2.1 Diener's subjective well-being model.

American psychologist Ed Diener is the representative personage of Subjective Well-Being (SWB). Diener (1994) claimed that self-report questionnaire is the most

appropriate measurement instrument for SWB as no one better than the persons themselves can do the evaluation of their level of well-being. Therefore, in Diener's perspective, SWB can be described as an individual's self-evaluation of his/her condition regarding the various domain of life, including health, job, family, finances, etc. (Diener et al., 1999). The SWB includes both positive affects (happiness, pleasure, etc.) and negative affects (angle, worry, etc.) (Diener, 2000; Diener & Emmons, 1984; Diener, 1984).

Diener (1984) and Diener (2000) considered that the area of SWB has three hallmarks:

- **Subjectivity.** The SWB only exists in an individual's subjective and personal feelings. Objective conditions like health, virtue or money may influence a person's SWB but 'not seen as an inherent and necessary part of it' (p. 543).

- **Positivity.** A person's SWB is largely depended on two factors: absence of negative affect and existence of positive affect.

- **Integration.** A personal's SWB is based on his/evaluation of 'all aspects of life' (p.544), not just about one or two specific domain of life.

In terms of the components of SWB, Diener et al. (1999) suggested that 'subjective well-being is a broad category of phenomena that includes people's emotional responses, domain satisfactions, and global judgments of life satisfaction' (p. 277). In this way, high level of SWB is usually a consequence of high-frequency of pleasant affect, low-frequency of unpleasant affect, and an overall satisfaction of different domains of life. By summarizing the research results over three decades (from late 1960s to late 1990s), they provided a table which presented the major components (including divisions and subdivisions) of SWB, which is shown in Table 2.1.

Table 2.1: Major components of Diener's subjective well-being model

Pleasant Affect	Unpleasant Affect	Life Satisfaction	Domain Satisfactions
Joy	Guilt and shame	Desire to change life	Work
Elation	Sadness	Satisfaction with current life	Family
Contentment Pride	Anxiety and worry Anger	Satisfaction with past	Leisure Health
Affection	Stress	Satisfaction with future	Finances
Happiness	Depression	Significant others' views of one's life	Self
Ecstasy	Envy		One's group

Source: Diener et al. (1999)

2.2.2 Ryff's psychological well-being model.

Ryff (1989) disagreed with views of well-being that focus on an individual's subjective feelings of happiness and pleasure. In his assessment, a person's emotional state of pleasure, anger, sorrow, or joy cannot serve as the only evaluation criteria for judging his or her level of well-being. Instead, the essence of well-being lies in a person's endeavours to realise his or her potential (Ryff, 1989). Ryff's theories not only concern people's emotional experience but also focus on people's self-development, exertion of potential, and self-actualisation (Ryff & Keyes, 1995; Ryff, 1995; Keyes, Shmotkin, & Ryff, 2002). In a sense, Ryff's theory of well-being extends the eudemonic view into modern times.

Ryff proposed the following six dimensions of 'psychology well-being' (PWB):

1. Self-acceptance: an individual's attitude towards him or herself; more specifically, the extent to which one can acknowledge and accept the 'multiple aspects of self, including good and bad qualities' (Ryff & Keyes, 1995, p. 727) and a person's ability

to view his or her past life positively and embrace the present life.

2. Autonomy: a person's capability for independent thinking, that is, a person's ability to resist social pressures to think or act in certain ways, control his or her actions independently, and evaluate him or herself using his or her personal standards.

3. Purpose in life: a person's perception of the direction and meaning of his or her life. People who score high on this dimension generally feel that their past and present lives have been and are meaningful and that they have set and abided by meaningful life goals.

4. Personal growth: a person's perception of his or her growth and development. People who score high on this dimension generally feel that they have been improving and growing continuously and that they are gradually unearthing and realising their potential. They also are willing to face challenges and try new things and can change in ways that 'reflect more self-knowledge and effectiveness' (p. 727, Ryff & Keyes, 1995).

5. Positive relations with others: a person's willingness and ability to establish warm, satisfactory, and trustworthy friendships with others, to care about the welfare and interest of others, to appreciate others, and to balance the 'giving' and 'taking' in interpersonal relationships. An affinity for empathy, affection, and intimacy are key factors of this dimension.

6. Environmental mastery: a person's perception of his or her capability to manage the environment that he or she lives in, cope with complex external affairs, utilise resources in the surrounding environment reasonably, and choose or even create an environment that facilitates his or her personal growth and development.

Ryff (1989) asserted that 'purpose in life' and 'positive relations with others' were the most important two dimensions of PWB, followed by 'self-acceptance' and 'environmental

mastery'.

2.2.3 Maslach's burnout model.

Diener and Emmons (1984) claimed that human moods and emotions constitute their 'affect'. Bradburn and Caplovitz (1965) suggested that 'pleasant affect' and 'unpleasant affect' are independent of each other and thus should be measured separately. Diener et al. (1999) added that, although in the short run the degree of independence between the pleasant and unpleasant affects has been a controversial subject among different scholars, there is hardly any dispute over their independence in the long run.

For this reason, the author believes that, when conceptualizing the construct of well-being, in addition to positive psychological factors such as happiness (as suggested by SWB) and self-actualisation (as suggested by PWB), one must also consider negative psychological factors. Among these, the current study mainly discusses 'work burnout' because this factor has been used commonly in studies of teachers' negative work-related affects and emotions. In addition, many previous studies have discussed work burnout's significantly negative relationship to teacher well-being (Klusmann et al., 2008; Ghanizadeh & Jahedizadeh, 2015; Huberman, 1993; Parker et al., 2012).

Maslach and Jackson (1986) identified three dimensions of burnout: 'emotional exhaustion', 'depersonalisation', and 'reduced personal accomplishment'. Such symptoms usually result from long-term involvement in emotionally demanding situations.

Emotional exhaustion is associated with the energy loss and fatigue caused by excessive demands put on an individual's personal emotional resources. Emotional exhaustion can be accompanied by frustration and tension. This state can be understood given an individual's worry about his or her current or future failure to provide a level of services equal to what was rendered in the past. A typical thought reflecting this state might be 'I feel nervous and

worried every time I think of my next day's work'.

A sense of depersonalisation manifests as an individual displaying negative, indifferent, and excessively distant attitudes toward the people they serve. Individuals with these symptoms tend to treat the people they serve as inanimate objects and reduce interactions with them as much as possible. Moreover, they may behave like, say, petty bureaucrats in that they deal with service objects strictly in accord with dogma rather than trying to meet the objects' demands or solve problems based on the actual situation.

A sense of reduced personal accomplishment manifests as individuals tending to view themselves negatively, which includes having negative feelings regarding their work competence and a diminished sense of achievement about their employment. Such individuals, especially after being in their current job for a long time, believe their work capabilities and professional competence have not improved a bit, or have even declined.

Based on this three-dimension burnout model, Maslach and Jackson (1986) developed the Maslach Burnout Inventory (MBI). Yet this inventory is still the most widely used instrument for measuring job burnout in the world (Gorter et al., 1999; Schutte et al., 2011).

As noted in Chapter 1, the current study focuses on themes in relation to the professional well-being of college teachers. Therefore, next, the thesis discusses the concept of professional well-being, the factors that have been suggested as contributors to professional well-being in previous research, which of those factors were selected as the current study's hypothetical TPW components, and how did the above-mentioned three models, namely, Diener's SWB model, Ryff's PWB model, and Maslach's burnout model, guide the researcher's selection of these factors.

2.3 Teachers' Professional Well-Being

2.3.1 Definition of professional well-being.

Professional well-being is a relatively new term. Consequently, few studies clearly define the concept. Moreover, a great dissension exists in those studies regarding that definition. Yildirim (2015) suggested that a teacher's professional well-being is 'the perception about his or her level of possessing the qualities needed for professional tasks' (p. 59). Butt and Retallick (2002) described teachers' professional well-being as a sense of confidence that empowers teachers to adjust to the transitions that are an ongoing part of professional work and to overcome new challenges in the process of their professional development. In short, a sense of professional well-being provides teachers with 'a willingness to be committed, be creative and take risks in order to continue to grow professionally' (p. 31). Solomon (2016) claimed that the quality of an individual's professional life is influenced by four main components: the nature of the work, the relationships with people within the work environment, the work income, and the quality of life outside work. Therefore, he considered professional well-being to be a state of wholeness that results from bringing life, work, people, and money into balance.

After synthesizing the perspectives from the above-mentioned literature, the author developed his preliminary definition of teacher's professional well-being (TPW): a positive, happy, and active emotional experience generated by the satisfaction of the teachers' needs in their professional work and professional development process.

2.3.2 Professional well-being and occupational well-being.

The previous section briefly introduced the concept of professional well-being. As noted in Chapter 1, there is a type of work-related well-being that is closely related to the concept of professional well-being: occupational well-being. Some researchers have viewed

professional well-being as a synonym for occupational well-being (Matteucci, Guglielmi, & Lauermann, 2017; Soini, Pyhältö, & Pietarinen, 2010), while others have claimed that professional well-being is a sub-dimension of occupational well-being (Van Horn et al., 2004). Given the apparent lack of distinctions between the definitions of these two concepts, to clarify the notion of professional well-being in the current study's context, the researcher here briefly reviews the definitions of occupational well-being provided in other studies.

Mattern and Bauer (2014) suggested that occupational well-being is a 'multidimensional construct comprising affect, cognitions, motivations, behaviours, and self-reported physical health' (p.60). Van Horn et al. (2004) proposed a structure for teachers' occupational well-being that comprised five dimensions: 1) affective well-being, including job satisfaction, organizational commitment, and (absence of) emotional exhaustion; 2) professional well-being, covering work aspiration, work autonomy, and professional competence; 3) social well-being, comprising (absence of) depersonalisation and quality of social functioning; 4) cognitive well-being, which is measured by the level of cognitive weariness; and 5) psychosomatic well-being, which is evaluated by the frequency of psychosomatic complaints. Klusmann et al. (2008) claimed that the levels of emotional exhaustion and job satisfaction are the two key indices of teachers' occupational well-being.

Based on the definitions of professional well-being and occupational well-being discussed above, the researcher noted the following similarities and differences between the two concepts in terms of the teaching profession.

In general, professional well-being and occupational well-being are closely related. The boundaries between the two are so blurred that a clear distinction may not exist. 'Job satisfaction' and 'job burnout' are probably the factors with the greatest overlap between the two concepts in terms of their main components—and perhaps the components that contribute most strongly to both.

In fact, in addition to job satisfaction and burnout, professional well-being and occupational well-being likely share many common components and affecting factors. Even so, the two concepts may have the following differences.

First, relatively speaking, occupational well-being is related more to teachers' job satisfaction, especially satisfaction with material benefits such as income and insurance, which in turn is closely related to teachers' turnover intention. Professional well-being relates more to teachers' beliefs regarding their professional competence, work enthusiasm, motivation, and interest in the current work. Therefore, professional well-being may directly influence teachers' work achievements, initiative, and creativity. For example, a teacher may not like the exact professional job assigned to him or her, so the individual might lack interest, enthusiasm, and positivity for the work. However, in general, the person is satisfied with the salary and job prospects, so he or she will not consider quitting. In this case, this teacher's self-rated level of professional well-being may be quite different from the level of his or her occupational well-being.

Second, professional well-being is more 'narrowly focused', while occupational well-being is more 'broadly focused'. Specifically, professional well-being is directly related to teachers' professional work (e.g., teaching and research) and thus reflects the feelings and attitudes of teachers toward the specific type of professional work they are participating in and performing. In contrast, the concept of occupational well-being relates to the feelings of teachers regarding their occupation as a 'teacher' and pays more attention to income, disposable time, prospects, social status, and other work-related benefits of the occupation. As such, occupational well-being has broader concerns and thus probably comprises more components.

Since the current study's core concept is professional well-being, the researcher does not delve further here into reviewing literature related to occupational well-being. As noted,

'identifying the theoretically suggested TPW components to be tested in the empirical study' is the main objective of the current section's discussion. In pursuit of that objective, the next section moves on to identifying and reviewing the literature relevant to the components of professional well-being.

2.3.3 Components of professional well-being.

Yildirim (2015) claimed that to date there has been no consensus regarding the components or determinants of TPW, and so the measurement of TPW is still a contentious issue. The literature contains very limited mentions of the concept of 'professional well-being'. The state of research in this area thus served as one important reason for carrying out the current study.

After conducting a literature search using 'professional well-being' as a search term, the author reviewed the retrieved publications, which included book chapters, journal articles, and doctoral theses. Through this review, the author found that some publications explicitly discussed the components of professional well-being and that other publications did not mention the professional well-being components explicitly but did use 'professional well-being' as a keyword and adopted several factors to conceptualise or measure professional well-being. The author believes the latter category of literature is also worth incorporating into the current study as it discusses, as noted, the components of professional well-being, albeit implicitly. Therefore, in the thesis, the author classified the literature regarding components of professional well-being into these two categories: 'explicit professional well-being literature' and 'implicit professional well-being literature'. These two categories are discussed in detail below.

2.3.3.1 Explicit professional well-being literature.

Van Horn et al (2004) considered professional well-being as one dimension of

occupational well-being. They claimed that teachers' professional well-being is a concept that associated with teachers' job-related motivation, ambition, self-efficacy and achievement, and this concept comprises three components: autonomy, aspiration, and professional competence.

Aelterman et al (2007) tested the main determinants of general professional well-being in elementary education and secondary education, and found that teachers' self-efficacy had the highest impact on the teachers' professional well-being at both elementary and secondary levels. In addition, work pressure, support from colleagues (including school leaders), attitudes towards innovation, and relationship with parents also had significant influence on teachers' professional well-being.

Butt & Retallick (2002) and Retallick & Butt (2004) employed biography and autobiography methods to study teachers' professional lives, careers and workplace relationships, and suggested that teachers' professional health and well-being were related to feelings of trust, respect, autonomy, and efficacy as a teacher.

Yildirim (2015) tested five commonly cited determinants of professional well-being—self-efficacy, job satisfaction, recognition, aspiration, autonomy, and suggested that the three most significant determinants for teachers' professional well-being are self-efficacy, job satisfaction, and recognition.

Babenko (2018) examined the effect of Canadian physicians' three basic psychological needs—work autonomy, professional competence, and relatedness with the people from workplace—on their professional well-being, and suggested that the need for relatedness was a significant predictor for professional well-being. In addition, in this study, he conceptualised professional well-being with three factors: satisfaction with professional life, work-related engagement, and exhaustion.

Cassidy et al. (2016) suggested "the feelings teachers have about their work are

important factors in their professional well-being" (p. 1667), as well as in their emotional availability in classroom teaching. They defined teachers' professional well-being to include "feelings about their work, autonomy in decision making, actual wages, and perceptions of fairness of wages within the programme as well as within the early childhood profession at large" (p. 1666). In addition, this 'feelings about work' factor comprises seven extents of feelings: excitement; frustration; inspiration; stress; tiredness; anxiety; and dread.

O'Reilly (2014) employed a mixed-method study to examine the relationship between primary school and secondary school teachers' professional well-being and five work-related factors—school climate and working environment, support from colleagues and school management, choice of profession (teachers' attitude toward the teaching profession), perceived professional development opportunities, and perception about teachers (how teaching profession was recognised / respected by the society and the current school). The quantitative analysis results suggested the school climate, support, and professional development opportunities could significantly predict teachers' professional well-being, while the qualitative results suggested the remaining two factors, namely, choice of profession, and perception about teachers also have played important role in teachers' job satisfaction and intention of retention.

Lauermann & König (2016) claimed that, job burnout is 'an indicator of lacking professional well-being' (p. 9). In addition, their study found that teachers' professional competence can critically predict teachers' professional well-being and success, and self-efficacy is a vital component of professional competence.

Munn, Berber, and Fritz (1996) investigated levels of professional well-being among 156 child life specialists. In their study, they used three factors to conceptualize participants' own perceptions of their professional well-being: burnout, job dissatisfaction, and turnover intention. As predictor variables for professional well-being, they used workload, role stress,

and social support, with role stress being operationalised by two components—role ambiguity and role conflict. Their test results suggested that 'role stress' (and 'role ambiguity' in particular) was the strongest predictor of participants' burnout, alongside job dissatisfaction; 'lack of supervisor support' was the strongest predictor of participants' job dissatisfaction and turnover intention.

Soini, Pyhaltö & Pietarinen (2010)'s research focused on one specific aspect of teachers' professional well-being—pedagogical well-being. By interviewing 68 Finnish primary and secondary school teachers, they found that in terms of teachers' perception of their pedagogical well-being, more than half of the descriptions that elicited from interviewees' comments were related to teachers' experiences of 'empowerment and engagement'. Such 'empowerment and engagement' was characterised by four sub-themes that related to teachers' sense of autonomy, relatedness, professional competence, and belonging in their work.

As mentioned in Chapter 1, due to the language issue, examples from the Chinese literature specifically related to TPW are rare. However, there is one doctoral thesis (Tan, 2009) that discusses 'teachers' professional activities well-being'. The author claimed that professional activities well-being is one sub-scale of teachers' occupational well-being, which refers to teachers' positive emotions generated by the satisfaction of their psychological needs related to professional teaching activities. Tan (2009) surveyed 912 teachers from three cities in Mainland China and suggested that the main factors that could predict professional activities well-being were self-efficacy, job burnout, job satisfaction, self-esteem, emotion regulation strategies, and teaching style.

2.3.3.2 Implicit professional well-being literature.

As noted, while some studies did not focus on 'professional well-being' as their main

research theme, they did use 'professional well-being' as a variable in their overall theoretical model. Although these studies did not explicitly discuss the components of professional well-being, they have adopted several factors to measure professional well-being in order to operationalise this concept. Therefore, the author also treated these studies as a source for investigating the components of professional well-being.

Given that these studies did not particularly discuss the role that such factors played in professional well-being, the researcher chose to present brief information on them in a table and move on.

Table 2.2 provides a brief introduction to these studies' sample size, participants, and the factors that they have used to operationalise 'professional well-being'.

Table 2.2: Implicit professional well-being literature

Literature	Participant and sample size	Factors for operationalising professional well-being
Simoens et al. (2013)	Musicians in Finland (N = 320)	Perceived pressure; perceived support; confidence in one's own performance; music performance anxiety; social phobia.
Efeoglu and Ulum (2017)	EFL teachers from state schools in Turkey (N =120)	Self-efficacy; recognition; professional collaboration and sharing with colleagues.
Maggiori et al. (2013)	Employed and unemployed adults living in Switzerland (N = 2002)	Job satisfaction; work-related stress.
Zeidner and Hadar (2014)	Mental health practitioners (N = 89) and physicians (N = 93) from hospitals and clinics in Northern Israel	10 items for assessing "the quality of participants' feelings of satisfaction in relation to their work as a 'helper' in the health care professions" (p. 93).
Dries (2010)	Full-time employees in United States (N= 143)	Job satisfaction, work stress, burnout.
Fowler (2006)	Music therapists in United States (N = 49)	Burnout; work stress; professional longevity (total years as a practicing music therapists)

Literature	Participant and sample size	Factors for operationalising professional well-being
Gottlieb (2007)	New graduate registered nurses in United States (N = 79)	McCloskey/Mueller Satisfaction Scale, including the satisfaction with extrinsic rewards, balance of family, interaction opportunities with colleagues, professional opportunities, praise/recognition, control and responsibility.
Yildirim, Arastaman, and Dasci (2016)	Elementary and secondary school teachers in Turkey (N = 301)	Self-efficacy; recognition; professional collaboration and sharing.
Yoo et al. (2017)	Trainees of surgical residency programmes from the 6 New England states, US (N = 166)	Satisfaction with work environment (including job satisfaction, work-related stress, stress coping strategy, workplace relationships); and the extent of fatigue.
Wolf et al. (2019)	Kindergarten teachers working in Greater Accra region, Ghana (N = 444)	Work motivation; burnout; job satisfaction
Babenko (2018)	Practicing physicians in Canada (N = 57)	Professional life satisfaction; work-related engagement; and emotional, physical, and cognitive exhaustion.
Matteucci, Guglielmi, and Lauermann (2017)	Italian public high-school teachers (N = 287)	Career choice satisfaction; and work engagement (including vigor, dedication, and absorption for work)

The literature review discussed above makes it clear that the theoretically suggested components for professional well-being vary widely and are the subject of dispute. As one of the most important purposes of the current study was to explore the 'main' components of TPW, the author needed to choose the current study's TPW components from among those defined somewhat contentiously in the previous research.

2.3.3.3 Selection of TPW components for testing

As shown in Figure 2.1 in Chapter 2, the review of philosophical perspectives on well-being (Section 2.1), teachers' well-being (Section 2.2), the three classic models in

teacher well-being studies (Section 2.2) and the concept and influence factors of teachers' professional well-being (Section 2.3) jointly served as a foundation for selecting the theoretically suggested TPW components that were tested in the empirical study. To be specific, we selected such components based on the following three considerations.

1. The frequency with which certain factors were cited in previous TPW studies as discussed in Section 2.3.3.

2. The philosophical perspectives on well-being. When selecting the components, the researcher considered the core ideology of the following different philosophical perspectives on well-being introduced in Section 2.2. First, the philosophy of hedonism, which mainly involves seeking a positive affect for things such as life in general and job satisfaction and reducing negative affects such as burnout, fatigue and sadness. Second, the philosophy of eudemonism, which upholds the rational power of human beings—that is, it posits that people should aspire to and have the self-efficacy to set up valuable goals for achieving self-actualisation and self-improvement. Third, the philosophy of Confucianism, which encourages people to seek merit and fame zealously in the secular world and to obtain recognition from others in their pursuit of self-transcendence. In other words, Confucianism emphasises the role of self-efficacy, aspiration and recognition in a person's well-being. Fourth, the philosophy of Taoism, which highlights the significance of having no desire, being content and having autonomy for a person's well-being. It also emphasises pursuing an existence in which individuals completely control their own lives and have harmonious relationships with other people and the entire natural world.

3. The three classic well-being models. The researcher selected the TPW components while keeping in mind the three classic well-being models introduced in Section 2.2: Diener's subjective well-being model, Ryff's psychological well-being model and Maslach's burnout model. Regarding the teaching profession, Diener's model relates mainly to teachers' job

satisfaction, Maslach's model to teachers' negative work-related feelings such as work stress and burnout and Ryff's model to factors that might contribute to teachers' personal growth and self-actualisation. The latter can occur in areas such as workplace relationships, autonomy, work aspirations, professional competence and recognition from others.

After diligently considering the three factors described above, the author selected seven factors as the hypothetical components of TPW.

These seven factors, in brief, are as follows:

- Professional competence: The teachers' self-confidence in his or her own professional competence, that is, the extent to which he or she possesses the required capabilities to do his or her professional work and overcome challenges in that work.

- Job satisfaction: The teachers' general job satisfaction (that is, not regarding a specific professional work) in terms of factors such as satisfaction with the institute, department and/or school, transportation, salary, working environment, and physical facilities.

- Autonomy: The teachers' perceived freedom in work in terms of his or her autonomous rights as authorised by superiors, and the extent to which he or she is free from the administrative supervision.

- Aspiration: The teachers' motivation, interest, and passion for work, as well as their enthusiasm for future professional development.

- Recognition: The teachers' feeling of being recognised or respected by others.

- Support and relationships: The teachers' perceived workplace interpersonal relationships and the support from superiors and peers.

- Burnout: The teacher' feelings of anxiety, pressure, fatigue, or other negative feelings caused by work.

Next, Section 2.4 offers a detailed introduction to these seven theoretically suggested components of TPW.

2.4 Introduction to the Seven TPW Components

In the last section, the thesis discussed the seven factors selected as the hypothetical components of TPW. In this section, the author further discusses the related literature that covers the definition for, the indicators of, and measurement instruments for each of these seven factors, as well as the significance of these factors in terms of professional well-being.

2.4.1 First factor: work burnout.

The concept of job burnout was first proposed by Freudenberger in 1974, when he described a series of symptoms evinced by employees under long-term working pressure (Ghanizadeh & Jahedizadeh, 2015). The phenomenon of job burnout is most readily observed in employees whose jobs involve providing services to people (Pas, Bradshaw, & Hershfeldt, 2012). Ghanizadeh and Jahedizadeh (2015) defined burnout as "a state of physical, emotional and mental exhaustion caused by long-term involvement in situations that are emotionally demanding" (p. 25). As noted, Maslach and Jackson (1986) suggested that job burnout comprises three dimensions: 'emotional exhaustion', 'depersonalisation', and 'reduced personal accomplishment'. In these three dimensions, 'emotional exhaustion' is the foremost predictor (Maslach, Schaufeli, & Leiter, 2001).

The hazards of job burnout can affect certain professions in particular, for example, teachers, who provide long-term service to students and are expected to build close affection with these students (p. 24, Ghanizadeh& Jahedizadeh, 2015). Chang (2009) suggested that burnout among teachers can stem from three different areas: organisational issues (e.g., role conflict, classroom climate), transactional issues (e.g., locus of control, self-esteem), and

individual issues (e.g., work status, age, gender) (p. 199).

Huberman (1993) pointed out that high frequency of job burnout among teachers could increase their risk of physical and mental illness. Those teachers who endure long-term job burnout are more likely to see negative effects, such as impatience, irritation, emotional sensitivity, or depression. Moreover, these symptoms can further exacerbate teachers' tiredness at work and increase both absence rates (Ghanizadeh & Jahedizadeh, 2015) and turnover rates (Ingersoll, 2001). Results from a study by Shen et al. (2015) suggested that higher job burnout rates can significantly reduce students' perceptions of teacher motivation. In addition, they found that job burnout among teachers can also negatively influence students' enthusiasm for engaging in self-learning activities.

Job burnout is strongly correlated with intense job stress (Antoniou, Ploumpi, & Ntalla, 2013). Forlin (2001) summarized 24 common stressors that teachers might experience in their daily work and classified them into three categories—administrative management, classroom teaching, and individual factors. The effects of these stressors on teachers' levels of job burnout vary by individual (p.48, Betoret, 2009). Whether the stressors could actually convert into a sense of burnout or not depends on each teacher's personality, values, capabilities, and the environment in which they work (p. 349, Antoniou et al).

The most popular measurement instrument for job burnout is the Maslach Burnout Inventory (MBI). Many of the studies that use the MBI to investigate job burnout among teachers reported high levels of reliability and validity (Aluja, Blanch, & Garcia, 2005; Byrne, 1989, 1993; Iwanicki & Schwab, 1981; Kantas & Vassilaki, 1997; Yuen, Lau, Shek, & Lam, 2002). For this reason, the questions related to the factor 'burnout' in this study's item pool were mostly borrowed from the MBI.

2.4.2 Second factor: job satisfaction.

Job satisfaction is a concept that associated with the sense of fulfillment, joyfulness, and satisfaction from the work (Collie, Shapka & Perry, 2012). Locke (1969) defined job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job value" (p.316). Low level of job satisfaction is strongly related to turnover and intention to quit job (Muchinsky, 1977; Lucas, Babakus, & Ingram, 1990), as well as to the incidence of teachers' absenteeism and attrition (McCarthy, Lambert, Crowe, & McCarthy, 2010; Zembylas & Papanastasiou, 2004; Katrina, 1999).

Evans (1997) claimed that job satisfaction is an ambiguous term. He explained that the main reason for this ambiguity lies in the distinction between two concepts - 'satisfactory' and 'satisfying'. Specifically, when people are discussing about their satisfaction to something, this satisfaction could be a result of "circumstances which are satisfactory and/or circumstances which are satisfying" (p. 832). Therefore, he suggested the concept of job satisfaction should comprises two components: job comfort and job fulfillment. These two components jointly describe "a state of mind determined by the extent to which the individual perceives her/his job-related needs to be being met" (p.833).

Skaalvik and Skaalvik (2009) suggested that one issue with research regarding teachers' job satisfaction is the lack of agreement regarding how to measure this concept. The reason for this lack of agreement is that teachers hold different values and have different preferences regarding their working circumstances. For example, one important job-related factor for 'teacher A' might be insignificant for 'teacher B'. Therefore, the results from studies regarding the influence of certain circumstance-related factors on teachers' job satisfaction might be overlooked, which makes it risky to develop survey questions to measure teachers' job satisfaction.

For this reason, to measure job satisfaction, the current study chose not to use evaluative

statements that were related to a specific facet of job, such as 'I am happy with the campus location' or 'I do not like the teaching task assignment'. Instead, the statements employed focused more on teachers' general job satisfaction—for example, 'I feel happy at work most of the time'. Such statements have been employed as job satisfaction measurement instruments in large-scale tests and have been proven to produce valid, reliable results—for example, Ho and Au (2006)'s "Teaching Satisfaction Scale" and Macdonald and MacIntyre (1997)'s 'Generic Job Satisfaction Scale'.

2.4.3 Third factor: autonomy.

Breaugh (1985) provided a simple definition to work autonomy: the extent to which an individual is granted with the freedom to perform a job task. Garcia, Nima & Kjell (2014) claimed work autonomy is the "expressions of internal locus of evaluation, thus not looking to others for approval but evaluating oneself by personal standards" (p.4). Van Horn et al. (2004) suggested that work autonomy refers to "the degree to which people can resist environmental demands and follow their own opinions and actions" (p. 367). In sum, work autonomy is a concept that relates to employees' sense of freedom in work activities and decision-making (Sia & Appu, 2015). Many studies had discussed the significantly positive relationship between employees' perceived work autonomy and their job performance, work efficiency, and job satisfaction. (Luthans, 1992; Madjar, Oldham, & Pratt; 2002; Loher, Noe, Moeller & Fitzgerald, 1985; Oldham & Cummings, 1996).

In educational research area, for a long time, teacher autonomy has been a topic of interest (Friedman; 1999). Many studies' results had suggested that teacher autonomy has a positive effect on teachers' teaching performance as well as on students' learning achievement (Shen, Mccaughtry, Martin, & Fahlman, 2009; Porter, 1989; Benson, 2010).

There is no consensus regarding the construct or components of teacher autonomy.

Nevertheless, by examining the content of some classic measurement instruments of teacher autonomy—for instance, Charter's (1976) 'Sense of Teacher Work Autonomy', Pearson & Hall's (1993) 'Teaching Autonomy Scale', and Friedman's (1999) 'Teacher Work-Autonomy Scale'—the following main factors that contribute to teachers' self-rated level of autonomy were identified:

- Freedom from external interference and constraint

- Freedom from surveillance

- Freedom in choosing the preferred teaching method and assessment criteria

- Freedom in arranging teaching content and progress

- Freedom in modifying the syllabus based on actual situations

- Opportunities to engage in curriculum development and textbook selection

Thus, in the current study, when selecting or self-designing questions to measure the participants' perceived level of autonomy, the researcher mainly considered the existence of these contributing work autonomy factors.

2.4.4 Fourth factor: aspiration.

Laws (1976) claimed that in psychological study, the term 'aspiration' is used to describe 'an integral part of a dynamic cycle involving goal-setting, effortful striving, events that provide feedback about success or failure, and the adjustment aspiration' (p. 33). Van Horn et al (2004) suggested aspiration is related to people's interest in their environment, ambition and motivation for future life, and initiative to seek for ways for personal development. They also defined job-related aspiration as 'the degree to which a person pursues challenging goals in the job' (p. 367). Hoppe and Fujishiro (2015) suggested that people's career aspiration can reflect their 'attitudes and values regarding their own career' (p. 15).

Work aspiration is found to be significantly correlated with employees' job-related well-being and satisfaction, as well as self-efficacy (Monnot, 2017; Warr, 1987; Van Horn et al, 2004). Warr (1990) explained the reason for such relationships is because aspiration is a 'behavior in transactions with the environment through which level of mental health is exhibited' (p.196). Therefore, a psychologically healthy person was usually seen to be interested in the circumstance that he or she lives or works in, and was also willing to participate in and interact with such circumstance. This perspective is consistent with Herzberg's (1966) and Maslow's (1973) related theories in terms of employees' work motivation and psychological well-being.

Literature that discusses instruments specifically designed to measure work aspirations is scarce. Most so-called scales of 'career aspirations' or 'occupational aspirations' have focused on investigating people's (mostly college students') aspirations for careers or occupations before they engage in such jobs (e.g., Gray & O'Brien, 2007; Jackson, Potere, & Brobst, 2006; Cheng & Yuen, 2012). Questionnaires designed based on these scales are more like surveys of occupational preferences, which is not suitable for the current study in terms of providing references for measuring work aspirations.

Given this situation, in the current study the author adopted two methods to develop questions that would help measure work aspirations:

1. Collecting questions used by other researchers to measure employees' work aspirations.

2. Designing questions based on the definition of work aspirations, as well as on findings from related literature that discussed the signs that reflect an individual's level of aspirations.

Regarding the second method, after generalizing the findings from the related literature (Palmer, et al., 1965; Yildirim, 2015; Van Horn et al, 2004; Warr, 1990; Loughlin & Barling,

1998), the researcher identified the following signs as being associated with a high level of work aspirations:

1. A willingness to face new challenges at work that are personally significant.

2. The spontaneous establishment of goals and a willingness to put in the effort needed to make the desired achievement at work.

3. An ongoing alertness for opportunities for professional development.

4. A continuing interest in the current work.

5. An ongoing ability to find meaning within the current work.

Part of the self-rated questions in the current study for measuring work aspiration were then developed based on these signs.

2.4.5 Fifth factor: work support and relationships.

'Workplace relationships' is one of the most predominant factors for organisational climate (Halpin,1966; Butt & Retallick, 2002). Results from studies in educational field suggested that 'workplace relationships' serves as the most important determinant for teachers' perception of school climate (Collie, Shapka and Perry, 2012; Cohen et al., 2009). Sias (2005) defined workplace relationships as the 'unique interpersonal relationships with important implications for the individuals in those relationships and the organisations in which the relationships exist and develop' (p. 377). Rawlins (1994) claimed that workplace relationship functions as an instrumental and emotional support systems at the workplace.

Many researchers had indicated the significantly positive relationship among workplace relationships, job satisfaction, and organisational commitment (Judge & Ilies, 2004; Locke, 1969; Nystrom, 1993; Raabe & Beehr, 2003). In addition, McKenzie (2015) suggested that the workplace-based interpersonal conflict could cause a special kind of work stress. Except for the decline of employees' job satisfaction as well as productivity, such work stress could

also lead to a rise in employees' compensation claims for psychological injury.

Butt & Retallick conducted a series of qualitative studies to investigate teachers' perception about their workplace relationships. By means of biography and autobiography methods, Butt & Retallick (2002) summarised three sub-themes, namely, 'support'; 'recognition, respect and trust'; and 'caring', to describe teachers' perceived relationships with their administrators. Later, in their another companion article, they suggested 'collegial support', 'recognition, respect and trust', 'mutual caring', and 'social cohesiveness (ie. social interaction with peers outside school)' were the four sub-themes that characterised teachers' perceived relationships with their peers (Retallick & Butt, 2004).

By synthesizing the theories from the above literature, the researcher noticed that two key words could be used to encapsulate teachers' perception of workplace relationships: support and relationship. The term 'work support and relationships' was then adopted in the current study to delineate participants' perceptions in terms of the organisational climate, humanistic atmosphere, organisational support, and interpersonal relationships at their workplace.

2.4.6 Sixth factor: professional competence.

Professional competence is a domain-specific competence (Warr, 1987). Warr (1990) mentioned, 'a competent person is one who has adequate psychological resources to deal with experienced difficulties' (p. 197). Lauermann & König (2016) suggested teachers' professional competence comprised "professional knowledge, skills, beliefs and motivation" (p. 9). Kunter et al. (2013) claimed that for teaching profession, professional competence incorporates teachers' work motivation, beliefs in terms of teaching, professional knowledge, and self-regulatory capability.

Warr (1990) suggested that professional competence can be measured by participants'

subjective self-reports or by independent assessment that conducted by a 'relevant observer.' Knowledge test is the most commonly used approach for playing the role as such 'relevant observer.' For example, Lauermann & König (2016)'s study used general pedagogical knowledge (GPK) as one of the instruments for measuring teachers' professional competence. This assessment captures knowledge about general aspects of teaching, including 'knowledge about lesson structuring, dealing with student diversity, student motivation, and classroom management' (p. 13). Participants were asked to retrieve information from memory, analyze concepts, or generate responses. Similarly, Kunter et al. (2013) used a test with several open-ended question to measure participants' mathematical pedagogical content knowledge.

The current study chose not to assess participants' professional competence based on such knowledge test, as it is a quite time-consuming thing for the participants to answer the test questions while 'professional competence' is not the main theme of the current study. Moreover, such tests usually include many open-ended questions and it is a difficult job to recruit experts who are able to offer a reliable evaluation on the answers of these questions.

For these concerns, the current study adopted the self-report approach to measure participants' professional competence. Therefore, the 'professional competence' in the current study can be seen as a kind of 'self-perceived competence'. According to the related literature, the notion of such subjective competence is closely associated with three concepts: self-efficacy, environmental mastery, and self-regulation (Warr 1990; Yildirim, 2015; Ryff, 1989; Lauermann & König, 2016; Kunter et al., 2013). The development of the questions for measuring 'professional competence' in the current study was then based on the definition of these three concepts, which are introduced at the following paragraphs.

Environmental mastery is described as a person's capability to adapt to the changing environment, and to choose, or even to make use of the environment to overcome challenges that he or she confronts so as to achieve his or her goals (Hill & Allemand, 2010; Ryff, 1989;

Wettstein et al, 2014). In addition, Ryff (1989) mentioned, the extent to which "the individual takes advantage of environmental opportunities" (p.1071) is a key indicator for older people's successful aging experience.

Self-efficacy is a term postulated by Bandura (1977), which can be understood as "one's belief that one can perform a specific behavior or task in the future" (Lorig et al., 1989, p.37). Teachers' self-efficacy is described as a teacher's belief about his/her competence to defeat the difficulties in teaching practice as well as to facilitate the growth of students (Deemer & Minke, 1999; Skaalvik & Skaalvik; 2007; Friedman & Kass; 2002).

Self-regulation indicates "the ability to engage oneself while simultaneously monitoring one's own behavior and, in stressful situations, finding ways to cope adaptively" (p. 807, Kunter et al., 2013). Teachers' self-regulatory capability serves as an important competence for teachers to handle work-related stressors and prevent burnout syndrome (Klusmann et al., 2008).

2.4.7 Seventh factor: recognition.

Honneth (1996) claimed that there are three types of recognition: love, respect, and esteem. Further studies on Honneth's theory illustrated that the concept of recognition consists of three independent spheres: (1) the private sphere: including the emotional support from family members and friendships, which offers the pre-condition for individual's basic self-confidence; (2) the sphere of rights and legal entitlements, including the "universal respect gained from rights" (p. 339, Petersen & Willig, 2004), which is associated with people's self-respect; and (3) the sphere of cultural and political solidarity, which triggers individuals' self-esteem (Petersen & Willig, 2004; Angella, 2016; Mewes, 1996).

Many studies in organisational management area had reported a significant relationship between employees' perceived recognition, job satisfaction, work performance, and

well-being (Gilbert & Kelloway, 2018; Kouzes & Posner, 1999; Larsen, 1993; Engelking; 1986). Study results have also showed that in teaching profession, teachers' perceived recognition from administrators, peers, and students is an important source for their sense of satisfaction, fulfillment, and gratification (Blase and Kirby, 1992; Butt & Retallick, 2002; Orton, 1981; Retallick & Butt, 2004). Specifically speaking, sense of recognition can bring a positive effect on teachers' work motivation, loyalty to the school, teaching performance, creativity in teaching, and disciplinary pedagogy strategies (Blase and Kirby, 1992; Godkin, Parayitam, & Natarajan, 2010; Gillat & Sulzer-Azaroff, 1994).

The forms that a sense of recognition can take are diverse. Sometimes a simple 'thank you' or praise from the students or colleagues can be unexpectedly and powerfully inspirational for teachers (Hong & Lv, 2018; Luthans, 2000). Andrews (2011) also claimed that, for teachers, recognition can come in the form of professional awards or from a few words from students, principals, parents or political bodies that praise some effort made by the teacher. Though simple, such praise can give teachers a great sense of professionally good.

Individuals' perception of work recognition is usually measured via self-reporting. Many scales of job satisfaction have a sub-scale to measure the respondents' self-rated level of recognition. The statements in these scales are mostly general in nature—for example, 'I feel I am recognised for the work that I do'—and are usually associated with a person's perception of the respect, praise, and notice they receive from others at work (Grolleau, Mzoughi, & Pekovic, 2015; Yildirim, 2015; Bialopotocki, 2006; Gilbert & Kelloway, 2018).

As the current study chose rehired college teachers as its main research subjects, it is relevant to look at the concepts of retirement and post-retirement reemployment, the different categories of reemployment, as well as the demographic factors associated with the

post-retirement careers of rehired employees by previous studies.

2.5 Retirement, and Post-Retirement Reemployment

People used to consider retirement as a single discrete point in their lives (Kantarici & van Soest, 2008). Before this point, they would work full-time or part-time. After this point, they would stop working. With the development of studies related to retirement, researchers found that retirement is not a discrete event but a dynamic, complex process (Tam, 2017). Cahill, Giandrea, and Quinn (2011) indicated that retirement is a gradual procedure and that many retired elders continue working for a time before completely withdrawing from the labour force.

Technically, in North America, the phenomenon that retirees choose to engage in a paid job after retirement from the previous major career is called bridge employment (Shultz, 2003). There are some terminologies that are related to bridge employment, for example,

- Partial retirement: people choose to work for a new employer after their retirement, and usually deduct their working hours, compared to the previous long-term job (Cahill, Giandrea & Quinn, 2015).

- Phased retirement: people still work for the original employer after retirement, but have a scale back of the working hour / workloads (Kalokerinos, von Hippel & Henry, 2015);

- Post-retirement employment: this is the most general concept, which refers to the activity that people return to a paid employment after their first retirement (Wang & Shultz, 2010).

In Mainland China, terminology which shares similar meanings with 'post-retirement employment' is 'Tui Xiu Fan Pin [退休返聘]' (re-employment after retirement) (Zhao & Cheng, 2016). In a traditional sense, Chinese people are considered to be retired when they

have reached the statutory retirement age, and go through the formalities of retirement. Therefore, in Mainland China, as a general rule, except in special cases (e.g. early retirement), post-retirement rehiring can be seen as an activity that older people continue to work for a paid job when they have already reached the statutory retirement age.

Compared to the number of studies which discussed the determinants of older workers' intention or motivation to participate in post-retirement employment, yet few studies had been conducted to investigate the consequences of post-retirement employment, for example, the effect of post-retirement employment on rehired employees' life experience (e.g., well-being, life/work satisfaction, happiness, etc.) (Dingemans, 2016). Among these limited number of studies, some demographic factors were commonly used to extract information regarding the rehiring career.

- Number of years in which the retirees engage in post-retirement employment (Choi, 2001; Kalokerinos, von Hippel & Henry, 2015).

- Extent of post-retirement employment or workload (Kim & Feldman, 2000; Zhan et al., 2009; Davis, 2003).

- Whether the retirees are working in the organisation that same as the one they retired from or not (Raymo et al. 2004; Armstrong-Stassen et al., 2012).

- Whether the retirees engage in the same occupational area pre- and post-retirement (Feldman 1994, Wang et al., 2008; Shultz, 2003; Zhan et al., 2009).

- Whether retirees are self-employed or not (Kerr & Armstrong-Stassen, 2011; Zissimopoulos & Karoly, 2009).

The primary research participants in the current study were college teachers. Therefore, the question of the teachers being self-employed was not a concern. In addition to the other four demographic factors described above, the current study incorporated two more factors associated with the pre- and post-retirement career differences: income change as compared

to pre-retirement, and workload change as compared to pre-retirement. These two factors were selected based on the theory of Kalokerinos et al. (2015) that suggested that, compared to their pre-retirement phase, many rehired employees would have a scaled-back workload, which hence results in decreased work income. Therefore, these changes should also be considered in a study regarding post-retirement hiring.

To sum up, the current study chose the following six demographic factors to elicit information about rehired teachers' post-retirement careers:

- Years engaged in rehired employment

- Extent of workload as measured by participants' working hours (including teaching hours, research hours, and administrative work hours) per week

- Whether the participants were working at the institute from which they retired

- Whether the participants engage in the same occupational area pre- and post-retirement

- Changes in income as compared to pre-retirement

- Changes in workload as compared to pre-retirement.

As noted in Chapter 1, the current study's RQ3 mainly concerns the relationship between the teachers' level of professional well-being and certain work-related demographic factors. To address this question, in addition to the factors discussed above that are especially related to rehired teachers' careers, the researcher needed to look at the demographic factors that apply to the professional work of the entire teacher group. Due to the large number of these factors, in reviewing the past work, the author focused mainly on the empirical studies that suggested demographic factors that could have significant effects on teachers' well-being. Again, as the current study was conducted in Mainland China, the researcher reviewed not only the English literature but also Chinese literature. The next section, then, summarises the

pertinent findings from this review.

2.6 Demographic Factors that Relate to Teachers' Well-Being

Previous studies have seldom directly discussed the demographic factors that might impact employees' professional well-being, mostly because the number of studies that specifically focus on professional well-being is limited. Therefore, after retrieving the demographic factors used in those studies, the author also looked at the demographic factors frequently used in studies that focused on other concepts of teachers' well-being such as 'teachers' general well-being', 'teachers' subjective well-being', and 'teachers' occupational well-being'.

Collie et al. (2015) conducted a study to investigate the components of teacher well-being. They collected the following socio-demographic information of the participants: 'gender, age, ethnic background, years of teaching experience, school setting (urban, suburban, small town, or rural), teaching position (e.g., general classroom teachers, special education teachers), and school level' (p. 9). Their findings suggested that there were no significant effects for these demographic factors on teachers' overall well-being, but age, teaching experience, and school levels can affect the 'organisational well-being', which is one dimension of the teacher well-being structure that hypothesised by the researchers. This dimension comprises teachers' perception of their work-place support and relationships.

Kinnunen, Parkatti & Rasku (1994)'s study examined the relationship between Finnish aging teachers' occupational well-being and several demographic factors, which consisted of sex, age, teaching subject, and teaching level. Their analysis results suggested that all these demographic factors could significantly predict the level of occupational well-being among the participants. That said, gender differences were modest.

In McInerney et al. (2018)'s research on Hong Kong teachers' work-related well-being,

they used a demographic questionnaire to collect participants' school information (such as school name, location, religion, and class size) and age, education level, teaching grade level, gender, family income, and number of years teaching. Among these factors, family income was suggested to be a significant predictor for two determinants of teachers' psychological well-being: feeling of competency and perceived recognition at work.

Gloria, Faulk, and Steinhardt (2013)'s study collected participants' personal characteristics including 'age, gender, ethnicity, education level, grade level taught, years of teaching experience, and whether they had received a 'Teaching Excellence Award' from the university's alumni association' (p.187). Their regression analysis results suggested that generally speaking, these demographic factors were not strongly related to those important indicators of teacher well-being—such as work stress, positive affect, resilience, or teacher burnout. They mentioned, "although there were some significant correlations, they were small in size" (p. 189). Specifically, more experienced and award-winning teachers reported greater positive affect and less burnout. Award winning teachers also reported greater resilience and females reported greater work stress.

Munn et al. (1996) examined the relationship between child life specialists' professional well-being and five demographic factors that served as epitomizing participants' background characteristics. These factors are, 'age, sex, educational level, and professional experience (i.e., the number of months as a child life specialist, the number of internship hours, and the perception of the value of past experiences)' (p. 74). Among these factors, only the 'perception of the value of past experiences' was found to be a significant predictor of participants' professional well-being.

Some studies had collected participants' demographic information but only used demographic factors as the controlling variables and did not discuss the effect of such factors on teachers' well-being. for example, Matteucci et al. (2017)'s study on Italian public

high-school teachers' well-being collected participants' background information such as 'gender, age, school track in which they teach (professional, technical, or lyceum), enrollment status (tenured vs. non-tenured position), educational degrees, years of teaching experience, subjects taught, and whether the teacher had a leadership position within the school' (p. 282). Albuquerque et al. (2012) collected school level, age, gender and teaching experience as socio-demographic characteristics in their study of Portuguese teachers' subjective well-being structure. Van Horn (2004)'s research on Dutch teachers' occupational well-being incorporated 'health condition, school type, gender, age, teaching experience and workload (teaching hours per week)' (p. 369) as the background information.

As explained, all research participants in the current study are Chinese locals. For that reason, the author reviewed the Chinese research literature that discussed demographic factors that might impact teachers' well-being. His findings from that review are as follows.

Wu, Chi, and Li (2018) suggested that the well-being of college teachers in Hunan Province was significantly affected by demographic factors such as age, professional titles, and educational qualifications.

Qi and Wu (2009) investigated Jiangxi college teachers' level of well-being and found that, regarding this well-being, significant differences existed related to gender and educational background. In addition, work income had a curvilinear relationship with the level of well-being, professional titles had a modest effect on well-being, and age and teaching years were not significant predictors of well-being.

Qiu (2006) suggested that Chinese college teachers' professional titles and monthly work income were positively correlated with their level of happiness.

Cao, Li, and Lin (2007) suggested that, in terms of the subjective well-being of advanced vocational college teachers in China, there were significant differences in gender, age, professional titles, and marital status, but not in work income level.

In their study, Mao, Zhou, Cao, and Zhang (2007) found that gender, years of engagement in work, professional titles, and educational qualifications were significant predictors of the well-being of college teachers in Nanchang City.

Zhang and Jin (2013)'s study on college teachers' occupational well-being found that professional titles had a curvilinear relationship with well-being, with teachers holding medium-grade professional titles having the highest level of well-being among all groups of teachers. In addition, the relationships between work income and well-being and between age and well-being were u-shaped. Age and marital status were found to be insignificant predictors of teachers' occupational well-being.

It is observed that the demographic factors commonly used by Chinese researchers are basically the same as those used by the previously discussed Western researchers. That said, the factor 'professional title' seems to be an exception in research on teachers' well-being. This factor seldom appeared in Western studies but was frequently cited in Chinese studies.

Moreover, given the many previous studies that have discussed the relationship of learning and training opportunities to well-being (Jenkins & Mostafa, 2015; Cohen, 2006; Webb et al., 2009; Retallick & Butt, 2004), the current study is especially interested in the potential effect of the teachers' perceived professional development opportunities at work on their professional well-being. Another reason for hypothesizing 'professional development opportunities' as a potential predictor of professional well-being stems from 'teaching and learning help each other [教学相长]' being a traditional pedagogical ideology throughout Chinese history. For instance, Confucian classics 'The Book of Rites [禮記]' mentioned:

"*When he learns, one knows his own deficiencies; when he teaches, he knows the difficulties of learning. After he knows his own deficiencies, one is able to turn round and examine himself; after he knows the difficulties, he is able to stimulate himself to effort.*

Hence it is said - teaching and learning help each other" (P. 221, Dai, 2016).

To sum up, based on his literature review, the researcher selected 14 demographic factors to analyse in the current study in terms of their relationship to teachers' professional well-being. The selected demographic factors included nine common factors applicable to all teacher participants and five post-retirement career factors that apply only to the rehired teacher participants. These factors were selected because they were the ones cited most frequently in related past works but also due to the researcher's special considerations discussed below.

2.6.1 The nine common factors applicable to all teacher participants.

1. Work income. Income might be the most important material benefit of a job and might serve as the biggest incentive for most employees to engage in a job. It was interesting to examine whether the importance of income to rehired teachers' well-being is the same as that for the regular teachers' well-being.

2. Teaching years. Rehired teachers and regular teachers have large differences in teaching years. Analysing this factor's relationship to TPW may shed some light on the characteristics of rehired teachers' professional well-being.

3. Professional title. As with teaching years, rehired teachers and regular teachers have large differences in their profession titles. Another reason for including this factor was that the current study was conducted in China and the literature review suggested that most studies of teacher well-being conducted by Chinese researchers had incorporated it.

4. Weekly working hours. This factor is an important indicator of teachers' workload. Rehired teachers and regular teachers may have large differences in this factor. As suggested by Kalokerinos et al. (2015), many rehired employees have scaled-back working hours compared to their pre-retirement employment.

5. Institution type. As noted in Chapter 1, the teaching administration mode, source of

students and employment pattern for teachers may vary substantially in different institutions. Therefore, 'institution type' should be considered as an important exogenous variable for teachers' professional well-being.

6. Perceived professional development opportunities. In addition to the apparent benefits offered by a job (e.g., income, insurance), there are also many latent benefits. Professional development opportunities are definitely one of the most important among the latter. However, rehired teachers' professional development opportunities may not be as rich as those for regular teachers. Consequently, it is meaningful to examine whether the role of professional development opportunities in rehired teachers' professional well-being is as important as it is for regular teachers' well-being.

7 and 8: Gender and Age. These two demographic factors may be the most frequently cited ones in all studies related to teacher well-being. The role of age is especially important in the current study, as it is one of most significant differences between rehired teachers and regular teachers.

9. Health. It is common sense to assume that, as people get older, they may increasingly value their health. Hence, the researcher is curious about whether rehired teachers, who are usually older, attach more importance to health than regular teachers, who are usually younger.

2.6.2 The five post-retirement career factors.

1. Years engaging in rehiring. The researcher is interested in how the rehired teachers' level of professional well-being changed after they began their post-retirement career. However, due to the limitations of the current study's cross-sectional design, this question is not easily addressed. As an alternative measure, the researcher chose to examine the role of 'years engaging in rehiring' in the variations in rehired teachers' level of well-being.

2 and 3: Changes in workload as compared to pre-retirement and changes in income as

compared to pre-retirement. As noted, compared to their pre-retirement employment, many rehired employees have a scale back in their workload in their post-retirement career, which decreases their income. Therefore, the pre- and post-retirement changes in income and in workload should be considered as two potential influence factors for rehired teachers' professional well-being.

4. Whether working for the same institution pre- and post-retirement. Kim and Feldman's (2000) research findings suggest that pre- and post-retirement differences in their employing organisation may influence rehired teachers' post-retirement life satisfaction. The researcher would like to add knowledge to Kim and Feldman's (2000) findings through testing, in the context of Chinese society, whether this factor influences rehired teachers' work-related satisfaction and well-being.

5. whether working in the same occupational area pre- and post-retirement. According to the researcher's preliminary investigation, many colleges tend to employ retired professional to teach practice-oriented courses—for example, employing retired engineers to teach engineering courses. Hence, the rehired teacher population contains a group of people who were not teachers prior to their retirement. The attitude of these rehired teachers toward their post-retirement career might be different from that of the rehired teachers who have served in the teaching profession pre- and post-retirement.

2.7 Conceptual framework

Through synthesizing the discussion results relating to the key concepts, the author has constructed the current study's conceptual frameworks. Figures 2.2 and 2.3 present the frameworks for the quantitative study and qualitative study, respectively.

Figure 2.2: Conceptual framework for the quantitative study
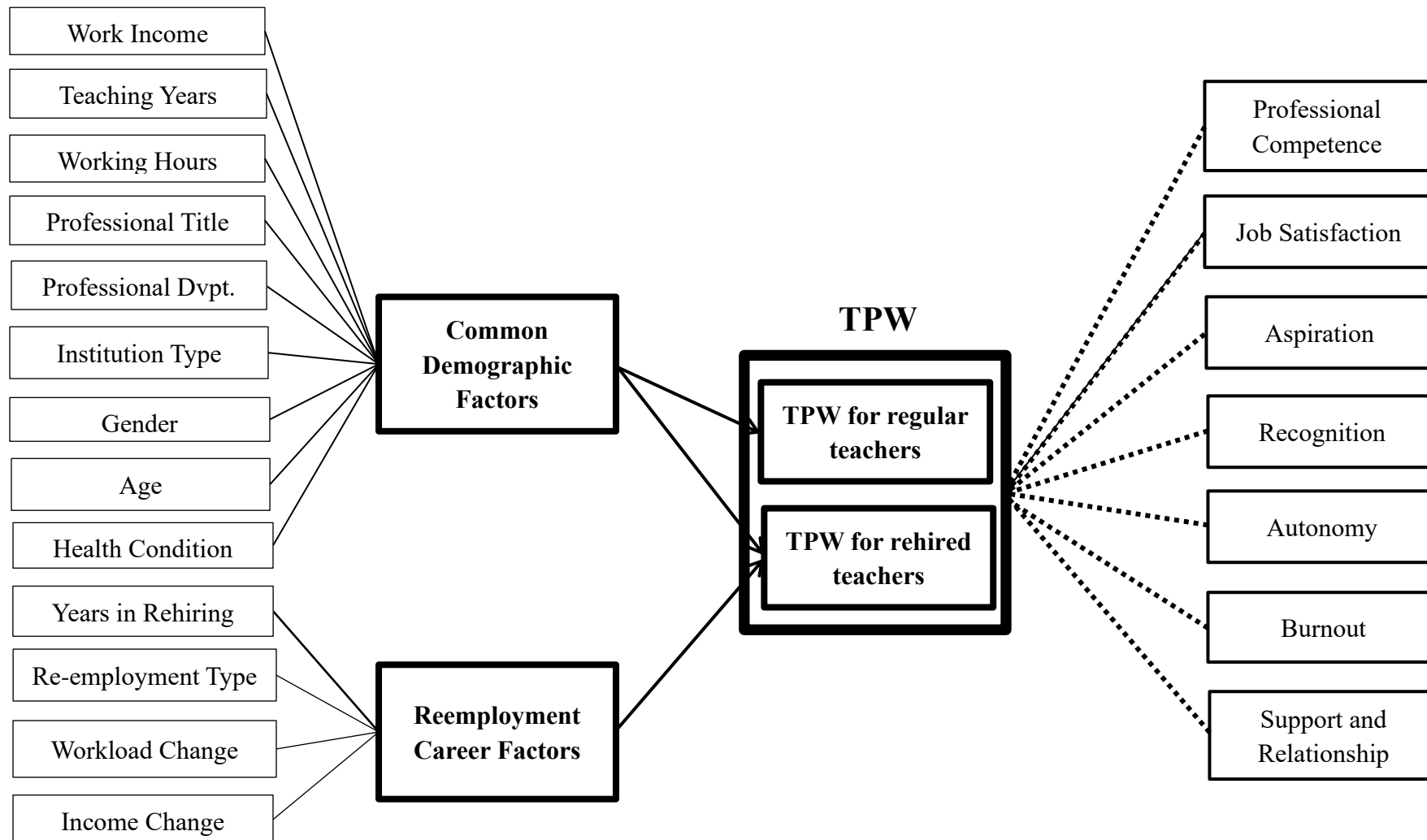
Note: TPW stands for 'teachers' professional well-being'

***Figure 2.3*:** Conceptual framework for the qualitative study

Interviewees' comments relating to the **seven TPW factors**:
1. Professional Competence; 2. Job Satisfaction; 3. Aspiration;
4. Recognition; 5. Autonomy, 6. Support and Relationships;
7. Absence of Burnout.

Manifestation of TPW components in **teachers' career experience**

Teachers' **attitude** towards the seven TPW components

Rehired teachers' attitude

Regular teachers' attitude

Differences between rehired teachers and regular teachers in terms of professional well-being

Rehired teachers' perceived differences between their **pre- and post-retirement** career experience in terms of the seven TPW components

Based on the two conceptual frameworks, the researcher suggested a series of hypotheses about the relationship between or among the key concepts and factors involved in the current study. Specifically, for the quantitative study, the researcher assumed that:

1. TPW mainly comprises seven components: professional competence, job satisfaction, aspiration, recognition, autonomy, support and relationships, and absence of burnout.

2. Rehired and regular teachers may differ in their perceived levels of the seven TPW components and the ways in which these components contribute to their professional well-being.

3. There are 14 demographic factors—including nine common factors and five post-retirement career factors—that may influence TPW. In addition, some of the nine common factors may affect the professional well-being of rehired and regular teachers differently.

For the qualitative study, the researcher assumed that:

1. Teachers' career experiences would be of important significance to the analyses of the key concepts relating to their professional well-being.

2. Teachers' perceptions of professional work in which they engaged are important sources for substantiating the TPW components—thus providing knowledge in terms of the manifestation of each TPW component in teachers' career experience. In addition, those perceptions may also offer insight into the roles that the cultural and historical contexts of the place in which the teachers live have played in shaping their professional well-being.

3. Rehired and regular teachers' different comments about their professional work can offer useful information for analysing the characteristics of rehired teachers' professional well-being.

4. Based on the theory that retirement may be a continuous and dynamic process, it is possible that rehired teachers have career experiences that change along with the process of

retirement (involving pre-retirement stage, early retirement stage, later retirement stage). Therefore, rehired teachers' perceptions of the differences between their pre- and post-retirement career experiences may reveal clues about how the characteristics of rehired teachers' professional well-being differ from those of regular teachers.

In sum, the conceptual framework for the quantitative study focuses on describing the relationship between different concepts and factors related to TPW while the qualitative study emphasises delineating the role of career experience in shaping TPW. Correspondingly, to examine the hypotheses suggested by the two conceptual frameworks, the researcher employed a mixed-methods research design that included (1) a questionnaire survey for quantifying the related concepts and factors into measurable variables and (2) qualitative interviews for eliciting teachers' career experiences.

The next chapter, then, discusses how the researcher organised the overall research design, devised the data collection instruments (the questionnaire and interview protocols), recruited research participants, and employed quantitative and qualitative tools to analyse the collected data under the guidance of the two conceptual frameworks.

Summary of Chapter 2

The pursuit of well-being has been one of the most enduring quests of human civilisation. Around the world, different classical philosophies have produced differing perspectives on the connotations of well-being. Confucianism holds the view that the core elements for well-being are benevolence, honesty, and benignity and that self-discipline serve as the most important practices for humans to obtain well-being. Taoism considers freedom and natural harmony to be the premise of well-being and suggests the key to well-being is letting things take their own course and abiding by natural laws. Hedonism associates well-being with sensory happiness and mental pleasure after the physical desires are satisfied and believes that pleasure is the only criterion for judging 'good and evil'. Eudaemonism advocates the rational and moral power of human beings and believes well-being lies in the holistic development of humans and in the full development of their potential.

In the research on well-being in the teaching profession, the researcher mainly reviewed three classic conceptual models that frequently have served as the theoretical basis for the measurement instruments of teacher well-being: Diener's SWB model, which adopts the hedonistic view; Ryff's PWB model, which adopts the eudaemonic view; and Maslach's burnout model, which looked at teachers' well-being from the negative psychology angle.

As one dimension of teachers' well-being, TPW is a relatively new concept, and few studies provide a clear definition of it. After reviewing the related literature, the researcher hypothesised that TPW mainly comprises seven components: professional competence, job satisfaction, aspiration, recognition, autonomy, support and relationship, and absence of burnout. Then, by teasing out from the literature the demographic factors used frequently in post-retirement reemployment studies and teacher well-being studies, the researcher was able to finalise the current study's conceptual frameworks. The next chapter discusses how the conceptual frameworks instructed the current study's research design and process.

Chapter 3: Research Methodology

This chapter discusses the current study's research paradigm, research design, methodology, analysis approach, and ethical considerations. It begins with a brief introduction to the research design and research questions. It also explains why this research design was employed—specifically, what research paradigms the design embodies and how the design serves to address the research questions.

The remainder of the chapter describes the research instrument, the participants, the data-collection process, and the analysis approach used for the pilot study, as well as for the two main approaches employed in the formal study: a quantitative survey and qualitative interviews. The chapter closes with a discussion of the ethical considerations regarding the research process.

3.1 Introduction to the Research Design

The current study employed a mixed-method design that mainly consists of two approaches: quantitative survey and qualitative interviews. As Creswell (2014) suggested,

"Mixed-method research is an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of inquiry is that the combination of the qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach provides on its own." (p. 42)

3.1.1 Reasons for employing a mixed-method design.

1. From an ontological angle.

Professional well-being is a product manufactured by the joint action of objective and subjective factors (Aelterman et al, 2007; Butt & Retallick, 2002; Munn & Berber, 1996). Specifically, although professional well-being is a subjective feeling, it is a feeling that results from teachers' interaction with their environment (Retallick & Butt, 2004). Therefore, research on teachers' professional well-being should not only investigate teachers' subjective feelings about their work, but also acquire objective information regarding the work-related factors, so as to analyse these factors' effects on the teachers' professional well-being (hereinafter, abbreviated as TPW). The mixed-method research approach is the best option for meeting this requirement.

2. From an epistemological angle.

Like a person's overall well-being, professional well-being changes constantly over an individual's lifetime. This is especially true for rehired teachers. Typically, as these teachers have been working for 30 or more years and have experienced many great events over their

career, their sense of professional well-being may have changed several times. However, because the current study employed a cross-sectional design, the quantitative survey could only investigate the respondents' current situation and so could reveal little about what factors may play important roles in the transformation of their professional well-being over the years. For that reason, the study included qualitative interviews to help offset the survey's limitations.

3. From a methodological and axiological angle.

Many previous studies have indicated that, when conducting a study of teachers' work-related perceptions, researchers should consider the teachers' career experience as an important source of data for their analysis (Butt & Retallick, 2002; Kelchtermans, 1993; Maxwell, 2013; Seale et al., 2004; Ruane, 2005). However, the quantitative approach provides very limited information on such career experience. Therefore, the researcher needed to include a qualitative approach in this study to supplement the quantitative findings.

For the current study, the researcher chose interview as the primary qualitative approach. As Kelchtermans and Ballet (2002) suggested, information regarding the teachers' perception of their career experiences can be reconstructed through "interpretative analysis of teachers' stories, the narratives teachers construct to make sense of their career experiences" (p. 106). Therefore, qualitative interviews likely comprise the best way to collect information on such experience.

As there are various categories of mixed-method design, next, the thesis briefly discusses the main types of mixed-method design, as well as which of those was finally adopted by the current study and why it was chosen.

3.1.2 Current study design: explanatory sequential mixed-method.

Creswell (2014) suggested that the mixed-method research design has four primary models: 1) the convergent parallel mixed method, 2) the explanatory sequential mixed method, 3) the exploratory sequential mixed method, and 4) the transformative mixed method. The current study employed the explanatory sequential mixed method. As Creswell explained, the researcher who employs this design 'first conducts quantitative research, analyses the results and then builds on the results to explain them in more detail with qualitative research' (p. 56).

The current study employed the explanatory sequential mixed-method design due to the following concerns.

As mentioned in Chapter 2, the rough definition, concept scope, predictors, and related factors of professional well-being have been discussed in previous research. While these discussions have been contentious at times, they have begun to form a theoretical basis for the concept of professional well-being. In addition, the related literature has also discussed the instruments available for measuring most of the suggested components of TPW (e.g., Maslach's Burnout Inventories for measuring the 'burnout' factor). Therefore, the researcher assumed he did not need to build his study 'from the ground up' by means of qualitative approaches. Instead, the researcher presumed it would be more effective to begin his study by assuming some components for professional well-being based on theories and then examine those components by means of collected quantitative data. After this step, the researcher could continue to use statistical approaches to address the rest of the RQs. By checking the quantitative analysis results, the researcher would then have a deeper understanding of what issues related to the RQs need to be analysed in a more profound way and which parts of the quantitative results need further interpretation and supplemental qualitative data. Having this information, the researcher could conduct the qualitative interviews more effectively and thus obtain interview data that better served the goal of answering the RQs.

Given these considerations, the sequential explanatory strategy seemed the most appropriate research design for the current study.

Next, the thesis discusses the major philosophical paradigms that have guided this explanatory sequential design.

3.1.3 Major philosophical paradigms.

As noted, the current study employed a mixed-method design comprising a quantitative survey and qualitative interviews. The purpose of this approach was to gain an understanding of the research issues from different standpoints and to address the research questions through the complex insights gained by using this mixed-method approach.

The current study's quantitative and qualitative approaches are relatively independent of each other, as explained below.

1. The participants for the two studies were different. The quantitative study employed an anonymous survey, that is, no respondent personal information was recorded. The qualitative interview participants are another group of teachers who were different from those participants for the survey.

2. The two studies were designed to address the research questions from different angles. The quantitative study was used to explore the main components of TPW, to ascertain the differences between rehired teachers and regular teachers in terms professional well-being, and to examine the relationship between demographic factors and TPW for rehired teachers and regular teachers, respectively. The qualitative study was designed to look for the manifestation of the TPW components in teachers' career experience, and to help explain the differences between rehired teachers and regular teachers as revealed in the quantitative data analyses.

3. The two studies employed different analytic strategies. The analyses in the

quantitative study were mostly 'confirmatory'. Preliminary hypotheses were made based on existing theories. These hypotheses were then tested to serve for answering of research questions. In contrast, the qualitative analyses were 'exploratory'. As noted, those analyses were conducted to obtain useful knowledge and insights to supplement the quantitative study.

Due to this relative independence of the quantitative and qualitative studies, the current study was conducted under the guidance of different philosophical paradigms.

The Oxford English Dictionary defines 'paradigm' as 'a typical example or pattern of something; a pattern or model'. Kuhn (1962) adopted this term to describe the common worldview and behavioural pattern followed by researchers working in a certain scientific field. Creswell (2014) claimed that there are three major types of philosophical paradigms: Pragmatism, Post-positivism and Constructivism.

In the current study design, the three major philosophical paradigms were used as the guiding ideology for the different research process approaches to achieve for a pragmatic purpose. In the following sections, the researcher briefly introduces the three philosophical paradigms and discusses how they guided the current study's research approaches.

1. Post-positivism.

Post-positivists advocate employing a series of measures to quantify qualitative data and then analysing the resulting quantitative data using a statistical approach (Dwivedi et al., 2009). They also claim that the starting point for a research project is usually a theory, given that our world is ruled by theories and objective laws (Thorpe & Holt, 2008). They assert as well that 'absolute truth' does not exist and that researchers should always discuss the possibility of their hypotheses being rejected (Howell, 2013; Creswell, 2014).

The key approaches employed in the current study design follow the post-positivistic instruction. Specifically, 1) in the current study, the TPW components and the questions used to measure those components were selected based on existing theories as well as the findings

of previous studies; 2) based on the data collected via the survey questionnaire, all abstract notions involved in the current study were converted into quantitative variables; and 3) when illustrating analysis results, the researcher always discusses the possibility of his hypothesis being rejected.

2. Constructivism.

The constructivists have suggested that an individual's knowledge and perspective are sourced from his or her living and working environments and are constructed based on the connection between the person and the world he or she perceives (Flick, 2007; Kincheloe, 2005; Merriam, 2009). Creswell (2014) claimed that qualitative interviews serve as one of the most useful tools for eliciting such perceptions from people.

With this Constructivism ideology in mind, the researcher adopted qualitative interviews to learn about the participants' career experience, their feelings about their professional work, and their perception of the key concepts related to professional well-being. When conducting the interviews, he paid substantial attention to the interview participants' social contexts and working environments and made all interview questions open-ended to invite free flowing, in-depth answers.

3. Pragmatism.

As the guiding ideology of the mixed-method design, Pragmatism encourages researchers to choose freely from available methods to find the combination that best fits their studies (Cherry-Holmes, 1992). It then offers researchers the opportunity to construct their study by integrating the characteristics of different philosophical paradigms (Creswell, 2014).

The relevant literature on Pragmatism suggests that researchers who plan to employ a mixed-method design should have a clear understanding of the purpose of such design, that is, they should know the reasons for using quantitative and qualitative research methods

simultaneously rather than just one or the other (Johnson & Onwuegbuzie, 2004; Wiersma & Jurs, 2005; Feilzer, 2010). In the context of the current study, this point was discussed previously in Section 3.1.2.

3.2 Research Design and Research Questions

Under the instruction of the above-mentioned paradigms, the current study's overall research design was organised to facilitate answering the following three research questions:

1) **RQ1:** What are the main components of teachers' professional well-being? How does each of these components contribute to the well-being? How do these components manifest in the teachers' career experience?

2) **RQ2:** Do rehired teachers differ from regular teachers in terms of professional well-being and, if so, in which aspects?

3) **RQ3:** What is the relationship between work-related demographic factors and teachers' professional well-being and does that relationship affect the rehired teachers and regular teachers differently?

Prior to the formal data collection process, two pilot studies were conducted to develop, test, and refine the questionnaire for the quantitative survey and to acquire background information on such aspects as cultural context, local education policy, and school management system for the subsequent qualitative interviews.

The quantitative survey was conducted to answer all three RQs. The results from CFA analysis and a regression analysis helped define the main TPW components, as well as establish the relationship between these components and TPW. The t-test results were used to identify the differences in professional well-being between rehired teachers and regular teachers. The moderation analysis and ANOVA results were employed to check whether the

relationships between the demographic factors and TPW differ significantly for rehired teachers and for regular teachers. Table 3.1 presents the statistical tools used to facilitate answering each RQ.

Table 3.1: Main statistical tools used to facilitate answering the RQs

Research questions	Statistical tools
RQ1	CFA; multiple linear regression analysis.
RQ2	Independent-sample t-test
RQ3	ANOVA; simple linear regression analysis; moderation analysis; test of simple slope

The qualitative interviews were conducted to address the third sub-question in RQ1: 'How does each component of TPW manifest in the teachers' career experience'? Content analysis with thematic categorisation of the interview responses was the main method used to encapsulate the meaning of the interviewees' comments relating to each TPW component. Moreover, the interview responses also provided the researcher with potential clues for understanding the quantitative findings regarding RQ2—the difference between rehired teachers and regular teachers in terms of professional well-being. There were mainly two sources of qualitative data available to achieve this purpose. The first was the frequency of interviewees' positive and negative comments on each sub-theme for the TPW components. The second was the rehired teachers' perceptions regarding the difference between their pre- and post-retirement career experience.

The following sections of this chapter, then, describe the research instrument, the participants, the data-collection process, and the analysis approach used for the pilot studies, as well as for the two main data-collection approaches employed in the formal study: namely, a quantitative survey and qualitative interviews.

3.3 Pilot Studies

The survey questionnaire was the predominant instrument used to collect quantitative data for the current study. The researcher understands that questionnaire quality directly determines the validity and reliability of the data collected and the analysis results. Therefore, to protect the content validity of the current study's questionnaire, the researcher ensured that most questions in it that related to the seven hypothetical TPW components—professional competence, job satisfaction, aspirations, autonomy, support and relationships, recognition, and burnout—were borrowed from existing scales that have proven by the previous studies to have good levels of validity and reliability.

However, given the questionnaire's length, the researcher did not include all of the questions from these original scales. In addition, most of the selected questions were in English, while during the current study's data-collection process, these questions were translated into Chinese. Therefore, after the questions were selected and translated, the validity and reliability of the original scales from which they were sourced could no longer be assumed for the newly developed questionnaire. Consequently, the pilot studies were necessary to ensure the quality of the current study's questionnaire.

Moreover, in addition to the concern of questionnaire quality, the researcher also needed the pilot study to help to collect the background information that was necessary for the subsequent qualitative interviews, e.g., information on the local cultural context, the local education system, and post-retirement rehiring policies and human resource management systems of the target colleges. Having this information helped the researcher improve the interviews' quality by making the questions more relevant to the experience, knowledge, and basic situation of the interviewees.

Two pilot-studies were conducted to fulfill such needs. The following sub-sections

introduce, respectively, how the two pilot studies were organised and then implemented step by step and what contributions these studies made to the formal research.

3.3.1 Pilot Study 1.

The primary steps involved in conducting Pilot Study 1 were as follows:

1) Selecting items from the existing measurement instruments related to the seven TPW components

2) Constructing an item pool comprising those selected items and several self-made items

3) Translating the items into Chinese

4) Developing a questionnaire based on the item pool

5) Conducting informal interviews to collect feedback for revising the questionnaire and for developing the protocol for the follow-up formal interviews

6) Conducting a small-scale survey to test the questionnaire's quality

7) Based on the above test results, revising the questionnaire

8) Back-translating the questionnaire into English to check whether the meaning of some questions was distorted during the translation process.

These activities are described in more detail below.

1. Item selection and translation.

As noted in Chapter 2, after reviewing the existing literature, the researcher hypothesised that TPW comprises seven main factors. To identify an appropriate set of items for measuring each factor, the first step of the pilot study was the formation of an item pool.

For each TPW factor, the researcher selected 18 to 24 items from different scales sourced from the related literature. The item pool consisted of 145 items: 123 borrowed and

22 developed by the researcher. For detailed information on the item pool, including the literature from which the items were sourced, see Appendix 3-1.

The initial item pool contained only the English version of the items as they were generally sourced from literature published in English. To assure the accuracy of the translations, an English teacher who specialised in 'English Translation and Interpretation' was invited to translate the items from English to Chinese.

The researcher then organised a panel to select the items that could best serve for measuring the seven TPW factors. The panel comprised the researcher, two associate professors of psychology skilled in designing psychological scales, and a professor of pedagogy. During the selection discussion, the researcher first presented the definitions of the seven TPW factors as derived from existing theories to the panel members. The panel then examined the items one by one and provided a treatment suggestion for each item. (See Appendix 3-1 for the treatment suggestions.)

After this review, 37 items were picked from the item pool to serve as the tools for measuring the seven TPW factors. Each item was designed as a single-choice question with five answer options that ranged from 'strongly disagree' to 'strongly agree'. Next, with the help of a Chinese language specialist, minor wording modifications were made to the 37 questions to adjust them to the local context of the research site.

2. Design of questions for measuring explanatory/moderator variables.

In addition to the above-mentioned 37 questions related to the seven TPW factors, the questionnaire also contained some questions to elicit the respondents' demographic information and career experience. Such demographic information and career experience were related to the explanatory/moderator variables to be used in the subsequent quantitative analyses. 18 questions were designed for this purpose. After this was done, the first version of the questionnaire was developed.

3. Pilot interviews.

After the questionnaire (first version) was completed, the researcher informally interviewed five college administrative staff members, three rehired teachers, and five regular serving teachers to obtain their opinions on the questionnaire. Based on the interviewees' recommendations, some revisions to the questionnaire structure and question wordings were made. The second version of questionnaire was then completed.

In addition, through the pilot interviews, the researcher collected background information on the research site and target population. This information included the local cultural and historical context, the local education policy, and details on the human resource management system and re-employment policy of the local colleges. Such information was of significant use in designing the protocol for the qualitative interviews, which is discussed later in Section 3.5.

4. Questionnaire testing.

The second version of questionnaire was employed in a small-scale test that took place from 10 to 26 August 2018. The test participants comprised 62 college teachers in Nanchang City. This group included seven rehired teachers and 55 regular teachers. Of this group, 46 completed the questionnaire in its online format and 16 completed it in its paper format. The convenient sampling method was employed. Most of the participants came from the university where the researcher was working. Considering the test's main purpose was to examine the questionnaire's content validity and the construct validity of the TPW structure within the questionnaire rather than generalise conclusions regarding the relationship between variables, this sampling method was acceptable at this stage.

Using the data collected, an internal consistency analysis was employed to detect items that brought down the Cronbach's α coefficient value of the TPW factor with which the items were associated. The problematic items were replaced with backup items from the item pool.

5. *Questionnaire revision and back translation.*

Based on respondent feedback, four new self-rated professional well-being questions (hereinafter, abbreviated as SRPW questions) were added to the questionnaire. These questions were designed to measure participants' perceived level of professional well-being in their teaching, research, administrative work, and overall professional work, respectively. The first three SRPW questions were thought to be useful in helping participants think more clearly about their general SRPW level which was measured by the fourth question.

In addition, the questionnaire originally employed a five-point Likert scale made up of five attitude levels: 'strongly agree', 'agree', 'neutral', 'disagree' and 'strongly disagree'. However, the small-scale survey results suggested that the proportion of participants who chose the 'neutral' option was too large. To determine why this occurred, the researcher informally interviewed several survey participants. One of the most likely explanations they suggested was that people in Mainland China are largely influenced by the Confucian culture. This culture emphasises 'The Doctrine of Mean [中庸]', as well as the 'Dialectical Thought of Marxist Philosophy'. Therefore, many people simply chose 'neutral' when they did not have a strong feeling about a survey response and thus ignored the 'agree' and 'disagree' options. If this phenomenon occurred in the formal study, the statistical analysis results would be biased because the data's variability could not be guaranteed. Therefore, the researcher decided to use a six-point Likert scale in the subsequent survey questionnaire to avoid providing the 'neutral' option. The new options in this six-point scale were later described in Section 3.4.1.

Finally, the researcher asked a professional translation company in Nanchang City to 'back translate' the Chinese questionnaire into English. The purpose of the back translation was to determine whether the original meaning of each item had been distorted during the above-mentioned translation and rephrasing process. Simple wording disparities that did not

influence the meaning of the items were tolerated. Only those items in which the original meaning had been seriously distorted were marked for further assessment. For those items, the researcher had discussions with his supervisors on whether to keep the original wording or use revised wording.

After this step, the third version of the questionnaire was developed.

3.3.2 Pilot study 2.

The primary steps involved in conducting Pilot Study 2 were as follows:

1) Conducting another small-scale survey to retest the questionnaire

2) Revising questionnaire based on statistical analysis results

3) Shaping the final version of questionnaire

As noted, the researcher launched another small-scale survey to test the quality of third version of the questionnaire. This survey took place from 29 September to 5 October 2018. The respondents comprised 60 teachers from different colleges in Nanchang City. This group included 11 rehired teachers and 49 regular serving teachers. All the questionnaires were edited, distributed, and administered by Survey Star [問卷星], a popular online survey website in Mainland China, and were sent to the participants by WeChat/QQ/Email.

The response rate was 100% due to the purposeful sampling method employed. The participants were teachers from different types of colleges in Nanchang City. The researcher used this form of sampling because he treated pilot study 2 as a mock test for the subsequent formal study. Therefore, the researcher used purposeful sampling to simulate the sample distribution of the formal study, with the goal of increasing the trustworthiness of the test's results.

In addition to the internal consistency tests, the test also employed an exploratory factor analysis (EFA) to examine the construct validity of the theoretically suggested TPW structure.

Items in the structure that were found to be poorly loaded on the presupposed factors (factor loadings of less than 0.4) or irregularly loaded on many factors were deleted or rephrased.

Again, based on the respondents' feedback, minor wording and structure changes were also made to questions in other parts of the questionnaire.

When this process was complete, the final questionnaire for the formal study—the fourth version—was developed (see Appendices 3-2 and 3-3). Section 3.4.1 describes this version of questionnaire in detail.

3.4 Formal Study: Questionnaire Survey

As noted, the formal study consists of two approaches: quantitative survey and qualitative interviews. In this section, the thesis introduces the instrument, participants, and procedure of the questionnaire survey, as well as the analysis methods of the quantitative data.

3.4.1 Instrument.

The quantitative data used in the current study was collected through a close-ended questionnaire (see Appendices 3-2 and 3-3) that included the following four sections.

Section A: Questions related to the seven TPW factors

This section consisted of 44 questions related to the seven theoretically-suggested TPW components (hereinafter called 'particularized TPW factors'): professional competence, job satisfaction, aspiration, recognition, autonomy, support and relationships, and burnout. All these questions featured a six-point Likert Scale that offered participants the following six response choices: '6 = strongly agree', '5 = agree', '4 = slightly agree', '3 = slightly disagree', '2 = disagree', '1 = strongly disagree'.

Section B: Self-rated professional well-being (SRPW) questions

This section included four questions designed to measure participants' perceived level of

professional well-being in 1) teaching, 2) research, 3) administrative work, and 4) overall professional work. Participants were asked to score on a scale of 1-10 to indicate the level of their professional well-being in terms of such four types of work, respectively.

Correspondingly, the variables created via participants' responses to these four questions were named as: 1) 'SRPW level in teaching', 2) 'SRPW level in research', 3) 'SRPW level in administrative work', and 4) 'general SRPW level'.

Section C: Demographic information questions

This section was made up of nine questions that related to the participants' work-related socio-demographic information (e.g., age, gender, professional title, teaching years).

Section D: Re-employment information questions

This section appears only on the version of questionnaire used for the rehired teachers. It includes five questions related to the participants' post-retirement career experience.

The questions in Sections B, C, and D, as well as the variables for which they were designed are shown in Table 3.2 below.

Table 3.2: Questions related to demographic factors and four types of SRPW

No.	Variable	Description	Measurement (question in survey)
1	Age	Continuous variable	Fill-in-the-blank question regarding age.
2	Gender	0 = Female 1 = Male	Single choice question regarding gender.
3	Health condition	1 = Poor 2 = Not so good 3 = Average 4 = Good 5 = Very good	Single choice question: Comparing to other people at your age, how do you rate your health condition?
4	Teaching years	Continuous variable	Fill-in-the-blank question: How many years have you been serving as a teacher?
5	Teaching hours (weekly)	Continuous variable	Fill-in-the-blank question: In this semester, each week you have ____ (class) hours spent on teaching.
6	Research hours (weekly)	Continuous variable	Fill-in-the-blank question: In this semester, each week you have ____ hours spent on doing research.
7	Administrative work hours (weekly)	Continuous variable	Fill-in-the-blank question: In this semester, each week you have ____ hours spent on handling administration work.
8	Professional title	1 = Teaching Assistant 2 = Lecturer 3 = Associate Professor 4 = Professor	Single choice question: What is your current professional title?
9	Institution type	1 = Public College 2 = Private College 3 = Independent school of a public college	Single choice question: What type of college that you are currently working in?
10	Work income satisfaction	1 = Very Unsatisfied 2 = Unsatisfied 3 = Just OK 4 = Satisfied 5 = Very Satisfied	Single choice question: To which extent you are satisfied with your current wage income?

11	Perceived professional development opportunities	1 = None 2 = Seldom 3 = Some 4 = A lot of	Single choice question: How do you feel about the opportunities of acquiring new professional knowledge at work in every semester.
12	Years engaging in rehiring	Continuous variable	Fill-in-the-blank question: how many years have you been working since you were rehired?
13	Re-employment type	0 = working in an institution that different from the pre-retirement one 1 = working in the institution that same as the pre-retirement one	Single choice question: Are you currently working in the same institution that you have worked before retirement?
		0 = had been working as a teacher before retirement 1 = not a teacher before retirement	Fill-in-the-blank question: Were you also a teacher before you retired? If not, please write down your occupation before retirement____
14	Changes in workload (pre- vs, post-retirement)	1 = Largely decreased 2 = Moderately decreased 3 = Slightly decreased 4 = Remained the same 5 = Slightly increased 6 = Moderately increased 7 = Largely increased	Single choice question: Comparing to your workload before retirement, now your weekly workload has____
15	Changes in work income (pre- vs, post-retirement)	The same as above	Single choice question: Comparing to your work income before retirement, now your work income has____
16	Teacher group	0 = Rehired teacher 1 = Regular teacher	Note: The questionnaire for rehired teacher and for regular teacher is different.
17	SRPW level in teaching	1 (lowest) to 10 (highest)	Three fill-in-the-blank questions: Please score on a scale of 1-10 to indicate the extent of well-being for your following professional works: teaching, research, and administrative work, respectively.
18	SRPW level in research	1 (lowest) to 10 (highest)	
19	SRPW level in administrative work	1 (lowest) to 10 (highest)	
20	General SRPW level	1 (lowest) to 10 (highest)	One fill-in-the-blank question: Please score on a scale of 1-10 to indicate your overall sense of professional well-being.

Note 1: in this table, Questions No. 1-16 were related to the independent variables or moderators for the regression analysis, and Questions No. 17-20 were related to the dependent variables. The 'General SRPW Level' was used most frequently in the regression analysis to stand for teachers' general and overall feeling regarding their professional work.

Note 2: except for the categorical variables such as 'gender', 'institution type', and 're-employment type', the coding scheme for the rest of the variables generally followed this rule: the larger the number, the stronger the extent.

3.4.2 Survey participants and procedure.

The participants in the questionnaire survey were post-retirement rehired teachers and regular serving teachers who worked in colleges in Nanchang City, Jiangxi Province. The data were collected from mid-October to mid-November 2018.

Online questionnaire and traditional paper questionnaire were both used in the data-collection process, with the online questionnaire being the heavily favoured method. Totally 388 teachers participated in the questionnaire survey, of this group, 379 respondents—129 rehired teachers and 250 regular teachers—completed the online questionnaire. Only nine participants, all rehired teachers, used the paper questionnaire.

Due to the data-collection method, it is hard to calculate the real response rate of the survey. Nevertheless, the Survey Star website offered some information on the questionnaire completion rate, which was computed by dividing the number of valid questionnaires by the webpage visit volume (i.e., webpage views). Although sometimes the participants closed the questionnaire webpage accidentally during the answering process and so had to click the webpage link a second time to complete the questionnaire, this 'completion rate' could still offer some useful information regarding the real response rate. For the regular teachers, the questionnaire completion rate was 72.46% (250/345), while for the rehired teachers this

figure was 55.13% (129/234).

To facilitate the data collection, the researcher targeted 14 colleges in Nanchang City, including five public colleges, five private colleges, and four independent schools of public college (traditionally called 'San Ben College'). The researcher contacted the administrative staffs of these 14 colleges prior to the data collection, seeking their help in distributing the questionnaire. The online questionnaire was still administered through the Survey Star. A web-page link for the online questionnaire that offered by the Survey Star was sent to the schools' or departments' public WeChat/QQ group of each college, or directly to participants' personal WeChat/QQ after prior permission was obtained.

The methods for distributing the questionnaires to the rehired teacher participants were more diversified. In addition to the methods described above, email and/or cell phone text message was also used to distribute the questionnaires (web-page link). Online approach is still heavily favoured as many of the rehired teachers only worked part-time and did not have a settled office, which means this would have made it very time-consuming for the researcher to personally visit them one by one to distribute the questionnaire. Nevertheless, for the small portion of rehired teachers who willing to participate in the research but had technical difficulties in filling out the online questionnaire, the researcher visited them in person.

In most cases, during the face-to-face contact, the researcher would still recommend that the rehired teacher participant complete the questionnaire online as this method would be safer in terms of protecting the participants' privacy (The privacy issue is discussed later in the 'Ethical Considerations' section), in this way, the researcher simply offered some technical assistance to the participant (e.g. instructing the rehired teacher to use some Apps to open the link). However, in some special cases, e.g., where the participant was not a smartphone user or preferred the traditional format, the paper questionnaire was used.

It is worth noting that the snowball sampling method was also employed in the data

collection from the rehired teacher group, given that this group of teachers are quite special and not easily targeted. Whenever the researcher had a chance to contact a rehired teacher, he would suggest that him/her to encourage his/her friends who were also working as college rehired teachers in Nanchang City to participate in the current study. Therefore, the quality of the collected questionnaires might be influenced by this sampling method. Although the researcher adopted measures to control the questionnaire quality (see Section 3.4.3, 'Data Cleaning'), this way of sampling inevitably brings some limitations. These limitations are discussed in Chapter 6.

3.4.3 Data cleaning.

Based on the experience from the pilot studies, the researcher identified a set of criteria to judge whether an entire questionnaire or some answers in a questionnaire were invalid, as described below:

1. Incredibly short response time.

The Survey Star allowed the researcher to check the response time of the participants who completed the questionnaire. Any regular teacher questionnaires finished in fewer than three minutes and rehired teacher questionnaires done in fewer than five minutes were designated as invalid questionnaires and were eliminated regardless of their content.

2. Obvious random answering.

Some of the participants basically gave the same responses for all items, or gave answers that were found to have some kind of obvious regularity - for example, the participant repeated a sequence of answers throughout the questionnaire, like choosing options "1, 2, 3, 1, 2, 3, 1, 2, 3 ......" or "3, 2, 1, 3, 2, 1, 3, 2, 1 ......" for all single-choice questions. Questionnaires with these types of responses were eliminated.

3. Respondents with inconsistent teaching work information.

The current study's target population was college teachers. The sampled participants should not include any administrative staff, research personnel, or school official. Therefore, in the question 'Please score on a scale of 1-10 to indicate your perceived level of professional well-being in terms of the teaching work', if a respondent chose the option 'N/A - do not undertake any teaching work' and meanwhile, in the question 'how many hours do you spend on teaching each week', wrote '0 (hours)', that person's questionnaire was eliminated. However, if the respondent's response matched one or the other of the above two cases but not both, his or her questionnaire was reserved, but both answers were denoted as a 'missing value' in SPSS.

In addition, the questionnaires from regular teacher respondents who indicated they spent very few hours on teaching (weekly teaching hours < 4) but many hours on other work (weekly research hours + weekly administrative work hours > 30) were also eliminated.

4. Rehired teacher respondents with suspicious age information.

According to regulations in Mainland China, in most cases, rehired teachers are called 'rehired' because they have reached the statutory retirement age but continue to work. Consequently, the rehired teacher respondents' ages should be at least equal to or greater than the statutory retirement age. Therefore, any questionnaires from rehired teacher respondents whose stated age was not reasonable given their gender (male < 60 and female < 55) were eliminated.

5. Unreasonable weekly working hours.

The following answers regarding *weekly* working hours were treated as missing values: 1) more than 45 teaching hours, 2) more than 45 hours spent on research, and/or 3) more than 45 hours spent on administrative work.

In addition, for one questionnaire in which the overall working hours exceeded 60 hours, all the answers regarding working hours were coded as missing values.

As mentioned earlier, a total of 388 participants completed the questionnaire. In data cleaning, **69** questionnaires (18 from rehired teachers and 51 from regular teachers) were eliminated because of their incredibly short online response time or unreasonable responses.

After the eliminations, **319** valid questionnaires (**120** from rehired teachers and **199** from regular teachers) remained for use in the current study's analysis.

3.4.4 Analysis approach for quantitative data.

As mentioned earlier, the survey had four sections: Section 1—question related to the seven TPW components, Section 2—four SRPW questions, Section 3—questions of socio-demographic information, and Section 4—questions of re-employment career information. Table 3.3 provides an overview of each section's function in pursuing answers for the RQs, as well as by which kinds of analysis tool that each section could play its role.

Table 3.3: Each questionnaire section's function in addressing the RQs

Sections of survey	Facilitate answering	Uses of quantitative analysis tools
Section 1	Validity and Reliability of the TPW structure	CFA; Internal consistency test.
Section 1 & 2	RQ 1	Second-order CFA; Multiple linear regression analysis.
Section 1 & 2	RQ 2	Independent-sample t-test
Section 2 & 3	RQ 3	ANOVA, Simple linear regression analysis.
Section 2 & 4	RQ 3	ANOVA; Moderation analysis; Test of simple slope.

3.4.4.1 Test of validity and reliability of the TPW structure.

Based on existing literature, a theoretically-suggested TPW structure with seven main factors was constructed. As noted, these seven factors are: professional competence, job satisfaction, aspiration, recognition, autonomy, support and relationships, and burnout. Cronbach's α coefficient was used to examine the internal consistency for this structure, as well as for each factor within the structure, while a confirmatory factor analysis (CFA) was the main technique used to test the structure's construct validity.

CFA is a powerful, effective tool which allows the researcher to check whether a theoretical model fits well with collected data (Hurley et al., 1997), and if not, it can also provide suggestions on how to refine the model (Kaplan, 2009; Kline, 2011). The researcher did not use this tool during the pilot-study stage as when conducting CFA, the sample size should be more than 200 cases (Shah & Goldstein, 2006; MacCallum & Austin, 2000; Barrett, 2007).

3.4.4.2 Analysis approach for RQ1.

RQ1 has three sub-questions: 1) What are the main components of teachers' professional well-being? 2) How does each of these factors contribute to the well-being? 3) How do each of these factors manifest in teachers' career experience? The quantitative analysis mainly focused on the sub-questions 1 and 2. The third sub-question was designed to be answered by qualitative analysis, which was discussed later in Section 3.5.4.

For addressing the first two sub-questions, the researcher employed two approaches. The first approach was a 'second-order CFA'. An orthogonal model with a second-order overall factor called 'TPW' on which the seven first-order factors load was built, so as to examine whether TPW indeed comprises the seven theoretically suggested components.

Nevertheless, although the 'second-order CFA' was a strong and reliable tool, at this step all its results were data-driven. In other words, from the CFA results, the researcher

could only know whether the seven factors would load on one overall factor or not. He did not, however, has robust evidence to show that this 'overall factor' was indeed the 'TPW'. Therefore, the researcher employed another approach to supplement the CFA result.

The another approach is a regression analysis that examined the relationship between 'participants' self-rated level of professional well-being' and their 'perceived levels in the seven particularized TPW factors'. The general SRPW score was used as the dependent variable, and the seven factors' scores were the independent variables. The statistical significance of the effect of each factor on the general SRPW was then checked. The results from this regression analysis, as well as from the above-mentioned second-order CFA, were used to address the first sub-question of RQ1.

In addition, by checking the variance in the general SRPW score as explained by the scores of the seven factors, the researcher could analyse how each factor contributed to the general SRPW. These results were applicable to answering the second sub-question of RQ1.

3.4.4.3 Analysis approach for RQ2.

RQ2 concerns the difference between rehired teachers and regular teachers in terms of professional well-being. To address this RQ, the researcher needed to test the means differences in the four types of SRPW level—namely, SRPW in teaching, SRPW in research, SRPW in administrative work, and general SRPW—between these two groups of teachers, as well as the differences in each particularized TPW factor's score.

Given that the current study only needs to compare two groups of people (rehired teacher vs. regular teacher), the independent-sample t-test is the best statistical tool for meeting this requirement. For the t-test, a p-value of 0.05 was set as the cut-off point for examining the statistical significance of mean difference, and a 95% confidence interval was also reported to support the analysis result.

3.4.4.4 Analysis approach for RQ3.

RQ3 consists of two sub-questions. The first sub-question focuses on the effect of work-related demographic factors on TPW. These demographic factors were categorised into three types: 1) factors that relate to the teachers' professional information, including work income satisfaction, working hours, professional title, institution type, and perceived professional development opportunities; 2) factors that relate to the participants' basic physical information, including gender, age, and health condition; and 3) factors that relate to the rehired teachers' post-retirement career experience, including years engaging in rehiring, changes in workload as compared to pre-retirement, changes in income as compared to pre-retirement, and reemployment type.

Simple linear regression analysis was the main tool for analyzing the effect of the above-mentioned factors on TPW. The general SRPW level was used as the dependent variable, and those demographic factors were solely used as independent variables.

Among these demographic factors, there are two of them which nature is categorical and therefore regression analysis is not applicable for analyzing their relationship with TPW. The first factor is 'institution type'. The current study recruited participants from three types of colleges, thus the 'institution type' is a variable that consists of three conditions. In this case, a one-way, between-subjects ANOVA is used to compare the means of the general SRPW scores between teachers of the three types of colleges. The second factor is 're-employment type'. This factor was conceptualised by two variables for which data were collected via the questions on 'whether the rehired teacher works for the same organisation pre- and post-retirement' and 'whether the rehired teacher works in the same occupational area pre- and post-retirement'. Dummy codings of '0' and '1' were used to quantify the data for these two variables. Independent-sample t-test was employed to compare the means of general SRPW levels between different rehired teacher groups.

The second sub-question of RQ3 focuses on the difference between rehired teachers and

regular teachers in terms of the effects of demographic factors on TPW. A moderation analysis (based on hierarchical regression analysis) was employed to address this sub-question. The general SPRW score was set as the dependent variable, the demographic factors were used individually as the independent variables, and the variable 'teacher group' (coding: 0 = rehired teacher; 1 = regular teacher) was set as the moderator. For the demographic factors which relationship with the general SRPW score was found to be significantly moderated by the variable 'teacher group', a 'test of simple slope' approach was employed to further examine whether those factors' main effects on general SRPW score was significant in each type of teacher or not.

Regarding the factor 'institution type' which nature is categorical, the researcher split the SPSS file based on the variable 'teacher type' (0 = rehired teacher, 1 = regular teacher) and then employed the one-way, between-subjects ANOVA to analyse whether this factor's effect on general SRPW affect rehired teachers and regular teachers differently.

The demographic factors related to post-retirement career experience were not used in such moderation analyses as these factors only applied to the rehired teachers.

3.5 Formal study: Qualitative Interviews

As mentioned earlier, with RQ1, the quantitative data was applicable for answering its first and second sub-questions but not suitable for answering the third one – 'How do the main components of TPW manifest in the teachers' career experience?'. In addition, For RQ2, the quantitative analysis was very useful in exploring whether there is difference between regular and rehired teachers regarding their level of professional well-being, but if the difference(s) do exist, the quantitative data could offer very limited information regarding the potential clues for interpreting such difference.Therefore, the current study employed qualitative interviews for the purpose of complementing the quantitative analysis results and

helping the researcher better comprehend those results.

3.5.1 Interview participants and procedure.

The interviews were conducted from 9 December 2018 to 10 January 2019. Totally **17** college teachers working in Nanchang City participated in the interviews. This group included **nine** regular teachers and **eight** rehired teachers. The 17 teachers came from **11** colleges. These institutions included **six** public colleges, **two** private colleges, and **three** independent schools.

Each interview was conducted in a semi-structured setting. According to Kvale (2007), a semi-structured setting is the most common setting for qualitative interviews. Semi-structured interviews include pre-designed questions that lead a sequence of themes. As a result of this process, 'there is openness to changes of sequence and question forms in order to follow up the answers given and the stories told by the interviewees' (p. 54).

1. Sample selection of target interviewees.

The researcher targeted interviewee candidates with help from the administrative staffs of different colleges in Nanchang City. To lessen the biases that might be caused by this convenient sampling method, before inviting a candidate to participate, the researcher carefully considered the diversity and representativeness of the sample. Along with coverage of different age groups, genders, professional backgrounds, types of institution, years of teaching, and years of being rehired (for rehired teachers only), the researcher also tried to target teachers who solely have working experience in different types of college—for example, a teacher who worked in a private college but later changed to a public university.

There were two benefits for recruiting interviewee of this kind. First, these interviewees could compare their feelings toward different types of colleges, which could contribute irreplaceable value as interview data. Second, given the interviewee sample size is small, the

researcher had to determine a way to acquire information as rich as possible from as few participants as possible. Therefore, the recruitment of interviewees with diverse working experience could best serve for this purpose.

2. Interview procedure.

All interview meetings were organised and conducted by the researcher. The place and time for the meetings were scheduled at the interviewee's convenience. Cafes, restaurants, and offices were the most common interview places for regular teachers. The meetings with rehired teachers usually took place in a faculty lounge or at their homes as many colleges do not offer office space to rehired teachers.

Before the meetings, the interviewees were asked to read an information sheet that provided information about the study, the researcher, and his principal supervisor. The interviewees then signed a consent form to participate in the study. They were also asked to complete (or instruct the researcher to complete) a form to record their personal background information such as age, gender, college type, current professional title, years of teaching, specialty, and years of being rehired (for rehired teachers only).

Of the interviewee group, **15** people allowed the researcher to audio record the interview. **Two** participants (one rehired teacher and one regular teacher) declined to be audio recorded. For those two interviews, the researcher invited a colleague, who was also a college teacher, to take notes in the interview meetings. The assistant's notes were used to cross-check the researcher's notes and thus protect the reliability of the interview data.

All interviews were semi-structured. The researcher generally followed the pre-designed interview protocol. However, in instances where he noted that an interviewee was talking about something significant to the research topic, he used prompt questions to delve deeper into the participant's response. This arrangement gave the researcher flexibility in controlling the meeting pace and in making sure the pivotal discussions could be sufficiently conducted.

3. Brief introduction to interviewees' backgrounds.

Table 3.4 lists the brief personal background information for each individual. The rule of coding for regular serving teachers is Serial Number - Teacher Type - College Type - Age - Years of Teaching, and for the rehired teacher is Serial Number - Teacher Type - College Type - Age - Years of Teaching - Years of Being Rehired (presented in parenthesis).

For 'Teacher Type', 'I' means 'in-service teacher', 'R' means 'rehired teacher'; For 'College Type', 'Pub' means 'Public College', 'Pvt' means 'Private College', 'Int' means 'Independent School'.

Table 3.4: Brief personal background information for each interviewee

No.	Code	Interview Date	Gender	Main Speciality	Professional Title
1	01-I-Pvt-30-2	2018.12.13	Female	Film and TV Production	Teaching Assistant
2	02-I-Pvt-26-0.6	2019.1.7	Female	English	Teaching Assistant
3	03-I-Pub-32-10	2018.12.16	Male	Western Literature	Lecturer
4	04-I-Pub-32-6	2018.12.17	Female	English	Lecturer
5	05-I-Pub-38-16	2018.12.20	Female	PE (Aerobics)	Associate Professor
6	06-I-Pub-33-5	2018.12.25	Male	History Study	Lecturer
7	07-I-Pub-31-10	2018.12.26	Female	English	Lecturer
8	08-I-Ind-29-3	2018.12.27	Female	Advertising, Marketing	Lecturer
9	09-I-Ind-42-10	2018.12.27	Male	Business Administration	Associate Professor
10	10-R-Pub-60-34(4)	2018.12.11	Female	Statistics	Professor
11	11-R-Pub-62-39(7)	2019.1.10	Female	Automobile Operation and Maintenance	Professor
12	12-R-Pub-61-40(1)	2018.12.21	Male	Athletic Psychology	Associate Professor
13	13-R-Pub-61-38(6)	2018.12.22	Female	Mathematics	Professor
14	14-R-Pvt-73-53(13)	2018.12.23	Male	Mechanical Engineering	Professor
15	15-R-Pub-61-35(1)	2018.12.25	Male	Computer Theory	Professor
16	16-R-Pub-60-34(0.7)	2018.12.26	Male	Chinese Medicine	Professor
17	17-R-Ind-71-41(5)	2019.1.1	Female	Ideological and Political Education	Professor

Note: No. 1 to 9 are regular serving teachers, and No. 10 to 17 are rehired teachers.

3.5.2 Introduction to the interview questions.

13 interview questions were designed based on the theories of TPW that been discussed in Chapter 2 as well as the findings from the previous quantitative part of the current study. These 13 interview questions comprised 11 common questions for all participants, and two questions particularly designed for the rehired teachers.

The interviewees were not asked all questions because a participant's answer to one question often covered the information being sought via other questions. All questions were open-ended and invited freeflowing, in-depth answers.

As mentioned earlier, the researcher also used 'prompt' questions during the interview process when he wanted to go deeper into interesting or significant participant comments or when a participant had been talking about things that deviated from the interview topic for more than two minutes. The prompt questions were not fixed. The researcher asked them extemporaneously based on the participants' comments.

Generally, there was no fixed sequence for asking the interview questions except for Questions 1 and 2, which were asked at the beginning of each interview, and Questions 8 and 9. The latter were questions related to post-retirement career experience that needed to be asked consecutively.

The **13** interview questions are described below:

Question 1: When and why did you choose to become a college teacher? How do you feel about being a teacher?

These questions seek to elicit general information regarding the interviewees' educational background, job-hunting experience, job description, years of employment, and employer. Moreover, the participant responses could be used to directly address RQ1 because

when people talk about their motivation for engaging in a profession or finding work in a particular place, they will very likely reveal their thoughts regarding what kind of work might satisfy their needs and bring them with a strong sense of professional well-being.

Question 2: How do you feel about your working environment, students, and main work tasks.

This question was designed to evoke more contextual details about the interviewees' workplace in areas such as their work environment, job description, students, and colleagues, as well as their feelings toward these. Such information is important for analysing the manifestation of professional well-being in the interviewees' career experience, which is applicable to the answering of RQ1.

Question 3: Please look back at your professional career. Were there any events that gave you a great sense of happiness or produced warm feelings?

Question 4. Please look back at your professional career. Were there any events that made you unhappy or uncomfortable that, in your view, greatly lowered your level of well-being.

The previous discussed quantitative analysis approach has one limitation: it evaluates respondents' level of professional well-being by asking them to give several self-rated scores, while in practice, people's emotions are complicated and always changing. Such self-rated scores can be viewed as a tentative reflection of the dynamic balance of the respondents' sense of well-being, that is, a 'comprehensive value' that incorporated the respondents' 'happiness value' and 'unhappiness value'. However, the quantitative data can not offer any details about what work-related events could respectively contribute to the respondents' 'happiness value' and 'unhappiness value'. The interview Questions 3 and 4 were designed to explore these details. Indeed, these two questions served as the core of the whole interview.

Question 5: Was there ever a moment when you felt really tired of your work or felt

totally exhausted because of your work? Do you remember what caused those feelings?

This question was used to elicit information about 1) how the interviewees perceived workplace burnout; 2) how this sense of burnout was generated; 3) how the burnout influenced their sense of well-being; and 4) what strategies they used in attempting to cope with this negative feeling.

Question 6: How do you perceive the concepts of 'freedom' and 'autonomy' in your professional work? How would you rate the adequacy of these?

This question supplements Questions 3 and 4. It aims to elicit the interviewees' perception of work autonomy in their work.

Question 7: Do you have any future plans regarding your professional work?

This question supplements Questions 3 and 4. It aims to encourage interviewees to share their thoughts regarding their work ambitions, visions, or aspirations. In this question, the researcher chose the term 'future plan' instead of the phrase 'aspiration' because the latter terms were too abstract and might have confused the interviewees.

Question 8 (for rehired teachers only): Why did you choose to continue work after retirement and why did you choose your current institution?

This question aims to elicit the interviewees' motivation in engaging in re-employment work. Such information is important as the motivation often reflect some kinds of need, while the interviewee's perception regarding whether he/she has successfully fulfilled those needs through the re-employment work can be used as a resource for analyzing the characteristics of rehired teachers' professional well-being.

Question 9 (for rehired teachers only): What was it like for you to retire? What does a post-retirement career mean to you? Has there been any difference between your job experiences before and after retirement? If so, do the changes matter to you?

These questions were meant to encourage the interviewees to share comments about

their feelings regarding the difference between their pre- and post-retirement careers, which can render some clues regarding the difference between rehired teachers and regular teachers in terms of professional well-being. This information relates to the answering of RQ2.

Question 10: Why did you make the choice to leave the _____ college and then come to the current college? Can you talk a little bit about your feeling regarding the different institutes?

This question applies to the interviewees who have worked at different colleges. Having the interviewees to discuss this topic was meant to investigate which components of TPW were frequently mentioned by them for explaining their decision of leaving the previous institute and choosing the current one.

Question 11: Can you recall something in your professional work that brought you a strong sense of pride?

This question supplements Questions 3 and 4. If interviewees were not overly forthcoming in responding to Questions 3 and 4, the researcher asked this question. Compared to Questions 3 and 4, which are more open and general, this question focuses on the interviewees' sense of recognition and perceived professional competence.

Question 12: In your professional work, is there anything that embarrassed or frustrated you very much? How did you feel about it during that period? Have you found a way to cope with it later?

This question supplements Question 4. The researcher asked it when the collected information regarding the interviewees' negative feelings at work seemed insufficient.

Question 13: Please rate on a scale from 1 to 10, one being lowest and 10 being highest, what you judge to be your level of professional competence.

This question was not intended to collect the interviewees' self-rated professional competence score. Rather, it was designed to elicit the interviewees' perception of

'professional competence.' When interviewees consider this question, they are very likely to make comments like "it depends on how do you define professional competence" or "to which part of professional competence are you referring". In this manner, interviewees would be encouraged to share their perception of professional competence.

3.5.3 Analysis approach for qualitative data.

The predominant analysis tool for the interview data was content analysis. Content analysis is a research method commonly employed by social researchers. The method involves analysing documents and communication artifacts by investigating the patterns within the text or artifacts in a replicable, systematic manner (Bryman & Bell, 2011). Numerous approaches have been developed for conducting content analysis, and nearly all these approaches use data coding in which the researcher creates short codes to label interesting, meaningful pieces within the content and so encapsulate the content by eliciting its core information (Denzin & Lincoln, 2003).

Specifically, the qualitative data analysis approach conducted by the researcher was content analysis with thematic categorisation of the interview responses. Based on the analysis procedure suggested by Kuckartz (2019), Merriam (2009), and Maxwell (2013), the current study took the following steps to implement the data analysis:

1. Transcribing the audio files or shorthand scrips into text.

2. Generating the initial codes. Short terms were used as the code to encapsulate the meaning within sentences. During this step, the researcher kept an open mind, that is, he tried to blank out the previous quantitative results that he already knew.

3. Combining codes with similar meanings.

4. Categorizing the codes into overarching themes. The seven TPW components were used as the seven overarching themes for grouping these initial codes. Therefore, in

this step, the coding process was theory-driven.

5. Re-examining whether the seven themes accurately and properly reflected the raw data, re-coding data that were missed, and re-categorizing these missing data into the seven themes.

6. Creating a word document which contained seven headings that stood for the the seven themes. Under each theme, the categorised comments from each interviewee were displayed.

7. Looking for sub-themes that could depict the pattern within the comments that under each overarching theme. These results of sub-theme were used to answer the third sub-question of RQ1.

8. Subdividing the comments to make them accord with the sub-themes. Sometimes one comment was related to more than one sub-theme.

9. Judging whether each comment implied a positive attitude or negative attitude on the part of the interviewee. The Appendix 4-3 displays the result of all the analysis works that the researcher had done till this step (from step 1 to 9).

10. Calculating the positive and negative comment occurrence frequency for each sub-theme. The detailed method for this calculation is discussed later in Chapter 4.

11. Comparing rehired teachers' and regular teachers' positive and negative comment frequency, and using the comparison results to supplement the quantitative findings regarding RQ2.

12. Retrieving each rehired teachers' comments relating to the differences they perceived between their pre- and post-retirement work, generalizing the main viewpoints, and using them to aid in answering RQ2.

3.6 Ethical Considerations

Given that the current study involved human participants and that all of the analyses were conducted based on human data, the researcher adhered to a high standard of ethical research practices to safeguard the physical, emotional, and intellectual well-being of the participants.

First, when formulating the research idea, the researcher thought extensively about how to ensure the well-being and welfare of the participants. In particular, he kept Flick (2007) and Creswell (2003) in mind. These researchers have suggested that, when setting up a research project, one of the most important ethical goals involves the researcher making the research beneficial to the participant and avoiding any risk of marginalizing or dis-empowering the participants. When the researcher made his final decision as to the current study's research objectives and questions, he believed the study would expand our knowledge of college teachers' professional well-being, especially that of rehired teachers, and thus provide a basis for recommendations for the strategies of educational institutions regarding teacher motivation and well-being. He also thought the study would increase the public's awareness of the rehired teacher group.

Second, in the study's data-collection process, an information sheet and consent form were used to guarantee the participants' right to know about the study and their freedom to withdraw from the research. In addition, there was one more important ethical consideration regarding data collection: the protection of the participants' privacy. This protection was necessary because the survey questionnaires and personal interviews included questions related to the participants' attitudes toward their schools, departments, colleagues, and superiors. For data-collection purposes, the researcher relied on the assistance of the target colleges' administrative staffs to distribute the questionnaire and recruit interviewees. In such circumstances, any disclosure of the participants' personal information might put them in an

embarrassing situation.

To prevent such occurrences, the researcher employed an anonymous questionnaire to collect the quantitative data. To maintain this anonymity, the researcher ensured that the participants' consent forms (including the information sheets) were kept separate from the questionnaires. As an added step to help ensure privacy during the data-collection process, the researcher generally recommended that participants complete the online questionnaire. He did so because, in the online survey, the collected consent forms and questionnaires were saved separately in two discrete databases by Survey Star. With this precaution, even the researcher himself could not match questionnaires to their respondents. Regarding the nine paper questionnaires, the researcher collected these himself to minimise the risk of any privacy disclosures during the data-collection process.

In terms of the interviews, although all interviewees were recruited with the help of the administrative staffs of the target colleges, these staffs did not include any administrative officials, that is, there was no power relationship between them and the interviewees. The interviewees took part in the interviews of their own free will. No one was ordered to do so by any administrative individual. During the interview process, participants always had the right to skip any question or end the interview. Also, in the data analysis, a code was substituted for the interviewees' names. No personal information from any interviewee appears in this thesis.

Summary of Chapter 3

Guided by the ideology of pragmatism, the researcher incorporated the perspectives of post-positivism and constructivism into the current study to construct an explanatory sequential mixed-method design comprising two main data-collection methods: quantitative survey and qualitative interviews. The instruments for these two approaches were a questionnaire and an interview protocol with 13 questions, both designed by the researcher. Two pilot studies were performed prior to the formal data collection process to refine the survey questionnaire and to acquire background information for designing the interview protocol. The questionnaire was completed by 388 respondents from 14 colleges. Of these, 319 valid questionnaires (120 from rehired teachers and 199 from regular teachers) were used for the analysis. The interviews involved 17 participants (eight rehired teachers and nine regular teachers) came from 11 colleges.

For the quantitative data analyses, CFA and regression analysis were employed to explore the main TPW components, the t-test was the main tool used to test the means of differences between the professional well-being of rehired teachers and regular teachers, and a moderation analysis was used to examine the relationship between demographic factors and TPW for rehired teachers and regular teachers, respectively.

In terms of the qualitative data analyses, content analysis with thematic categorisation of the interview responses was the main tool employed to explore the manifestation of the seven TPW components in teachers' career experience, as well as to search for clues for interpreting the differences between rehired teachers and regular teachers detected by the prior quantitative data analyses.

The next chapter presents and discusses the findings extracted from the data analysis.

Chapter 4: Results and Findings

The previous chapter briefly discussed the current study's data collection, the measuring instruments used, and the analysis methodology for the quantitative and qualitative research approaches. This chapter begins by discussing the validity and reliability of the theoretically suggested TPW structure, as well as how the structure was modified based on the results of the confirmatory factor analyses (CFAs), and the internal consistency tests.

The chapter then describes how the quantitative findings were employed to answer the RQs. As noted, the results from a second-order CFA analysis and a regression analysis helped define the main TPW components, as well as establish the relationship between these components and TPW. The t-test results were used to identify the differences in professional well-being between rehired teachers and regular teachers. The moderation analysis results were employed to check whether the relationships between the demographic factors and TPW differ significantly for rehired teachers and for regular teachers.

Finally, the chapter discusses how the qualitative findings were used to supplement the quantitative findings in answering RQ1 and RQ2. Using content analysis, the researcher categorised the interviewees' comments into seven overarching themes in accord with the seven TPW components. Sub-themes were then derived from the categorised comments, and these were used to discuss how each TPW component manifested in the teachers' career experience. In addition, the results obtained from comparing how often rehired teachers and regular teachers made positive and negative comments on each sub-theme, as well as from rehired teachers' perceptions regarding the difference between their pre- and post-retirement careers were employed to complement previous quantitative findings regarding differences in TPW between the two teacher groups.

Special Data Treatment in SPSS

1. The scores of the items belonging to the 'burnout' factor were reversed in SPSS. Therefore, when interpreting the results relating to the 'burnout' factor score, the term 'absence of burnout' is used.

2. According to Tabachnick and Fidell (2007), in a regression analysis that has a sample size smaller than 1000, any cases with standardised residuals in excess of about ± 3.3 are defined as 'outliers'. Therefore, for all regression analyses in the current study, the researcher deleted the cases that would be considered outliers according to this criterion.

Abbreviation of statistical terms shown in the tables presented in Chapter 4:

1. *p* = Significance level which is lower than 0.5

2. **p* = Significance level which is lower than 0.01

3. B = Unstandardised coefficient

4. SEB = Standard Error for the Sample Mean

5. SD = Standard Deviation

5. β = Standardised coefficient

6. t = t value

7. SS = Sum of Squares

8. MS = Mean Square

9. df = Degree of freedom

10. M = Mean

4.1 Validity, Reliability, and Model Modification

As mentioned in Chapter 3, two pilot studies were carried out before the formal data-collection process. Pilot Study 1 was conducted to provide support for the content validity of the entire questionnaire, and Pilot Study 2 was conducted to offer an initial validation of the hypothetical seven-factors TPW structure. Nevertheless, the results from the pilot studies may not be robust given the small sample size. To ensure that the TPW structure could indeed fit the data collected in the formal study, the researcher conducted a series of statistical tests of the hypothetical TPW structure's validity and reliability and modified the structure based on such test results.

Specifically, an intrinsic consistency test was employed to examine the construct reliability of the TPW structure, and CFA analyses were used to examine the construct validity of the structure.

4.1.1 Internal consistency test.

Cronbach's Alpha Coefficient was the main index used to evaluate the internal consistency of the hypothetical TPW factor structure. Table 4.1 presents the internal consistency test results.

Table 4.1: Cronbach's Alpha Coefficient for each factor in TPW structure

Factor	Number of items	Cronbach's Alpha
Professional competence	6	0.910
Job satisfaction	6	0.926
Aspiration	6	0.960
Recognition	6	0.919
Autonomy	6	0.939
Support and relationship	7	0.942
Absence of burnout	7	0.944
Total	44	0.947

As shown in the table, it seems that the hypothetical TPW structure has a satisfactory level of internal consistency.

4.1.2 Confirmatory factor analysis (CFA) and model modification.

Structural equation modelling (SEM) using the software R (version: 3.5.1) was employed in the CFA analysis. The method of estimation was maximum likelihood, and a covariance matrix was adopted. To obtain the model that fit better to the collected data, the researcher tested two different models.

Model 1: This is the original model. It included **seven** latent factors and **44** items (which served as observed variables). Information on each factor and the subordinate items under each factor in this TPW structure are displayed in Appendix 4-1.

Model 2: This model has **seven** latent factors and **28** items. Each factor was loaded on four items. Appendix 4-2 displays the detailed information on Model 2. The remainder of this section illustrates how Model 2 was constructed step by step.

Brown (2006) claimed that 'the presence of unnecessary parameters may be reflected by large, negative standardized residuals that indicate that the model is overestimating the observed relationship between a pair of indicators' (p. 125). To identify those 'unnecessary parameters', the researcher conducted a CFA analysis on Model 1 to examine whether the factor loading of each item (namely, each observed variable) was statistically significant at a p level of 0.05. He took this action because, as Brown (2006) suggested, 'the necessity of existing parameters can be evaluated by examining their statistical significance' (p. 125). Also, according to Lee (2007), in CFA analyses, observed variables that associated with insignificant factor loadings should be deleted to improve the overall model fit.

In addition, the researcher also checked the analysis result in terms of the modification indices (MI) of the fixed parameters in the original CFA model (Model 1). According to Wu

(2010), the MI can be interpreted as the expected drop in chi-square statistics after adding one parameter. For those parameters generated by the correlation between two residual-error terms, a large 'expected parameter change (EPC) value' in MI may suggest that the correlation between the two observed variables that defines these two error terms cannot be explained primarily by the two observed variables' presupposed common latent factor. As noted earlier, in the CFA model of the current study, the observed variables are the items that the researcher selected from different measurement instruments (e.g. scales) of the past work. That is, such residual-error correlations were very likely to be caused by the semantic similarity between the items. Therefore, in the current analysis, based on the MI results, the researcher deleted the items that were repeatedly suggested to have strong residual-error correlations with other items.

After the researcher deleted 16 items from the original model (Model 1) by means of the above-mentioned two approaches, Model 2 was constructed.

The construct validity of the two models were evaluated by a set of goodness-of-fit indices. The models were firstly evaluated by the chi-square test (χ^2). Because the chi-square test is known to produce significant values in large samples, a variety of practical model-fit indices were also used, based on the common standard of model-fit indices that were suggested by Brown (2006) and Byrne (2001). These were: the ratio of chi-square statistics to the degree of freedom, for which values 1-3 indicate an acceptable fit; the comparative fit index (CFI), for which values above 0.90 indicate an acceptable fit; the non-normed fit index (NNFI, also named TLI), for which values above 0.90 indicate an acceptable fit; the root-mean-square error of approximation (RMSEA), for which values of 0.05 or less indicate a good fit, and values 0.06 - 0.08 indicate an adequate fit; standardised root mean square residual (SRMR), for which values below 0.05 indicate a good fit, and values 0.06 - 0.08

indicate a mediocre fit; goodness-of-fit index (GFI), for which values above 0.09 indicate an acceptable fit; adjusted goodness-of-fit index (AGFI), for which values above 0.09 indicate an acceptable fit; and parsimony goodness-of-fit index (PGFI), for which values above 0.05 indicate an acceptable fit.

Table 4.2 displays the values of the two models in terms of their goodness-of-fit index.

Table 4.2: Results of goodness-of-fit test for CFA Models 1 and 2

	Items No.	χ^2/df	*P*	CFI	TLI	RMSEA	SRMR	GFI	AGFI	PGFI
Model 1	44	2.449	<0.01	0.904	0.897	0.067	0.058	0.734	0.701	0.653
Model 2	28	1.746	<0.01	0.967	0.962	0.048	0.042	0.886	0.859	0.718

As shown in the table, the CFA results suggested that, most of the fit indices of Model 2 reached an acceptable level. The exceptions were the chi-square statistics, the GFI, and the AGFI. Given that Model 2 is a relatively complicated model and that, while its GFI and AGFI had passed 0.85, most of its other model-fit indices were satisfactory, the researcher considered the overall model-fit situation of Model 2 to be generally acceptable.

In sum, based on the results from CFA analyses, 16 items were deleted from the original model (Model 1) to create Model 2. The related model-fit indices suggested that, after this model modification, the revised TPW structure—namely, Model 2—had achieved an acceptable level of construct validity. Therefore, the Model 2 was adopted as the final model representing the TPW structure of the current study. **Its seven latent factors and 28 items were employed for the subsequent analyses** (see Appendix 4-2 for the detailed information on Model 2).

4.2 Quantitative Analysis Results and Findings for RQ1

Table 4.3 summarises the figures related to the data analysis for RQ1, including the respondents' self-reported scores for the seven hypothetical TPW factors and the four types of self-rated professional well-being (SRPW) scores. A six-point system was used to describe the seven factors' scores in which 1 is the lowest score and 6 is the highest. A 10-point system was used for the four SRPW scores. Each of the seven factors' scores was computed as the average value of its subordinate items. As mentioned in the last section, the items used for computing the factors' scores were those remaining after the model modification, that is, the items in **Model 2**.

Table 4.3: Statistical information on levels of TPW factors and SRPW types

TPW factors and Four Types of SRPW	All Respondents			Rehired Teachers			Regular Teachers		
	n	*Mean*	*SD*	*n*	*Mean*	*SD*	*n*	*Mean*	*SD*
Competence	319	4.93	0.85	120	5.05	0.83	199	4.85	0.85
Job Satisfaction	319	4.81	0.93	120	5.00	0.81	199	4.70	0.97
Aspiration	319	4.68	1.14	120	4.22	1.26	199	4.96	0.97
Recognition	319	4.96	0.77	120	5.04	0.74	199	4.91	0.79
Autonomy	319	4.52	1.02	120	4.51	0.95	199	4.52	1.06
Support	319	4.92	0.87	120	5.12	0.82	199	4.80	0.88
Absence of Burnout	319	4.06	1.33	120	4.64	1.05	199	3.71	1.36
SRPW for Teaching	311	7.33	1.91	115	7.83	1.63	196	7.04	2.00
SRPW for Research	217	5.54	2.63	67	6.57	2.26	150	5.09	2.67
SRPW for Admin	235	5.89	2.56	96	6.40	2.41	139	5.54	2.61
General SRPW	319	7.17	1.89	120	7.83	1.51	199	6.77	1.98

As noted, RQ1 has three sub-questions, and the quantitative analyses served to address

the first and second sub-questions—'What are the main components of teachers' professional well-being?' and 'How does each of these components contribute to the well-being?'

To answer these two sub-questions, the researcher employed two statistical approaches: a second-order CFA analysis and a multiple linear regression analysis. The second-order CFA analysis was used to address the first question. The regression analysis was used to supplement the second-order CFA result for the first question and to answer the second question.

4.2.1 Data analysis for the first sub-question of RQ1.

An orthogonal model with a second-order overall factor on which the seven first-order factors load was built based on **Model 2** to test whether there was an overall factor that could explain the correlation between the seven TPW factors.

Again, a CFA analysis employing a means of maximum likelihood estimation was conducted to test the goodness of fit of this second-order model. The main fit indices of the model are shown in Table 4.4.

Table 4.4: Results of goodness-of-fit test for the second-order CFA model

No. of Items	χ^2/df	p	CFI	TLI	RMSEA	SRMR	GFI	AGFI	PGFI
28	1.984	<0.01	0.954	0.950	0.056	0.079	0.863	0.838	0.729

According to the CFA results shown in Table 4.4, five indices—χ^2/df, CFI, TLI, RMSEA, and PGFI —suggested that the second-order CFA model fits the data quite well. In contrast, four indices—chi-square p value, SRMR, GFI, and AGFI—suggested the model is just a marginal fit or even a poor fit. Although this second-order CFA model did not fit the data as well as the previous oblique seven-factor model (that is, **Model 2**), its overall fit situation was

still considered to be acceptable.

This CFA result partly supported the researcher's hypothesis that all seven factors played a role as the main components of TPW. However, because the model-fit situation was poorer than the anticipated result, the researcher used a multi-level regression analysis to supplement the CFA result.

4.2.2 Data analysis for the second sub-question of RQ1

As noted above, a multiple-level regression analysis was conducted to complement the second-order CFA result and to address the second sub-question of RQ1 by examining how each of the seven particularized TPW factors contributed to the general SRPW level. Specifically, in this analysis, the seven factors' scores served as the independent variables *simultaneously*, and the general SRPW score was used as the dependent variable.

Note that in this regression analysis, each factor's score was computed by means of Principal Component Regression (PCR) Analyses. PCR is a type of multivariate calibration methods (Keithley, Heien, & Wightman, 2009). PCR analysis is used "when the predicting variables correlate significantly against the regressor variables and, when a collinearity and multicollinearity exist among regressor variables" (p.441, Mager, 1990). PCR analysis follows a two-step process: first, extract principal components from the original predictors by means of principal component analysis (PCA). Second, run a multiple linear regression analysis by only using these newly extracted principal components as the independent variables (P. 128-136, Esbensen, 2002). Watanabe, Kobayashi, and Kuroda (2012) suggested that via PCR, only the most relevant part of the variance in the original predictors is utilised to correlate with a response variable.

Specifically, in this regression analysis, the factors' scores were calculated by a regression method based on the principal component method with varimax rotation instead of

the regular arithmetic average computing method. The reason for taking this approach is that if each factor's score is computed by the mean score or subtotal score of its subordinate items, serious multicollinearity issues might arise during the regression analysis and distort the results, given that these seven factors are theoretically correlated. Therefore, by using varimax rotation, the researcher was able to obtain factor scores that were independent from each other and so avoid the multicollinearity issue.

Scholars warned that one potential risk in using PCA and PCR analysis is that the newly extracted factor may not be robust enough to encapsulate the meaning of the original items (Hair Jr, Black, Babin, & Anderson, 2009; Keithley et al., 2009; Jackson, 2004). For example, say the score for an extracted factor, say, 'Factor-1', was computed based on four items, two of which were originally designed for measuring 'Autonomy' and two to measure 'Recognition'. In such a case, 'Factor-1' would be meaningless because it could represent neither 'Autonomy' nor 'Recognition'. To avoid this risk, the researcher checked the EFA results for the revised TPW structure (that is, Model 2). The EFA's rotated component matrix (see Appendix 4-5) suggested that all items could appropriately load on their presumed factors, which are in line with the hypothetical TPW structure. Therefore, the researcher believes that this calculation method for the factor score was safe to use for the regression analyses.

Table 4.5 (containing two sub-tables) shows the results from the regression analysis.

Table 4.5: Regression results of seven TPW factors on general SRPW

Variation Source	df	SS	MS	F	p
Regression	7	612.131	87.447	52.362	<0.001**
Residual	311	519.387	1.670		
Total	318	1131.517			

a. Predictors: Recognition, Satisfaction, Competence, Autonomy, Support, Absence of Burnout, Aspiration
b. Dependent Variable: General SRPW Score

Independent variables	B	SEB	β	t	p	Part Correlation
Aspiration	0.216	0.072	0.115	2.985	0.003**	0.115
Absence of Burnout	0.663	0.072	0.352	9.150	<0.001**	0.352
Support	0.628	0.072	0.333	8.663	<0.001**	0.333
Autonomy	0.283	0.072	0.150	3.899	<0.001**	0.150
Competence	0.280	0.072	0.148	3.859	<0.001**	0.148
Satisfaction	0.857	0.072	0.454	11.826	<0.001**	0.454
Recognition	0.390	0.072	0.207	5.377	<0.001**	0.207

Dependent Variable: General SRPW Score
$R^2 = 0.541$

The regression analysis results suggest that the seven factors together significantly predict participants' general SRPW level ($F(7, 311) = 52.362$, $p < 0.01$), and can explain 54.139% of the total variance of the general SRPW level. Meanwhile, each of the seven factors was found to be a significant predictor for the general SRPW.

This result offers additional support for the second-order CFA result reported in Section 4.2.1, That is, in sum, the results from the second-order CFA and the regression analysis jointly support this hypothesis: the seven factors—professional competence, job satisfaction, aspiration, recognition, autonomy, support and relationships, and absence of burnout—are all important components of TPW.

In terms of the answering of the second sub-question of RQ1—'how does each of the

seven factors contribute to TPW', Table 4.6 describes the variance of the general SRPW score

respectively explained by each particularized TPW factor's score.

Table 4.6: Variance of general SRPW score explained by each TPW factor

TPW factor	Variance explained in general SRPW
Job satisfaction	20.612 %
Absence of burnout	12.390 %
Support and relationships	11.089 %
Recognition	4.285 %
Autonomy	2.250 %
Professional competence	2.190 %
Aspiration	1.323 %

This result suggests that for, all teacher participants, the top three factors with the

strongest effect on their level of general SRPW were job satisfaction, absence of burnout, and

support and relationships, in that order.

4.3 Quantitative analysis results and findings for RQ2

RQ2 concerns whether rehired teachers differ from regular teachers in terms of

professional well-being and, if so, in which aspects.

For operationalizing this RQ, the notion 'professional well-being' is conceptualised by

the four types of self-rated professional well-being (SRPW), namely, 1) the general SRPW, as

well as the SRPW for 2) teaching, 3) research, and 4) administrative work.

The word **'aspect'** in RQ2 has the following two layers of meaning.

The first layer concerns the difference between rehired teachers and regular teachers in

terms of their level in each of the seven particularized TPW factors, e.g., whether the two

types of teacher have significant differences in terms of the level of perceived autonomy,

burnout, professional competence, etc. An independent-sample t-test was employed to conduct this comparison.

The second layer concerns the difference between rehired teachers and regular teachers in terms of the relationship between the seven particularized TPW factors and the general SRPW. As mentioned in the previous Section 4.2.2, when addressing the question 'how does each of the TPW components contribute to the general SRPW', the researcher used the data from all teacher participants. This time, for answering RQ2, the researcher separated the data of the rehired teachers from that of the regular teachers and ran a similar regression analysis—using the seven factors' scores simultaneously as the independent variables and the general SRPW score as the dependent variable—to determine 'whether the seven factors affect the two types of teachers' general SRPW differently'.

4.3.1 Independent-sample t-test result

An independent-sample t-test was employed to evaluate the difference between rehired teachers and regular teachers in terms of each of the four SRPW scores as well as the self-reported level of each TPW factor. Because the t-test has no multicollinearity concerns, the seven TPW factors' scores in this stage of analysis were computed using the mean score of each factor's respective subordinate items.

Table 4.7 presents the t-test results for comparing the means differences between rehired teachers and regular teachers in terms of their self-reported levels in the four types of SRPW (namely, the general SRPW, as well as the SRPW for teaching, research, and administrative work) and seven particularized TPW factors.

Table 4.7: T-test results for four SRPW scores and seven TPW factors' scores

Ho: Equal means between rehired teacher and regular teacher groups

Comparing Object	Rehired	Regular			
	Mean	*Mean*	*t*	*df*	*p*
SRPW score for teaching	7.83	7.04	3.760	277.180	<0.001**
SRPW score for research	6.57	5.09	4.214	148.246	<0.001**
SRPW score for admin work	6.40	5.54	2.552	233	0.011*
General SRPW score	7.83	6.77	5.388	300.140	<0.001**
Professional competence	5.05	4.85	2.063	317	0.040*
Job satisfaction	5.00	4.70	2.892	317	0.004**
Aspiration	4.22	4.96	-5.477	203.642	<0.001**
Recognition	5.04	4.91	1.459	317	0.146
Autonomy	4.51	4.52	-.032	317	0.974
Support & relationships	5.12	4.80	3.224	317	0.001**
Absence of Burnout	4.64	3.71	6.813	299.055	<0.001**

Note: Rehired = Rehired Teachers; Regular = Regular Teachers

In sum, the t-test results suggest that, on average, rehired teachers have significantly higher levels of general SRPW and of teaching, research, and administrative work SRPW. In addition, analyses using the t-test between rehired teachers' and regular teachers' self-reported levels in each particularized TPW factor suggested that the reason rehired teachers had higher SRPW levels might be because they generally had a higher level of professional competence, job satisfaction, and work support and relationships along with a lower level of work burnout.

However, the results also suggested that rehired teachers tended to have a lower level of work aspiration and that no significant difference existed between rehired teachers and regular teachers in terms of their level of autonomy and recognition. Therefore, such t-test

results seemed to be insufficiently robust to explore the deeper reasons behind rehired teachers tending to have a higher SPRW level. These findings served as a rationale for employing the qualitative interviews to dig out more clues regarding this issue. The analyses based on qualitative data are discussed later in Section 4.5.

4.3.2 Multiple regression analysis result

As noted, a multiple regression analysis was employed to address the question of 'whether the seven particularized TPW factors affect rehired teachers' and regular teachers' general SRPW differently'. For this analysis, the researcher split the data file based on the variable 'teacher type' (0 = rehired teachers; 1 = regular teachers), used the seven TPW factors' scores simultaneously as independent variables, and used the general SRPW score as the dependent variable. The results from the regression analysis are shown in Table 4.8 (containing two sub-tables).

Table 4.8: Regression results of TPW components on general SRPW (rehired vs. regular)

Variation Source	*df*	*SS*	*MS*	*F*	*p*
Rehired Teacher					
Regression	7	147.504	21.072	19.162	<0.001**
Residual	112	123.163	1.100		
Total	119	270.667			
Regular Teacher					
Regression	7	409.598	58.514	30.434	<0.001**
Residual	191	367.226	1.923		
Total	198	776.824			

a. Predictors: Recognition, Satisfaction, Competence, Autonomy, Support, Absence of Burnout, Aspiration
b. Dependent Variable: General SRPW Score

Independent Variable	*B*	*SEB*	*β*	*t*	*p*	Part Correlation
Rehired Teacher						
Aspiration	.282	.090	.205	3.121	0.002**	0.199
Absence of Burnout	.467	.125	.246	3.730	<0.001**	0.238
Support	.687	.100	.444	6.857	<0.001**	0.437
Autonomy	.056	.103	.037	.539	0.591	0.034
Competence	.217	.108	.135	2.004	0.047*	0.128
Satisfaction	.647	.127	.360	5.088	<0.001**	0.324
Recognition	.447	.101	.289	4.417	<0.001**	0.282
Regular Teacher						
Aspiration	.405	.124	.168	3.261	<0.001**	0.162
Absence of Burnout	.605	.097	.320	6.260	<0.001**	0.311
Support	.517	.100	.262	5.194	<0.001**	0.258
Autonomy	.385	.100	.195	3.856	<0.001**	0.192
Competence	.279	.098	.144	2.841	0.005**	0.141
Satisfaction	.857	.093	.468	9.207	<0.001**	0.458
Recognition	.336	.098	.172	3.415	0.001**	0.170

Dependent Variable: General SRPW Score
R^2 for Rehired Teachers = 0.545; R^2 for Regular Teachers = 0.527

The results suggested that for **rehired teachers**, the seven particularized TPW factors together could significantly predict the teachers' general SRPW level ($F_{(7, 112)} = 19.162$, $p < 0.01$), explaining 54.5% of the variance in the general SRPW level. For the **regular teachers**, the seven factors together also significantly predicted their general SRPW level ($F_{(7, 191)} = 30.434$, $p < 0.01$), explaining 52.7% of the variance in the general SRPW level.

For **regular teachers**, all seven factors were found to be significant predictors for their general SRPW. However, for the **rehired teachers**, work autonomy could ***not*** significantly predict their general SRPW level ($β = 0.037$, $t = 0.539$, $p = 0.591$). The other six factors were found to be significant predictors.

Table 4.9 shows the rehired teachers' and regular teachers' differences in terms of the

variance of the general SRPW score explained by each particularized TPW factor's score.

Table 4.9: Variance of SRPW explained by each TPW factor (rehired vs. regular)

TPW factor	Variance explained in SRPW (Rehired teachers)	Variance explained in SRPW (Regular teachers)
Aspiration	3.960%	2.624%
Absence of Burnout	5.664%	9.672%
Support and relationships	19.097%	6.656%
Autonomy	0.116%	3.686%
Competence	1.638%	1.988%
Job Satisfaction	10.498%	20.976%
Recognition	7.952%	2.890%

These results suggested that, for **rehired teachers**, the top three factors affecting their professional well-being most strongly were support and relationships, job satisfaction, and recognition, in that order. For **regular teachers**, the top three factors were job satisfaction, absence of burnout, and support and relationships, also in that order.

4.4 Quantitative analysis results and findings for RQ3

4.4.1 Summary of statistical information by demographic factor.

4.4.1.1 Information on continuous variables

Table 4.10 presents the sample size, mean value, and standard deviation of the participants' data relating to the demographic factors which are continuous variables. As noted in Chapter 3, 'Health condition' was scored on a 5-point scale; 'Work income satisfaction' was scored on a 5-point scale; 'professional development opportunities' was scored on a 4-point scale. Other variables were evaluated via fill-in-the-blank questions.

Table 4.10: Statistical information on demographic factors (continuous variables)

Demographic factors	All Respondents			Rehired Teachers			Regular Teachers		
	n	*Mean*	*SD*	*n*	*Mean*	*SD*	*n*	*Mean*	*SD*
Age	318	43.70	15.94	119	62.80	4.20	199	32.27	6.77
Health Condition	319	3.49	0.82	120	3.61	0.79	199	3.42	0.82
Teaching Years	318	16.81	14.56	119	33.22	7.83	199	7.00	6.64
Teaching Hours	305	12.49	6.61	116	9.26	3.75	189	14.47	7.19
Research Hours	310	5.91	8.32	116	4.16	6.52	194	6.96	9.08
Admin Hours	307	7.19	9.28	115	5.24	6.85	192	8.36	10.31
Work Income	319	2.99	1.02	120	3.46	0.82	199	2.71	1.03
PDO	319	2.63	0.77	120	2.79	0.72	199	2.53	0.79
Years in Rehiring	119	4.43	3.03	119	4.43	3.03	N/A	N/A	N/A

Note: PDO = Professional Development Opportunities

4.4.1.2 Information on categorical variables.

In the current study, there are seven demographic factors of which nature is categorical. Of these, three are applicable for all teacher participants, these are: 'gender', 'professional title', and 'institution type'. The remaining four are applied only to rehired teachers, these are: 'whether serving in the same institution as the pre-retirement one or not', 'occupation before retirement', 'workload change as compared to pre-retirement stage', and 'income change as compared to pre-retirement stage'. The sample distribution of these seven demographic factors were presented in the following seven tables, respectively.

1. Gender.

Table 4.11: Sample distribution by 'gender'

Gender	All Respondents		Rehired Teachers		Regular Teachers	
	n	*%*	*n*	*%*	*n*	*%*
Male	128	40.1%	53	44.2%	75	37.7%
Female	191	59.9%	67	55.8%	124	62.3%
Total	319	100%	120	100%	199	100%

2. Professional title.

Table 4.12: Sample distribution by 'professional title'

Professional Title	All Respondents		Rehired Teachers		Regular Teachers	
	n	*%*	*n*	*%*	*n*	*%*
Teaching Assistant	59	18.5%	0	0%	59	29.6%
Lecturer	112	35.1%	6	5%	106	53.3%
Associate Professor	86	27.0%	60	50%	26	13.1%
Professor	62	19.4%	54	45%	8	4%
Total	319	100%	120	100%	199	100%

3. Institution type.

Table 4.13: Sample distribution by 'institution type'

Institution type	All Respondents		Rehired Teachers		Regular Teachers	
	n	*%*	*n*	*%*	*n*	*%*
Public College	138	43.3%	66	55%	72	36.2%
Private College	109	34.2%	41	34.2%	68	34.2%
Independent School	72	22.6%	13	10.8%	59	29.6%
Total	319	100%	120	100%	199	100%

4. Whether serving in the same institution as the pre-retirement one or not.

Table 4.14: Sample distribution by 'whether serving in the same institution as pre-retirement one or not'

Same vs. different	n	Frequency (in rehired teacher respondents)
Yes, same institution	53	44.2%
No, different institution	67	55.8%
Total	120	100%

5. Occupation before retirement.

Table 4.15: Sample distribution of 'occupation before retirement'

Occupation before retirement	n	Frequency (in rehired teacher respondents)
Teacher	115	95.8%
Nurse	3	2.5%
Doctor	2	1.7%
Total	120	100%

6. Workload change as compared to pre-retirement stage.

Table 4.16: Sample distribution of 'workload change (pre- vs. post-retirement)'

Workload change	n	Frequency (in rehired teacher respondents)
Largely decreased	30	25.0%
Moderately decreased	33	27.5%
Slightly decreased	36	30.0%
Remained the same	12	10.0%
Slightly increased	4	3.3%
Moderately increased	4	3.3%
Largely increased	1	0.8%
Total	120	100.0%

7. Income change as compared to pre-retirement stage.

Table 4.17: Sample distribution of 'income change (pre- vs. post-retirement)'

Work Income Change	*n*	*Frequency (in rehired teacher respondents)*
Largely decreased	3	2.5%
Moderately decreased	18	15.0%
Slightly decreased	27	22.5%
Remained the same	26	21.7%
Slightly increased	34	28.3%
Moderately increased	11	9.2%
Largely increased	1	0.8%
Total	120	100.0%

4.4.2 Data analyses for RQ3

RQ3 consisted of two sub-questions. The first sub-question concerned the effect of certain demographic factors on TPW. The second sub-question concerned whether the relationship between these demographic factors and TPW affected the rehired teachers and regular teachers differently.

To address RQ3, the researcher mainly adopted a regression-based moderation analysis to test whether the interaction effect of the variable 'teacher type' (coding: 0 = rehired teacher; 1 = regular teacher) on the relationship between each demographic factor and the participants' general SRPW level was significant. If the relationship was not significant, then only the main effects were reported. If it was significant, then the researcher further used the 'test of simple slope' method to examine whether the main effect was significant in each teacher group. Some categorical variables (e.g., institution type, gender) were not suitable to be examined by means of moderation analysis in terms of their relationship with the teachers' general SRPW. In such cases, an 'analysis of variance' analysis (ANOVA) or an independent-sample t-test was employed.

In addition, as mentioned in Chapter 3, there were some demographic factors associated with post-retirement career experience that were only applied to the rehired teachers. Hence, these demographic factors' relationship with the general SRPW level was only tested by a simple linear regression analysis, given that a moderation analysis was not applicable in their case.

Due to the large number of demographic factors, for clarity the researcher classified these factors into the following three groups:

1) Common factors that are continuous variables (note: 'common' here means these factors were applied to both rehired teachers and regular teachers)

2) Common factors that are categorical variables

3) Factors that are associated with post-retirement career experience, which only apply to rehired teachers

The relationship of these three groups of factors to the general SRPW score is discussed in the Sections 4.4.3 to 4.4.5 below.

4.4.3 Results regarding common factors (continuous variables)

In the moderation analyses, the variable 'teacher type' was set as the moderator, 'general SRPW score' was used as the dependent variable, and the following eight demographic factors were individually used as independent variables: age, health condition, teaching years, teaching hours, research hours, administrative work hours, work income satisfaction, and professional development opportunities. Table 4.18 presents the analysis results.

Table 4.18: Moderation analysis results: interaction effect

Demographic factor	Standardised Coefficients	Interaction Effect	
	β	t	p
Age	-0.659	-1.710	0.088
Health condition	-0.488	-2.077	0.039*
Teaching years	-0.188	-1.982	0.048*
Teaching hours	-0.153	-0.661	0.509
Research hours	0.044	0.352	0.725
Administrative work hours	-0.052	-0.383	0.702
Work income	0.340	1.881	0.061
Professional development	0.026	0.135	0.893

Dependent Variable: General SRPW Score
Note: Interaction terms were computed by the moderator 'teacher type' multiply by each demographic factor;

The moderation analysis results suggested that the relationship between general SRPW and two demographic factors, health condition and teaching years, was different for rehired teachers and regular teachers given that the interaction effect of the moderator 'teacher type' on such relationship was statistically significant. Therefore, for these two demographic factors, the researcher further employed the 'test of simple slope' method to examine whether the main effect was significant for each type of teacher.

The results of 'test of simple slope' analysis (TSSA) are shown in Table 4.19.

Table 4.19: TSSA results for the effects of 'health' and 'teaching years' on SRPW

Demographic Factor	Teacher Type	Simple Slope	SE	t	p
Health condition	Rehired teacher	1.021	0.200	5.105	<0.001**
	Regular teacher	0.504	0.148	3.398	<0.001**
Years of engaging in teaching	Rehired teacher	0.054	0.021	2.543	0.011*
	Regular teacher	-0.003	0.019	-0.155	0.877

The results of 'test of simple slope' analysis suggested that the relationship between health condition and general SRPW was significant for rehired teachers (unstandardised simple slope = 1.021, $p < 0.001$) and regular teachers (unstandardised simple slope = 0.504, $p < 0.001$). Generally, then, teachers with better health tended to have a higher level of general SRPW. However, regarding its effect on SRPW, the health condition factor was stronger for the rehired teachers than the regular teachers.

In addition, the relationship between teaching years and general SRPW was not significant for regular teachers (unstandardised simple slope = -0.003, $p = 0.877$) but was significant for rehired teachers (unstandardised simple slope = 0.054, $p = 0.011$). The results suggested that, for regular teachers, there was no linear relationship between their teaching years and general SRPW. However, for rehired teachers, the individuals with more teaching years tended to have a higher level of general SRPW.

The moderation analysis results also suggested that the effects of the following six demographic factors on general SRPW were roughly at the same level for rehired teachers and regular teachers: age, work income satisfaction, professional development opportunities, teaching hours, research hours, and administrative work hours. Therefore, a 'test of simple slopes' was *not* applicable for these factors. Here, the researcher only reports the results from a simple linear regression analysis that examined the linear relationship between each of these demographic factors and the general SRPW level. The analysis used 'general SRPW score' as the dependent variable and each of the above-mentioned six demographic factors individually as independent variables. Table 4.20 presents the analysis results.

Table 4.20: Regression results of six demographic factors on general SRPW

Demographic factor	*B*	*SEB*	*β*	*t*	*p*
Age	0.033	0.006	0.277	5.122	<0.001**
Work income satisfaction	0.805	0.093	0.436	8.614	<0.001**
Professional development	1.026	0.124	0.421	8.262	<0.001**
Teaching hours	-0.075	0.016	-0.262	-4.735	<0.001**
Research hours	0.022	0.013	0.097	1.718	0.087
Administrative work hours	-0.010	0.012	-0.047	-0.815	0.416

Dependent Variable: General SRPW Score

In sum, these regression analysis results suggested the following:

1) Participants' perceived professional development opportunities ($\beta = 0.421$, $t = 8.262$, $p < 0.01$), work-income satisfaction ($\beta = 0.436$, $t = 8.614$, p < 0.01), age ($\beta = 0.277$, $t = 5.122$, $p < 0.01$), and teaching hours ($\beta = -0.262$, $t = -4.735$, $p < 0.01$) significantly predicted their general SRPW score. In addition, professional development opportunities, work-income satisfaction, and age were positive predictors while teaching hours was a negative predictor.

2) Participants' weekly research hours ($\beta = 0.097$, $t = 1.718$, $p = 0.087$) or administrative work hours ($\beta = -0.047$, $t = -0.815$, $p = 0.416$) did not significantly predict their level of general SRPW.

4.4.4 Results regarding common factors (categorical variables)

The following three factors are categorical variables: (1) gender, (2) institute type, and (3) professional title. Thus, the analyses regarding their relationship with TPW needed a special statistical treatment.

1. Gender.

Because gender is a dichotomous variable, in SPSS the researcher set it as a dummy

variable (male = 1, female = 0). The two tables below present the outcomes from the t-test.

Table 4.21 presents the general SRPW level difference between males and females in terms

of their teacher type (rehired or regular). Table 4.22 presents the general SRPW level

difference between rehired teachers and regular teachers in terms of their gender.

Table 4.21: Female vs. male in terms of teacher type (rehired or regular)

H_0: Equal means between females (I) and males (J)

Teacher Type	*t*	*df*	*Mean Difference (I-J)*	*SE*	*p*
Rehired Teacher	0.02	118	0.006	0.278	0.984
Regular Teacher	1.332	129.525	0.407	0.306	0.185

Comparing Object: General SRPW score

Table 4.22: Rehired teachers vs. regular teachers in terms of gender

H_0: Equal means between rehired teachers (I) and regular teachers (J)

Gender	*t*	*df*	*Mean Difference (I-J)*	*SE*	*p*
Female	3.439	189	0.908	0.264	0.001**
Male	4.136	121.999	1.310	0.317	<0.001**

Comparing Object: General SRPW score

The t-test results suggested that, generally, for rehired teachers (t (118) = 0.020, p =

0.984) and regular teachers (t (129.525) = 1.332, p = 0.185), males and females did not differ

significantly in terms of their general SRPW score.

Further analysis also indicated that male and female rehired teachers had significantly

higher general SRPW scores than male and female regular teachers. Specifically, **for females**,

rehired teachers had a significantly higher general SRPW score (mean difference = 0.908, t

(189) = 3.439, p = 0.001) than regular teachers. **For males**, the rehired teachers' general

SRPW score was also higher (mean difference = 1.310, t (121.999) = 4.136, $p < 0.001$) than the general SRPW score for regular teachers.

In short, gender was not a significant predictor of teachers' general SRPW level.

2. Institution type.

As noted in Chapter 3, the current study recruited teacher participants from three different types of institution: public colleges, private colleges, and independent schools (Sanben colleges). A one-way between-subjects ANOVA was conducted to compare rehired teachers and regular teachers from these three institution types in terms of their general SRPW scores. Table 4.23 shows the ANOVA results.

Table 4.23: Test for mean difference between three institution types

Variation Source	*df*	*SS*	*MS*	*F*	*p*
Rehired Teacher					
Between Groups	2	14.391	7.196	3.285	0.041*
Within Groups	117	256.276	2.190		
Total	119	270.667			
Regular Teacher					
Between Groups	2	8.717	4.359	1.112	0.331
Within Groups	196	768.107	3.919		
Total	198	776.824			

Comparing Object: General SRPW Score

As shown in the table, the ANOVA results were not significant for regular teachers (F (2, 196) = 1.112, $p = 0.331$) but were marginally significant for rehired teachers (F (2, 117) = 3.285, $p = 0.041$). Given these findings, two post-hoc analysis measures for ANOVA—Tukey's HSD test and the Bonferroni test—were employed to conduct a pairwise

comparison between the rehired teachers of the three institution types. Table 4.24 presents the test results.

Table 4.24: Post-hoc test for mean difference between three institution types

Test Measure	Institution type (I)	Institution type (J)	Mean Difference (I-J)	*SD*	*p*
Tukey HSD					
	Public College	Private College	0.600	0.294	0.108
		Independent School	0.906	0.449	0.113
	Private College	Public College	-0.600	0.294	0.108
		Independent School	0.306	0.471	0.793
	Independent School	Public College	-0.906	0.449	0.113
		Private College	-0.306	0.471	0.793
Bonferroni					
	Public College	Private College	0.600	0.294	0.131
		Independent School	0.906	0.449	0.138
	Private College	Public College	-0.600	0.294	0.131
		Independent School	0.306	0.471	1.000
	Independent School	Public College	-0.906	0.449	0.138
		Private College	-0.306	0.471	1.000

Comparing Object: Rehired teachers' general SRPW Score

As shown in the table, the results from the Tukey's HSD and Bonferroni tests both suggested that the general SRPW score did not differ significantly for rehired teachers from the three types of institution.

In sum, the ANOVA results suggested that teachers working in public colleges, private colleges, and independent schools generally had the same level of general SRPW and that this result applied to rehired teachers and regular teachers. In other words, the institute type was not a significant predictor of teachers' general SRPW level.

3. Professional title

Although 'professional title' is a categorical variable, in the current study it was viewed as a continuous variable for regression analysis, given that this factor was not normally distributed among the two groups of teachers. Specifically, the rehired teachers were basically associate professors and full professors, whereas there were very few full professors among the regular teachers. Therefore, an ANOVA method was not applicable in this case.

Table 4.25 presents the results from the regression analysis.

Table 4.25: Regression results of 'professional title' on SRPW

Independent Variable	B	SE	β	t	p
Professional Title	0.522	0.101	0.278	5.162	<0.001**

Dependent Variable: General SRPW Score

The regression analysis results suggested that participants' professional titles could significantly predict their general SRPW score ($\beta = 0.278$, $t = 5.162$, $p < 0.001$), implying that the higher their professional title, the higher their level of general SRPW.

4.4.5 Results regarding rehiring factors

The following five demographic factors were associated with rehired teachers' post-retirement career experience: 1) years engaging in rehiring, 2) changes in income as compared to pre-retirement, 3) changes in workload as compared to pre-retirement, 4) whether the participant works for the same institution pre- and post retirement, and 5) whether the participant works in the same occupational area pre- and post retirement.

A simple linear regression analysis was employed to estimate the effects of the first three

factors, which were respectively named 'years engaging in rehiring', 'changes in income', and 'changes in workload', on the rehired teachers' level of general SRPW. The general SRPW score was used as the dependent variable and these three factors were individually used as independent variables. Table 4.26 presents the analyses results.

Table 4.26: Regression results of three rehiring-related factors on SRPW

Demographic factor	*B*	*SE*	*β*	*t*	*n*
Years engaging in rehiring	0.140	0.044	0.281	3.169	0.002**
Changes in income	0.070	0.104	0.062	0.675	0.501
Changes in workload	-0.095	0.105	-0.083	-0.900	0.370

Dependent Variable: General SRPW Score

The regression analysis results suggested the following:

1) Years engaged as a rehired teacher significantly predicted the rehired teachers' general SRPW ($β = 0.281$, $t = 3.169$, $p = 0.002$), suggesting that rehired teachers with more years of engaging in rehiring tended to have a higher level of professional well-being.

2) Changes in income ($β = 0.062$, $t = 0.675$, $p = 0.501$) and in workload ($β = -0.083$, $t = -0.900$, $p = 0.370$) as compared to the pre-retirement stage were not significant predictors of rehired teachers' general SRPW, suggesting that income and workload changes compared to pre-retirement stage did not affect rehired teachers' professional well-being.

A t-test was used to analyse the effect of the fourth factor, 'whether the participant works for the same institution pre- and post retirement', on their general SRPW. As this factor is a dichotomous variable, the researcher divided rehired teacher participants into two groups according to whether they were serving the same institute (coding: 0) or not serving the same

institute (coding: 1). The table below presents the t-test results.

Table 4.27: T-test results of rehired teachers with different rehiring choices

Comparing Object	Mean Difference	SD	t	df	p
General SRPW score	-0.434	0.276	-1.574	118	0.118

The t-test results suggested that no significant difference existed between the two groups of rehired teachers (t (118) = -1.574, p = 0.118) regarding the fourth factor. This result implied that, on average, rehired teachers who work in institutes that are not the ones they worked in before retirement had the same level of general SRPW as rehired teachers working in the same organisation they worked in before retirement.

Regarding the fifth factor, 'participants' occupation before retirement', due to the limitation of the sampling method, the researcher only managed to collect five questionnaires from participants who were not teachers before retirement. Therefore, he was not able to compare the SRPW scores of rehired teachers who were also teachers before retirement to the scores of those who were not. The researcher discusses this limitation in Chapter 6.

4.5 Qualitative analysis results and findings

The qualitative analyses were conducted for two purposes. As mentioned in previous sections, in addressing RQ1, the quantitative analysis results offered robust evidence that TPW comprises seven main components. The first purpose of the qualitative analysis, then, was to supplement the quantitative finding by looking at 'how these seven TPW components manifest in the teachers' career experience'. To achieve this goal, the interviewees' comments were categorised into seven overarching themes in accord with the seven TPW components. Then, content analysis was employed to look for sub-themes that could generalise the meaning of the comments relating to each overarching theme.

The second purpose of the qualitative analysis was to complement the findings of the quantitative results regarding RQ2 by looking for clues for interpreting the detected differences between rehired teachers and regular teachers in terms of professional well-being. There were mainly **two sources** of qualitative data available to achieve this purpose.

The first source was the frequency of interviewees' positive and negative comments on each TPW component sub-theme. The researcher subdivided the comments to align them with the sub-themes (one comment could be related to one or more sub-themes) and to determine whether each comment implied a positive or negative attitude on the part of the interviewee. For example, for the theme 'support and relationships,' a positive expression would be 'my colleagues are so nice to me' and a negative expression would be 'I can hardly get any support from the administrators'. The positive and negative comment frequency for each sub-theme was then calculated (see Section 4.5.1 for the detailed calculation method), and the results for the rehired teachers and regular teachers were compared.

The current study looks at the positive and negative aspects of the interviewees' comments, rather than focus on just one of those aspects. It does so because, as Kvale (2007) suggested, in interview practice, if an interviewee does not mention a theme, it does not mean he or she considered that theme to be unimportant. Rather, their perceptions related to that theme may simply not have come to his or her mind during the interview, or he or she may have considered the theme to not be worth mentioning. For example, while the rehired teachers interviewed in the current study seldom mentioned their feelings about job stability, this does not mean they thought job stability was unimportant to them or suggest they were satisfied or dissatisfied with their current job stability. Instead, they might have simply thought they did not need to mention this point. Such failures to mention sub-themes inevitably lead to a decrease in their comment occurrence frequency. Therefore, for the researcher, interpreting an interviewee's comment from just one perspective would not best

serve the current study's research objectives.

The second qualitative data source was the rehired teachers' perceptions regarding the difference between their pre- and post-retirement career experience. Their main viewpoints toward this were generalised to aid in interpreting the difference between rehired teachers' and regular teachers' professional well-being. This part of the analysis results is discussed in Section 4.5.3.

4.5.1 Calculation method for comment occurrence frequency

Under one facet (positive/negative) of each sub-theme, each interviewee's comment was counted only once. For example, for the sub-theme 'recognition from students,' even if an interviewee made several mentions of his/her experience of being respected by students, the researcher treated these comments in aggregate as one comment in terms of the positive facet of this sub-theme.

Sometimes an interviewee had positive and negative experiences under one sub-theme. For example, one interviewee mentioned that an administrator once disparaged her, which made her feel frustrated for a long time. But later she also mentioned that she was happy because another administrator appreciated her capability. She therefore contributed two comments in terms of the sub-theme 'Recognition from Administrators,' one positive and one negative.

The occurrence rate for comments was calculated as (Occurrence Frequency) / [(Number of Sub-themes) * (Number of Interviewees)]. Take the occurrence rate of rehired teachers' comments related to the overarching theme 'recognition' as an example. The theme 'recognition' comprises **five** sub-themes. Given that the sample of interview participants contained **eight** rehired teachers in total, ideally, each of the rehired teachers would mention all five sub-themes. Hence, the maximum comment frequency would be 5 * 8 = **40**. In reality,

the total number of rehired teachers' comments for these five sub-themes was **23**, so the occurrence rate was 23 / 40 = 57.5%. Similarly, regular teachers, of whom the sample contained **nine**, provided **12** comments related to the 'recognition' theme, so the rate was 12 / (9 * 5) = 26.7%.

4.5.2 Sub-themes and their comment frequency.

Appendix 4-3 displays the initial results from the content analysis, that is, there the interviewees' original comments have been categorised into the seven overarching themes (representing the seven TPW components). Note that a short term or sentence in parentheses follows each comment. The term or sentence represents the sub-themes related to the comment.

Sections 4.5.2.1 to 4.5.2.7 introduce the sub-themes under each TPW component and the occurrence frequency of interviewees' positive/negative comments related to the sub-themes. Note that this chapter only provides the results drawn directly from the content analysis. The contribution of such results to answering RQs is discussed in Chapter 5.

4.5.2.1 Professional competence.

The following five sub-themes were synthesised from comments that interviewees made regarding their self-perceived professional competence:

1) Self-perceived professional knowledge: the extent to which teachers believe they have the professional knowledge necessary for their work.

2) Self-perceived teaching skills, including the perceived competence in 1) turning abstract or boring knowledge points into lively and interesting course content, 2) dealing with complicated classroom situations (i.e., students in one classroom having different levels of ability or learning foundations), 3) motivating students, and 4)

mastering classroom discipline and controlling student misbehaviours.

3) Self-perceived work attitude and effort: the extent to which teachers believe they have been working hard enough to improve themselves, to satisfy students, to look for appropriate solutions for solving work-related problems, or to carry out professional requirements effectively under unsatisfactory conditions.

4) Self-perceived moral quality: the extent to which teachers believe they have the moral quality necessary for the teaching profession. Interviewees mentioned this sub-theme frequently when describing stories about things they had done to help students. From their perception, the 'required moral quality for a qualified teacher' was generally associated with characteristics such as empathy, sympathy, integrity, tolerance, and thoughtfulness.

5) Self-perceived capability to manage relationships with students: teachers' perceived capability in managing their interpersonal relationships with students during lectures and during extracurricular activities.

Table 4.28 presents the occurrence frequency and rate for the sub-themes under 'professional competence' theme.

Note that in the table, N(Rehired) and N(Regular), respectively, represent the number of rehired teachers and the number of regular teachers who made the comment(s) related to the sub-theme (the same as in the following tables in Sections 4.5.2.2 to 4.5.2.7).

Table 4.28: Comment frequency for sub-themes of 'professional competence'

Subsidiary themes	Positive comment		Negative comment	
	N (Rehired)	N (Regular)	N (Rehired)	N (Regular)
Self-perceived professional knowledge	6	6	0	1
Self-perceived teaching skills	5	3	0	1
Self-perceived work attitude and effort	6	6	0	0
Self-perceived moral quality	4	3	0	0
Self-perceived capability to manage relationships with students	4	3	0	1
Sum (rate)	25 (62.5%)	21 (46.7%)	0 (0.0%)	3 (6.7%)

According to the table, rehired teachers had a moderately higher positive comment rate (62.5%) and a slightly lower negative comment rate (0%) than regular teachers' rate (46.7% and 6.7%, respectively).

4.5.2.2 Autonomy.

The following four sub-themes were extrapolated from the interviewees' comments related to autonomy:

1) Autonomy in selecting teaching materials: teachers' perceived decision-making power in selecting preferred textbooks or teaching materials or their perceived rights and opportunities for participating in textbook editing.

2) Autonomy in arranging extracurricular time: the extent to which a teacher perceives he/she can freely arrange his/her extracurricular time to handle affairs outside classroom teaching. From the interviewees' perspective, extracurricular time refers to the time that teachers spend on daily professional work other than lecture time, for example, time preparing the lecture, supervising students' assignments or theses,

doing research, or handling administrative affairs.

3) Autonomy in designing lecture content: the extent to which a teacher can determine his/her course content based on syllabi.

4) Autonomy in choosing instructional mode: the extent to which a teacher can determine how to teach. Some schools have strict requirements regarding teachers' teaching posture (i.e., whether the teacher should stand during the lecture time or can take a seat), teaching tools (e.g., PowerPoint, blackboard writing, microphone), dressing style, courseware, and so on. Other schools pay little attention to these details as long as the teachers can follow the syllabus scheme and satisfy the students.

Table 4.29 presents the occurrence frequency and rate for the sub-themes under 'autonomy' theme:

Table 4.29: Comment frequency for sub-themes of 'autonomy'

Subsidiary themes	Positive comment		Negative comment	
	N (Rehired)	N (Regular)	N (Rehired)	N (Regular)
Autonomy in selecting teaching materials	2	2	2	1
Autonomy in arranging extracurricular time	3	2	1	4
Autonomy in designing lecture content	6	5	1	3
Autonomy in choosing the instructional mode	3	2	1	3
Sum (Rate)	14 (43.8%)	11 (30.6%)	5 (15.6%)	11 (30.6%)

According to the table, rehired teachers had a slightly higher rate of positive comments (43.7%) and a slightly lower rate of negative comments (12.5%) than regular teachers' rate (30.6% and 30.6%, respectively).

4.5.2.3 Recognition.

The following five sub-themes emerged from comments that interviewees made regarding their perception of recognition:

1) Recognition in the form of student gratitude or respect: this form of recognition relates, for example, to high SET (Students' Evaluation of Teaching) scores, good feedback from students, or meaningful actions by students that show their appreciation.

2) Recognition from administrators, and

3) Recognition from peers: teachers' experience of being appreciated, respected, or praised by their superiors or peers.

4) Recognition in the form of receiving a profession-related award: this form of recognition relates to intramural and extramural awards in teachers' professional areas. The intramural awards frequently mentioned relate to a school's appraisal activity such as the president's awards for outstanding performance in teaching, research, and knowledge transfer. Extramural awards are usually related to teaching skills competitions.

5) Recognition in terms of occupational identity: this form of recognition relates to interviewees' experience of being respected by others because of their occupation as teachers or their perception of whether teaching is a respected career.

Table 4.30 presents the occurrence frequency and rate for the sub-themes under 'recognition' theme:

Table 4.30: Comment frequency for sub-themes of 'recognition'

Subsidiary themes	Positive comment		Negative comment	
	N (Rehired)	N (Regular)	N (Rehired)	N (Regular)
Recognition in the form of student gratitude or respect	7	5	1	1
Recognition from administrators	5	5	0	2
Recognition from peers	3	1	0	1
Recognition in the form of receiving a profession-related award	3	2	0	0
Recognition in terms of occupational identity	4	1	0	0
Sum (rate)	22 (55.0%)	14 (31.1%)	1 (2.5%)	4 (8.9%)

According to the table, rehired teachers had a moderately higher rate of positive comments (55%) and a slightly lower rate of negative comments (2.5%) than regular teachers' rate (31.1% and 8.9%, respectively).

4.5.2.4 Aspiration.

The following three sub-themes were assigned to the aspiration theme based on the interviewees' comments:

1) Ambition for job achievements and promotions, including ambition to obtain research achievements, win profession-related awards, and earn promotions that advance their professional titles.

2) Aspiration for professional knowledge or qualification enhancements, including ambition to gain new professional knowledge and skills, engage in mid-career training programmes, or seek more advanced academic degrees (e.g., PhD).

3) Interest in current and future work, including interest in current work or expectations of and interest in trying new things at the current university in the future.

Note: When an interviewee revealed his/her intention to leave a job or leave the current university in the near future, the researcher coded his/her related comment as a negative expression of the sub-theme 'interest in current and future work'.

Table 4.31 presents the occurrence frequency and rate for the sub-themes under 'aspiration' theme:

Table 4.31: Comment frequency for sub-themes of 'aspiration'

Subsidiary themes	Positive comment		Negative comment	
	N (Rehired)	N (Regular)	N (Rehired)	N (Regular)
Ambition for job achievements and promotions	0	5	0	1
Aspiration for professional knowledge or qualification enhancements	3	7	0	0
Interest in the current and future work	3	4	4	4
Sum (rate)	6 (25.0%)	16 (59.3%)	4 (16.7%)	5 (18.5%)

According to the table, rehired teachers had a much lower rate of positive comments (25.0%) and a slightly lower rate of negative comments (16.7%) than regular teachers' rate (59.3% and 18.5%, respectively).

4.5.2.5 Burnout.

The following four sub-themes were extrapolated from the interviewees' comments related to burnout:

1) Burnout caused by heavy workload: Heavy workload is a relative concept given that the ability to cope with stress varies among teachers. In the interviewees' perception, heavy workload could be interpreted to be a workload that is beyond a teacher's

endurance. In addition, feelings of an effort-reward imbalance can also contribute to workload-related burnout.

2) Burnout caused by student misbehaviour: This type of burnout relates to different types of student misbehaviours. These can include being absent from or late for class, making noise in class, being impolite, cheating on tests, and plagiarising an assignment or graduation thesis.

3) Burnout caused by frequent overtime: The interviewees see overtime as work that occupies their personal leisure time. As such, this concept is not part of the heavy workload concept.

4) Burnout caused by meaningless work assignments: Interviewees viewed meaningless work as work that is irrelevant to their professional area or formulaic work that is separate from their teaching practice and thus meaningless and a waste of time.

Table 4.32 presents the occurrence frequency and rate for the sub-themes under 'burnout' theme:

Table 4.32: Comment frequency for sub-themes of 'burnout'

Subsidiary themes	Positive comment		Negative comment	
	N (Rehired)	N (Regular)	N (Rehired)	N (Regular)
Burnout caused by heavy workload	5	2	1	5
Burnout caused by student misbehaviour	1	0	2	4
Burnout caused by frequent overtime	0	1	0	3
Burnout caused by meaningless work assignment	1	1	1	4
Sum (rate)	7 (21.9%)	4 (11.1%)	4 (12.5%)	16 (44.4%)

According to the table, rehired teachers had a moderately higher rate of positive comments (21.9%) and a much lower negative rate (12.5%) than regular teachers' rate (11.1% and 44.4%, respectively) regarding absence of burnout.

4.5.2.6 Support and relationships.

Theoretically speaking, work support and workplace relationships are two different concepts. The former is official in nature, and the latter is usually unofficial and interpersonal. Therefore, the interview data related to these concepts should be coded into different schemes. However, in data coding, the researcher discovered that it was difficult to distinguish between the two given that they were usually mentioned together and that the participants seemed to view them as one. Therefore, only two sub-themes could be summarised from the comments related to the support and relationship theme:

1) Support from and relationship with superiors

2) Support from and relationship with peers

Table 4.33 presents the occurrence frequency and rate for the sub-themes under 'support and relationships' theme:

Table 4.33: Comment frequency for sub-themes of 'support and relationships'

Subsidiary themes	Positive comment		Negative comment	
	N (Rehired)	N (Regular)	N (Rehired)	N (Regular)
Support from and relationship with superiors	4	4	0	2
Support from and relationship with peers	5	5	2	2
Sum (rate)	9 (56.3%)	9 (50.0%)	2 (12.5%)	4 (22.2%)

According to the table, in terms of the theme 'support and relationships', rehired teachers had almost the same level of positive comment rate (56.3%) and a slightly lower level of negative comment rate (12.5%) than regular teachers' rate (50.0% and 22.2%, respectively).

4.5.2.7 Job satisfaction.

In the qualitative analysis stage, there was an issue with identifying the comments that could be particularly useful for instantiating job satisfaction. Unlike the previous six TPW factors (professional competence, aspirations, autonomy, recognition, support and relationships, and burnout), which have relatively explicit definitions and scopes, job satisfaction is an ambiguous term (Evans, 1997). The concept's scope is much bigger than that of the other factors and also overlaps them considerably.

Specifically, summarising the definitions from the most-cited academic articles regarding job satisfaction (Locke, 1969; Brayfield & Rothe, 1951; Wanous, Reichers, & Hudy, 1997; Judge et al., 2001), this concept may relate to factors such as the work itself (meaning in work), payment, welfare, promotions, growth opportunities, recognition, working conditions, relationships with superiors and peers, top leadership, policies, the presence of a humanistic atmosphere, work motivation, and ambition. Some of these job satisfaction indicators have already been covered under the previous six factors.

Given this situation, for the content analysis, the researcher shrank the scope of job satisfaction by excluding any areas that overlapped with the other six factors. Therefore, in the current study, an inevitable discrepancy exists between the connotations of job satisfaction in the quantitative analysis and the qualitative analysis. The thesis discusses the potential limitations associated with such discrepancies in Chapter 6.

For the current study, the researcher identified the following six sub-themes related to

the job satisfaction theme:

1) Satisfaction with the physical facility, including teachers' satisfaction with classroom equipment (e.g., PC, networks, air-conditioning, audio systems), course management systems (e.g., Moodle), libraries, and experimental facilities.

2) Satisfaction with academic atmosphere, including teachers' perception of students' learning attitude and learning initiative, intramural academic exchange opportunities, and classroom atmosphere (whether students respond to classroom discipline).

3) Satisfaction with work income and welfare, including teachers' perceptions of fairness of wages within the programme and within the higher-education profession at large. The welfare could be monetary in nature such as bonuses or non-monetary—for example, many interviewees viewed summer and winter breaks as a common non-monetary welfare benefit for college teachers.

4) Satisfaction with job stability: This relates to teachers' sense of security that they can engage in their work for a long time—even until retirement—without unexpectedly losing their jobs.

5) Satisfaction with campus location and transportation, including teachers' feelings about the school location (e.g., the distance from city centre), the transportation situation, and the school bus arrangement (e.g., schedule, route).

6) Satisfaction with career prospects, including teachers' feelings about professional training opportunities, job promotion opportunities, career path, and opportunity for overseas training programmes (e.g., as a visiting scholar).

Table 4.34 presents the occurrence frequency for the sub-themes under 'job satisfaction' theme:

Table 4.34: Comment frequency for sub-themes of 'job satisfaction'

Subsidiary themes	Positive comment		Negative comment	
	N (Rehired)	N (Regular)	N (Rehired)	N (Regular)
Satisfaction with physical facility	0	2	2	5
Satisfaction with academic atmosphere	4	3	2	3
Satisfaction with work income and welfare	5	4	1	4
Satisfaction with job stability	0	4	0	0
Satisfaction with campus location and transportation	1	0	0	3
Satisfaction with career prospect	0	3	0	4
Sum (occurrence rate)	10 (20.8%)	16 (29.6%)	5 (10.4%)	19 (35.2%)

According to the table, rehired teachers' positive comment rate (20.8%) was slightly lower than the rate for regular teachers' (29.6%), but their negative comment rate (10.4%) was much lower than the regular teachers' rate (35.2%).

4.5.3 Viewpoints drawn from pre- and post-retirement work experience.

As mentioned earlier, the second qualitative data source for identifying differences between rehired teachers and regular teachers was the rehired teachers' perceptions of the differences between their pre- and post-retirement career experiences. These data were collected via two interview questions: 'What does a post-retirement career mean to you?' and 'Are there any differences in your job experience before and after retirement?'

Appendix 4-4 presents the rehired teacher interviewees' original comments regarding their perceptions of differences between their pre- and post-retirement life. These comments are categorised according to the seven TPW components. At the end of each comment, a short term in parentheses appears that contains the corresponding points synthesised from all

comments. These points are introduced below.

1. Professional competence.

Only two interviewees made comments related to professional competence regarding the differences in their pre- and post-retirement experience. Both mentioned the following two viewpoints.

(1) Richer teaching experience

The two interviewees believed that, as older teachers, their teaching experience was richer than that of younger teachers. The post-retirement work also offered them the opportunity to consolidate their teaching techniques and to continue to gain teaching experience.

(2) More time to improve teaching quality

The two interviewees also suggested that, since being rehired, they no longer had to engage in chores irrelevant to teaching; hence, they could spend all their energy and time on improving their teaching quality.

2. Autonomy.

Two viewpoints emerged from the comments related to work autonomy.

(1) More autonomy and freedom from surveillance

Four interviewees stated that as rehired teachers, compared to their pre-retirement experience, they had more autonomy at work and experienced less surveillance from the administration.

(2) More flexible work schedule

Four interviewees mentioned that their work arrangement during the post-retirement stage was more flexible. They had more freedom to arrange extra-curricular work, and the school usually considered their personal convenience when setting the lecture schedules.

3. Recognition.

Two viewpoints were synthesised from the comments related to recognition:

(1) More respect from others

Three interviewees sensed that, compared to their pre-retirement experience, people now treated them with more respect.

(2) More trust from others

Four interviewees noted that being rehired was an honourable thing because it meant the college still needed them and that others recognised and trusted their capability.

4. Aspirations.

Reduced work aspirations because of aging: three interviewees mentioned a pre- vs. post-retirement difference regarding aspirations. All of their comments suggested a decline in their work aspirations due to aging.

5. Absence of Burnout.

Three viewpoints emerged from the comments related to absence of burnout.

(1) Scaled-back workload

Four interviewees said that, compared to their pre-retirement experience, their workload had decreased. In fact, three of them suggested their workload had greatly decreased.

(2) Fewer types of professional work

Four interviewees stated that they used to undertake different types of professional work such as teaching, research, and administrative tasks and that sometimes they were obliged to do work they preferred not to do. Since being rehired, however, they have only needed to focus on one or two types of work that they like.

(3) More age-related fatigue

One interviewee mentioned that she could feel the negative effects of aging. Although the workload was not heavy, she still felt tired at times.

6. Support and relationships.

Only two interviewees made comments related to differences in the support and relationships they had pre- and post-retirement. One interviewee felt that, since being rehired, she received more work support and empathy from her colleagues given that she was now older. In contrast, another interviewee suggested that he sometimes had difficulty in managing interpersonal relationships with others or obtaining support at work because he no longer held an administrative role. Before retirement, he was vice president of the university.

These results suggest that rehired teachers' perceptions of changes in support and relationships depend on their specific situations. In general, for individuals, the support and relationships factor was relatively stable, that is, it was not greatly affected by retirement.

7. Job satisfaction.

Two viewpoints emerged from the comments related to job satisfaction.

(1) Work income change

Six interviewees commented on changes in their work income. Five people reported that, compared to pre-retirement, they now earned more money because their income included their wages plus their pensions. One person reported having a lower income.

(2) Higher sensitivity to physical facility

One interviewee suggested that, because of her physical degeneration due to aging, some physical facility issues that she had not cared about before had gradually become troublesome.

Summary of Chapter 4

This chapter has further illustrated how the raw data were analysed using quantitative and qualitative approaches. The quantitative analysis results generally supported the theoretically suggested seven-factor TPW structure. The results also suggested that, compared to regular teachers, rehired teachers had significantly higher levels in all four types of SRPW. The rehired teachers also tended to have higher self-reported levels in the particularized TPW factors that contributed most strongly to the rehired teachers' and regular teachers' level of well-being, such as 'job satisfaction' and 'absence of burnout'. In addition, two demographic factors 'health condition' and 'teaching years' were found to affect rehired teachers and regular teachers differently in terms of their professional well-being. Specifically, compared to regular teachers, the health condition factor was more significant for the rehired teachers regarding its effect on general SRPW, while the teaching years factor was a significant predictor for rehired teachers' SRPW but not for that of regular teachers.

Results from the subsequent qualitative analyses provided supplementary knowledge for analysing the quantitative results. Using content analysis with thematic categorisation of the interview responses, the researcher generalised different sub-themes from that interviewees' comments that aligned with the seven TPW components. These sub-themes were further used to substantiate these components with participants' actual career experience.

The results obtained from comparing how often rehired teachers and regular teachers made positive and negative comments on each sub-theme suggested that rehired teachers tended to be much more optimistic than regular teachers in terms of most TPW components. In addition, the viewpoints generalised from the rehired teachers' perceived pre- and post-retirement career differences suggested that, compared to regular teachers, rehired teachers were more confident about their professional competence, more satisfied with their work income, workload, and work autonomy, and perceived themselves as receiving more

work-related recognition. However, they were more passive than regular teacher in terms of work aspiration.

The conclusions regarding the main findings presented in this chapter appear in Chapter 5 following the comparison of the current study's results with the findings from other related studies.

Chapter 5: Discussion

The previous chapter presented the results of this study's quantitative and qualitative analyses. This chapter summarises the answers to the three RQs that were formulated based on the current study's findings and the findings presented in other related studies.

In accordance with the three main research questions, Chapter 5 comprises three sections. Section 5.1 discusses the current study's answer to RQ1, which is related to the main components of TPW and to the manifestation of these components in teachers' career experiences.

Section 5.2 focuses on answering RQ2. Given the dearth of previous studies on how the characteristics of rehired teachers differ from those of regular teachers, the analysis results addressing RQ2 cannot be directly compared to past work. Therefore, the RQ2 discussion focuses on comparing the qualitative and quantitative findings from the current study that are relevant to this question.

Section 5.3 presents an answer to RQ3 that was formulated by synthesising the current study's quantitative analysis results regarding the relationship of work-related demographic factors to TPW and the related findings from previous studies.

5.1 Discussion for RQ1

     As noted in previous chapters, RQ1 has three sub-questions: 1) What are the main components of teachers' professional well-being? 2) How does each of these factors contribute to the well-being? 3) How do these factors manifest in teachers' career experience? Section 5.1.1 discusses the answering of the first and second sub-question while Section 5.1.2 discusses the answering of the third sub-question.

5.1.1 TPW and its main components.

     Referring back to the conceptual frameworks laid out in Chapter 2 in which the researcher assumed that teachers' professional well-being (TPW) mainly comprises of seven components: professional competence, job satisfaction, aspiration, recognition, autonomy, support and relationships, and absence of burnout. As described in Chapter 4, the results from CFAs had provided robust evidences in support of this assumption, and the regression analyses provided results on the strength regarding the effects of these seven factors on teachers' general level of self-rated professional well-being (SRPW). Figure 5.1 summarises the regression analysis results in terms of the effects of these seven factors on teachers' general SRPW .

Figure **5.1:** Effects of the seven TPW components on teachers' general SRPW
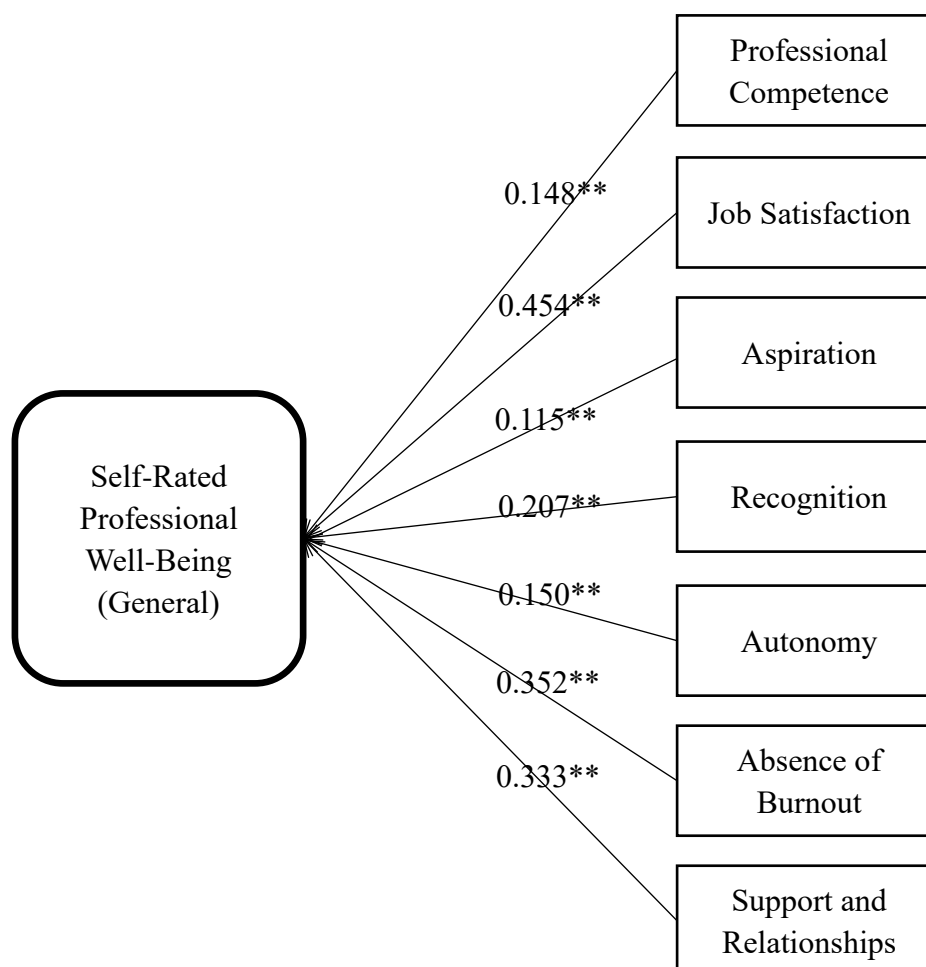
Note: the numbers presented in the figure are the standardised regression coefficients (*β*). The asterisk sign '*' means the effect was significant at *p* < 0.05 level, and the double asterisk sign '**' means the effect was significant at *p* < 0.01 level.

The regression analysis results also suggested that job satisfaction seems to be the most powerful predictor of TPW as it explained 20.61% of the variance in the general SRPW level. The results for the other six factors, ranked from highest to lowest in terms of explaining the variance in the general SRPW level, were: absence of burnout (12.39%), support and relationship (11.10%), recognition (4.29%), autonomy (2.25%), professional competence

(2.19%), and aspiration (1.32%).

These results were somewhat consonant with Yildirim's (2015) research findings. Using Turkish basic education teachers as a research sample, Yildirim tested five theoretically suggested determinants for TPW: 'self-efficacy', 'job satisfaction', 'recognition', 'aspiration', and 'autonomy'. His quantitative results suggested that job satisfaction, self-efficacy, and recognition were important determinants for TPW, with job satisfaction being the most powerful one. However, his study did not find aspiration and authority to be important determinants. Likewise, the results of the current study suggested that job satisfaction was the strongest TPW factor. Also, compared to the other factors, the results suggested that the effect of autonomy and aspiration on TPW was relatively weaker, as each of them explained a smaller proportion of the general SRPW's variance. Despite this, the current study suggested that autonomy and aspiration were still important components of TPW. Therefore, regarding these findings, the current study only partly supported Yildirim's results.

The biggest difference between Yildirim's findings and those of the current study related to two factors: support and relationships, and absence of burnout. Yildirim did not consider these factors in his study, while the current study found them to be rather important components of TPW. Indeed, in the current study's regression analysis, support and relationships, and absence of burnout had the second and third strongest impacts on TPW, respectively.

The current study's results also only partly supported the findings of Van Horn et al. (2004). Van Horn et al. asserted that professional well-being is one dimension of occupational well-being and that professional well-being is composed of three factors: 'professional competence', 'aspiration', and 'autonomy'. They also suggested that job satisfaction belongs to another dimension of occupational well-being called 'affective well-being', and they divided burnout into 'emotional exhaustion' and 'depersonalisation',

categorising the former under 'affective well-being' and the latter under 'social well-being'. Given these disparities, it is difficult to explain the inconsistency between the current study's findings and those of Van Horn et al.

The current study's findings were mostly consonant with the findings of Butt and Retallick (2002) and Retallick and Butt (2004) in terms of the key components of TPW. The two Butt and Retallick studies suggested that teachers' feelings regarding 'the trust and respect from people around', 'autonomy', 'efficacy', 'workplace relationships', and 'professional competence' played important roles in their professional health and well-being. As the two Butt and Retallick studies were conducted using qualitative research methods such as biographical and autobiographical techniques, the current study provided quantitative support for their qualitative findings.

Babenko (2018) investigated the roles of 'autonomy', 'competence', and 'relatedness' in physicians' professional well-being and found that the 'relatedness', that is, interpersonal relationships with others, contributed strongly to physicians' professional well-being. In addition, Babenko found that professional competence and autonomy also contribute to professional well-being, although the effect was weaker compared to that of relatedness. These findings also seem consistent with the current study's findings.

Cassidy et al. (2016) categorised the factors that influence TPW to include the 'teachers' feeling of work', 'autonomy', '(job) satisfaction', 'actual wages', and 'perception of wage fairness'. The current study did not include wages (or wage satisfaction) as a component of TPW, as the researcher considered the teachers' perception of wage fairness to be contained in the factor 'job satisfaction'. In the current study, 'work income satisfaction' was treated as an exogenous demographic factor. Its relationship with the TPW is discussed later in Section 5.3.1.

Lauermann and Konig (2016) used just one factor—the 'teachers' likelihood of

experiencing burnout''attitude toward challenge'to conceptualise professional well-being. The researcher of the current study tends to disagree with approaches that only use one or two factors to measure TPW as he believes that professional well-being is a complicated construct that incorporates multiple work-related variables. In the current study, although absence of burnout was found to be an important component of TPW, its impact was not strong enough to explain the entire picture of TPW.

Soini, Pyhaltö, and Pietarinen (2010) focused on one specific aspect of TPW, pedagogical well-being, and defined four indicators for this concept: 'professional efficacy', '(job) satisfaction', 'engagement', and 'authority'. Their results complemented those of the current study, as the current study did not pay close attention to TPW in each specific domain of the participants' professional work, i.e., teaching. The current study focused mainly on the teachers' overall, general feelings toward their professional work. Therefore, although the current study's questionnaire contained questions related to teachers' SRPW in teaching, research, and administrative works, the main purpose of those question were to help respondents think more clearly about their general SRPW.

To sum up, in terms of the components of professional well-being, the current study's findings are somewhat inconsistent with those of previous studies. The researcher identified two main factors that may have contributed to this inconsistency.

The first factor is that different researchers may have adopted different definitions for the concept of professional well-being and for each component of professional well-being. The definitions for these concepts are still subject to debate, and thus every researcher has his or her own theoretical framework regarding the components of professional well-being. For example, researchers who use only the 'job satisfaction' factor to conceptualise professional well-being might see job satisfaction as a concept with a broad meaning that could

encompass employees' perception of other factors such as autonomy, workplace relationships, and absence of burnout.

The second factor—which is the one the researcher was particularly interested in—is the influence from the research site's local socio-cultural context. The researcher paid special attention to this possibility because, as noted in earlier chapters, due to the translation issue, there have been few empirical studies of teachers' professional well-being in Mainland China. This prompted the researcher to wonder how China's socio-cultural context contributed to the inconsistency between the current study's findings regarding professional well-being components and those of previous studies.

Of course, the researcher understands that the collected data is far from conclusive on this topic. Nevertheless, the researcher speculates that the current study's findings regarding the 'manifestation of TPW components in teachers' career experience' could shed some light on this socio-cultural context suspense.

In Chapter 4, the thesis mentions that, to address the third sub-question of RQ1—'How does each TPW component manifest in teachers' career experience?—the researcher synthesised several sub-themes from the comments interviewees made about their perception of each of the seven TPW factors. In the following sections, the researcher compares the current study's findings regarding those sub-themes to the findings from previous studies that discussed the components, determinants, or dimensions of each of these seven factors. Through the comparison, the researcher can investigate whether some sub-themes not commonly mentioned in previous studies might be unique to the current study. Based on the analysis of such sub-themes unique to this study, the researcher then discusses the characteristics of Chinese teachers' professional well-being, as well as what local socio-cultural factors might contribute to these characteristics.

5.1.2 Sub-themes of TPW components.

5.1.2.1 First component: Recognition.

The following five sub-themes were synthesised from comments interviewees made regarding their perception of recognition:

- Recognition in the form of the students' grateful or respectful attitude

- Recognition from administrators

- Recognition from peers

- Recognition in the form of receiving a profession-related award

- Recognition in terms of occupational identity

In general, most of these sub-themes had been mentioned in previous work. For example, Andrews (2011) suggested that, for teachers, recognition can come in the form of professional awards or from a few words from students, principals, parents, or political bodies that praise some effort made by the teacher. Hong and Lv (2018) also claimed that sometimes simple praise from the students or colleagues can be unexpectedly and powerfully inspirational for teachers.

In contrast, the sub-theme 'recognition in terms of occupational identity' seems to be one seldom covered by previous studies. One reason for this neglect might be the assumption of the Chinese tradition of 'showing great respect to teachers.' From the records going back to ancient books, China has had a time-honoured history of 'honouring teachers' (Hao, 2019). For example, the Confucian classic 'Note of Learning [學記]' stated that 'in pursuing the course of learning, the difficulty is in securing the proper reverence for the master. When that is done, the course (which he inculcates) is regarded with honour' (p. 229, Dai, 2016). The 'Note of Learning' also stated that honouring teachers is a part of the traditional rite and discipline: when the master is teaching, even the 'son of heaven' ([天子], usually referring to the emperor of one country), has to be modest and show respect to him (Dai, 2016). A famous

poet from the Tang Dynasty, Han Yu [韩愈], also mentioned in his classic 'Shi Shuo [师说]' that 'those who wanted to learn would seek out a teacher, one who could propagate the doctrine, impart professional knowledge, and resolve doubts' (*China Daily*, English version of 'Shi Shuo', 2017). In sum, in Chinese traditional thinking, the teaching is definitely viewed as an honourable career with high social status because the teachers' role is not only to give knowledge but also, more importantly, to 'propagate the doctrine'.

It is worth noting that many Chinese researchers have suggested that the actual status and conceptual status of the teaching profession have been contradictory over Chinese history. Specifically, in traditional thought, teaching has always been considered to be a noble, superordinate career, while in fact, in ancient and modern times, teachers have been relatively underprivileged in terms of their economic treatment and political status (Li, 2016; Ye & Lu, 2012; Jing & Zhou, 2019). Therefore, the researcher believes that such 'recognition in terms of occupational identity' experienced by the interviewees of the current study could be related to not only each interviewee's individual social status but also the traditional cultural context of China.

In addition, when the interviewees tried to describe their feeling of receiving recognition from others, they usually mentioned improvements in working motivation, loyalty to the school, teaching performance, and work creativity. This finding is consistent with other research results regarding the relationship between employees' perceived recognition and their work enthusiasm and performance (Blase & Kirby, 1992; Godkin, Parayitam, & Natarajan, 2010; Gillat & Sulzer-Azaroff, 1994).

5.1.2.2 Second component: Aspiration.

Three sub-themes were assigned to the aspiration theme based on the interviewees' comments:

- Ambition for job achievements and promotions

- Aspiration for professional knowledge or qualification enhancements

- Interest in the current and future work

These sub-themes are basically in accord with the existing theories on work aspiration, which suggest that aspiration usually manifests in relation to an individual's future prospects and plans for professional development (Van Horn et al., 2004; Laws, 1976; Warr, 1990).

In addition, when discussing about work aspirations, many interviewees had also simultaneously made comments relating their job satisfaction, their feeling toward working environment, and their work motivation. This observation is consistent with Warr's (1990) theory, which suggested aspiration should be considered as an indicator for employees' work-related mental health, because 'aspiration is a behaviour in transactions with the environment through which level of psychological health is exhibited' (p. 196).

It is worth noting here that the current study and previous studies exhibited a major difference regarding the work aspiration sub-theme 'attitude toward challenge'. Previous studies suggested that 'attitude toward challenge' is one of most important indicators of aspiration, and the existing literature generally agrees that employees with a high level of work aspiration tend to be more willing to face challenges, take on challenges, and make use of challenges to facilitate their professional development (Palmer et al., 1965; Van Horn et al., 2004; Loughlin & Barling, 1998). In contrast, the interviewees in the current study seldom mentioned their attitude toward challenge or even the word 'challenge' itself.

To uncover a reason for this inconsistency, the researcher checked the current study's quantitative findings. As noted, in the survey questionnaire used in the data collection process, there are two items that subordinate to the factor 'aspiration' which related to employees' attitude toward challenge. As the researcher discovered, after his TPW structure was modified based on the CFA results, nearly one-third of the items in the original structure were deleted.

However, these two items on 'challenge' were retained because they were found to have very strong loadings on the 'aspiration' factor. This result suggested that, same as teachers of Western countries, for Chinese teachers, 'attitude toward challenge' should also be an important indicator of their work aspiration.

The inconsistency on 'attitude toward challenge' between the current study and previous studies, then, might have been caused by a semantic issue—for example, the interviewees may have preferred terms like 'opportunity' or 'personal effort' to 'challenge'. This preference, however, does not preclude attitude toward challenge from being a determinant of their aspirations. Unfortunately, the current study was unable to examine or ascertain the validity of this assumption from the collected data.

5.1.2.3 Third component: Support and relationships

As mentioned in Chapter 4, according to Butt and Retallick (2002) and Retallick and Butt (2004), the interview data related to work support and workplace relationships should be coded into different schemes. They suggested that teachers' perceived relationships with their administrators and peers could be characterised by four sub-themes: 'collegial support', 'recognition, respect, and trust', 'mutual caring', and 'social cohesiveness'.

However, in the current study's qualitative data analysis, the researcher discovered that it was difficult to distinguish between the concepts of support and relationships in the interviewees' comments, given that these concepts were usually mentioned together and that the participants seemed to view them as one. Specifically, it seemed that the interviewees generally believed that a supportive working environment should also be harmonious and friendly and vice-versa. Therefore, the current study only generalised two sub-themes under the 'support and relationships' theme:

- Support from and relationship with superiors

- Support from and relationship with peers

The variation in the sub-theme definitions between the current study and two Butt and Retallick's studies could stem from cultural differences. This sub-section then discusses the possible cultural reasons for such an occurrence.

Hofstede, Hofstede, and Minkov (2010) claimed that collectivism is one of the most significant values held by Chinese people. Furthermore, Yang (2002) suggested that, under the influence of traditional Confucianism, the collectivism embraced by the Chinese people is a typical 'in-group collectivism', that is, the Chinese people are willing to put the 'group' interest above their personal interest. This 'group' does not refer to a formal organisation but rather an 'in-group' within the organisation. Li, Ling, and Liu (2012) added that this 'in-group' is formed by a group of people with good interpersonal relationships. The 'in-group' provides its members with sense of security and sense of belonging. It also helps members support each other (Huangpu, Jiang, & Zhang, 2013). Therefore, in such 'in-groups', 'interpersonal relationships' serve as the source of 'support' at the organisational and individual levels.

In addition, Law et al. (2000) found that, in Chinese organisations, an interpersonal relationship between a subordinate and a superior that developed based on social interactions that were irrelevant to work-related occasions could significantly affect the official workplace relationship between them. Indeed, the interpersonal relationship could even influence the superior's work-related decisions relating to that subordinate.

Likewise, Zheng (2006) suggested that, in organisations run by ethnic Chinese, the superiors usually categorise their subordinates according to factors such as interpersonal relationships between the subordinate and superior, the subordinate's degree of loyalty as perceived by the superior, and the subordinate's capability. Thus, the superiors tend to treat the subordinates in these categories differently and give special care to subordinates who

have close relationships with them. In other words, in Chinese organisations, employees who have good relationships with their superiors are likely to obtain more opportunities for promotion and better rewards.

Similarly, in terms of the employee-peer relationship, Huang and Hu (2010) suggested that, in Chinese organisations, employees tended to allocate their limited resources to those who have high level of interpersonal interaction with them. Wu, Guan, and Ma (2015) called this phenomenon 'organisational politics'. They also found that the more profoundly the employees perceived the existence of such 'organisational politics' in their workplace, the more time and energy they tended to spend on constructing workplace relationships with others to gain the support and resources they needed.

As summarised in the above discussion, the current study's participants were likely influenced by the Chinese 'in-group' collectivistic values as well as their particular local organisational culture. Thus, they tended to believe that the interpersonal relationships with and support from superiors and peers were indivisible.

5.1.2.4 Fourth component: Autonomy.

With the autonomy theme, the following four sub-themes were derived from the interviewees' comments:

- Autonomy in selecting teaching materials
- Autonomy in arranging extracurricular time
- Autonomy in designing lecture content
- Autonomy in choosing the instructional mode

The core concept of these four sub-themes might best be described as 'perception of freedom'. In short, the interviewees viewed autonomy to be the perceived extent of freedom they had regarding a certain task or a certain facet of their professional work. This

interpretation is consonant with that of Breaugh (1985), who defined work autonomy as the extent to which an individual is granted freedom to perform a job task.

The classic literature that discussed the structure and components of work autonomy—for example, Charters (1976), Pearson and Hall (1993), and Friedman (1999)—had covered most of the autonomy sub-themes in the current study. However, 'autonomy in arranging extracurricular time' seems to be an exception. The reason might be that many of these previous theories were developed using basic education or secondary education teacher participants, while the current study's participants are college teachers. The professional work of college teachers is more complicated. In Mainland China, a college teacher's 'working hour' may include the lecture time, the time needed to prepare lectures, the time needed for conducting research and, in some cases, administrative work (Liu, 2015; Lu et al., 2010). In other words, for Chinese college teachers, much work must be done at extracurricular time, and therefore the extent of freedom they have in arranging this time is an important aspect of their perceived work autonomy. Future studies may want to consider this factor when designing and testing instruments to measure Chinese college teachers' work autonomy.

5.1.2.5 Fifth component: Professional competence.

Five sub-themes were synthesised from interviewees' comments associated with the teachers' perceived professional competence:

- Self-perceived professional knowledge
- Self-perceived teaching skills
- Self-perceived work attitude and effort
- Self-perceived moral quality
- Self-perceived capability to manage relationships with students

In aggregate, these sub-themes suggested that, from the interviewees' perspective, professional competence can be understood as the extent to which one teacher believes his/her competence is sufficient to accomplish professional work, or all the required capabilities for a qualified teacher.

In terms of perspectives taken from other research literature, the concept of professional competence has been suggested to comprise components such as work motivation, beliefs regarding teaching, professional knowledge and skills, and self-regulatory capability (Lauermann & König, 2016; Kunter et al., 2013; Skaalvik & Skaalvik, 2007; Friedman & Kass; 2002; Warr, 1990). These suggested components of professional competence mostly corresponded with the sub-themes of professional competence that synthesised in the current study.

However, one important sub-theme of professional competence in the current study, 'self-perceived moral quality', was seldom mentioned in the existing literature. One reason could be that the government in Mainland China has been using the slogan 'morality, intelligence, physique, and aesthetics [德智體美]' to represent its requirements for any work position for many years, and having morality appear first in the slogan to stress its primary importance (Tian, 2011). Moreover, in Mainland China, the most commonly used format of cadre's[3] self-evaluation report is to ask individuals to describe their competence and achievements in these four areas: 'morality, capability, attitude, and performance [德能勤績]' (Lu & Han, 2004; Shi & Cui, 2004; Xie, 2011), with the space for the morality self-evaluation always appears first on the report. Therefore, it is possible that teachers in Mainland China have been encouraged to keep the notion of morality at the forefront of their thinking when judging their professional competence.

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[3] As mentioned in Chapter 1, in Mainland China, teachers belong to the cadre group. This group is roughly similar to the civil service system in other countries.

5.1.2.6 Sixth component: Burnout

Four sub-themes were extrapolated from the interviewees' comments related to burnout:

- Burnout caused by heavy workload

- Burnout caused by student misbehaviour

- Burnout caused by frequent overtime

- Burnout caused by meaningless work assignments

These sub-themes can be viewed as different stressors associated with teachers' professional work. All of them were mentioned in Forlin's (2001) research, which generalised 24 common potential stressors for teachers, including administrative, classroom-based, and personal stressors.

In addition, the following burnout syndromes were generalised from the interviewees' comments in the current study: mental fatigue, low work motivation, a low sense of fulfilment, a low perception of whether the work is meaningful, a reduced feeling of self-efficacy, and negative, callous, or excessively estranged attitudes toward students. These syndromes basically fell within the scope of the three dimensions of Maslach and Jackson's (1986) job burnout construct: emotional exhaustion, depersonalisation, and reduced personal accomplishment.

The interviewees' comments regarding burnout also suggested that the relationship between work stressors and burnout depended on their perceived professional competence and work aspirations. Interviewees with a high work motivation and confidence regarding their professional competence tended to take on heavy workloads and viewed work stress as a kind of opportunity for professional development. This finding is consistent with the results of existing studies that discuss the relationship between work stressors, self-efficacy (or coping strategies), and burnout (Yu et al. 2015; Antoniou et al., 2013; Betoret, 2009; Skaalvik & Skaalvi, 2010).

In general, the current study's findings regarding the sub-themes of burnout were basically consistent with those of previous studies, that is, no new sub-themes were discovered.

5.1.2.7 Seventh component: Job satisfaction.

Six sub-themes were derived from the interviewees' comments associated with job satisfaction:

- Satisfaction with the physical facility

- Satisfaction with the academic atmosphere

- Satisfaction with work income and welfare

- Satisfaction with job stability

- Satisfaction with campus location and transportation

- Satisfaction with career prospects

Most of these sub-themes fall within the scope of job satisfaction suggested by previous studies. One exception was 'satisfaction with job stability', which is not commonly mentioned in the existing literature, even in the classic studies that use a broad definition of job satisfaction (e.g., Locke, 1969; Brayfield & Rothe, 1951; Wanous, Reichers, & Hudy, 1997). Comments from interviewees who mentioned this sub-theme in the current study suggested that the local, newly graduated job seekers generally prefer and highly value stable, long-term, and low-risk careers and that, in most people's perception, the college teaching profession is considered to be a career of this type.

In addition, the sub-theme of job stability was only mentioned by four interviewees. These were all regular teachers, which means no rehired teachers mentioned it. This result suggested that this sub-theme might come up more often if the study recruited more regular teacher participants. The reason for this disparity might be that, relatively speaking, rehired

teachers are not that concerned about job stability as most of them receive pensions that cover their living costs. That said, little evidence could be found in the related literature to support this inference.

In terms of why 'satisfaction of job stability' became a unique sub-theme discovered by the current study, the researcher believes that the occupational values of young Chinese could be one of the most important contributors. The Chinese General Social Survey [中國綜合社會調查] (CGSS) conducted in 2015 contained the following question relating to people's occupational values: "In terms of the following work-related rewards, which one is the first thing that you want to get from your ***intended*** job? Which is the second thing? Which is the third thing?" The question provided 12 options that represent 12 types of work-related rewards. The respondents were asked to choose three of the options according to their degree of preference. The 12 options were 1) high income, 2) long-term security regarding the job, 3) social prestige and respect, 4) more work-related authority, 5) satisfying personal interest, 6) opportunities for promotion, 7) short working hours, 8) expanding human relations in society, 9) having the chance to serve for the public and to make contributions to society, 10) giving play to personal talents and acquiring a sense of achievement, 11) generous disposable personal time, and 12) others (Chinese National Survey Data Archive, 2015). Based on the CGSS data for participants aged 18 to 40, through a weighted approach for synthesising the respective data from the respondents' first, second, and third choices, Zhang and Ye (2019) calculated the weighted proportion of people who chose each option. According to their analysis results, 'high income' (68.4% weighted proportion) and 'long-term security regarding the job' (45.0% weighted proportion) were the two most popular options. These proportions were substantially higher than the third ranked option, 'satisfying personal interest' (17.2% weighted proportion). The weighted proportion for the other options ranged from 4% to 12.6%.

Based on such results, Zhang and Ye (2019) inferred that young Chinese job seekers value 'job stability and security' so much—second only to 'high work income'—because, due in part to China's industrial restructuring in recent years, generally the job market workforce far exceeds the number of jobs available. The employment pressure for young Chinese people is growing day by day. Meanwhile, the instability of job positions is also increasing. Li and Liu (2019) suggested that the recent trade war between China and America may further exacerbate this situation. All these factors give young Chinese job seekers, in general, a sense of insecurity and thus they especially value job stability.

5.2 Discussion for RQ2

RQ2 concerns the characteristics of rehired teachers differ from those of regular teachers in terms of professional well-being. Given the scarcity of previous studies on this subject, the analysis results addressing RQ2 cannot be directly compared to past work. In the current thesis, the discussion of such results, then, focuses on a comparison of the current study's qualitative and quantitative findings.

As mentioned in Chapter 4, the results from t-test suggested that rehired teachers may generally have a higher level of professional well-being, given they scored significantly higher than regular teachers on all four types of SRPW (general SPRW, and SRPW in teaching, research, and administrative work).

The current study initially employed a quantitative analysis approach to explore the potential reasons for these differences. The t-test was used again to test the means of difference in each particularized TPW factor's score between the rehired and regular teachers. The results suggested that rehired teachers generally had higher levels of professional competence, job satisfaction, and support and relationship, and a lower level of work burnout. However, the t-test result also revealed that the rehired teachers' work aspiration was weaker

than that of regular teachers, and that no significant difference existed between rehired teachers and regular teachers regarding the level of perceived work autonomy and recognition.

In sum, rehired teachers had relatively higher SRPW levels compared to regular teachers, even though they had scores lower than or equivalent to regular teachers for the factors 'aspiration', 'autonomy', and 'recognition'. Next, the thesis discusses how did the researcher search for the potential clues that might explain this occurrence from the quantitative and qualitative findings.

5.2.1 Clues from quantitative findings

The researcher first checked the differences between rehired teachers and regular teachers in terms of the relationship between their level of general SRPW and their levels in the seven particularized TPW factors. Figure 5.2 summarises the regression analysis results in terms of the effect of the seven factors on rehired teachers' and regular teachers' general SRPW, respectively. Note that the numbers presented in this figure are the standardised regression coefficient (β). The asterisk sign '*' means the effect is significant at $p < 0.05$ level, and the double asterisk sign '**' means the effect is significant at $p < 0.01$ level.

Figure 5.2: Effects of TPW components on SRPW (Rehired vs. Regular)
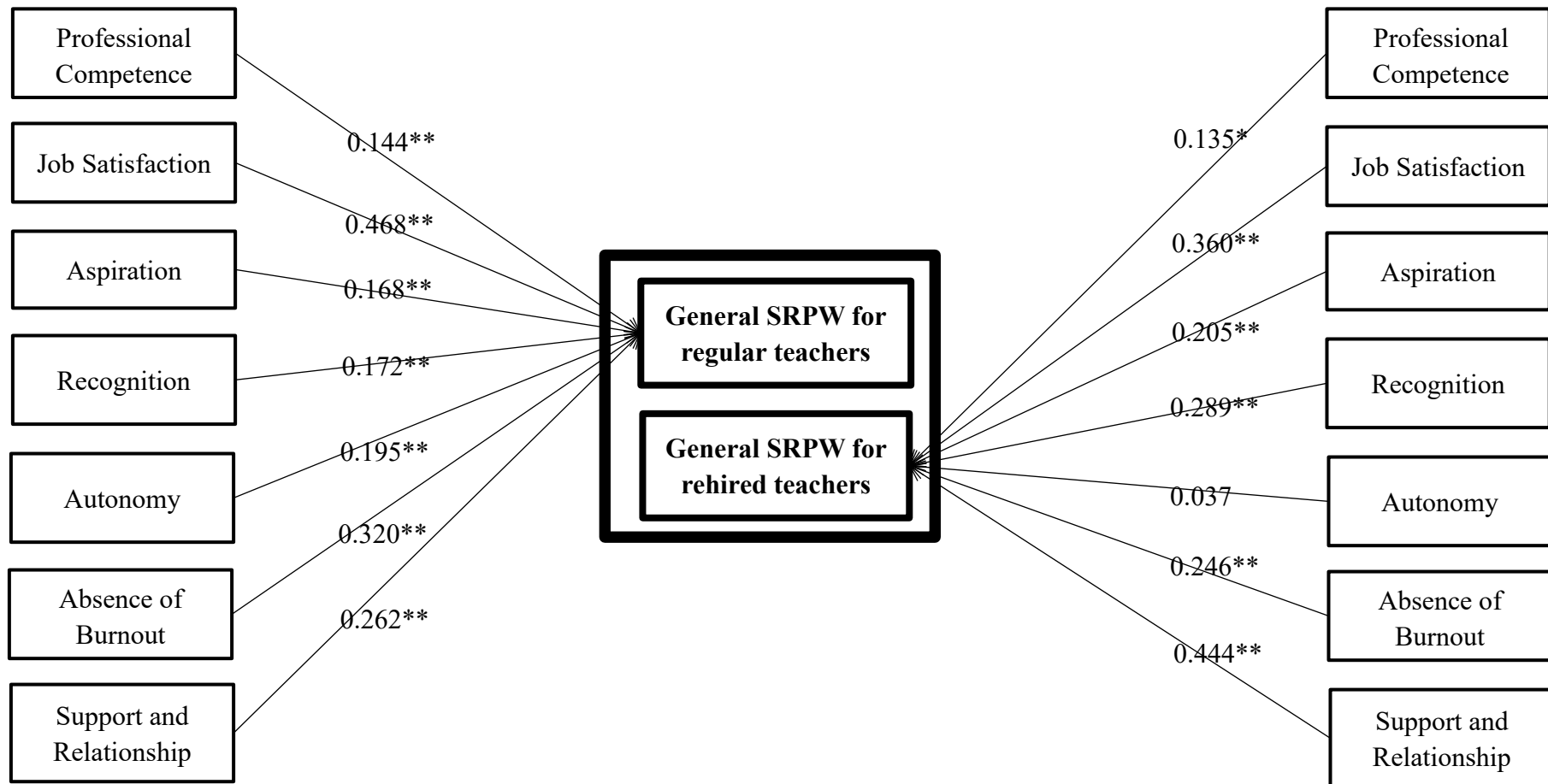
The regression analysis results also provided the rank order for the seven factors in terms of the percentage of the variance in the general SRPW score. In descending order, for **rehired teachers**, the rankings were support and relationships (19.10%), job satisfaction (10.50%), recognition (7.95%), absence of burnout (5.66%), aspirations (3.96%), professional competence (1.64%), and autonomy (0.12%). For **regular teachers**, the rankings were job satisfaction (20.98%), absence of burnout (9.67%), support and relationships (6.66%), autonomy (3.69%), recognition (2.89%), aspirations (2.62%), and professional competence (1.99%).

These results from regression analyses suggested that rehired teachers achieved higher scores in the factors that are most important for both types of teacher, e.g., support and relationships, job satisfaction, and absence of burnout. Regarding the aspiration factor, the ranking for rehired teachers (sixth out of seven factors) was lower than that for regular teachers (fourth out of seven factors); therefore, relatively speaking, rehired teachers' low level of aspiration might have not affected their general SRPW level too much.

In short, the quantitative analysis results suggest that rehired teachers had a higher level of general SRPW, because they were much more content in terms of those particularized TPW factors that are most important for all college teachers. Therefore, although rehired teachers did not have a significant advantage in some factors such as aspiration, recognition, and autonomy, the effect of these three factors on teachers' general SRPW was relatively weaker compared to the other four factors.

5.2.2 Clues from qualitative findings

After examining the interviews, the researcher realised the reason for the above-summarised differences between rehired teachers and regular teachers is complicated, which could be associated with changes in China's social context and educational policy, as

well as in people's perspective on teaching profession that occurred between the pre- and post-Mao periods. For example, some rehired teachers mentioned that they now feel satisfied with their profession because they had lived through the Great Cultural Revolution, a time when teaching was disparaged as an inferior occupation.

For this reason, to control the research scope, the current study did not explore the underlying reasons behind the differences. Nevertheless, by generalizing the qualitative findings, there are indeed some clues that might shed some light on such differences.

As mentioned in Chapter 4, two aspects of the qualitative results might render some clues regarding the differences between rehired teachers' and regular teachers' professional well-being. The first is from the comparison of how often the rehired teacher and regular teacher interviewees made positive and negative comments that align with each of the seven TPW components. The second is from the rehired teachers' personal feelings regarding the difference between their pre- and post-retirement work. The thesis discusses these two aspects in the following two points.

1. Comparing of comment frequency.

In Chapter 4, the thesis presented seven sheets to show the frequency of the interviewees' positive comments and negative comments under each sub-theme (see Sections 4.5.2.1 to 4.5.2.7). Table 5.1 presents a summary of these seven sheets, which, again, summarised the overall comment frequency for each of the seven TPW components.

Table 5.1: Summary of comment frequency for the seven TPW components

TPW components	Occurrence frequency: Positive comment		Occurrence frequency: Negative comment	
	N (Rehired)	N (Regular)	N (Rehired)	N (Regular)
Professional Competence	25 (62.5%)	21 (46.7%)	0 (0.0%)	3 (6.7%)
Job Satisfaction	10 (20.8%)	16 (29.6%)	5 (10.4%)	19 (35.2%)
Aspiration	6 (25.0%)	16 (59.3%)	4 (16.7%)	5 (18.5%)
Recognition	22 (55.0%)	14 (31.1%)	1 (2.5%)	4 (8.9%)
Autonomy	14 (43.8%)	11 (30.6%)	5 (15.6%)	11 (30.6%)
Support and Relationships	9 (56.3%)	9 (50.0%)	2 (12.5%)	4 (22.2%)
Absence of Burnout	7 (21.9%)	4 (11.1%)	4 (12.5%)	16 (44.4%)

As shown in Table 5.1, rehired teachers had a higher positive comment rate compared to regular teachers for all particularized TPW factors except job satisfaction and work aspiration. At the same time, the rehired teachers' negative comment rate was lower than that of the regular teachers for all seven factors, with four factors in particular—job satisfaction, recognition, absence of burnout, and professional competence—the rehired teachers tended to be much more optimistic than the regular teachers. This result was roughly consistent with the t-test result from the quantitative analysis which discussed earlier.

2. Comparing of pre- and post-retirement career experience

The following general observations were derived from the rehired teachers' viewpoints regarding the differences between their pre- and post-retirement careers (for more details on these viewpoints, see Section 4.5.3). These observations also provide some clues as to why rehired teachers commonly have a higher level of professional well-being than regular teachers.

1. Rehired teacher interviewees were generally satisfied with their post-retirement income and welfare. According to them, their income mainly comprised their wages and bonuses from re-employment work and their pensions. Even without the re-employment work income, the pension was sufficient to cover their living expenses compared to the pre-retirement income as their living expenses had largely declined.

2. Rehired teachers were generally confident regarding their professional competence because they had worked for a long time in their professional area and they knew that only retired professionals with recognised competence have the opportunity to be rehired.

3. Compared to their pre-retirement period work, rehired teachers had a lighter workload and fewer work stressors.

4. Although rehired teachers had a relatively lower level of work aspirations and many of them expressed their intention to retire fully soon, these occurrences seemed not to be caused by factors related to their professional well-being. Specifically, their reasons for quitting were usually something about being 'too old to keep working', 'wanting to try another way of life', or 'needing to take care of other personal affairs'.

That said, after synthesising all qualitative findings, including the rehired teachers' perceptions of pre- and post-retirement differences, as well as the above-mentioned comparison of the occurrence of positive and negative comments, the researcher found the following two points to be inconsistent with the quantitative findings:

1. Rehired teachers had more freedom and work autonomy and less surveillance from administrators.

2. Rehired teachers perceived themselves as receiving more work-related recognition and as being more likely to evoke respect from the people around them due to China's traditional 'respect for seniors and elders' and the fact that rehired teachers generally had profound professional knowledge and advanced professional qualifications.

The inconsistency between the quantitative and qualitative findings regarding these two points is this: the qualitative findings suggested that rehired teachers should have a higher level of perceived work autonomy and recognition, while the quantitative results showed that, between the two types of teachers, there was no statistically significant difference in the self-reported levels of autonomy and recognition.

Given the scarcity of related literature that might offer comparable results, it is not easy to interpret this inconsistency in the current study. One possibility for its occurrence is the small size of the interviewee sample, that is, the two viewpoints described above only apply to the eight rehired teachers interviewed.

5.3 Discussion for RQ3

RQ3 consisted of two sub-questions. The first sub-question concerned the effect of certain demographic factors on TPW. The second sub-question concerned whether the relationship between these demographic factors and TPW affected the rehired teachers and regular teachers differently.

In this section, the thesis discusses the relationship between the demographic factors and TPW found in the current study, as well as related findings from previous studies. Because the number of previous studies that specifically focused on professional well-being was limited, therefore, the author also looked at the studies that discussed the relationship between such demographic factors and other concepts of teachers' well-being such as

'teachers' general well-being', 'teachers' subjective well-being', and 'teachers' occupational well-being'.

Referring back to the conceptual frameworks presented in Chapter 2, the current study mainly examined the effect of 14 demographic factors on teachers' general SRPW. These selected demographic factors included nine common factors applicable to all research participants and five post-retirement career factors that applied only to the rehired teacher participants. The nine common factors are: work income satisfaction, teaching years, weekly working hours, professional title, institution type, professional development opportunities, gender, age, and health condition. The five post-retirement career factors are: years engaging in rehiring, changes in workload as compared to pre-retirement, changes in income as compared to pre-retirement, whether working for the same institution pre- and post-retirement, and whether working in the same occupational area pre- and post-retirement.

Among the nine common factors, two were found to affect rehired teachers and regular teachers differently in terms of their general SRPW. These two factors are 'teaching years' and 'health condition'. Figure 5.3 summarises the results from the 'test of simple slope' approach.

Figure 5.3: Test of simple slope results for 'teaching years' and 'health condition'
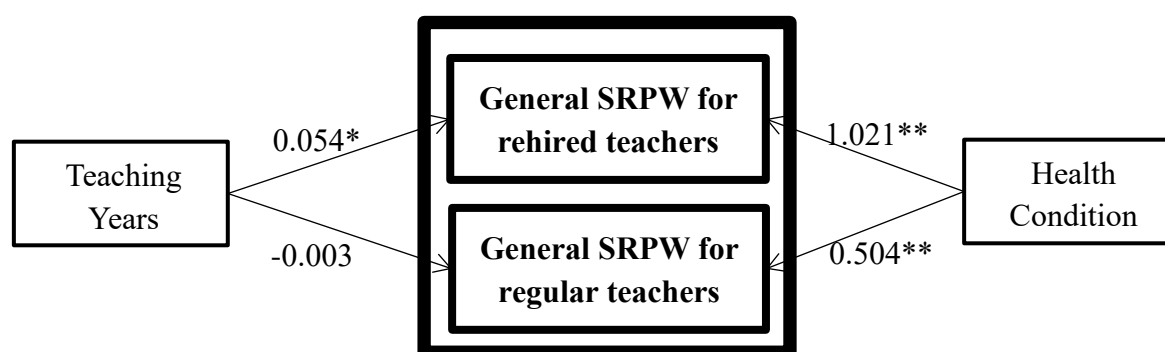
Note: the numbers presented in the figure are the unstandardised simple slopes. The asterisk sign '*' means the effect was significant at $p < 0.05$ level, and the double asterisk

sign '**' means the effect was significant at $p < 0.01$ level.

The thesis discusses these findings in the two sections below:

5.3.1 Health condition.

In the current study, the regression analysis results suggested that teachers with better health condition tend to have higher general SRPW level. This result is consistent with many previous studies that found that health condition was positively associated with Chinese people's subjective well-being (Appleton & Song, 2008; Knight, Song, & Gunatilaka, 2009; Monk-Turner & Turner, 2011).

Meanwhile, the results from the 'test of simple slope' also indicated that, compared to regular teachers, health condition was a more significant factor for the rehired teachers regarding its effect on professional well-being. The age difference might be one reason why health was more strongly related to rehired teachers' professional well-being. As people's health (physical and mental) declines as they age (Schaie & Baltes, 1996; Wahl, Schilling, Oswald, & Heyl, 1999) and as rehired teachers are older people, their health definitely plays a more important role in their sense of well-being compared to the regular teachers, who are much younger.

5.3.2 Teaching years.

In the current study, 'teaching years' was found to be a significant predictor for the general SRPW of rehired teachers but not for regular teachers, which means, for the rehired teachers, people with more teaching experience tended to have a higher level of professional well-being.

One possible reason for why teaching years could not significantly predict regular teachers' SRPW is that the current study used, in its analysis approach, the 'simple ***linear***

regression method', while some previous studies on Chinese teachers suggested that the relationship between teaching years and teachers' well-being is ***curvilinear*** (Mao et al., 2008; Qiu, Zhang, & Yao, 2007; Sun, Jiang, & Chen, 2016).

In the current study, the researcher did not split the participants into different groups according to teaching years to further test whether this curvilinear relationship existed. This choice was made because the study's focus was on the rehired teachers, and there was no need to divide rehired teachers into different teaching-year groups because the range of years was not long.

As to why teaching years is a significant predictor for rehired teachers' SRPW, given the scarcity of related literature the researcher could only presume that this occurred because rehired teachers with more teaching years were also more likely to have longer 'years engaged in rehiring'. The impact of 'years engaged in rehiring' on professional well-being is later discussed in Section 5.3.9.

The other seven common factors—work income satisfaction, weekly working hours (including three sub-factors: teaching hours, research hours, and administrative work hours), professional title, institution type, perceived professional development opportunities, gender, and age—were found to affect rehired teachers and regular teachers ***roughly the same*** in terms of their general SRPW. Figure 5.4 summarises the results from the regression analyses in terms of the effects of these demographic factors on teachers' general SRPW. Note that the numbers presented in this figure are the standardised regression coefficients (β). The asterisk sign '*' means the effect was significant at $p < 0.05$ level, and the double asterisk sign '**' means the effect was significant at $p < 0.01$ level.

Figure 5.4: Regression results of demographic factors on SRPW
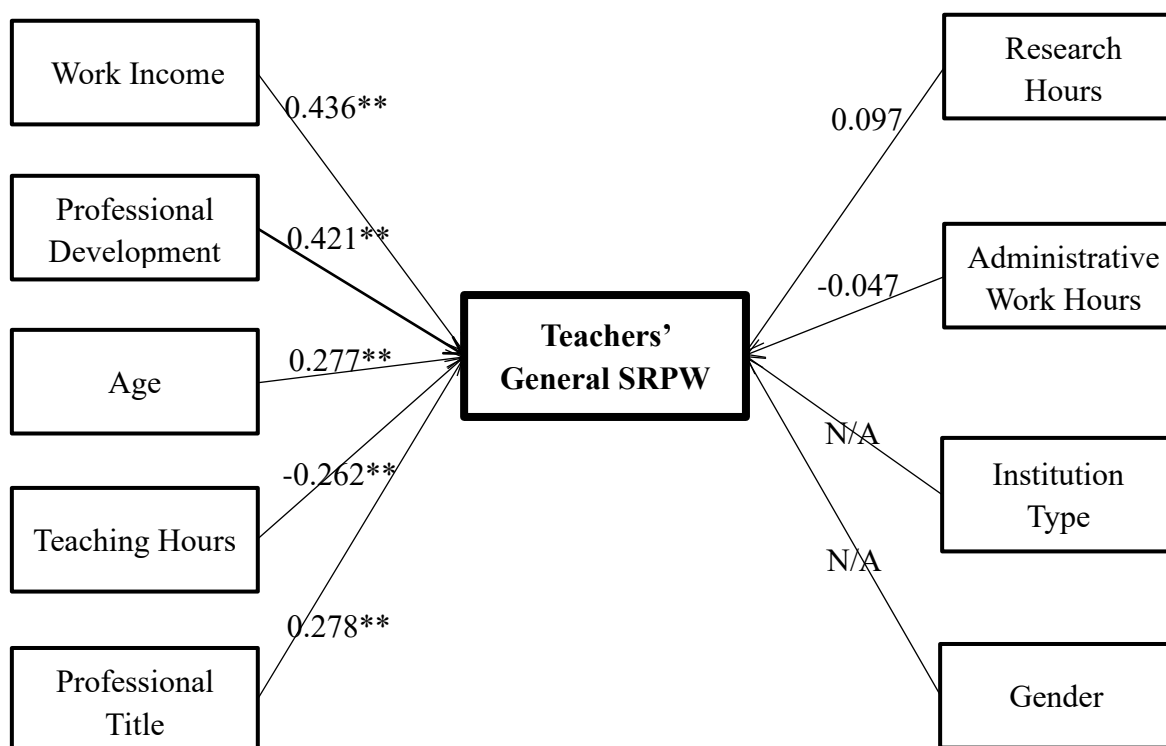
Note: N/A means that the effect of those demographic factors on the general SRPW is not estimated by means of regression analysis method, due to the categorical nature of these variables.

In sum, for both rehired teachers and regular teachers, work income, professional development opportunities, age, weekly teaching hours, and professional title were all significant predictors of their general SRPW, while weekly hours spent on research, weekly hours spent on administrative work, institution type, and gender were not significant predictors. The following Sections 5.3.3 to 5.3.8 discuss the findings relating to these seven factors.

5.3.3 Age.

The effect of age on teachers' well-being is controversial among existing studies. Some have suggested the effect is significant (Fisher, Francis, & Johnson, 2002; Mao et al., 2007), some have suggested the effect is insignificant (Habibzadeh & Allahvirdiyani, 2011; Hu, 2015), and some have suggested the relationship between age and teachers' well-being is curvilinear (Sevastos, Smith, & Cordery, 1992).

The current study's results suggested that age has a significantly linear relationship with general SRPW, that is, older teachers tend to have higher level of professional well-being. Among the current study's survey respondents, 37% were rehired teachers whose age was over 55. Therefore, to control for the confounding effect of the age difference between rehired teachers and regular teachers, the study separately tested the relationship between age and general SRPW for these two types of teachers. The test results showed that the relationship between age and general SRPW is roughly at the same level for rehired teachers and regular teachers, which is significant.

5.3.4 Work income and professional development opportunities.

In the current study, the demographic factors 'work income satisfaction' and 'professional development opportunities' could positively predicted the general SRPW of both rehired teachers and regular teachers. This result is consistent with common sense. Nonetheless, it is worth noting that many researchers argued that, while at one point in time the relationship between people's sense of well-being and work income was statistically significant (Diener et al., 1999; Easterlin, 1995; Hsee, Yang, Li, & Shen, 2009), the results from longitudinal studies suggested that, from a long-term perspective, this correlation is not as strong as common sense might suggest or even rather weak (Veenhoven, 1991; Argyle, 1987; Headey, Veenhoven, & Wearing, 1991; Veenhoven, 1996). Some studies even found

that, while the participants' work income increased over time, their subjective well-being did not increase (Blanchflower & Oswald, 2004; Ferrer-i-Carbonell, 2005).

Given its cross-sectional design, the current study is not able to examine the relationship between professional well-being and work income by adopting a long-term perspective.

5.3.5 Gender.

For both rehired teachers and regular teachers, there was no significant difference between males and females in terms of the general SRPW scores. In addition, both the male and female groups of the rehired teachers had significantly higher levels of SRPW than regular teachers. In other words, gender was not a significant predictor for both types of teachers' professional well-being. This finding differed from many previous studies that suggested a gender difference existed in Chinese college teachers' well-being (Qiu, 2006; Cao et al., 2007; Mao et al., 2007). One potential reason for this difference might be that TPW and teachers' general well-being are two different concepts.

5.4.6 Professional title.

The current study found, unsurprisingly, that participants' professional titles could significantly predict their general SRPW. In other words, the higher their professional titles, the higher the SRPW score. This result is in line with the findings of some previous studies (Huang & Miao, 2012; Wang et al., 2011) but inconsistent with the findings of Qiu (2006), Mao et al., (2007), and Zhang and Jin (2013). The latter studies suggested that, in Mainland China, the relationship between professional title and teachers' well-being is curvilinear and that teachers with medium-grade professional titles (e.g., lecturer) tend to have the highest occupational well-being compared to other levels of professional titles.

5.3.7 Institution type.

The ANOVA test result suggested that the teachers currently working in public colleges, private colleges, and independent schools of public college generally had almost the same level of general SRPW. This result applied to both rehired teachers and regular teachers. This finding was quite surprising because it is inconsistent with the previous research findings that suggested that, in Mainland China, public college teachers should have a significantly higher level of general well-being or occupational well-being than teachers at other institutions given that the work payment, job stability, and career prospects offered by private colleges or independent schools are generally not as good as those offered by public colleges (Yang, 2013; Zhao & Zhou, 2017; Yao, 2018; Dai & Xiao, 2011).

One potential explanation for this inconsistency is that professional well-being is a specific concept that focuses mostly on teachers' perception of the detailed 'professional work' they currently engage in, while 'teachers' well-being', 'occupational well-being', or 'job satisfaction' put more emphasis on teachers' general feelings regarding 'teaching career' or 'job prospects'. Unfortunately, the current study did not have enough data to test this hypothesis. Researchers are encouraged to delve into this topic in their future studies.

5.3.8 Working hours.

The current study considered three types of working hours: hours spent on teaching, on research, and on administrative work each week. The results suggested that, for both rehired teachers and regular teachers, 'teaching hours' could negatively predict their general SRPW, while 'research hours' and 'administrative work hours" were not significant predictors. One reason for the latter result is that the participants of the current study were teaching staff, that is, the sample did not include administrative staff, research personnel, or school leaders. Therefore, teaching was the main professional work of the sampled participants and thus had

the strongest connection to their professional well-being. This finding is partly consistent with the findings of Bannai, Ukawa, and Tamakoshi (2015), which suggested that long working hours negatively correlated with psychological distress in male teachers but not in females teachers.

As noted, of the 14 demographic factors used in the current study, there are five post-retirement career factors that applied only to the rehired teacher participants. These are, years engaging in rehiring, changes in workload as compared to pre-retirement, changes in income as compared to pre-retirement, whether working for the same institution pre- and post retirement, and whether working in the same occupational area pre- and post retirement. Among these five factors, the effect of 'whether working in the same occupational area' on TPW was not analyzed due to the limited number of respondents with pre-retirement career experience that was other than teaching. Limitations caused by the sampling method will be discussed later in Chapter 6.

In terms of the other four factors, the analysis results suggested that for rehired teachers, the years engaged in rehiring significantly predicted their general SRPW, while income change and workload change (pre- vs. post-retirement) did not. In addition, in terms of the general SRPW level, there was no significant difference between rehired teachers working for the same institution as they did before retirement and those working in different institutions pre- and post-retirement.

Figure 5.5 summarises the results in terms of the effects of post-retirement career factors on rehired teachers' SRPW. Note that the numbers presented in this figure are the standardised regression coefficients (β). The asterisk sign '*' means the effect was significant at $p < 0.05$ level, and the double asterisk sign '**' means the effect was significant at $p <$ 0.01 level.

Figure 5.5: Effects of post-retirement career factors on SRPW

Effect that is significant: **Effects that are not significant:**
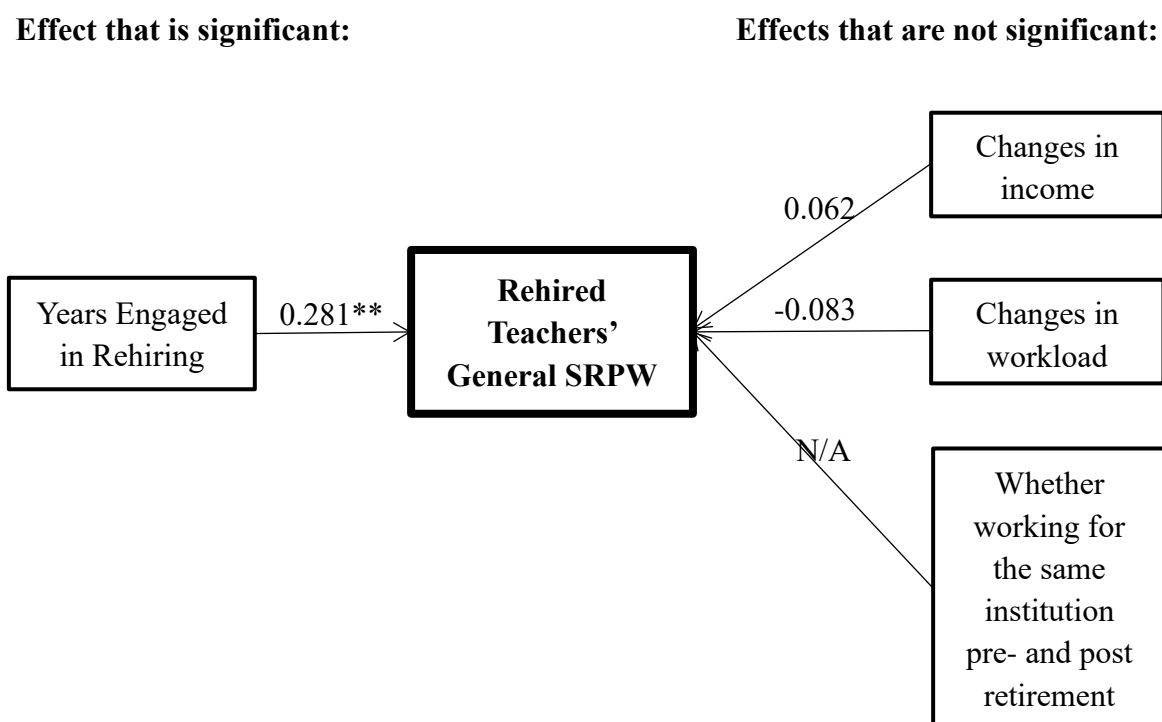
Note: N/A means that the effect of this demographic factor on the general SRPW is not estimated via regression analysis method, due to the categorical nature of this variable.

5.3.9 Years engaged in rehiring.

The factor 'years engaged in rehiring' was found to be a significant predictor of rehired teachers' general SRPW. Rehired teachers with more years of engaging in rehiring tended to have a higher level of professional well-being.

The relationship between rehired teachers' working years (after retirement) and their well-being has not been investigated extensively in the previous studies. Regarding the reason why rehired teachers' professional well-being is positively related to their years engaged in rehiring, one unproven speculation from the researcher was that, generally, rehired teachers are free to make decisions on whether they should quit a job, given that most

of them enjoy a good pension and do not rely on work income to survive. If they are unhappy with their current teaching life, they are very likely to quit teaching and engage in the other life pursuits they value. Therefore, it is possible that teachers choose to engage in rehiring for long periods because they like the teaching profession and hence have a high level of SRPW.

5.3.10 Income and workload change (pre- vs. post-retirement).

The analysis results suggested that income change and workload change as compared to the pre-retirement stage were not significant predictors for the rehired teachers' general SRPW. In other words, in terms of the level of professional well-being there is no difference between rehired teachers—who perceived their work income to be lower than that in the pre-retirement stage—and those who perceived it to be higher. Also there was no difference between rehired teachers—who had less of a workload than they did in the pre-retirement stage—and those who had a heavier workload.

These results cannot be directly compared to the previous work, as the studies comparable to the current one are rare. However, the comments from the rehired teacher interviewees of the current study may shed some light on such occurrence.

As noted in Chapter 4, according to most of the interviewees, rehired teachers' income mainly comprised of their wages and bonuses from re-employment work and their pensions. Even without the re-employment work income, the pension was sufficient to cover their living expenses. Also, as discussed in Section 5.3.4, for those teachers who have engaged in their profession for a long period, the correlation between income and their well-being is not as strong as what common sense expected, and it could even be rather weak (Veenhoven, 1991; Argyle, 1987; Headey et al., 1991; Veenhoven, 1996). Therefore, as rehired teachers generally have long-term working experience and most of them could enjoy a stable financial support from their pension, changes in their income would not substantially influence their

professional well-being as long as their income is above some minimal level that allows the rehired teachers to cover their living expenses.

In terms of 'workload change', interviewees generally believe that as compared to the pre-retirement stage, now they have more freedom in adjusting their workload based on their personal preference. In other words, it is very likely that for rehired teachers, their workload and income may fluctuate dramatically in different post-retirement periods. For example, in some periods when they are in greater need financially, they may choose to undertake a relatively heavy workload. However, for those other periods when they need more leisure time, they may prefer to have a reduced workload. In short, rehired teachers' workload and income change as compared to the pre-retirement stage do not have a linear relationship with their professional well-being, because such 'change' is very likely to be a consequence of the choices that rehired teachers make on their own initiatives.

These findings suggest that for future studies, longitudinal design is suitable for analysing the relationship between rehired teachers' professional well-being and the fluctuation in their workload and income during different retirement stages (e.g. pre-retirement stage, early re-employment stage, and later post-retirement stage).

5.3.11 Working in same organisation vs. a different organisation after retirement.

On average, the current study found that rehired teachers working in organisations different from the ones they retired from have a general SRPW level that roughly the same as that of rehired teachers working in the same organisation post-retirement. This result was inconsistent with Kim and Feldman's (2000) research findings. The latter conducted a study on retired university professors from the University of California (UC) system and found that the relationship between 'bridge employment' and 'life satisfaction' is stronger for the retired professors who engaged in bridge employment inside the UC system compared to those who

engaged in bridge employment outside the system. They also found, however, that this inside-outside difference did not exist in terms of the relationship between bridge employment and 'retirement satisfaction'.

The inconsistency between the results of current study and those of Kim and Feldman (2000) is uninterpretable as there are many differences among the concepts of professional well-being, life satisfaction, and retirement satisfaction. In addition, the research site's cultural context and local educational policy can strongly affect study results.

Summary of Chapter 5

Chapter 5 presented the results of discussion regarding the quantitative and qualitative findings of the current study and the comparable findings from previous studies. The results generally supported the conclusion that professional competence, job satisfaction, aspiration, recognition, autonomy, support and relationships, and absence of burnout are the main components of teachers' professional well-being.

The qualitative results in terms of the sub-themes under each particularized TPW factor were mostly consistent with the findings in the existing literature. However, the following sub-themes, which seemed to be a unique contribution from the current study's interviewees, were not commonly mentioned: 'self-perceived moral quality', 'satisfaction with job stability', 'recognition in terms of occupational identity', and 'autonomy in arranging extracurricular time'.

The quantitative and qualitative results of the current study were basically consistent with each other regarding the differences in the rehired teachers' and regular teachers' general self-rated professional well-being (SRPW) level, as well as in the levels for the particularized TPW components, except for autonomy and recognition. The qualitative findings suggested that rehired teachers should have a higher level of perceived work autonomy and recognition, while the quantitative results showed that, between the two types of teachers, there was no statistically significant difference in the self-reported levels of autonomy and recognition.

Many of the current study's findings in terms of the relationship between demographic factors and TPW were different from previous research that studied the effect of such demographic factors on teachers' general well-being or occupational well-being, suggesting that professional well-being is a relatively independent concept, one that is different from the many traditional concept of well-being and thus deserving of further exploration by future studies.

Chapter 6: Conclusions, Implications, and Limitations

The previous chapter summarised the current study's answers to the three research questions, which were formulated based on the study's findings and those presented in other related studies. As the final chapter of the thesis, Chapter 6 comprises three sections. Section 6.1 offers brief conclusions to the current study based on the discussion presented in Chapter 5. Section 6.2 describes the current study's implications and potential contributions to future studies. Section 6.3 discusses the main limitations of the current study, which mostly relate to its sample size, sampling method, and data analysis method. In Section 6.3, the author also recommends how future studies that might remedy the current study's shortcomings.

6.1 Main Conclusions of Current Study

Based on the discussion that described in Chapter 5, the main conclusions from the current study's findings are as follows:

1. Teachers' professional well-being (TPW) mainly comprises seven components: professional competence, job satisfaction, aspiration, recognition, autonomy, support and relationship, and absence of burnout.

2. Compared to regular teachers, rehired teachers had significantly higher levels in all four types of self-rated professional well-being (SRPW), namely, general SRPW, SRPW in teaching, SRPW in research, and SRPW in administrative work. The quantitative results further showed that, compared to regular teachers, rehired teachers generally had higher levels for professional competence, job satisfaction, and support and relationships and a lower level for burnout. Meanwhile, there was no significant difference between rehired teachers and regular teachers in terms of their levels of work autonomy and recognition. In addition, rehired teachers tended to have lower levels of work aspiration. The qualitative results suggested that rehired teachers' low level of work aspiration was usually not a consequence of work-related issues.

3. For rehired teachers, the top three particularized TPW factors affecting their general SRPW were support and relationships, job satisfaction, and recognition, in that order. For regular teachers, these were job satisfaction, absence of burnout, and support and relationships, also in that order. In addition, autonomy was found to not be a significant predictor for rehired teachers' general SRPW.

4. The results from comparing how often rehired teachers and regular teachers made positive and negative comments in relation to each of the seven particularized TPW factors suggested that rehired teachers tended to be much more optimistic than

regular teachers, especially regarding the job satisfaction, recognition, absence of burnout, and professional competence factors.

5. After synthesising the previous two points (Conclusions 3 and 4), it can be seen that job satisfaction, support and relationship, and absence of burnout are the three most important factors for rehired teachers and regular teachers in terms of their professional well-being. Therefore, compared to regular teachers, rehired teachers had significantly higher levels in those factors that contributed most strongly to teachers' general SRPW. In addition, the qualitative findings suggested that rehired teachers' perception of their career experience regarding job satisfaction and absence of burnout is also much more positive and optimistic than that of regular teachers. In sum, these findings may shed some light on why rehired teachers had relatively higher general SRPW level compared to regular teachers, even though they had scores lower than or equivalent to regular teachers for factors such as aspiration, autonomy, and recognition.

6. The qualitative results in terms of the sub-themes under each particularized TPW factor were mostly consistent with the findings in the existing literature. However, the following sub-themes, which seemed to be a unique contribution from the current study's interviewees, were not commonly mentioned: 'self-perceived moral quality' under professional competence, 'satisfaction with job stability' under job satisfaction, 'recognition in terms of occupational identity' under recognition, and 'autonomy in arranging extracurricular time' under autonomy. In addition, different from existing theories, in the interviews 'work support' and 'workplace relationship' appeared to be two indivisible concepts and were usually mentioned simultaneously. Therefore, the current study favoured the idea of putting support and relationship together as one factor.

7. For both rehired teachers and regular teachers, work income, professional development opportunities, age, weekly teaching hours, and professional title were all significant predictors of their general SRPW, while weekly hours spent on research, weekly hours spent on administrative work, institution type, and gender were not significant predictors. For rehired teachers, the years engaged in rehiring significantly predicted their general SRPW, while income and workload change (pre- vs. post-retirement) did not. In addition, in terms of the general SRPW level, there was no significant difference between rehired teachers working for the same institution as they did before retirement and those working in different institutions pre- and post retirement.

8. The relationship between general SRPW and two demographic factors – 'health condition' and 'teaching years' was different for rehired teachers and regular teachers. All teachers with better health condition tended to have a higher level of general SRPW. But, compared to regular teachers, health was more significant for the rehired teachers regarding its effect on SRPW. Meanwhile, teaching years did not have a linear relationship with SRPW in regular teachers, but rehired teachers with more teaching years tended to have a higher level of SRPW.

6.2 Current Study Implications

1. Offering some new thoughts and insights into educational gerontology

The current study chose rehired college teachers as its main research subjects because these people are special—they are elders and teachers, and thus, researching this group of people is uniquely valuable in terms of educational gerontology—an inter-discipline of gerontology and education.

Specifically, one of the most predominant research topics in educational gerontology is

the role of education in older people's well-being and life satisfaction. Most of the previous studies on this topic have focused on the relationship between their well-being and their self-learning or learning activities in organisations specifically established for elderly education purposes (e.g. The University of the Third Age). However, education comprises not only learning, but also teaching, and in a sense, teaching can also facilitate learning—just as the Confucian classic the *'Book of Rites'* mentions: 'teaching and learning help each other' (Dai, 2016, p. 221). That said, few studies have covered the topic regarding older people's teaching and well-being.

The current study serves to help fill this research gap. It brings a new research angle to educational gerontology by looking at the relationship between college rehired teachers' teaching-related activities and their well-being. Moreover, its findings suggest that rehired teachers generally have a high level of professional wellbeing. One important reason for this is that re-employment allows rehired teachers to maintain the work-life structure and interpersonal contact they had pre-retirement. It also gives them an opportunity to keep learning and strengthening their professional knowledge and skills to meet their post-retirement jobs' demands. In addition, re-employment also offers rehired teachers a high level of work autonomy that enables them to avoid many burnout-related stressors.

According to Rowe and Kahn's (1998) and Bowling and Dieppe's (2005) research findings, the abovementioned post-retirement, work-related benefits could serve as positive predictors for older people's positive experiences while ageing. In other words, the current study's findings suggest that re-employment can simultaneously provide older people with factors positively related to their post-retirement well-being and life satisfaction. Again, all these findings are likely to help push the boundaries of educational gerontology research. The researcher encourages future studies to employ the current study's findings in order to delve further into the relationships between teaching, learning, and professional well-being with

older people's general post-retirement well-being and satisfaction.

2. Making theoretical and practical contributions to HRD for older professionals

As noted in Chapter 1, more and more human resource development (HRD) programmes for retired professionals will be implemented in China soon. The administrators of those programmes need to think about how to make the programmes attractive to retired professionals to ensure teacher recruitment. The administrators also need to consider how best to sustain the programmes through motivation strategies suitable for rehired teachers.

To make a programme 'attractive', administrators need to consider what kind of benefits or supports can motivate retired professionals to engage continuously in such programmes. To do so effectively, they need to have a good understanding of the characteristics of rehired teachers' work-related well-being and satisfaction. However, not much research exists regarding this topic. The fact is, while the rehired teacher group is gradually becoming an important part of the profession, it is under-represented in the literature.

Specifically, the extant studies on teacher well-being (or satisfaction) have seldom incorporated rehired teachers in their research samples. As a result, the rehired teachers' characteristics have been masked or inaccurately represented by the characteristics of the regular serving teachers. Hence, it is not useful for administrators of the retirees' HRD programmes to employ the existing research findings on teacher well-being in designing their rehired teachers' motivation strategy because a strategy that suits regular serving teachers may not work effectively for rehired teachers.

The current study, then, has theoretical and practical implications for the HRD of older professionals. Theoretically, the study helps close the research gap regarding rehired teachers' professional well-being by investigating the characteristics, components, and influential demographic factors of such well-being. Practically, these findings can be used as a reference in designing HRD programme motivation strategies suitable to rehired teachers.

3. Facilitating development of TPW measurement instruments

The current study explored the main components of TPW and how these components manifested in the teachers' career experience. Its findings can be used as a reference by researchers intending to develop TPW measurement instruments. Specifically, if future researchers plan to design scales to measure TPW, during the development stage they could consider using the seven TPW components suggested by the current study to construct their scales' initial dimensions or sub-scales. They could also employ the current study's qualitative findings (that is, the sub-themes generalised from interviewees' comments) as a guideline for designing the items under each dimension or sub-scale.

In addition, as noted, the current study's findings suggested that the seven factors—professional competence, job satisfaction, autonomy, burnout, aspiration, support and relationships, and professional competence—may contribute to the level of professional well-being differently for rehired teachers and regular teachers. That means a well-being-related scale that is applicable to regular teachers may not be suitable for rehired teachers. Considering the potential increase in rehired teachers in the near future (as discussed in Chapter 1), the researcher believes it would be useful to have measurement instruments for specifically assessing the professional well-being of rehired teachers or, at the very least, for in-service teachers who are 50 years of age or older. The current study findings may also serve that purpose.

6.3 Current Study Limitations and Suggestions for Future Studies

1. Research participants sampled from one city.

By and large, the education systems in Mainland China are astonishingly uniform (Bray & Jiang, 2016), and this uniformity manifests in each school's policy, management system, and even the curriculum arrangement (Sun, 2003). This situation served as the rationale for

the current study's sampling method, which involved conducting the investigation in only one city. However, the socioeconomic disparity in China leads to a great variation in educational situations between the different districts (Yang, 2016). Bray and Jiang (2016) also mentioned that, along with the continuous deepening of educational reform in Mainland China that started from the mid-1980s, educational diversity has developed not only among different districts but within each district. Therefore, as the current study chose one city as the research site and all participants were teachers working in this city, the representativeness of its findings is limited. Researchers are encouraged to conduct future investigations on teachers from multiple cities with different economic development levels to further explore the effect of social context and regional economic factors on TPW.

2. Relatively small sample size.

For the current study's questionnaire survey and interviews, the sample size was relatively small, especially in terms of the rehired teacher participants. In the data-collection practice, it was challenging to involve a sufficient number of rehired teachers in the study for the following reasons. First, compared to regular teachers, the rehired teacher population is much smaller. Second, many rehired teachers worked part-time and did not have offices, which made them difficult to contact for the survey and interviews. Third, many participants were unfamiliar with social networking apps, which further increased the difficulties in contacting them.

The small sample size issue limited the employment of statistical approaches and tools in the analysis. For example, when addressing RQs 1 and 2, the current study could only employ the CFA approach to examine the main TPW components for the entire teacher group. This is, it was not possible to run separate tests for the rehired teacher group or the regular teacher group given that the total valid questionnaire respondents, 319, just marginally passed the suggested CFA sample size requirement (Shah & Goldstein, 2006; MacCallum & Austin,

2000; Barrett, 2007). In other words, the analysis results would not be reliable if the sample were split into two groups.

In addition, the small sample size may have produced unstable results for the other analyses, including the regression analysis, t-test and Anova in the quantitative study and the content analysis in the qualitative study. The researcher recommends that future studies be done to test the current study's findings based on a larger sample size.

3. Convenience sampling used in data-collection process.

The current study mainly used convenience sampling to collect data. Specifically, 1) the 14 colleges involved in the study were conveniently selected by the researcher, 2) the administrative staff that helped the researcher distribute the questionnaire might have chosen teachers conveniently, and 3) for the rehired teacher participants, snowball sampling was also employed.

Ideally, the participants should be teachers who were randomly sampled from all colleges in Nanchang. However, in fact, the actual participants of the current study might have been teachers with good interpersonal relationships with the administrative staff who helped the researcher distribute the questionnaire and recruit the interviewees. Therefore, there was a discrepancy between the ideal approach and the actual approach. The researcher was unable to analyse how this discrepancy affected the research results.

The researcher adopted a series of measures to control data quality. In the data-cleaning process, almost 15% of the collected questionnaires were classified as invalid and deleted. Even so, the representativeness of the collected sample was definitely influenced by this convenience sampling method.

4. Lack of diversity in rehired teacher group.

One question in the survey for rehired teachers asks, 'Were you also a teacher before you retired? If not, please indicate your pre-retirement occupation.' Originally, the researcher

wanted to split the rehired teachers into several groups based on the answers to this question to test whether there were significant differences among these groups' SRPWs. However, due to the sampling method's limitations, the researcher only collected five questionnaires in which the participants said they were not teachers before retirement. For this reason, the current study was unable to perform the analysis described above. The researcher highly recommends that future studies fill this gap by sampling more rehired teachers from different pre-retirement occupations, as these teachers' perceptions of pre- and post-retirement differences, as well as motivations for engaging in post-retirement work are valuable experiences that could be employed to further delve into rehired teachers' professional well-being.

5. *Discrepancy regarding the connotations of job satisfaction.*

In Chapter 4 (Section 4.5.2.7), the thesis mentioned that, due to the large concept scope of job satisfaction, this factor overlapped to an extent with the other six TPW factors. This finding was acceptable for the quantitative data analysis. For the qualitative data analysis, however, it caused trouble in coding the interviewees' comments, particularly those related to job satisfaction. Therefore, while coding, the researcher shrank the scope of job satisfaction by excluding the areas that overlapped with the other six factors, and this exclusion is what caused the discrepancy between the quantitative and qualitative analysis results in terms of the job satisfaction connotations.

After carefully examining the current study's conclusions, discussed in Section 5.4, the researcher presumes that this discrepancy will raise some questions related to the current study's results and findings. These questions are about, if there were no such discrepancy, then,

Would the frequency of the rehired teachers' and regular teachers' positive and negative comments relating to job satisfaction change?

Would the results for the rehired teachers' perceived differences in job satisfaction between their pre- and post-retirement change?

Would there be more sub-themes for job satisfaction to extract from the comments of interviewees?

The researcher was unable to analyse the extent to which this discrepancy affected the research results. Generally speaking, though, because the qualitative analysis' main role in the current study was to supplement the quantitative results, the researcher believes the effect of this discrepancy does not distort the study's main conclusions.

6. The theory-driven qualitative analysis approach might bias the analysis results.

The data analysis mode used in the qualitative study was 'top-down'. Specifically, in the qualitative data analysis, the researcher adopted a theory-driven approach wherein the seven theoretically suggested TPW components were used as seven overarching themes to direct the entire data categorization process.

In the traditional 'bottom-up' qualitative analysis approach, researchers conduct data coding and data categorization with no hypothesis and allow the data to drive the analysis process completely. In comparison to this technique, the current 'top-down' analysis approach might create some issues. For example, some interview comments might not have fallen into any of the seven overarching themes but were shoehorned by the researcher into one of the themes to make the qualitative study's conceptual framework align with that of the quantitative study. In such cases, the qualitative analysis results could be biased.

In addition, there could be factors besides the quantitative study's seven factors that also serve as important TPW components. If the researcher adopted the traditional 'bottom-up' approach, he might find TPW components that have been ignored by existing theories. However, under the current 'top-down' design, there is virtually no chance for the researcher to find factors that reside outside of his seven-factor TPW structure.

In general, the researcher still believes that, in the current study's overall design, the above-mentioned risks can be tolerated. Specifically, with this design, the qualitative study's function is to supplement the quantitative study by looking for insights and potential explanations for the quantitative analysis results instead of solely exploring the TPW components. Nevertheless, these risks should not be overlooked. The researcher highly recommends that efforts be made to ascertain such risks by undertaking pure qualitative studies that employ a 'bottom-up' analysis approach.

Summary of Chapter 6

In the current study, the researcher chose college rehired teachers and regular serving teachers as the research subjects and investigated the characteristics of their professional well-being, the main components of such well-being, and the effects of certain demographic factors on that well-being.

The study, then, has theoretical and practical implications to the gerontology and education fields. Its findings can facilitate the development of TPW measurements as it investigated the main components of TPW, how these components contribute to TPW, and how these components manifested in the teachers' career experience. It also offers new thoughts and insights related to aging and retirement as its findings suggest that re-employment work may provide retirees with many benefits and opportunities that relate positively to their well-being and life satisfaction. Finally, the findings produced by the study's investigation of the characteristics, components, and influential demographic factors for rehired teachers' professional well-being can help fill the research gap in that area, and serve as a reference for the administrators designing management strategies for HRD programmes of retired professionals.

Nevertheless, the current study has many limitations due to its sample size, sampling method, and analysis method. Specifically, the representativeness of its findings is limited due to all research participants being sampled from one city and the use of the convenience sampling method. Also, the relatively small sample size might result in unstable analysis results. In addition, the 'top-down' theory-driven qualitative analysis method may have caused some interviewee comments that did not fit with any of the seven theoretically suggested TPW factors to be shoehorned into one of those factors. The 'top-down' method also prevented the researcher from discovering new factors outside of his presumed seven-factor TPW structure. Moreover, the method caused difficulty for the researcher in

coding the interviewee comments in relation to the 'job satisfaction' theme and thus led to a discrepancy between the quantitative and qualitative analysis results in terms of the job satisfaction connotations.

Due to these limitations, future researchers are strongly encouraged to delve into the research issues of the current study with a larger sample size, one that includes participants from multiple cities that have different economic development levels. It is also strongly recommended that these researchers use data-driven qualitative analysis approaches that dissect data in a more comprehensive 'bottom-up' manner. And, if possible, it is also highly recommended that future studies sample more rehired teachers from different pre-retirement occupations. These teachers' perceptions of pre- and post-retirement differences, as well as their motivations for engaging in post-retirement work, would be valuable information for efforts to better understand rehired teachers' professional well-being.

References:

Aelterman, A., Engels, N., Van Petegem, K., & Verhaeghe. J. P. (2007). The Well-Being of Teachers in Flanders: The Importance of a Supportive School Culture. *Educational Studies, 33*(3), 285-297.

Albuquerque, I., Lima, M., Figueiredo, P., & Matos, C. (2012). Subjective Well-Being Structure: Confirmatory Factor Analysis in a Teachers' Portuguese Sample. *Social Indicators Research, 105*(3), 569-580.

Aluja, A., Blanch, A., & Garcia, L. F. (2005). Dimensionality of the Maslach Burnout Inventory in School Teachers: A Study of Several Proposals. *European Journal of Psychological Assessment, 21*(1), 67-76.

American heritage dictionary (2001). *The American heritage dictionary (4th ed.)*. New York: Houghton Mifflin.

Anderson, J. R. (1995). *Cognitive psychology and its implications*. New York: W.H. Freeman.

Andrews, H. A. (2011). Supporting Quality Teachers with Recognition. *Australian Journal of Teacher Education, 36*(12), 59-70.

Angella, M. (2016). Work, recognition and subjectivity: Relocating the connection between work and social pathologies. *European Journal of Social Theory, 19*(3), 340-354.

Angrosino, M. (Ed.). (2007). *Doing ethnographic and observational research*. London: Sage Publications.

Annas, J. (1987). Epicurus on Pleasure and Happiness. *Philosophical Topics, 15*(2), 5-21. Retrieved from http://www.jstor.org.ezproxy.eduhk.hk/stable/43154002

Antoniou, A., Ploumpi, A. & Ntalla, M. (2013). Occupational Stress and Professional Burnout in Teachers of Primary and Secondary Education: The Role of Coping Strategies. *Psychology, Scientific Research, 4*(3A), 349-355.

Appleton, S., & Song, L. (2008). Life satisfaction in urban China: Components and

determinants. *World Development, 3*6(11), 2325-2340.

Argyle, M. (1987). *The psychology of happiness*. New York, NY, US: Methuen.

Armstrong-Stassen, M., Schlosser, F., Zinni, D. (2012). Seeking resources: Predicting

retirees' return to their workplace. *Journal of Managerial Psychology, 27*(6), 615-635.

Atchley, R. C. (1989). A Continuity Theory of normal aging. *The Gerontologist, 29*(2),

183-190.

Babenko, O. (2018). Professional Well-Being of Practicing Physicians: The Roles of

Autonomy, Competence, and Relatedness. *Healthcare, 6*(12), 1-8.

Baltes, P. B., & Baltes, M. M. (Eds.). (1990). *Successful aging: Perspectives from the*

behavioral sciences. New York, NY, US: Cambridge University Press.

Bandura, A, (1977). Self-efficacy: Toward a unifying theory of behavioral change.

Psychological Review, 84(1), 191-215.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.*

Englewood Cliffs, NJ: Prentice-Hall.

Bannai, A., Ukawa, S., & Tamakoshi, A. (2015). Long working hours and psychological

distress among school teachers in Japan. *Journal of Occupational Health, 57*(1), 20-27.

Bao, W. G. (2009). *Chinese people's view of well-being [中国人的幸福观]*. Nanjing: Jiangsu

People's Publishing House.

Barrett, P. (2007). Structural equation modeling: Adjudging model fit. *Personality and*

Individual Differences, 42(5), 815-824.

Bauer, J. J., McAdams, D. P., & Sakaeda, A. R. (2005). Interpreting the good life: Growth

memories in the lives of mature, happy people. *Journal of Personality and Social*

Psychology, 88(1), 203-217.

Beaumont, T. (2018). J. S. Mill's hedonism: activism, experientialism and eudaimonism.

British Journal for the History of Philosophy, 26(3), 452-474.

Beehr, T. A. & Bennett, M. M. (2015). Working After Retirement: Features of Bridge Employment and Research Directions. *Work, Aging and Retirement, 1*(1), 112-128.

Benson, P. (2010). Teacher education and teacher autonomy: Creating spaces for experimentation in secondary school English language teaching. *Language Teaching Research, 14*(3), 259–275.

Bernstein, R. (1983). *Beyond objectivism and relativism: science, hermeneutics, and praxis*. Philadelphia, Pennsylvania: University of Pennsylvania Press

Betoret, F. D. (2009). Self-efficacy, School Resources, Job Stressors and Burnout among Spanish Primary and Secondary School Teachers: a Structural Equation Approach. *Educational Psychology, 29*(1) , 45-68.

Bialopotocki, R. (2006). *Recognition and Praise Relate to Teachers' Job Satisfaction* (Doctoral thesis, the University of Nebraska, the United States).

Binmore, K. (2009). Utilitarianism. In *Rational Decisions* (pp. 60-74). Princeton University Press.

Blanchflower, D. G., & Oswald, A. J. (2004). Well-being over time in Britain and the USA. *Journal of Public Economics, 88*(7-8), 1359-1386.

Blase, J., & Kirby, P. C. (1992). The power of praise - a strategy for effective principals. *NASSP Bulletin, 76*(548), 69-77.

Bowling, A., Dieppe, P. (2005). What is successful ageing and who should define it? *BMJ, 33l*(7531), 1548-1551.

Bradburn, N. M. (1969). *The structure of psychological well-being*. Chicago: Aldine.

Bradburn, N. M., & Caplovitz, D. (1965). *Reports of happiness*. Chicago: Aldine.

Braun, V., & Clarke, V. (2006). *Using thematic analysis in psychology. Qualitative Research in Psychology*, 3(2), 77-101.

Bray, M. & Jiang, K. (2016), Comparing Systems. In M. Bray, B. Adamson, & M. Mason

(Eds.), *Comparative Education Research: Approaches and Methods* (2nd Edition) (285-308). Hong Kong: The University of Hong Kong.

Bray, M., Adamson, B., & Mason, M. (2016). *Comparative Education Research: Approaches and Methods* (2nd Edition). Hong Kong: The University of Hong Kong.

Breaugh, J. (1985). The Measurement of Work Autonomy. *Human Relations, 38*(6), 551-570.

Bridges, D. (2016). *Philosophy in educational research: Epistemology, ethics, politics and quality*. Springer International Publishing.

Brink, D. O. (1992). Mill's Deliberative Utilitarianism. *Philosophy and Public Affairs, 21*(1), 67-103.

Brown, T. A. (2006). *Confirmatory Factor Analysis for Applied Research*. New York: The Guilford Press.

Bryman, A. (1984). The Debate about Quantitative and Qualitative Research: A Question of Method or Epistemology? *The British Journal of Sociology, 35*(1), 75-92.

Bryman, A., & Bell, E. (2011). *Business research methods*. Cambridge: Oxford University Press.

Butt, R., & Retallick, J. (2002). Professional Well Being and Learning: A Study of Administrator-Teacher Workplace Relationships. *Journal of Educational Enquiry 3*(1), 17-34.

Byrne, B. M. (1989). *Teacher Burnout: Validating the Maslach Burnout Inventory across Four Educational Levels*. Paper presented at the 97th Annual Meeting of the American Psychological Association, NewOrleans, LA, United States.

Byrne, B. M. (1993). The Maslach Burnout Inventory: Testing for factorial validity and invariance across elementary, intermediate and secondary teachers. *Journal of Occupational and Organizational Psychology, 66*(3), 197-212.

Cahill, K., Giandrea, M. & Quinn, J. (2011). Reentering the Labor Force after Retirement.

Monthly Labor Review, 134(6), 34-42.

Cai, L. (2010). Influential factors of career happiness of teachers in universities, and

enhancing strategy [高校教师职业幸福感的影响因素及增进策略]. *Theory and*

practice of education, 30(12), 39-41.

Campbell, D. T. , & Fiske, D. (1959). Convergent and discriminant validation by the

multitrait-multimethod matrix. *Psychological Bulletin, 56*(2), 81-105.

Cao, G., Li, J., & Lin, Y. (2007). A Study on Subjective Well-being of Advanced Vocational

Colleges Teachers [高职教师主观幸福感研究]. *China Journal of Health Psychology,*

15(2), 190-191.

Caprara, G. V., Barbaranelli, C., Steca, P., Malone, P. S. (2006). Teachers' self-efficacy beliefs

as determinants of job satisfaction and students' academic achievement: A study at the

school level. *Journal of School Psychology, 44*(6), 473-490.

Caprara, G.V., Barbaranelli, C., Borgogni, L., & Steca, P. (2003). Efficacy beliefs as

determinants of teachers' job satisfaction. *Journal of Educational Psychology, 95*(4),

821-832.

Cassidy, D. J. , King, E. K. , Wang, Y. C. , Lower, J. K. , & Kintner-Duffy, V. L. . (2016).

Teacher work environments are toddler learning environments: teacher professional

well-being, classroom emotional support, and toddlers' emotional expressions and

behaviours. *Early Child Development and Care, 187*(11), 1666-1678.

Cazers, G. , & Curtner-Smith, M. D. . (2017). Robin's story: life history of an exemplary

American female physical education teacher. *Journal of Teaching in Physical Education,*

36(2), 197-208.

Chang, M. (2009). An appraisal perspective of teacher burnout: Examining the emotional

work of teachers. *Educational Psychology Review. 21*(3): 193-218.

Charters, W. W. (1976). *Sense of teacher work autonomy: Measurement and findings.* Eugene,

Oregon: CEPM Publications, University of Oregon.

Chen, J. (2017). A preliminary study on management of post-retirement reemployment staffs in private colleges [民办高校退休返聘管理初探]. *Modern Communication, 2017*(2), 155-156.

Cheng, H., & Zhang, S. (2010). Rational pursuit and Aesthetic Experience-The characteristics of Confucian morality culture on "Kong Yan's Happiness" [理性追求与审美体验——从"孔颜之乐"看儒家德性文化的特质]. *Journal of Inner Mongolia Agricultural University (Social Science Edition), 12*(4), 310-311.

Cheng, S. & Chan, A. C. (2005). Measuring psychological well-being in the Chinese. *Personality and Individual Differences, 38*(6), 1307-1316.

Cheng, S., & Yuen, M. (2012). Education and Career Aspirations Among Chinese High School Students: Validation of the Career Aspiration Scale. *Asia-Pacific Education Researcher, 21*(2), 394-401.

Cherryholmes, C. H. (1992). Notes on pragmatism and scientific realism. *Educational Researcher, 21*(6), 13-17.

Choi, N. G. (2001). Relationship between Life Satisfaction and Postretirement Employment among Older Women. *International Journal of Aging & Human Development*, 52(1), 45-70.

Chu, H. (2014). The Paradigm Shifts in Educational Administration Research. *Renmin University of China Education Journal. 3*(1), 5-22.

Chuang Tzu (2015). *Chuang Tzu [庄子]*. Beijing: Zhonghua Book Company.

Cline, E. (2018). Confucianism, East Asian Cultures, and the Spiritual Exercises. In *A World On Fire: Sharing the Ignatian Spiritual Exercises with Other Religions* (pp. 224-262). Washington, D.C.: Catholic University of America Press. Retrieved from http://www.jstor.org/stable/j.ctt207g5gf.9\

Clough, P., & Nutbrown, C. (2002). *A student's guide to methodology: justifiying enquiry*. Thousand Oaks: Corwin Press.

Cohen, J. (2006). Social, Emotional, Ethical, and Academic Education: Creating a Climate for Learning, Participation in Democracy, and Well-Being. *Harvard Educational Review, 76*(2), 201-237.

Cohen, J., McCabe, E. M., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record, 111*(1), 180-213.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*(4), 385-396. http://dx.doi.org/10.2307/2136404

Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social‐emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology, 104*(4), 1189-1204.

Collie, R. J., Shapka, J. D., Perry, N. E., Martin, A. J. (2015). Teacher Well-Being: Exploring Its Components and a Practice-Oriented Scale. *Journal of Psychoeducational Assessment , 33*(8), 744-756.

Confucius (2016). *The Analects of Confucius [论语]*. Nanchang: Jiangxi People's Publishing House.

Confucius (Kong Zi). (2013). *The Book of Rites (Li Ji): English-Chinese Version (English and Chinese Edition)*. Zhengzhou: Zhongzhou Ancient Books Publishing House.

Cotton, P., & Hart, P. M. (2003). Occupational Well-being and Performance: A Review of Organisational Health Research. *Australian Psychologist, 38*(2), 118-127.

Cousins M., Hussain A. (1984) *The Archaeology of Knowledge*. In M. Cousins, A. Hussain, Michel Foucault, Contemporary Social Theory (76-97). London: Palgrave.

Creswell, J. (2003). *Research design : Qualitative, quantitative, and mixed methods*

approaches (2nd ed.). Thousand Oaks, Calif.: Sage Publications.

Creswell, J. (2014). *Research design : Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks: SAGE Publications.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.)*. Thousand Oaks, CA, US: Sage Publications, Inc.

Creswell, J. W., Plano Clark, V., Gutmann, M., & Hanson, W. (2003). *Advances in mixed method design*. In A. Tashakkori & C. Teddlie (Eds.), Handbook of Mixed Methods in the Social & Behavioral Sciences. Thousand Oaks, CA: Sage.

Crisp, R. (1997). *Mill on Utilitarianism*. London: Routledge.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage.

Dai, S. (2016). *The Book of Rites [礼记]*. Chinese ancient books publishing house。

Dai, X., & Xiao, S. (2011). A brief discussion on the absence and reconstruction of teachers' occupational well-being in private colleges [浅议民办高校教师职业幸福感的缺失与重建]. *Jixiaoguanli, 2011*(10), 92-93.

Dang, J. W. (2018). *Survey Report on the Living Conditions of China's Urban and Rural Older Persons [中国城乡老年人生活状况调查报告]*. Social Sciences Academic Press.

Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations. *Organizational Behavior and Human Performance, 13*, 46-78.

Davis, M. A. (2003). Factors related to bridge employment participation among private sector early retirees. *Journal of Vocational Behavior, 63*(1), 55-71.

Deemer, S. A. , & Minke, K. M. . (1999). An investigation of the factor structure of the teacher efficacy scale. *The Journal of Educational Research, 93*(1), 3-10.

Denscombe, M. (2007). *The good research guide : for small-scale social research projects*

(4th ed.). Maidenhead, England : McGraw-Hill/Open University Press.

Denzin, N. K., and Lincoln, Y. S. (2003). *Collecting and Interpreting Qualitative Materials*. SAGE Publications.

Depp, C. A. & Jeste, D. V. (2006). Definitions and Predictors of Successful Aging: A Comprehensive Review of Larger Quantitative Studies. *The American Journal of Geriatric Psychiatry, 14*(1), 6-20.

Dick, R., Wagner, U. (2001). Stress and strain in teaching: a structural equation approach. *British Journal of Educational Psychology, 71*(2), 243-259.

Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*(3), 542-575.

Diener, E. (2000). Subjective well-being. The science of happiness and a proposal for a national index. *American Psychologist, 55*(1), 34-43.

Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology, 68*(4), 653-663.

Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology, 47*(5), 1105-1117.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*(1), 71-75.

Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*(2), 276-302. http://dx.doi.org/10.1037/0033-2909.125.2.276

Dimmock, M., & Fisher, A. (2017). Utilitarianism. In *Ethics for A-Level* (pp. 11-29). Cambridge, UK: Open Book.

Dingemans, E. A. A. (2016). *Working after retirement: Determinants and consequences of bridge employment* (Doctoral thesis. University of Groningen, Groningen, Netherlands)

Dong, K., Zhang, D. (2017). Peak or Plateau? The Trend of Population Ageing and

Rethinking of Its Influences on the Pension System in China. J*ournal of Population & Economics, 2017*(4), 43-53.

Dries, D. (2010). *The effect of vacation days taken on job satisfaction and professional well-being* (Dissertation, The University of the Rockies, the United States).

Dwivedi, Y. K. , Lal, B. , Williams, M. D. , Schneberger, S. L. , & Wade, M. R. . (2009). *Handbook of Research on Contemporary Theoretical Models in Information Systems*. IGI Global.

Easterlin, R. A. (1995). Will raising the incomes of all increase the happiness of all? *Journal of Economic Behavior & Organization, 27*(1), 35-47.

Efeoglu, İ. E., & Ulum, ömer. (2017). The relationship between Turkish EFL state school teachers' cultural intelligence and their professional well-being. *Journal of Education Culture and Society, 8*(2), 228-239.

Engelking, J. L. . (1986). Teacher job satisfaction and dissatisfaction. *Spectrum, 4*(1), 33-38.

Esbensen, K. H. (2002). *Multivariate data analysis in practice: An introduction to multivariate data analysis and experimental design (5th Edition)*. CAMO Process AS, Oslo.

Escolar Chua, R., & De Guzman, A. (2013). Effects of Third Age Learning Programs on the Life Satisfaction, Self-Esteem, and Depression Level Among a Select Group of Community Dwelling Filipino Elderly. *Educational Gerontology, 40*(2), 1-14.

Estes, R. J., & Sirgy, M. J. (2017). *The Pursuit of Human Well-Being: the Untold Global History*. Switzerland: Springer International Publishing Switzerland.

Estes, R., & Sirgy, M. J. (2017). *Advances in well-being : Towards a better world.* London: Rowman & Littlefield International.

Feldman, D. C. (1994). The decision to retire early: A review and conceptualization. *Academy of Management Review, 19*(2), 285-311.

Feng, J. (2011). *Western Theory of Well-being - from Solon to Feuerbach*. Beijing: Zhonghua Book Company

Feng, Y. (1998). *A new history of Chinese philosophy* [中国哲学史新编]. Beijing: People's Publishing House.

Ferrer-i-Carbonell, A. (2005). Income and well-being: An empirical analysis of the comparison income effect. *Journal of Public Economics, 89*(5-6), 997-1019.

Ficino, M. (trans.) (2014). *The Philebus Commentary [至善与快乐: 柏拉图《斐勒布》义疏]*. Shanghai: East China Normal University Press.

Fisher, J. W., Francis, L. J., & Johnson, P. (2002). The personal and social correlates of spiritual well-being among primary school teachers. *Pastoral Psychology, 51*(1), 3-11.

Flick, U. (2007). *Designing qualitative research*. London: Sage Publications.

Forlin, C. (2001). Inclusion: identifying potential stressors for regular class teachers. *Educational Research, 43*(3), 235-245.

Fowers, B. J., Mollica, C. O., & Procacci, E. N. (2010). Constitutive and instrumental goal orientations and their relations with eudaimonic and hedonic well-being. *The Journal of Positive Psychology, 5*(2), 139-153.

Fowler, K. L. (2006). The relations between personality characteristics, work environment, and the professional well-being of music therapists. *Journal of Music Therapy, 43(*3), 174-197.

Freudenberger, H. J. (1974) Staff Burn-out. *Journal of Social Issues, 30*(1):159-165.

Friedman, I. A. (1999). Teacher-perceived work autonomy: the concept and its measurement. *Educational and Psychological Measurement, 59*(1), 58-76.

Friedman, I. A. , & Kass, E. (2002). Teacher self-efficacy: a classroom-organization conceptualization. *Teaching & Teacher Education, 18*(6), 675-686.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction (6th ed.)*.

White Plains, NY, England: Longman Publishing.

Gao, H., & and Zhao, C. (2016). Study on Bridge Employment and Its Management: Based on the Effect of Commitment. *Human Resources Development of China, 8*(4), 25-31.

Gao, L., Zheng, X., & Yan, B. B. (2010). The differences of Well-being between the east and the west: From the view of self-construal. *Advances in Psychological Science, 18*(7), 1041–1045.

Garcia, D. , Nima, A. A. , & Kjell, O. N. . (2014). The affective profiles, psychological well-being, and harmony: environmental mastery and self-acceptance predict the sense of a harmonious life. *Peerj, 2*(2), e259.

Gaskins, R. W. (1998). "Leap into the Boundless": Teacher Freedom and Philosophies of Teaching. *Journal of Literacy Research, 30*(1), 143-161. https://doi.org/10.1080/10862969809547985

Ghanizadeh, A. & Jahedizadeh, S. (2015). Teacher Burnout: A Review of Sources and Ramifications. *British Journal of Education, Society & Behavioural Science, 6*(1), 24-39.

Gilbert, S., & Kelloway, E. (2018). Leadership, Recognition and Well-Being: A Moderated Mediational Model. *Canadian Journal Of Administrative, 35*(4), 523-534.

Gillat, A., & Sulzer-Azaroff, B. (1994). Promoting principals' managerial involvement in instructional improvement. *Journal of Applied Behavior Analysis, 27*(1), 115-129.

Glesne, C. (2006). *Becoming qualitative researchers: An introduction* (3rd Edition). Boston: Pearson/Allyn & Bacon.

Gloria, C., Faulk, K., & Steinhardt, M. (2013). Positive affectivity predicts successful and unsuccessful adaptation to stress. *Motivation and Emotion, 37*(1), 185-193. http://dx.doi.org/10.1007/s11031-012-9291-8

Godkin, L., Parayitam, S., & Natarajan, L. (2010). An empirical study of attitudes toward

recognition among civilian municipal employees in a U.S. City. *Journal of Organizational Culture, Communication and Conflict, 14*(2), 51-61.

Gorter, R. C., Albrecht, G., Hoogstraten, J. & Eijkman, M. A. J. (1999). Factorial Validity of the Maslach Burnout Inventory-Dutch Version (MBI-NL) among Dentists. *Journal of Organizational Behavior, 20*(2), 209-217.

Gottlieb, J. A. K. (2007). *Vulnerability, self-transcendence, and the professional well -being of new graduate registered nurses* (Doctoral dissertation, Barry University, Florida, the United States)

Gray, M. P., & O'Brien, K. M. (2007). Advancing the Assessment of Women's Career Choices: The Career Aspiration Scale. *Journal of Career Assessment, 15*(3), 317-337.

Greene, J. C., & Caracelli, V. J. (Eds.). (1997). Advances in mixed-method evaluation: *The challenges and benefits of integrating diverse paradigms*. San Francisco: Jossey-Bass.

Grolleau, G., Mzoughi, N., & Pekovic, S. (2015). Work recognition and labor productivity: evidence from french data. *Managerial and Decision Economics, 36*(8), 508-516.

Guba, E. G. (1990). *The paradigm dialog*. Newbury Park, CA: Sage.

Guba, E. G., & Lincoln, Y. S. (1992). E*ffective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches*. San Francisco, CA: Jossey Bass.

Guest, G. (2012). *Applied thematic analysis*. Thousand Oaks, California: Sage.

Guo, Q., Cui, T., Junping, L., & Ying, X. (2012). The Values of Confucian Benevolence and the Universality of the Confucian Way of Extending Love. *Frontiers of Philosophy in China, 7*(1), 20-54. Retrieved from http://www.jstor.org/stable/44259370.

Guo, Y. (2012). Research on occupational well-being of college young teachers: based on a case study of Xiamen university [高校青年教师职业幸福感研究——基于厦门大学的调研分析]. *Reform & Openning, 4*, 125-127.

Habibzadeh, S. , & Allahvirdiyani, K. (2011). Effects of economic and non economic factors on happiness on primary school teachers and urmia university professors. *Procedia - Social and Behavioral Sciences, 30*, 2050-2051.

Hackman, R. J., & Oldham, G. R. (1974). The Job Diagnostic Survey: An Instrument for the Diagnosis of Jobs and the Evaluation of Job Redesign Projects. *Yale University Technical Report, 4*, 1-87.

Hair Jr, J. F. , Black, W. C., Babin, B. J. , & Anderson, R. (2009). *Multivariate Data Analysis (7th Edition)*. Pearson.

Han, S. (2017). Institutionalization of Lifelong Learning in Europe and East Asia: From the Complexity Systems Perspective. *Asia Pacific Education Review, 18*(2), 281-294.

Hao, Z. J. (2019). The Characteristics and Contemporary Value of the Thought of respecting Teachers and Valuing Education in Ancient China [我国古代尊师重教思想的特点及当代价值]. *Modern Education Science, 5*, 75-80.

Havighurst, R. J. (1961) Successful aging. *Gerontologist. 1*(1), 8-13.

Headey, B., Veenhoven, R., & Wearing, A. (1991). Top-down versus bottom-up theories of subjective well-being. *Social Indicators Research, 24*(1), 81-100.

Herzberg, F. (1966). *Work and the Nature of Man*. Chicago: World Publishing Company.

Hill, P. L. , & Allemand, M. . (2010). Forgivingness and adult patterns of individual differences in environmental mastery and personal growth. *Journal of Research in Personality, 44*(2), 245-250.

Ho, C. L., & Au, W.-T. (2006). Teaching Satisfaction Scale: Measuring Job Satisfaction of Teachers. *Educational and Psychological Measurement, 66*(1), 172-185.

Hodous, L. (1946). Taoism. In *Jurji E. (Ed.), Great Religions of the Modern World* (pp. 24-43). Princeton University Press.

Hofstede, G., Hofstede, G. V., & Minkov, M. (2010). *Cultures and Organizations: Software*

of the Mind (Third Edition). McGraw-Hill Education.

Holowchak, M. A. (2004). *Happiness and Greek Ethical Thought*. London; New York: Continuum.

Homan, K. (2016). Self-Compassion and Psychological Well-Being in Older Adults. *Journal of Adult Development, 23*(2), 111-119.

Hong, M., & Lv, S. (2018). Occupational satisfaction of primary and secondary school teachers and its relationship with gratitude and self-esteem. *Journal of Leshan Normal College, 8*(1), 135-140.

Honneth, A. (1996) *The Struggle for Recognition. The Moral Grammar of Social Conflicts*. Cambridge: Polity Press.

Hoppe, A. & Fujishiro, K. (2015). Anticipated job benefits, career aspiration, and generalized self-efficacy as predictors for migration decision-making. *International Journal of Intercultural Relations, 47*, 13-27.

Howe, K. R. (1988). Against the quantitative-qualitative incompatibility thesis or dogmas die hard. *Educational Researcher, 17*(8), 10-16.

Howell, K. E. (2013). *An introduction to the philosophy of methodology*. London: SAGE Publications Ltd

Hsee, C. K., Yang, Y., Li, N., & Shen, L. (2009). Wealth, warmth, and well-being: Whether happiness is relative or absolute depends on whether it is about money, acquisition, or consumption. *Journal of Marketing Research, 46*(3), 396-409.

Hu, Z. (2015). *Teacher: in the pursuit of well-being - an empirical study*. Hangzhou: Zhejiang University Press.

Huang, G. G., & Hu, X. J. (2010). *Favor and Face: Power Game of Chinese [人情与面子——中国人的权力游戏]*. Beijing: China Renmin University Press.

Huang, H. (2007). The Concept of "Benevolence" in the Analects and the Connotation of the

Doctrine of Confucian Benevolence [论语中的"仁"与孔子仁学的内涵]. *Qilu Journal,*

1(1), 5-8.

Huang, H., & Miao, Y. (2012). A Survey Investigation on the Well-Being of College Teachers

[高校教师幸福感状况调查研究]. *The Exam Weekly Magazine, 7,* 152-153.

Huangpu, G., Jiang, D. Y., & Zhang, G. Y. (2013). From Organizational Commitment to

Organizational Loyalty: The Concept and Structures of Chinese Organizational Loyalty

[从组织承诺到组织忠诚：华人组织忠诚的概念内涵与结构]. *Advances in*

Psychological Science, 21(4), 711-720.

Huberman, M. (1993). Burnout in teaching careers. *European Education, 25*(3), 47–69.

Huppert, F., & So, T.C. (2013). Flourishing across Europe: Application of a new conceptual

framework for defining well-being. *Social Indicators Research, 110*(3), 837-861.

Hurley, A. E., Scandura, T. A., Schriesheim, C. A., Brannick, M. T., Seers, A., Vandenberg, R.

J., & Williams, L. J. (1997). Exploratory and confirmatory factor analysis: Guidelines,

issues, and alternatives. *Journal of Organizational Behavior, 18*(6), 667-683.

Huta, V. (2013). Pursuing eudaimonia versus hedonia: Distinctions, similarities, and

relationships. In A. Waterman (Ed.). *The best within us: Positive psychology*

perspectives on eudaimonic functioning (pp. 139-158).Washington, DC: APA Books.

Huta, V. (2015). The Complementary Roles of Eudaimonia and Hedonia and How They Can

Be Pursued in Practice. In S. Joseph (Eds.). *Positive Psychology in Practice: Promoting*

Human Flourishing in Work, Health, Education, and Everyday Life (2nd Edition) (pp.

159-182). John Wiley & Sons, Inc.

Huta, V., & Ryan, R. M. (2010). Pursuing pleasure or virtue: The differential and overlapping

well-being benefits of hedonic and eudaimonic motives. *Journal of Happiness Studies,*

11(6), 735-762.

Ingersoll, R. M. (2001). Teacher Turnover and Teacher Shortages: An Organizational

Analysis, *American Educational Research Journal, 38*(3), 499-534.

Iwanicki, E. F., & Schwab, R. L. (1981). A cross validation study of the Maslach Burnout Inventory. *Educational and Psychological Measurement, 41*(4), 1167-1174.

Jackson, J. E. (2004). *Principal Component Analysis*. New York, USA: Springer Science.

Jackson, M. A., Potere, J. C., & Brobst, K. A. (2006). Are success learning experiences and self-efficacy beliefs associated with occupational interests and aspirations of at-risk urban youth? *Journal of Career Assessment, 14*(3), 333-353.

Jenkins, A., & Mostafa, T. (2015). The effects of learning on well-being for older adults in England. *Aging & Society, 35*(10), 2053-2070.

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher and social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491-525.

Jiang, Y. (2008) A study on teachers' occupational well-being [教师职业幸福感研究]. *Ideological and Theoretical Education, 9*, 75-78

Jick, T. D. (1979). Mixing qualitative and quantitative methods: triangulation in action. *Administrative Science Quarterly, 24*(4), 602-611.

Jing, A. L., & Zhou, H. T. (2019). On the Task and Path of Faculty Construction in Colleges and Universities [加强高校教师队伍建设的关键任务和路径探析]. *Journal of National Academy of Education Administration, 3*, 48-52.

Johnson, B., & Christensen, L. (2008). *Educational research: Quantitative, qualitative, and mixed approaches*. (3rd ed.). Los Angeles: SAGE Publications.

Johnson, R., & Onwuegbuzie, A. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher, 33*(7), 14-26.

Johnson, S. M. (2012). The art of methods mixology: a fine blend of qual-quant methods unlocking performance excellence in banking. *Procedia Economics and Finance, 2*(1),

393-400.

Jose, P. E. (2013). *Doing Statistical Mediation and Moderation*. New York, NY: The Guilford Press.

Jowett, B. (trans.) (1991). The Works of Aristotle. Great Books of the Western World 8, Aristotle Volume II. Chicago: Encyclopaedia Britannica, Inc.

Judge, T. A., & Ilies, R. (2004). Affect and job satisfaction: a study of their relationship at work and at home. *Journal of Applied Psychology, 89*(4), 661-673.

Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-Being: The Foundations of Hedonic Psychology*. New York: Russell Sage Found.

Kakar, S. (1978). *The inner world: A psychoanalytic study of childhood and society in India*. Delhi, India: Oxford University Press.

Kalokerinos, E., & Von Hippel, C. & Henry, J. (2015). Job Attitudes Are Differentially Associated With Bridge Employment and Phased Retirement Among Older Australian Employees. *Work, Aging and Retirement, 1*(2), 1-12.

Kantarici. T., & Van Soest, A. (2008). Gradual Retirement: Preferences and Limitations. *De Economist. 156*(2), 113-144.

Kantas, A., & Vassilaki, E. (1997). Research note: Burnout in Greek teachers: Main findings and validity of the Maslach Burnout Inventory. *Work & Stress, 11*(1), 94-100.

Kaplan, D. (2009). *Structural Equation Modeling: Foundations and Extensions* (2nd ed.). Thousand Oaks, CA: Sage Publication.

Katrina, G. (1999). Job Satisfaction, Intention To Leave, and the Quality of Teachers' Interactions with Children. Developmentally Appropriate Practice. *Journal of Early Education and Family Review, 7*(2), 7-18.

Keefe, T. O. (2013). *Cyrenaics. The International Encyclopedia of Ethics.* Malden, MA : Blackwell Publishing Ltd.

Keithley, R. B., Heien. M. L., Wightman, R. M. (2009). Multivariate concentration determination using principal component regression with residual analysis. *Trends in Analytical Chemistry: Trac, 28*(9), 1127-1136. DOI: 10.1016/j.trac.2009.07.002.

Kelchtermans, G. (1993). Getting the story, understanding the lives. From career stories to teachers' professional development. *Teaching and Teacher Education, 9*(5/6), 443–456.

Kelchtermans, G. , & Ballet, K. . (2002). The micropolitics of teacher induction - a narrative-biographical study on teacher socialisation. *Teaching and Teacher Education, 18*(1), 105-120.

Kelloway, E. K., & Barling, J. (1994). *Development of the Canadian Forces Occupational Stress Questionnaire (Working Paper 94-2)*. Willowdale, ON: Canadian Forces Personnel Applied Research Unit.

Kerr, G., & Armstrong-Stassen, M. (2011). The bridge to retirement older workers' engagement in post-career entrepreneurship and wage-and-salary employment. *Journal of Entrepreneurship, 20*(1), 55-76.

Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. J*ournal of Personality and Social Psychology, 82*(6), 1007-1022. http://dx.doi.org/10.1037/0022-3514.82.6.1007

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.

Kincheloe, J. L. (2005). *Critical Constructivism Primer*. NY: Peter Lang.

Kinnunen, U., Parkatti, T., & Rasku, A. (1994). Occupational well-being among aging teachers in Finland. *Scandinavian Journal of Educational Research, 38*(3-4), 315-332.

Klein, D. (trans.) (2018). *Travels with Epicurus*. Beijing: Beijing United Publishing Company.

Kleinman, P. (2013). *Philosophy 101: From Plato and Socrates to Ethics and Metaphysics, an Essential Primer on the History of Thought*. Adams Media Corporation.

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd Ed.). New York: Guilford Press.

Klusmann, U., Kunter, M., Trautwein, U., Lüdtke, O., & Baumert, J. (2008). Teachers' occupational well-being and quality of instruction: The important role of self-regulatory patterns. *Journal of Educational Psychology, 100*(3), 702-715. http://dx.doi.org/10.1037/0022-0663.100.3.702.

Knight, J., Song, L., & Gunatilaka, R. (2009). Subjective well-being and its determinants in rural China. *China Economic Review, 20*(4), 635-649.

Kouzes, J. & Posner, B. (1999). *Encouraging the Heart: A Leader's Guide to Rewarding and Recognizing Others*. San Francisco, CA: Jossey-Bass Publishers.

Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress, 19*(3), 192-207.

Kuckartz, U. (2019). Qualitative Text Analysis: A Systematic Approach. In Kaiser G., Presmeg N. (eds) *Compendium for Early Career Researchers in Mathematics Education* (pp. 181-197). ICME-13 Monographs. Springer, Cham.

Kuhn, D., Cheney, R., & Weinstock, M. (2000). The development of epistemological understanding. *Cognitive Development, 15*(3), 309-328.

Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.

Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. Journal of Educational Psychology, 105(3), 805-820.

Kvale, S. (2007). *Doing interviews*. London: Sage Publications.

Kwak, M. H., Palmer, M., & Ramsay, J. (trans.) (1993). *Lao Tzu: Tao Te Ching*. New York: Barns & Noble Books.

Kwon, S. (2008). Well-being and Spirituality from a Korean Perspective: Based on the Study of Culture and Subjective Well-being. *Pastoral Psychology, 56*(6), 573-584.

Kwon, S., & Le, A. D. (2004). Relationship building in clinical pastoral education: A Confucian reflection from Asian chaplains. *Journal of Pastoral Care and Counseling, 58*(3), 203-214.

Lai, C. (2018). Historical and Cultural Features of Confucianism in East Asia. In Ames R. & Hershock P. (Eds.), *Confucianisms for a Changing World Cultural Order* (pp. 102-111). Honolulu: University of Hawai'i Press. doi:10.2307/j.ctv3zp05k.10

Lampe, K. (2015). Cyrene and the Cyrenaics: A Historical and Biographical Overview. In *The Birth of Hedonism: The Cyrenaic Philosophers and Pleasure as a Way of Life* (pp. 12-25). Princeton University Press. Retrieved from http://www.jstor.org/stable/j.ctt7zvf04.6

Lao Tzu (trans.) (2014). *Lao Tzu [老子]*. Beijing: Zhonghua Book Company.

Larsen, A. K. (1993). Employee recognitiona working model to enhance job satisfaction. *Aorn Journal, 57*(4), 909-912.

Laslett, P. (1996). *A Fresh Map of Life (2nd edition)*. London: Macmillan.

Lau, D. C. (trans.) (1970). *Mencius*. London: Penguin Books Ltd.

Lauermann, F., & König, J. (2016). Teachers' professional competence and wellbeing: Understanding the links between general pedagogical knowledge, self-efficacy and burnout. *Learning & Instruction, 45*(1), 9-19.

Law, K. S., Wong, C. S., Wang, D., & Wang, L. (2000). Effect of supervisor-subordinate Guanxi on supervisory decisions in China: an empirical investigation. *The International

Journal of Human Resource Management, 11(4), 751-765.

Laws, J. (1976). Work Aspiration of Women: False Leads and New Starts. *Signs, 1*(3), 33-49.

Lee, J. K. (2001). Educational Thoughts of Aristotle and Confucius. *The Journal of Educational Thought, 35*(2), 161-180.

Lee, M., & Jones, D. (2017). *Confucianism: Its Roots and Global Significance*. Honolulu: University of Hawai'i Press.

Lee, S.-Y. (2007). *Wiley series in probability and statistics. Structural equation modelling: A Bayesian approach*. New York, NY, US: John Wiley & Sons Ltd.

Legge, J (trans.) (2013). *Confucius: Confucian Analects, The Great Learning and The Doctrine of the Mean*. New York: Dover Publications.

Li, C. A., & Liu, N. (2019). A Study on the Impacts of "Normal" Trade War on China's Economy and Employment ["常态性"贸易战对我国经济与就业的影响研究]. *Journal of China University of Labor Relations, 33*(2), 9-13.

Li, H., & Li, H. (2008). Traditional "happiness" and well-being of life [传统之"乐"与人生"幸福"]. *Chuanshan Journal, 3*(1), 103-105.

Li, J. (2015). *Labour law and social security law: theories, materials and cases*. Beijing: Peking University Press.

Li, R., Ling, W. Q., & Liu, S. S. (2012). Traditional values, supervisor-subordinate relationship, and employee silence—an empirical investigation based on indigenous context [传统价值观、上下属关系与员工沉默行为: 一项本土文化情境下的实证探索]. *Management World, 3*, 127-150.

Li, W. (2016). A Review on origin and improvement of teachers' professional status in China [中国教师职业地位渊源与当今地位提高之再审视]. *Education and Teaching Research, 30*(4), 31-37.

Li, Y. (2005). *The structure and evolution of China's cadre system* (Doctoral thesis. The University of Illinois At Chicago, Chicago, the USA).

Lin, Y. T. (2016). *The wisdom of Laotse [老子的智慧]*. Hunan Literature and Art Publishing House.

Little, I. M. D. (1950). *A critique of welfare economics* (2nd Edition). Oxford: Oxford University Press.

Liu, B. (2015). A Study of University Teachers' Working Time [高校教师工作时间研究]. *Education Research, 21*(2), 56-62.

Liu, Z. J. (2009). Analysis on the present situation of human resources development in the retired high intelligence of universities in Guangxi Province [广西高校离退休高智力老年人力资源开发现状分析]. *Journal of higher correspondence education(philosophy and social sciences edition), 2009*(7), 13-15.

Lobel, D. (2017). Epicurus: Happiness Is Pleasure. In *Philosophies of Happiness: A Comparative Introduction to the Flourishing Life* (pp. 42-54). New York: Columbia University Press. Retrieved from http://www.jstor.org.ezproxy.eduhk.hk/stable/10.7312/lobe18410.6

Locke, E. (1969). What is job satisfaction? *Organizational Behavior and Human Performance, 4*(4), 309-336.

Loher, B.T., Noe, R.A., Moeller, N.L., & Fitzgerald, M.P. (1985). A meta analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology, 70*(4), 280-289.

Lorig, K., Chastain, R. L., Ung, E., Shoor, S., & Holman, H. R.. (1989). Development and evaluation of a scale to measure perceived self-efficacy in people with arthritis. *Arthritis and rheumatism, 32*(1), 37-44.

Loughlin, C., & Barling, J. (1998). Teenagers' part-time employment and their work-related

attitudes and aspirations. Journal of Organizational Behavior, 19(2), 197-207.

Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy, 33*(3), 335-343. http://dx.doi.org/10.1016/0005-7967(94)00075-U

Lu, G., Lai, M., Zhang, Q. Du, P., & Lo, N. (2010). An Analysis of the Types and Characteristics of Academic Work at the University Level [大学教师的学术工作:类型、特征及影响因素分析]. *Fudan Education Forum, 8*(6), 38-44, 50.

Lu, J. M. & Han, Q. (2004). Research on the evaluation index structure of college teachers and its integration method [高校教师评价指标结构及其整合方法探索]. *China Adult Education, 9*(1), 19-20.

Lucas, G. H., Babakus, E., & Ingram, T. N. (1990). An empirical test of the job satisfaction-turnover relationship: Assessing the role of job performance for retail managers. *Journal of the Academy of Marketing Science, 18*(3), 199-208.

Luthans, F. (1992). *Organizational behavior*. New York: McGraw-Hill.

Luthans, K. (2000). Recognition: A powerful but often overlooked leadership tool to improve employee performance. *The Journal of Leadership Studies, 7(*1), 31-39.

MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology, 51*(1), 201-236.

Macdonald, S., & MacIntyre, P. (1997). The generic job satisfaction scale: Scale development and its correlates. *Employee Assistance Quarterly, 13*(2), 1-16.

Macleod, C., & Miller, D. E. (2016). *A Companion to Mill*. John Wiley & Sons, Inc.

Madjar, N., Oldham, G. R., & Pratt, M. G. (2002). There's no place like home? The contributions of work & non work creative support to employees' creative performance. *Academy of Management Journal, 45*(4), 757-767.

Mager, P. P. (1980). Principal component regression analysis applied in structure-activity relationships. *Biometrical Journal, 22*(5), 441-446.

Maggiori, C., Johnston, C., Krings, F., Massoudi, K., & Rossier, J. (2013). The role of career adaptability and work conditions on general and professional well-being. *Journal of Vocational Behavior, 83*(3), 437-449.

Mao, J., Zhou, M., Cao, C., Zhang, J. (2007). A survey on subjective well-being in college teachers [高校教师主观幸福感的影响因素研究]. *Health medicine research and practice, 4*(3), 7-9.

Maslach, C. (1993). Burnout: A Multi-dimensional Perspective. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional Burnout: Recent Developments in Theory and Research* (pp. 19-32). Washington, DC: Taylor and Francis.

Maslach, C., & Jackson, S. E. (1986). *Maslach burnout inventory manual (2nd ed.)*. Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., & Leiter, M. P. (1999). Teacher burnout: A research agenda. In R. Vandenberghe & A. M. Huberman (Eds.), *Teacher burnout: A sourcebook of international research and practice* (295-304). Cambridge, UK: Cambridge University Press.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). Maslach burnout inventory manual. Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*(1), 397-422.

Mason, M. (2014). Comparing cultures. In *Comparative Education Research* (pp. 221-257). Springer International Publishing

Mastow, A. H. (1973). *The Farther Reaches of Human Nature*. London: Penguin.

Mattern, J., and Bauer, J. (2014). Does teachers' cognitive self-regulation increase their occupational well-being? The structure and role of self-regulation in the teaching context.

Teaching and Teacher Education, 43, 58-68.

Matteucci, M. C. , Guglielmi, D. , & Lauermann, F. (2017). Teachers' sense of responsibility for educational outcomes and its associations with teachers' instructional approaches and professional wellbeing. *Social Psychology of Education, 20*(2), 275-298.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach (3rd Edition).* Thousand Oaks, CA: Sage Publications

McCarthy, C. J., Lambert, R. G., Crowe, E. W., & McCarthy, C. J. (2010). Coping, Stress, and Job Satisfaction as Predictors of Advanced Placement Statistics Teachers' Intention to Leave the Field. *NASSP Bulletin, 94*(4), 306–326.

McCormick, J. (1997). Occupational stress of teachers: biographical differences in a large school system. *Journal of Educational Administration, 35*(1), 18-38.

Mcinerney, D. M. , Korpershoek, H. , Wang, H. , & Morin, A. J. S. (2018). Teachers' occupational attributes and their psychological wellbeing, job satisfaction, occupational self-concept and quitting intentions. *Teaching and Teacher Education, 71*, 145-158.

McKenzie, D. M.. (2015). The role of mediation in resolving workplace relationship conflict. *International Journal of Law and Psychiatry, 39*, 52-59.

McMahon, D. (2006). *Happiness : A history.* New York: Atlantic Monthly Press.

Mencius (trans.) (2017). *Mencius [孟子].* Beijing: Zhonghua Book Company.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* San Francisco: Jossey-Bass.

Mewes, H. (1996). The Struggle for Recognition: The Moral Grammar of Social Conflicts. (Book Review). *The American Political Science Review, 90*(4), 892-894.

Miao, Y. (2002). Feeling of Happiness:Research Orientation and Future Tendency [幸福感:研究取向与未来趋势]. *Social Science, 2002*(2), 51-56.

Mill, J., & Sher, G. (2001). Utilitarianism *(2nd ed.)*. Indianapolis; Cambridge: Hackett

Publishing Company.

Monk-Turner, E., & Turner, C. G. (2011). Subjective wellbeing in a southwestern province in China. *Journal of Happiness Studies, 13*(2), 357-369.

Monnot, M. J. (2017). Marginal Utility and Economic Development: Intrinsic Versus Extrinsic Aspirations and Subjective Well-Being Among Chinese Employees. *Social Indicators Research, 132*(1), 155-185.

Morgan, D. (1998). Practical strategies for combining qualitative and quantitative methods: applications to health research. *Qualitative Health Research, 8*(3), 362-376.

Muchinsky, P. M. (1977). Employee absenteeism: A review of the literature. *Journal of Vocational Behavior, 10*(3), 316-340.

Munn, E. K., Berber, C. E., Fritz, J. J. (1996). Factors Affecting the Professional Well-Being of Child Life Specialists. *Children's Health Care, 25*(2), 71-91.

Neuman, W. L. (2000). *Social research methods: qualitative and quantitative approaches* (4th ed.). Boston: Allyn and Bacon.

Nussbaum, M. C. (2001). The Fragility of Goodness: Luck and Ethics in Greek. Cambridge: Cambridge University Press

Nystrom P. C. (1993). Organizational cultures, strategies, and commitments in health care organizations. *Health Care Manage Rev, 18*(1), 43-49

Nystrom, P. C. (1990). Organizational commitment. Group and Organization Studies, 5, 296-312.

Odden, C. M., & Sias, P. M. (1997). Peer communication relationships, psychological climate, and gender. *Communication Quarterly, 45*, 153-166.

OECD (Organisation for Economic Co-operation and Development) 2010. TALIS 2008 Technical Report: OECD Teaching and Learning International Survey (TALIS). Paris: OECD Publications.

Oldham, G.R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal, 39*(3), 607-634.

O'Leary, Z. (2007). *The social science jargon buster.* London: SAGE Publications Ltd.

O'Reilly, P. E. . (2014). *Teachers at work: factors influencing satisfaction, retention and the professional well-being of elementary and secondary educators* (Doctoral thesis, City University of New York, the United States).

Orton, J. (1981). Gratifications reported by college psychology and family life teachers. *College Student Journal, 15*(4), 396-397.

Osborn, M. (1979). Recognition: The eye of the beholder. National recognition research project report. Washington, DC: Future Homemakers of America.

Palmer, G., Parnes, H., Herman, M., Wilcock, R., & Brainerd, C. (1965). The Reluctant Job Changer: Studies in Work Attachments and Aspirations.

Park, M. , & Chesla, C. (2007). Revisiting Confucianism as a conceptual framework for Asian family study. *Journal of Family Nursing, 13*(3), 293-311.

Parker, P. D., Martin, A. J. , Colmar, S., & Liem, G. A. (2012). Teachers' workplace well-being: exploring a process model of goal orientation, coping behavior, engagement, and burnout. *Teaching & Teacher Education, 28*(4), 503-513.

Pas, E. T., Bradshaw, C. P. and Hershfeldt, P. A. (2012). Teacher- and school-level predictors of teacher efficacy and burnout: Identifying potential areas for support. *Journal of School Psychology, 50*(1), 129-145.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

Paulsen, F., & Thilly, F. (1899). *A system of ethic*s. New York: Charles Scribner.

Pearson, L. C., & Hall, B. W. (1993). Initial construct validation of the teaching autonomy scale. *The Journal of Educational Research, 8*6(3), 172-178.

Pearson, L., & Moomaw, W. (2006). Continuing Validation of the Teaching Autonomy Scale. *The Journal of Educational Research, 100*(1), 44-51. Retrieved from http://www.jstor.org/stable/27548158

Pedrabissi, L., Rolland, J. P., Santinello M. (1993). Stress and burnout among teachers in Italy and France. *Journal of Psychology, 127*(5), 529-535.

Peking University History of Foreign Philosophy Teaching and Research Office (1982). *Selected Original Works of Western Philosophy [西方哲学原著选读]*. Beijing: The Commercial Press.

Petersen, A., & Willig, G. (2004). Work and recognition: reviewing new forms of pathological developments. *Acta Sociologica, 47*(4), 338-350.

Peterson, C., Park, N., & Seligman, M. E. P. (2005). Orientations to happiness and life satisfaction: The full life versus the empty life. *Journal of Happiness Studies, 6*(1), 25-41.

Phillips, D. C., & Burbules, N. C. (2000). Philosophy, theory, and educational research. *Postpositivism and educational research*. Lanham. MD, US: Rowman & Littlefield.

Porter, A. C. (1989). External standards and good teaching: The pros and cons of telling teachers what to do. *Educational Evaluation & Policy Analysis, 11*(4), 343-356.

Qi, L. L. ,& Wu, W. Q. (2009). The Measurement and Analysis of the Teachers' Happiness Index in Universities ofJiangxi Province [江西高校教师幸福指数的测度与分析]. *Journal of Jiangxi University of Finance and Economics, 65*(5), 108-113.

Qiu, X. (2006). Influence of professional titles and income of teachers on happiness sense and their inaction analysis [高校教师职称、月收入对主观幸福感的影响及其交互作用分析]. *Journal of Technology College Education, 25*(6), 100-102.

Qiu, X., Zhang, W., & Yao. D. (2007). The Relationships of University Teachers' Well-being and Coping Strategies [高校教师的主观幸福感、应对方式及其关系]. *The Modern*

Education Journal, 7, 22-26.

Que, M. (2016). Situation Analysis and Countermeasures on the Transfer of Independent Colleges [我國獨立學院轉設現狀分析及對策研究]. *Education Research, 434*(3), 65-71.

Raabe, B., & Beehr, T. A. (2003). Formal mentoring versus supervisor and coworker relationships: Differences in perceptions and impact. *Journal of Organizational Behavior, 24*(3), 271-294.

Rawlins, W. K. (1994). Being there and growing apart: Sustaining friendships through adulthood. In D. J. Canary & L. Stafford (Eds.), *Communication and relational maintenance* (pp. 275-294). New York: Academic Press.

Raymo, J. M., Liang, J., Sugisawa, H., Kobayashi, E. & Sugihara, Y. (2004) Work at older ages in Japan: Variation by gender and employment status. *Journal of Gerontology, 59*(3), 154-163.

Retallick, J., & Butt, R. (2004). Professional well-being and learning: A study of teacher-peer workplace relationships. *Journal of Educational Enquiry, 5*(1), 85-99.

Riddell, R. (2010). *Aspiration, identity and self-belief : Snapshots of social structure at work.* England: Trentham Books.

Ross, S. W., Romer, N. & Horner, R. H. (2012). Teacher Well-Being and the Implementation of School-Wide Positive Behavior Interventions and Supports. *Journal of Positive Behavior Interventions, 14*(2), 118-128.

Rossman, G. B., & Wilson, B. L. (1985). Numbers and words: Combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation Review, 9*(5), 627-643.

Rowe, C., & Schofield, M. (2000). *The Cambridge history of Greek and Roman political thought*. Cambridge: Cambridge University Press.

Rowe, J. W., & Kahn, R. L. (1998). *Successful aging.* New York: Pantheon.

Ruane, J. M. (2005). *Essentials of research methods*. Oxford, UK: Blackwell Publishing ltd

Rudebusch, G. (2009). *Socrates*. Wiley: Wiley-Blackwell.

Ryan, R. M., & Deci, E. L. (2001). On Happiness And Human Potentials: a Review of Research on Hedonic And Eudaimonic Well-Being. *Annual Review of Psychology, 52*(1), 141-166.

Ryff, C. (1995). Psychological Well-Being in Adult Life. *Current Directions in Psychological Science, 4*(4), 99-104. Retrieved from http://www.jstor.org/stable/20182342

Ryff, C. D. & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719-727. DOI: 10.1037/ 0022-3514.69.4.719.

Ryff, C. D. (1989). Happiness is everything, or is it? Exporations on the meaning of psychological well-being. *Journal of Personality & Social Psychology, 57*(6), 1069-1081.

Saaranen, T., Tossavainen, K., Turunen, H., Kiviniemi, V., Vertio, H. (2007). Occupational well-being of school staff members: a structural equation model. *Health Education Research, 22*(2), 248-260.

Saldana, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications Ltd.

Salkind, N. J. (2009). *Statistics for People Who (Think They) Hate Statistics: Excel 2007 Edition*. Sage Publications, Inc.

Schaie, K. W., Baltes, P. B. (1996). Intellectual development in adulthood: The Seattle longitudinal study. *Cambridge University Press. 98*(3), 571-572

Schoch, R. (2006). *The Secrets of Happiness: Three Thousand Years of Searching for the Good Life*. New York: Scribner.

Schommer, M. (1990). The Effects of Beliefs about the Nature of Knowledge on Comprehension. *Reading Research Quarterly, 25*(4), 340-341.

Schreiber, J., & Asner-Self, K. (2011). *Educational research*. Hoboken, NJ: Wiley.

Schutte, N., Toppinen, S., Kalimo, R. & Schaufeli, W. (2011). The factorial validity of the Maslach Burnout Inventory-General Survey (MBI-GS) across occupational groups and nations. *Journal of Occupational & Organizational Psychology, 73*(1), 53-66.

Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. In J.Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio* (pp. 35-38). Windsor: NFER-Nelson.

Scott, C., Dinham, S. (2003). The development of scales to measure teacher and school executive occupational satisfaction. *Journal of Educational Administration, 41(*1), 74-86.

Seale, C., Gobo, G., Gubrium, J. F. & Silverman, D. (Eds.). (2004). *Qualitative research practice*. London: Sage Publications.

Sevastos, P., Smith, L., & Cordery, J. L. (1992). Evidence on the reliability and construct validity of Warr's (1990) well-being and mental health measures. *Journal of Occupational and Organizational Psychology, 65*(1), 33-49.

Shah, R., & Goldstein, S. M. (2006). Use of structural equation modeling in operations management research: Looking back and forward. *Journal of Operations Management, 24*(1), 148-169.

Shen, B., Mccaughtry, N., Martin, J., & Fahlman, M. (2009). Effects of teacher autonomy support and students' autonomous motivation on learning in physical education. *Research Quarterly for Exercise and Sport, 80*(1), 44-53.

Shen, B., McCaughtry, N., Martin, J., Garn, A., Kulik, N. and Fahlman, M. (2015). The relationship between teacher burnout and student motivation. *British Journal of*

Educational Psychology, 85(4), 519-532.

Shen, W., & Shuei, W. (2010). *Book of Rites Explanations*. Hangchow: Zhejiang University Publisher.

Shi, W., & Cui, X. L. (2004). Whether the Dimensions of Evaluating the Civil Servants should be MADA (morality, ability,diligence and accomplishment) or Not? [论公务员绩效考核与德能勤绩]. *Social Sciences in Guangdong, 6*(1), 70-75

Shultz, K. S. (2003). Bridge employment: work after retirement. In G. A. Adams and T. A. Beehr (Eds.), *Retirement: Reasons, processes, and results* (pp. 214-241). New York: Springer.

Sia, S. K., & Appu, A. V. (2015). Work Autonomy and Workplace Creativity: Moderating Role of Task Complexity. *Global Business Review, 16*(5), 772-784.

Sias, P. M. . (2005). Workplace relationship quality and employee information experiences. *Communication Studies, 56*(4), 375-395.

Simmons, A. (1982). Utilitarianism and Unconscious Utilitarianism. In Miller H. & Williams W. (Eds.), *The Limits of Utilitarianism* (pp. 86-98). Minneapolis: University of Minnesota Press.

Simoens, V., Tervaniemi, M., Reiter-Palmon, Roni, & Tinio, Pablo. (2013). Musician-Instrument Relationship as a Candidate Index for Professional Well-Being in Musicians. *Psychology of Aesthetics, Creativity, and the Arts, 7*(2), 171-180.

Sisask, M., Varnik, P., Värnik, A., Apter, A., Balazs, J., Balint, M., Bobes, J., Brunner, R., Corcoran, P., Cozman, D., Feldman, D., Haring, C., Kahn, J., Postuvan, V., Tubiana, A., Sarchiapone, M., Wasserman, C., Carli, V., W Hoven, C., Wasserman, D. (2013). Teacher satisfaction with school and psychological well-being affects their readiness to help children with mental health problems. *Health Education Journal, 73*(4), 1-12.

Skaalvik, E. M. & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of

relations. *Teaching & Teacher Education, 26*(4), 1059-1069.

Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of Teacher Self-Efficacy and Relations With Strain Factors, Perceived Collective Teacher Efficacy, and Teacher Burnout. *Journal of Educational Psychology, 99*(3), 611-625.

Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and Teacher Education, 25*(3), 518-524.

Sloane-Seale, A. & Kops, B. (2010). Older Adults' Participation in Education and Successful Aging: Implications for University Continuing Education in Canada. *Canadian Journal of University Continuing Education, 36*(4), 29-36.

Smith, L. T. (2008). *Decolonizing methodologies: Research and indigenous peoples*. New York*,* NY: Zed Books.

Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). *The measurement of satisfaction in work and retirement: A strategy for the study of attitudes.* Oxford, England: Rand Mcnally.

Soini, T., Pyhaltö, K., & Pietarinen, J. (2010). Pedagogical well-being: reflecting learning and well-being in teachers' work. *Teachers and Teaching, 16*(6), 735-751.

Solomon, R. (2016). Professional Wellbeing: A New Definition for Success. *VITAL WorkLife*. Retrieved from https://insights.vitalworklife.com/blog/2016/01/14/wheel-of-well-being-professional-dimension-definition

Southerland, S. A. , Sinatra, G. M. , & Matthews, M. R. (2001). Belief, knowledge, and science education. *Educational Psychology Review, 13*(4), 325-351.

Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes and consequences*. London, England: Sage.

Strack, F., Argyle, M., & Schwarz, N. (Eds.). (1991). *Subjective wellbeing: An interdisciplinary perspective.* Oxford: Pergamon Press.

Sun, M. (2003). *The concept of system (Tizhi) in Chinese education*. (Doctoral thesis, University of Hong Kong, Pokfulam, Hong Kong SAR).

Sun, W., Jiang, X., & Chen, L. (2016). Investigation and Analysis of the Current State of Primary and Middle School PE Teachers' Career Happiness: Evidence from Guangdong Province [中小学体育教师职业幸福感的现状调查与分析——以广东省为例]. *Journal of Guangzhou Sport University, 36*(3), 17-22.

Tam, M. (2014). Understanding and Theorizing the Role of Culture in the Conceptualizations of Successful Aging and Lifelong Learning. *Educational Gerontology. 40*(12), 881-893.

Tam, M. (2017). Retirement and learning: A longitudinal qualitative approach. *Educational Gerontology, 44*(1), 1-13.

Tam, M. (2017). Towards a Cross-Cultural Understanding of Ageing and Learning by Senior Adults in Hong Kong and Australia. *International Journal of Lifelong Education, 36*(5), 565-577.

Tan, X. Z. (2009). *Research on the teachers' professional activities well-being* (Doctoral dissertation, Shanghai Normal University, Shanghai, China).

Tang, K. L. (2000). *The Summary of the Famous Works on Western Ethics [西方伦理学名著提要]*. Jiangxi People's Publishing House.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.

Taylor, R., & Arbuckle, G. (1995). Confucianism. *The Journal of Asian Studies, 54*(2), 347-354. doi:10.2307/2058740

Teddlie, C., & Tashakkori, A. (2012). Common "Core" Characteristics of Mixed Methods Research: A Review of Critical Issues and Call for Greater Convergence. *American Behavioral Scientist, 56*(6), 774-788.

Thompson, C., & Prottas, D. (2005). Relationships Among Organizational Family Support,

Job Autonomy, Perceived Control, and Employee Well-Being. *Journal of Occupational Health Psychology, 10*(4), 100-118.

Thoonen, E. E. J., Sleegers, P. J. C., Oort, F. J.,Peetsma, T. T. D., Geijsel, F. P. (2011). How to Improve Teaching Practices: The Role of Teacher Motivation, Organizational Factors, and Leadership Practices. *Educational Administration Quarterly, 47*(3), 496-536.

Thorpe, R., & Holt, R. (2008). *The SAGE dictionary of qualitative management research.* London: SAGE Publications Ltd.

Tian, X. M. (2011). A Brief Talk about the Purposes, Training Objectives and Education Content of Ideological and Political Education Incidentally on the Viewpoints of "Non-politicization of Moral Education" [简论思想政治教育的目的、培养目标和教育内容——兼评"德育非政治化"的观点]. *Journal of Ideological & Theoretical Education, 6*(1), 88-97.

Van Dierendonck, D. (2004). The construct validity of Ryff's Scales of Psychological Well-being and its extension with spiritual well-being. *Personality and Individual Differences, 36*(3), 629-643.

Van Horn, J. E., Taris, T. W., Schaufeli, W. B. Schreurs, P. J. (2004). The structure of occupational well-being: a study among Dutch teachers. *Journal of Occupational & Organizational Psychology, 77*(3), 365-375.

Veenhoven, R. (1991). Is happiness relative? *Social Indicators Research, 24*(1), 1-34.

Veenhoven, R. (1996). Developments in satisfaction-research. *Social Indicators Research, 37*(1), 1-46.

Velasquez, M. (2011). *Business ethics: Concepts and cases (7th ed.).* Pearson.

Wahl, H. W., Schilling, O., Oswald, F., Heyl, V. (1999). Psychosocial consequences of age-related visual impairment: comparison with mobility-impaired older adults and long-term outcome. *Journals of Gerontology, 54*(5), 304-316.

Wang, B., & Lou, Y. (2016). *Collation and Annotation of Lao Zi's Tao Te Ching [老子道德经注校释]*. Beijing: Zhonghua Book Company.

Wang, F. R. (2009). Zhuangzi's Points of Freedom——Philosophical Explanation of Free and Easy Wandering by Zhuangzi [论庄子的自由观——庄子《逍遥游》的哲学阐释]. *Hebei Academic Journal, 29*(6), 39-46.

Wang, M. & Shultz, K. S. (2010). Employee retirement: A review and recommendations for future investigation. *Journal of Management, 36*(1), 172−206.

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), 455-474.

Wang, M., Zhan, Y., Liu, S., Shultz, K. S. (2008). Antecedents of bridge employment: a longitudinal investigation. *Journal of Applied Psychology, 93*(4), 818-830.

Wang, P., Miao, Y., Huang, H., & Zhu, X. (2011). Current situation and influencing factors of college teachers' well-being [高校教师幸福感现状及影响因素]. Medical Research and Education, 28(3), 49-54.

Wang, Z. (2001). The Character of Zhuang Zi's Free Reason and Its Influence--Centered on 'Roaming' [庄子自由理性的特质及其影响--以"游"为中心而论]. *Journal of China Youth College for Political Sciences, 20*(6), 65-68.

Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology, 63*(1), 193-210.

Warr, P. B. (1987). *Work, unemployment, and mental health*. Oxford: Oxford University Press.

Warr, P. B. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology, 63*(3), 193-210.

Watanabe, K. , Kobayashi, I. , & Kuroda, N. (2012). Investigation of wood properties that influence the final moisture content of air-dried sugi (cryptomeria japonica) using principal component regression analysis. *Journal of Wood Science, 58*(6), 487-492.

Waterman, A. S. (1993). Two conceptions of happiness: contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology, 64*(4). 679-691.

Webb, R., Vulliamy, G., Sarja, A., Hämäläinen, S., & Poikonen, P. (2009). Professional learning communities and teacher well-being? A comparative analysis of primary schools in England and Finland. *Oxford Review of Education, 35*(3), 405-422.

Wei, Y. (1994). Discussion on the Basis for Dividing Public and Private Higher Education [論劃分公、私立高等教育的依據]. *Research on Higher Education in Liaoning Province, 6*, 36-40.

Weideman, A. (2012). *Positivism and Postpositivism*. The Encyclopedia of Applied Linguistics. Blackwell Publishing Ltd.

Wettstein, M. , Wahl, H. W. , Shoval, N. , Auslander, G. , Oswald, F. , & Heinik, J. . (2014). Cognitive status moderates the relationship between out-of-home behavior (OOHB), environmental mastery and affect. *Archives of Gerontology and Geriatrics, 59*(1), 113-121.

White, N. (2006). *A Brief History of Happiness*. Malden, MA; Oxford: Blackwell Pub.

Wiersma, W., & Jurs, S. G. (2005). *Research methods in education: An introduction*. Boston, MA: Ally and Bacon.

Wilson, W. (1967). Correlates of avowed happiness. *Psychological Bulletin, 67*(4), 294-306.

Wolf, S., Aber, J., Behrman, J., & Tsinigo, E. (2019). Experimental Impacts of the "Quality Preschool for Ghana" Interventions on Teacher Professional Well-being, Classroom Quality, and Children's School Readiness. *Journal of Research on Educational*

Effectiveness, 12(1), 10-37.

Wolgast, A., & Fischer, N. (2017). You Are Not Alone: Colleague Support and Goal-Oriented Cooperation as Resources to Reduce Teachers' Stress. *Social Psychology of Education, 20*(1), 97-114.

Woosley, S. A. Conley, S. (2000). Teacher role stress, higher order needs and work outcomes. *Journal of Educational Administration, 38*(2), 179-201.

Worthen, B. R., Sanders, J. R., & Fitzpatrick, J. L. (1997). *Program Evaluation.* New York, NY: Longman.

Wu, M. (2010). *Structural equation models: the operation and application of AMOS.* Chongqing: Chongqing University Press.

Wu, S., Chi, J., & Li, X. (2018). Research on Local University Teachers' Well-being and Its Influencing Factors [地方高校教师幸福感及影响因素研究]. *The Guide of Science & Education, 2018*(2). 64-65, 110.

Wu, W. (2003). A brief introduction to the well-being view of Rationalism in Ancient Greece [简述古希腊理性主义幸福观]. *Journal of Henan Institute of Education, 22*(4), 137-141.

Wu, X. F., Guan, H. G., Ma, J. (2015). Why Do Employees Prefer Workplace Networking Behavior? Empirical Research Based on Trait Activation Theory [员工为什么热衷于构建职场关系网络——基于特质激发理论的实证研究]. *Foreign Economics & Management, 37*(6), 50-63.

Wu, Y., Guo, P., Miao, W., & Xin, T. (2014). *Data Analysis of the Sampling Survey of the Aged Population in Urban/Rural China 2010 [2010 年中国城乡老年人口状况追踪调查数据分析]*. Beijing: China Society Press.

Xie, H. Y. (2011). A brief discussion on the "morality, capability, attitude, and performance"

of professional teachers in higher vocational colleges [浅谈高职专业教师的"德能勤绩"]. *Data of Culture and Education, 8*(1), 234-236.

Xu, G. D. (2013). Epicurus' s Hedonism, Bentham' s Utilitarianism, and the Formation of the Assumptions of English Law about Human Nature [伊壁鸠鲁学派的快乐主义、边沁功利主义与英国法人性假设的形成]. Journal of Henan University of Economics and Law, 28(2), 46-54.

Yang, B., & Wang, G. (2008). The Analysis of Lao Zi's View on 'No-desire' [浅议《老子》的"无欲"观]. *Morality and Civilization, 5*, 78-81.

Yang, D. (2009). Independent College is a New Type of Private College with Chinese Characteristics [獨立學院是中國特色的新型民辦高校]. *Journal of Higher Education, 30*(3), 56-60.

Yang, G. S. (2002). *Indigenous research on ethnic Chinese people's psychology* [华人心理的本土化研究]. Taipei: Laureate Book Company.

Yang, M. (2013). Exploration of the Factors Affecting the Well-being of Teachers in Private Schools - based on an investigation on the cities and states in Hunan Province [影响民办学校教师幸福感的因素探析——基于湖南省各市州的调查分析]. *Journal of Shaoyang University (Social Science Edition), 12*(1), 101-106.

Yang, R. (2016), Comparing Policies. In M. Bray, B. Adamson, & M. Mason (Eds.), *Comparative Education Research: Approaches and Methods* (2nd Edition) (285-308). Hong Kong: The University of Hong Kong.

Yao, C. (2018). Analysis of factors influencing teachers' well-being in private colleges: a case study of Wuhan Qingchuan School [民办高校教师幸福感的影响因素分析-以武汉晴川学院为例]. *Ability & Wisdom, 2018*(15), 163.

Ye, J. Y., & Lu, N. G. (2012). An Analysis on the Institutionalization of "Respect for

Teachers" in Traditional Chinese Society [中国传统社会"尊师"制度的形成]. *Teacher Education Research, 24*(3), 54-62.

Yildirim, K. (2015). Testing the main determinants of teachers' professional well-being by using a mixed method. *Teacher Development, 19*(1). 59-78.

Yildirim, K., Arastaman, G., & Dasci, E. (2016). The Relationship between Teachers' Attitudes toward Measurement and Evaluation and Their Perceptions of Professional Well-Being. *Eurasian Journal of Educational Research, 62*(1), 95-114.

Yoo, P. S., Tackett, J. J., Maxfield, M. W., Fisher, R., Huot, S. J., & Longo, W. E. . (2017). Personal and professional well-being of surgical residents in New England. *Journal of the American College of Surgeons, 224*(6), 1015-1019.

Yu, F., Peng, K. P., Dou, D. H., Dong, R., Han, T. T. (2014). Is Virtue a Pre-requisite for Happiness? [美德是幸福的前提吗?]. *Psychological Science, 37*(6), 1518-1523.

Yu, J. (trans.) (2011). Living Well and Doing Well: the Ambiguity of the Aristotelian Conception of Happiness ["活得好"与"做得好":亚里士多德幸福概念的两重含义]. *World Philosophy, 2*, 246-260.

Yu, X., Wang, P., Zhai, X., Dai, H., Yang, Q. (2015). The effect of work stress on job burnout among teachers: the mediating role of self-efficacy. *Social Indicators Research, 122*(3), 701-708.

Yuan, X., Gao, Y. (2017). The Strategic Opportunities for China's Rapidly Population Aging. *Hebei Academic Journal, 2017*(4), 119-124.

Yuen, M., Lau, P. S., Shek, D. T., & Lam, M. P. (2002). Confirmatory factor analysis and reliability of the chinese version of the maslach burnout inventory among guidance teachers in hong kong. *Psychological Reports, 9*1(3 Pt 2), 1081-1086.

Yvonne Feilzer, M. (2010). Doing Mixed Methods Research Pragmatically: Implications for the Rediscovery of Pragmatism as a Research Paradigm. *Journal of Mixed Methods*

Research, 4(1), 6-16.

Zeidner, M., & Hadar, D. (2014). Some individual difference predictors of professional well-being and satisfaction of health professionals. *Personality and Individual Differences, 65*(1), 91-95.

Zeng, H, & Guo, S. (2012). "Le": The Chinese Subject Well-Being and the View of Happiness in China Tradition Culture ["乐"——中国人的主观幸福感与传统文化中的幸福观]. *Acta Psychologica Sinica, 44*(7), 986–994. DOI: 10.3724/

SP.J.1041.2012.00986

Zeng, H., & Guo, S. (2013). "Le": the Chinese Subject Well-Being and the View of Happiness in China Tradition Culture. *Acta Psychologica Sinica, 44*(7), 986-994.

Zhan, Y., Wang, M., Liu, S., & Shultz, K. S. (2009). Bridge employment and retirees' health: A longitudinal investigation. *Journal of Occupational Health Psychology, 14*(4), 374-389.

Zhang, W. L., & Ye, Y. D. (2019). Work Values of Chinese Youth in the New Era: An Analysis Based on CGSS Data [新时代中国青年的职业价值观: 基于 CGSS 数据的分析]. *Journal of Fujian Normal University (Philosophy and Social Sciences Edition), 5*, 70-77.

Zhang, W., He, G. B., & Cheng, L. (2011). Chinese cultural values and Subjective Well-being of Chinese people [中国文化价值观与中国人幸福感的研究综述.]. *Psychological Research, 4*, 48-52.

Zhang, Y., & Jin, S. (2013). Investigation of University Teachers' Occupational Well-being and Analysis of Influencing Factors [高校教师职业幸福感调查与影响因素分析]. *Education Science, 29*(5), 51-57

Zhang, Y., & Jin, S. (2013). The structure and measurement of university teachers'

occupational well-being [高校教师职业幸福感的结构与测量]. *Study of psychology and behavior, 11*(5), 629-634.

Zhao, A., & Zhou, L. (2017). An empirical study on the happiness index of teachers in independent colleges - using independent colleges in Jiangxi Province as example [独立学院高校教师幸福指数实证研究——以江西省独立学院为例]. *Contemporary Economics, 2017*(29), 100-101.

Zhao, C., & Cheng, Z. (2016). A Literature Review of Bridge Employment and Its Future Research Prospects. *Human Resources Development of China, 2016*(8), 18-24.

Zhao, X. (2012). Rehired after retirement: technical capacity, interpersonal relationship and working experience are the biggest advantages [退休返聘：技术、人脉和经验是最大优势]. *China Legal Science, 2012*(5), 29-30.

Zheng X., Yan, B., Qiu, L., & Zhang, X. (2004). *Psychology of Happiness [幸福心理学]*. Guangzhou: Jinan University Press.

Zheng, B. X. (2006). The Pattern of Difference Sequence and organizational behavior of ethnic Chinese [差序格局与华人组织行为], In Y. Li, *Chinese social psychology review [中国社会心理学评论]* (1-52). Beijing: Social Sciences Academic Press (China).

Zhou, K. (2010). Professional identity of physical education teachers at secondary schools. (Doctoral dissertation, Henan University)

Zhu, Z., Xiao, P., & Cao, Q. (2018). *Philosophy of Confucianism and Taoism and its modern value [儒道情感哲学及其现代价值]*. Beijing: Social Sciences Academic Press

Zissimopoulus, J. M., Karoly, L. A. (2009) Labor-force dynamics at older ages: Movements into self-employment for workers and non-workers. *Research on Aging, 31*(1), 89-111.

References from website:

Bulletin of the main data of the sixth nationwide census, 2010 [2010 年第六次全國人口普查

主要資料公報]:

http://www.stats.gov.cn/tjsj/tjgb/rkpcgb/qgrkpcgb/201104/t20110428_30327.html

China Daily, English version of 'Shi Shuo' (2017): https://www.24en.com/p/192319.html

Chinese National Survey Data Archive, Chinese General Social Survey (2015):

http://www.cnsda.org/index.php?r=projects/view&id=62072446

Data of educational statistics: number of educational personnel in HEIs, released by the

Education Department of Jiangxi Provincial Government in 2016:

http://www.jxedu.gov.cn/info/2357/108479.htm

Financial Report of the 21st Century, Rank list of Provincial Capital City's GDP level:

http://www.zhicheng.com/n/20180408/208143.html

Jiangxi Radio and Television Station: Population size of Nanchang city,

http://news.jxntv.cn/2016/1209/8271655.shtml

Jiangxi Statistical Yearbook (2015): http://www.jxstj.gov.cn/resource/nj/2016CD/indexch.htm

Ministry of Education (2006). Provisional Regulation on the Setting Up of Ordinary

Undergraduate-Level Colleges [普通本科學校設置暫行規定]:

http://old.moe.gov.cn/publicfiles/business/htmlfiles/moe/s181/201006/88612.html

Ministry of Education of China (1986). Provisional Regulation on the Setting up of Ordinary

Higher Education Institutions [普通高等學校設置暫行條例]:

http://old.moe.gov.cn/publicfiles/business/htmlfiles/moe/moe_620/200409/3134.html

Ministry of Education of China (1993). Provisional Regulation on the Setting Up of Private

Colleges [民辦高等學校設置暫行規定]:

http://old.moe.gov.cn//publicfiles/business/htmlfiles/moe/moe_621/201001/xxgk_81912.

html

Ministry of Education of China (2003). Promotion Law for Non-Government Funded

Education [民辦教育促進法]: http://www.gov.cn/test/2005-07/28/content_17946.htm

Ministry of Education of China (2008). Measures for the Setting Up and Management of

Independent Schools [獨立學院設置和管理辦法]:

http://www.moe.gov.cn/srcsite/A03/s181/200802/t20080222_170538.html

Ministry of Education of China (2018). Silver Age Program [銀齡講學計畫]:

http://www.moe.gov.cn/srcsite/A10/s7151/201807/t20180719_343448.html

State Council of China (2017). The 13th Five-Year Plan for the Development of National

Aging Cause and the Construction of Pension System ["十三五"國家老齡事業發展

和養老體系建設規劃]:

http://www.gov.cn/zhengce/content/2017-03/06/content_5173930.htm

Xinhua news: China is one of countries that have the earliest retirement age:

http://news.163.com/15/1015/13/B5VK8CGU00014JB5.html

Yin Weimin, the Minister of China's Ministry of Human Resources and Social Security:

China's mandatory age for retirement is quite early:

http://news.sina.com.cn/c/2015-03-10/111531589581.shtml

Table of Contents for Appendix

Appendix 3-1: Item Pool (Including the Source of and Treatment Suggestion for Each Item)

1. For measuring 'Professional Competence'

No.	Item	Source	Treatment Suggestion
1	I can get all students in class to work hard with their schoolwork [我能督促班上學生努力去完成他們的課業].	Skaalvik & Skaalvik (2007)	Select
2	I can provide good guidance and instruction to all students regardless of their level of ability [我能給班上水平各不相同的學生都提供高質量的教學與指導].	Skaalvik & Skaalvik (2007)	Select
3	I can answer students' questions so that they understand difficult problems [我能通過解答學生提出的問題，來幫助他們理解知識疑難點].	Skaalvik & Skaalvik (2007)	Delete. Reason: this is just a basic job requirement for teachers, so perhaps most participants will choose "strongly agree", which can not assure the variability of this item.
4	I can explain subject matter so that most students understand the basic principles [我會向學生解析課程的主幹內容,以保證他們掌握其基本原理].	Skaalvik & Skaalvik (2007)	Delete. Reason: ditto
5	I can provide realistic challenge for all students even in mixed ability classes [我可以為學生水準各不相同的班級提供真實的練習].	Skaalvik & Skaalvik (2007)	Alternative
6	I can stimulate the desire to learn even among the lowest achieving students [就算是班上成績最糟糕的學生，我也能激發出他們的學習欲望].	Skaalvik & Skaalvik (2007)	Select
7	I can get students to do their best even when working on difficult problems [我能幫助學生在解答難題時發揮全力].	Skaalvik & Skaalvik (2007)	Alternative
8	I can maintain discipline in any school class or group of students [我能很好地在任何一次授課或者小組活動時掌控住課堂紀律].	Skaalvik & Skaalvik (2007)	Alternative

9	I can control even the most aggressive students [就算是班上最調皮搗蛋的學生，我也能很好地穩定住他們].	Skaalvik & Skaalvik (2007)	Select
10	I can cooperate effectively and constructively with other teachers, for example, in teaching teams [我能很好的和其他教師一起合作開展一些活動，比如說，教學團隊活動].	Skaalvik & Skaalvik (2007)	Alternative
11	I can successfully use any instructional method that the school decides to use [我能很好地落實學校安排下來的教學方式].	Skaalvik & Skaalvik (2007)	Select
12	I can teach well even if I am told to use instructional methods that would not be my choice [就算學校不給我自主選擇教學方式的機會，我也能用學校安排的方式教的很好].	Skaalvik & Skaalvik (2007)	Delete. Reason: might not directly related to teachers' professional well-being.
13	I feel that I am making a significant educational difference in the lives of my students [我的教學正在讓學生的生活產生顯著的變化].	OECD (2010)	Alternative
14	I follow recent developments about my profession [我會關注我這個專業領域近期的發展動態].	Yildirim (2015)	Delete. Reason: basically every teacher will do this activity.
15	I have technical knowledge and skills, which are necessary for my profession [我覺得我的知識與技能是足夠勝任我的專業工作的].	Yildirim (2015)	Select
16	I can carry out my profession requirements effectively even under difficult conditions [即使在苛刻的工作環境下，我也能進行我的專業工作].	Yildirim (2015)	Select
17	I can perform my profession successfully in different places [我能在不同的地方出色地發揮自己的專業能力].	Yildirim (2015)	Alternative
18	I usually know how to get through to people (students, parents and school staff) [我一般知道怎麼去和我的學生、學生家長與同事們溝通].	Yildirim (2015)	Select
19	I can always find an appropriate solution to solve the work-related problems [對於工作中的問題，我總是有辦法很好的解決掉它們].	Made by the researcher	Select. Reason: as a conclusive item for measuring participants' overall feeling of their self-efficacy.
20	I can always manage to solve difficult problems if I try hard enough [如果我很努力，我能設法解決許多困難的問題].	Schwarzer and Jerusalem (1995)	Alternative

2. For measuring 'Job Satisfaction'

No.	Item	Source	Treatment Suggestion
1	Generally speaking, I am very satisfied with this job [總的來說，我對我的工作很滿意].	Hackman & Oldham, 1974	Select
2	I feel a great sense of personal satisfaction when I do this job well [當把工作做好時，我會有極大的個人滿足感].	Hackman & Oldham, 1974	Alternative
3	I feel bad and unhappy when I discover that I have performed poorly on this job [當我發現自己工作做得不到位時，我會感到失落與難過].	Hackman & Oldham, 1974	Delete. Reason: seems not related to the job satisfaction directly
4	I am generally satisfied with the kind of work I do in this job [總的來說，我對我工作的內容是滿意的].	Hackman & Oldham, 1974	Select
5	I feel I should personally take the credit or blame for the results of my work on this job [我覺得我應該對自己這份工作負責，做得好的話我應該得到獎勵，而做的不好我也該受到責罰].	Hackman & Oldham, 1974	Delete. Reason: seems not related to the job satisfaction directly
6	I never think of quitting this job [我從未想過離職的事].	Hackman & Oldham, 1974	Alternative
7	The work I do on this job is very meaningful to me [我的工作對我來說非常有意義].	Hackman & Oldham, 1974	Select
8	My opinion of myself goes up when I do this job well [當我把這份工作做好時，我對自己的看法也更積極了].	Hackman & Oldham, 1974	Alternative
9	In this school, teachers and students usually get on well with each other [在這個學校裏，教師和學生可以和睦相處].	OECD (2010)	Select
10	I have been performing my professional objectives in this school [在這個學校裏，我一直在執行我的專業目標].	Yildirim (2015)	Alternative
11	If I were choosing again, I would still become a teacher [再給我一次選擇的機會，我還是會成為一名教師].	Klusmann et al. (2008)	Select
12	I feel a sense of pride in doing my job [我的工作讓我感到自豪].	Spector (1997)	Alternative

13	My job makes me appreciate the meaning of life [我的工作，讓我感受到了生命的意義].	Spector (1997)	Select
14	Taken together, I am satisfied with my students [總的來說，我對我的學生很滿意].	Van Horn et al. (2004)	Select
15	In this school students' request can be responded immediately [在這個學校，學生提出的請求會立即得到答復].	Yildirim (2015)	Delete. Reason: seems not related to the job satisfaction directly
16	Students in my class take care to create a pleasant learning atmosphere [我班上的學生可以自發地形成愉悅的學習氛圍].	Yildirim (2015)	Delete. Reason: seems not related to the job satisfaction directly
17	I am very interested in my job [我覺得我的工作充滿樂趣].	Warr (1990)	Alternative
18	So far I have got the important things that I want from my job [到目前為止，我已經從工作中得到了我想要的東西].	Ho and Au (2006)	Alternative
19	In most ways, being a teacher is close to my ideal [在大多數方面，當老師是我的理想].	Ho and Au (2006)	Alternative
20	Generally speaking, I think the working environment of my university is quite good [總的來說，我覺得我學校的工作環境挺好的].	Made by the researcher	Select. Reason: as a conclusive item for measuring participants' overall feeling of their working environment.

3. For measuring 'Aspiration'

No.	Item	Source	Treatment Suggestion
1	In my job I like to set myself challenging targets [在工作中,我喜歡給自己設計有挑戰性的目標].	Warr (1990)	Select
2	I enjoy trying new things in my job [我喜歡在工作中嘗試一些新鮮事物].	Warr (1990)	Alternative
3	In my job, I make special effort to keep trying when things seem difficult [在工作中, 碰到難題時, 我會盡最大努力去不斷嘗試解決它]	Warr (1990)	Select
4	I am very concerned how things turn out in my job [我非常在意以後我的工作會有什麼樣的變化].	Warr (1990)	Alternative
5	I always have enthusiasm for doing professionally new things [我對於專業工作中那些新任務總是充滿幹勁].	Yildirim (2015)	Select
6	I look for new ways to do my profession more effectively [我會去不斷尋找新的工作方式,來提升我的專業工作效率].	Yildirim (2015)	Alternative
7	My future plans on professional development make me feel excited [一想到自己未來的職業規劃,我覺得非常興奮].	Yildirim (2015)	Alternative
8	I will ask my colleagues for help to develop myself professionally [我會主動請教同事來提升我的專業能力]	Yildirim (2015)	Alternative
9	Even at my age, I still spend lot of time and energy to seek for professional success [即使到了我這個年紀,我還是會花很多時間與精力去努力獲取專業工作上的成就].	Made by the researcher	Select
10	I really aspire for professional success [我渴望工作上的成就].	Made by the researcher	Select. Reason: as a conclusive item for measuring participants' overall level of aspiration for their professional work.

11	Next semester, I would like to teach several courses which I have never taught before, even though this will cost me more time to prepare for the lectures [我挺想在下學期教一些我從來沒教過的課的，哪怕這會花去我更多的時間去備課].	Made by the researcher	Alternative
12	I think my profession has a good prospect [我覺得我的專業非常有前途].	Made by the researcher	Alternative
13	The challenges that I encounter in my professional work did not really frustrate me. On the contrary, they are precious to my professional development [在專業工作中碰到的問題與挑戰並不讓我真的感覺到沮喪，相反，我認為它們促進著我的專業能力的成長].	Made by the researcher	Select
14	I regularly read professional publications (books, magazines, articles ...) [我會經常地閱讀專業相關的書籍/報刊/文章].	Yildirim, Arastaman, & Dasci (2016)	Alternative
15	I have exciting future plans about my profession [我對我的職業前景有讓我激動的暢想與規劃].	Yildirim, Arastaman, & Dasci (2016)	Select
16	I do not plan on devoting energy to getting promoted in the organization I am working in [在我工作的組織中，我沒有打算把我的精力投入在升職中].	Gray & O'Brien (2007)	Alternative
17	Attaining leadership status in my career is not that important to me [在我的職業生涯中，得到領導地位對於我來說不是那麼重要]	Gray & O'Brien (2007)	Alternative
18	I think I would like to pursue advanced training in my occupational area of interest [我想在我感興趣的職業領域繼續深造].	Gray & O'Brien (2007)	Select

4. For measuring 'Recognition'

No.	Item	Source	Treatment Suggestion
1	I am appreciated for my professional accomplishments [我曾因為我的專業成就而受到他人的稱讚].	Yildirim, Arastaman, & Dasci (2016)	Alternative
2	My profession is highly respected at the place where I live [在我生活的地方，我的專業工作是非常受人尊敬的].	Yildirim, Arastaman, & Dasci (2016)	Select
3	I hold useful discussions with the school administration in professional matters [我曾與學校管理層探討專業工作事宜且收穫頗豐].	Yildirim, Arastaman, & Dasci (2016)	Alternative
4	I am appreciated by the administration for my professional accomplishments [我曾因為我的專業成就而受到學校管理層的稱讚].	Yildirim, Arastaman, & Dasci (2016)	Select
5	I can achieve my professional goals in my workplace [我能在我工作的單位實現我的專業目標].	Yildirim, Arastaman, & Dasci (2016)	Alternative
6	Teachers in this local community are well respected [在本地社區，教師是受人尊敬的].	OECD (2010)	Select
7	In my opinion, effective teachers in this school receive their well-deserved monetary or non-monetary rewards [在我看來，在我的學校，那些工作能力強的教師，他們可以得到他們應得的報酬（包括物質上的報酬與非物質上的報酬）].	OECD (2010)	Select
8	My colleagues think I am a good teacher [我的同事認為我是一名好老師]。	Made by author	Select
9	My superiors recognize my professional capability [我的領導認可我的專業能力].	Made by author	Alternative
10	My peers recognize my professional capability [我的同事認可我的專業能力].	Made by author	Select
11	My students recognize my professional capability [我的學生認可我的專業能力].	Made by author	Select

12	Generally speaking, my students respect me [總的來說，我的學生是尊重我的].	Made by author	Select
13	My students told me my lecture is interesting [我的學生告訴我，我的課很有意思]	Made by author	Select
14	My students told me my lecture benefit them a lot [我的學生告訴我，我的課令他們受益匪淺].	Made by author	Select
15	My colleagues once told me I am a capable teacher [我同事曾告訴我，我是一個很有能力的人].	Made by author	Alternative
16	My superiors told me I am quite talented [我領導說我很有才華].	Made by author	Alternative
17	My superiors praised me on public occasions [我領導曾經公開表揚過我].	Made by author	Alternative
18	I am satisfied with the recognition I receive for my work [我很滿意我從工作當中收到的認可].	Bialopotocki (2006)	Select
19	Nobody in authority appreciates my work [沒有權威人士欣賞我的工作].	Kelloway and Barling (1994) and Gilbert and Kelloway (2018)	Alternative
20	I feel I am recognized for the work that I do [我感覺我因為我所做的工作而受到認可].	Kelloway and Barling (1994) and Gilbert and Kelloway (2018)	Alternative
21	It is important for me to be recognized for my accomplishments [對於我來說，成就受到認可，是一件很重要的事].	Bialopotocki (2006)	Alternative
22	I think being a teacher is a sacred occupation [我覺得教師是一份神聖的職業].	Made by author	Delete: "recognition" should be a feeling that generated in the process of teachers' communication with others.

5. For measuring 'Autonomy'

No.	Item	Source	Treatment Suggestion
1	I have the freedom to decide what I do on my job [我可以自由決定我該怎麼開展工作].	Thompson & Prottas (2005)	Alternative
2	I have a lot of say about what happens on my job [關於我工作上發生的事，我有挺多發言權].	Thompson & Prottas (2005)	Alternative
3	I decide when I have break from work [我可以自由決定什麼時候給自己放個假休息一下].	Thompson & Prottas (2005)	Alternative
4	It is basically my own responsibility to decide how my job gets done [基本上，我可以自由去設計怎麼去完成我的工作].	Thompson & Prottas (2005)	Select
5	I am free to be creative in my teaching approach [在教學實踐中，我可以自由發揮自己的創造力].	Pearson & Hall (1993)	Select
6	The selection of student-learning activities in my class is under my control [我有自主權去安排學生的學習活動].	Pearson & Hall (1993)	Alternative
7	Code of conduct in my classroom are set primarily by me [學生在課堂上所需遵循的行為規範主要是由我來設定的].	Pearson & Hall (1993)	Alternative
8	I seldom use alternative procedures in my teaching [我很少會去使用備選教案].	Pearson & Hall (1993)	Delete. Reason: seems not related to the job autonomy
9	I could decide by myself the manner of teaching I like. [我可以自己決定我喜歡的授課方式].	Pearson & Hall (1993)	Select, but add one precondition: under the general guidance of school administration
10	I select the teaching methods and strategies I use with my students [我使用的授課方式與策略是我和學生們一起商量決定的].	Pearson & Hall (1993)	Alternative
11	I determine the content and skills taught in my class [上課具體教什麼樣的內容與技能，是我自己來決定的].	Yildirim (2015)	Alternative

12	Most of the materials I use in my class are chosen by me [學生上課用的教材與課件大部分是我自己選的].	Yildirim (2015)	Alternative
13	I know the code of conduct for the teaching profession [我知道教學工作所應遵循的守則].	Yildirim (2015)	Delete. Reason: seems not related to the job autonomy
14	I and my colleagues make decisions related to our profession in the work environment [和我的專業工作有關的事，都是我和我同事們一起制定的].	Yildirim (2015)	Alternative
15	I consider other people's advice about professional issues but I will make the last decision [專業工作中，我會考慮別人給我的一些建議，不過最終還是我自己來做決定].	Yildirim (2015)	Select
16	I have opportunities to discuss with the school administrators on professional issues [我有機會和學校的管理層一起討論一些和我的專業工作有關的事情].	Yildirim (2015)	Select, but change "I" to "teachers", to make this question more applied to the higher education background.
17	I think the school administration and my superior have offered me sufficient autonomy regarding my professional work [我覺得我的領導與上級管理部門給予了我足夠的專業工作自主權].	Made by the researcher	Select. Reason: as a conclusive item for this component.
18	In my situation, I have little say over the content and skills that are selected for teaching [在我的情況下，我對選擇教學內容和教學技能沒有太多發言權].	Pearson and Moomaw (2006)	Select
19	I select teaching methods based on the needs of my students [我根據學生的需求選擇教學方法].	Friedman (1999)	Select
20	I determine norms and rules for student behavior [我為學生的行為制定規範和規則].	Friedman (1999)	Alternative

6. For measuring 'Burnout'

No.	Item	Source	Treatment Suggestion
1	I feel exhausted in the morning at the thought of another day at work[早上醒來時想到又要面對一天的工作，我感到很累]。	Maslach, & Jackson (1996)	Select
2	Teaching makes me feel very exhausted [教學工作使我疲憊不堪]。	Maslach, & Jackson (1996)	Select
3	Since I got this work, I feel I have become more indifferent to other people [自從從事這項工作以來，我變得對人更冷淡了]。	Maslach, & Jackson (1996)	Alternative
4	I feel worry that my work will make me become an apathic people [我擔心這項工作使我感情冷漠].	Maslach, & Jackson (1996)	Alternative
5	My work makes me feel frustrated [我的工作使我有挫折感].	Maslach, & Jackson (1996)	Select
6	I feel my work is too hard for me [我覺得對我來說，我的工作太辛苦了].	Maslach, & Jackson (1996)	Alternative
7	I do not really care what happened to my students [我不太關心發生在我的學生身上的事情].	Maslach, & Jackson (1996)	Delete. Reason: seems not directly relate to the job burnout
8	I am blamed by others because of their own fault [在工作中，我感到別人因為他（她）們自己的某些問題而責備我].	Maslach, & Jackson (1996)	Alternative
9	I feel every working hour is a pain to me [工作時，我覺得每一個小時對我來說都是一種煎熬].	Kristensen et al. (2005)	Select
10	I do not have enough energy for family and friends after work [下班後，我累的連和家人與朋友一起聚一下的力氣都沒有了].	Kristensen et al. (2005)	Alternative
11	I feel burnt out because of my work [我的工作讓我感到十分倦怠].	Kristensen et al. (2005)	Select
12	I find it hard to get alone with my students [我覺得和我的學生相處真的好辛苦].	Kristensen et al. (2005)	Select
13	I find it frustrating to interact with my students [我發現和我的學生互動是一件非常令人沮喪的事情].	Kristensen et al. (2005)	Alternative

14	I feel that I give more than I can get back in my work [我覺得我工作中的付出與回報不成正比].	Kristensen et al. (2005)	Select
15	I am tired of doing this job [我已經不想再做這份工作了].	Kristensen et al. (2005)	Select
16	Sometimes I wonder how long I will be able to continue with this work [有的時候我會想，這份工作我還會繼續堅持多久].	Kristensen et al. (2005)	Alternative
17	I do not have a second of rest during my work [我感覺我的工作真的是讓我忙的一秒都不能停].	Made by the researcher	Select
18	I feel very stressful even during the non-office hours [就算下了班，我照樣感覺壓力很大]	Made by the researcher	Select
19	I found it difficult to relax [我發現很難放鬆一下].	Lovibond and Lovibond (1995)	Alternative
20	I felt I was close to panic [我覺得我幾乎要驚慌失措了].	Lovibond and Lovibond (1995)	Alternative
21	I often feel nervous and stressed [我經常感到緊張和有壓力].	Cohen, Kamarck, & Mermelstein (1983)	Alternative

7. For measuring 'Support and Relationships'

No.	Item	Source	Treatment Suggestion
1	I have been influenced by my colleagues. They all have a great impact on my attitude towards children and curriculum [我的同事們的工作精神感染了我，讓我會更多地去思考該用什麼樣一種心境去看待我教的課程，以及我的學生們].	Retallick & Butt (2004)	Alternative
2	I feel fortunate to be a member of staff where interpersonal relationships are strong, and where cooperation is a way of life [我覺得我挺幸運的，能在一個工作關係這麼和諧，合作意識這麼濃厚的地方上班].	Retallick & Butt (2004)	Select
3	The atmosphere in the school is very positive. Outsiders find it a happy family and everyone in the school looks happy [我的工作環境非常積極。外人感覺我們這裏就像一個歡樂的大家庭，每個成員都是幸福的].	Retallick & Butt (2004)	Select
4	I really enjoy working with my colleagues [我非常喜歡和我同事們在一起工作].	Retallick & Butt (2004)	Select
5	We often argued (in the true sense of the word) about education – often seeking one another out as sounding boards [我們經常會討論教育理念，會在彼此的身上尋找共鳴].	Retallick & Butt (2004)	Alternative
6	(My colleagues) gave me the direction I needed and also showed me that it was all right not to be perfect [我的同事們是我的工作榜樣，而他們讓我知道，一切無需追求盡善盡美].	Retallick & Butt (2004)	Delete. Reason: Containing multiple statements.
7	In meetings, the principal discusses educational goals with teachers [在開會制定工作計畫與目標時，學校管理層也會邀請普通教職工們一起參與討論].	OECD (2010)	Select
8	The principal or someone else in the management team observes teaching in classes [校長或者其他領導們會去教室旁聽教師上課。].	OECD (2010)	Delete. Reason: might not related to teacher well-being
9	The principal gives teachers suggestions as to how they can improve their teaching [校長會給教師一些關於如何提升教學技能的建議].	OECD (2010)	Select

10	When a teacher has problems in his/her classroom, the principal takes the initiative to discuss the matter [當一名教師在課堂授課中出現一些問題時，校長會主動地找教師探討這些問題].	OECD (2010)	Alternative
11	The principal ensures that teachers are informed about possibilities for updating their knowledge and skills [校長會盡可能地讓教師們瞭解到那些有助於他們專業能力提升的機會].	OECD (2010)	Delete. Reason: it is hard for the participants to make a judge of this item subjectively.
12	In this school, the principal and teachers work on a school development plan [在這個學校，校長與教師們一起討論與制定學校發展計畫].	OECD (2010)	Select
13	Generally I have a good relationship with my colleagues [基本上，我和同事們關係很和諧].	OECD (2010)	Select
14	There is consensus among our colleagues concerning the educational concept of our school [關於學校的教學理念，我和我的同事們都有一致看法].	Wolgast & Fischer (2017)	Delete. Reason: containing ambiguity. Consensus can be both positive or negative, however this item can not explore this information.
15	There is good team spirit at our school [我所在的學院裏，大家的團隊合作精神非常強].	Wolgast & Fischer (2017)	Alternative
16	When teachers have different opinions, we talk about them openly [當教師們對於某件事有不一樣的看法時，我們會公開的討論它].	Wolgast & Fischer (2017)	Select
17	Generally speaking, my superiors and colleagues really take care of me. [總的來說，我的領導與同事們對我挺照顧的].	Made by author	Select. Reason: as a conclusive item for this component.
18	School staff is ready to help me about anything related to teaching [在教學工作中，當我需要一些幫助時，學校其他教職工都願意對我施以援手].	Yildirim (2015)	Select
19	My superior often backs me up in dealing with the administration [我的上級經常在行政上給予我支持].	Dansereau, Graen, and Haga (1975)	Alternative

20	My superior generally follows through on his or her promises [我的上級能夠信守承諾].	Dansereau, Graen, and Haga (1975)	Alternative
21	We discuss personal topics such as families [我們會討論一些私人話題，例如家庭話題].	Sias (2005)	Alternative
22	We rarely keep secrets from each other [我們之間很少有秘密].	Sias (2005)	Alternative
23	We make a concerted effort to provide emotional support to each other [我們同心協力互相提供精神支持].	Sias (2005)	Alternative
24	We talk frankly about nearly all topics [我們真誠地討論幾乎所有的話題].	Sias (2005)	Alternative

Appendix 3-2: The Final Version of Questionnaire (English Version)

Questionnaire Survey: Teachers' Professional Well-being

I. For each of the following statements, please select the option corresponding to your feelings and opinions by circling a number on the scale from 1 - 6, with '6' being strongly agree and '1' being strongly disagree.

Please select only one option for each question.

No.	Question	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
1	I always have a way to make students understand my lecture and get their attention.	6	5	4	3	2	1
2	I am good at stimulating students' learning interest through my own way of teaching.	6	5	4	3	2	1
3	I always have a way to solve problems related to my professional work.	6	5	4	3	2	1
4	I could carry out well the professional tasks assigned to me by the school.	6	5	4	3	2	1
5	I could complete my professional tasks through efforts even under relatively unfavorable circumstances.	6	5	4	3	2	1
6	Generally speaking, I think I am competent to do my professional work with sufficient knowledge and skills.	6	5	4	3	2	1
7	My job makes me proud.	6	5	4	3	2	1
8	If I had to choose again, I would still choose to become a teacher.	6	5	4	3	2	1
9	I feel happy during the most time of my work.	6	5	4	3	2	1
10	I am satisfied with my work environment.	6	5	4	3	2	1
11	I really enjoy the feeling of sharing knowledge with students.	6	5	4	3	2	1
12	Generally speaking, I am satisfied with my job.	6	5	4	3	2	1

No.	Question	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
13	I have made a lot of plans to improve my professional competence.	6	5	4	3	2	1
14	I do not find the problems and challenges at work are troubles; instead, I find them as a way for growth.	6	5	4	3	2	1
15	I am very eager to have achievements in my professional work.	6	5	4	3	2	1
16	Even at my age, I still put a lot of efforts into pursuing achievements in my professional work.	6	5	4	3	2	1
17	I am eager to seek new challenges in my professional work.	6	5	4	3	2	1
18	Generally speaking, I have aspirations for my professional work.	6	5	4	3	2	1
19	My students told me that my class was very interesting, where they have learned a lot of helpful knowledge.	6	5	4	3	2	1
20	My students respect me.	6	5	4	3	2	1
21	My superiors consider me competent.	6	5	4	3	2	1
22	My colleagues consider me a good teacher.	6	5	4	3	2	1
23	Compared to most professions in society college teaching is highly respected.	6	5	4	3	2	1
24	Generally speaking, my professional competence is recognized by the people around me.	6	5	4	3	2	1
25	Under the principle of following the syllabus, I could make decisions on the teaching progress and contents.	6	5	4	3	2	1
26	My superiors have not interfered in my professional work too much.	6	5	4	3	2	1
27	My superiors offered me some overall work instructions, but I could independently consider the specific actions.	6	5	4	3	2	1

No.	Question	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
28	I am free to be creative in my professional work.	6	5	4	3	2	1
29	The Code of Conduct for students in my classroom are set primarily by me.	6	5	4	3	2	1
30	Generally speaking, the school has given me sufficient professional work autonomy.	6	5	4	3	2	1
31	When doing my professional work, my colleagues are happy to help me if I asked.	6	5	4	3	2	1
32	My superiors have taught me a lot of things to help improve my professional competence.	6	5	4	3	2	1
33	Generally speaking, my colleagues take good care of me.	6	5	4	3	2	1
34	Generally speaking, my superiors take good care of me.	6	5	4	3	2	1
35	I really like to work with my current colleagues.	6	5	4	3	2	1
36	I think my colleagues have offered me sufficient help to do my professional work.	6	5	4	3	2	1
37	I think my superiors have offered me sufficient guidance and support for my professional work.	6	5	4	3	2	1

II. The 7 questions below are related to the teachers' **sense of burnout**. Please follow the above-mentioned instructions for choosing options.

No.	Question	Strongly Agree	Agree	Slightly Agree	Slightly Disagree	Disagree	Strongly Disagree
38	I feel tired at the end of each work day, because my work drains my energy.	6	5	4	3	2	1
39	I feel very stressful at work, and sometimes it makes me depressed.	6	5	4	3	2	1
40	I feel that I give more than what I can get back in my work.	6	5	4	3	2	1
41	I find it very exhausting to manage my students in class every day because they are quite disobedient.	6	5	4	3	2	1
42	I think that my work has become a pain for me.	6	5	4	3	2	1
43	I feel I cannot relax during work, and I remain stressful even after my work.	6	5	4	3	2	1
44	Generally speaking, my work has brought me a strong sense of fatigue.	6	5	4	3	2	1

III. Please score on a scale of **1-10** to indicate your **level of well-being** in terms of the following three types of professional work, with '1' stands for a very low level of well-being, and '10' stands for a very high level of well-being.

1. Teaching: points
Please write "N/A" if you do not undertake any teaching work.

2. Research: points
Please write "N/A" if you do not undertake any research work.

3. Administrative work: points
Please write "N/A" if you do not undertake any administrative work.

IV. At last, please score on a scale of **1-10** to indicate your
overall sense of **professional well-being**:   points

V. General background questions.

1. Your age:

2. Your Gender: ☐ Male ☐ Female

3. Comparing to other people at your age, how do you rate your health condition?
☐ Poor ☐ Not so good ☐ Average ☐ Good ☐ Very good

4. How many years have you been serving as a teacher?

5. Please briefly describe your average weekly working hours on the following works:

(1) Your **weekly teaching hour** of this semester is about _____ **class hour(s)**.

(2) During this semester, **each week** you have _____ hour(s) spent on **research.**

(3) During this semester, **each week** you have _____ hour(s) spent on **administrative work**.

6. What is your current professional title：
☐ Teaching Assistant
☐ Lecturer
☐ Associate Professor
☐ Professor

7. What type of college that you are currently working in?
☐ Public College
☐ Private College
☐ Independent school under the management of a public college

8. Are you satisfied with your current wage income?
☐ Very Unsatisfied
☐ Unsatisfied
☐ Just OK
☐ Satisfied
☐ Very Satisfied

9. How do you feel about the opportunity of learning new professional knowledge from work in every semester?
☐ A lot of
☐ Some
☐ Seldom
☐ None

VI. The following questions only apply to post-retirement rehired teachers.

1. How many years have you been working since you were rehired?

2. Are you currently working in the same organization that you have worked before retirement?
☐ Yes
☐ No

3. Were you also a teacher before you retired?
☐ Yes
☐ No , I used to be a

4. Comparing to your workload before retirement, now your weekly workload has
☐ Largely increased
☐ Moderately increased
☐ Slightly increased
☐ Remained the same
☐ Slightly decreased
☐ Moderately decreased
☐ Largely decreased

5. Comparing to your work income before retirement, now your work income has
☐ Largely increased
☐ Moderately increased
☐ Slightly increased
☐ Remained the same
☐ Slightly decreased
☐ Moderately decreased
☐ Largely decreased

Appendix 3-3: The Final Version of Questionnaire (Chinese Version)

調查問卷：教師的專業幸福感

一. 以下是一些陳述性語句，請根據您的自身感受與意見進行選擇。每個語句會有 6 個選項，請在您欲選擇的選項對應的數字上畫個圈。比如說，假如您想選擇"強烈贊同"，那您可以在它對應的數字"6"上畫個圈；假如你想選擇"強烈反對"，那就在"1"上畫個圈。

每個題目，請僅選擇一個選項。

題號	題目	強烈贊同	中度贊同	有點贊同	有點反對	中度反對	強烈反對
1	我總是有辦法讓學生理解我講授的內容，以及吸引他們的注意力。	6	5	4	3	2	1
2	我擅長使用我自己的教學方式來激發學生的學習興趣。	6	5	4	3	2	1
3	對於專業工作中的問題，我總是有辦法很好地解決掉它們。	6	5	4	3	2	1
4	我可以很好地落實學校佈置給我的專業任務。	6	5	4	3	2	1
5	即使在比較不理想的工作環境下，我也能通過努力，完成自己的專業任務。	6	5	4	3	2	1
6	總的來說，我覺得我的知識與技能還是足夠勝任我的專業工作的。	6	5	4	3	2	1
7	我的工作，讓我感到自豪。	6	5	4	3	2	1
8	若我能再選一次，我還是會選擇成為一名教師。	6	5	4	3	2	1
9	在工作中，大部分時間裏我都是開心的。	6	5	4	3	2	1
10	我的工作環境令我挺滿意的。	6	5	4	3	2	1
11	我很享受與學生們在一起分享知識的感覺。	6	5	4	3	2	1
12	總的來說，我對我的工作很滿意。	6	5	4	3	2	1
13	我制定了很多計畫，來提升我的專業能力。	6	5	4	3	2	1

題號	題目	強烈贊同	中度贊同	有點贊同	有點反對	中度反對	強烈反對
14	我覺得在工作中碰到的問題與挑戰不是一種麻煩，而是一種成長的途徑。	6	5	4	3	2	1
15	我非常渴望能在專業工作中有所建樹。	6	5	4	3	2	1
16	即使到了我這個年紀,我還是會花很多精力去努力獲取專業工作上的成就。	6	5	4	3	2	1
17	我渴望在專業工作中尋找新的挑戰。	6	5	4	3	2	1
18	總的來說，對於專業工作，我充滿了志向與抱負。	6	5	4	3	2	1
19	我的學生告訴我，我的課很有意思，讓他們學到很多有用知識。	6	5	4	3	2	1
20	我的學生挺尊重我的。	6	5	4	3	2	1
21	我的領導覺得我挺能幹的。	6	5	4	3	2	1
22	我的同事認為我是一名好老師。	6	5	4	3	2	1
23	相比起社會上大多數職業而言,大學教師屬於非常受人尊敬的那一類職業。	6	5	4	3	2	1
24	總的來說,我的專業能力是受到周邊人認可的。	6	5	4	3	2	1
25	在遵循教學大綱的原則下,我可以自己決定教學進度與教學內容。	6	5	4	3	2	1
26	我的領導並沒有太多地干預我的專業工作。	6	5	4	3	2	1
27	我的領導給了我一些總的工作指示,但是我可以獨立去思考如何開展具體的工作。	6	5	4	3	2	1
28	在專業工作中,我可以自由發揮自己的創造力。	6	5	4	3	2	1
29	學生在課堂上所需遵循的行為規範主要是由我來制定的。	6	5	4	3	2	1
30	總的來說,學校給予了我足夠的專業工作自主權。	6	5	4	3	2	1
31	在專業工作中,當我請求同事幫忙時,他們會樂意施以援手。	6	5	4	3	2	1
32	我的領導教會了我挺多有利於我的專業能力提升的東西。	6	5	4	3	2	1
33	總的來說，我的同事們對我挺照顧的。	6	5	4	3	2	1

題號	題目	強烈贊同	中度贊同	有點贊同	有點反對	中度反對	強烈反對
34	總的來說，我的領導對我挺關照的。	6	5	4	3	2	1
35	我非常喜歡和我現在的同事們共事。	6	5	4	3	2	1
36	我覺得專業工作上,我的同事們給予了我足夠的幫助。	6	5	4	3	2	1
37	我覺得專業工作上,我的領導給予了我足夠的指導與支持。	6	5	4	3	2	1

二. 以下為 7 個與教師的**工作倦怠感**相關的問題，作答方式同上。

題號	題目	強烈贊同	中度贊同	有點贊同	有點反對	中度反對	強烈反對
38	每天下班時，我都感到很累，因為工作榨幹了我的精力。	6	5	4	3	2	1
39	我的工作壓力挺大的，有時讓我感到挺壓抑。	6	5	4	3	2	1
40	我覺得我工作中的付出與回報不成正比。	6	5	4	3	2	1
41	我覺得我的學生不大聽話，為了每天在課堂上管好他們，我真的是筋疲力盡了。	6	5	4	3	2	1
42	我覺得工作對於我來說已經變成了一種痛苦。	6	5	4	3	2	1
43	我覺得我的工作都不給我放鬆一下的機會，就算下了班照樣壓力很大。	6	5	4	3	2	1
44	總而言之，我對我的工作已經產生了很強的倦怠感。	6	5	4	3	2	1

三. 請用 **1-10 分**給以下專業工作的**幸福感**打分。1 分意味著幸福感極低，而 10 分意味著幸福感滿滿。

1. 教學工作: _____ 分
[如沒有承擔教學工作，請寫"N/A"]。

2. 科研工作: _____ 分
[如沒有承擔科研工作，請寫"N/A"]。

3. 行政工作: _____ 分
[如沒有承擔行政工作，請寫"N/A"]。

四. 最後，請用 **1-10 分**，給自己的**專業工作幸福感**打個**總的**分數:　　　　　　分

五. 一般背景問題
1. 請問您今年貴庚:

2. 請問您的性別是:　□　男　□　女

3. 相比起您的同齡人，您覺得您的身體健康狀態:
□　非常糟糕
□　不是很好
□　一般吧
□　挺好的
□　非常棒

4. 您當老師已經大概有多少年了:

5. 請簡要描述您在以下工作上的周平均工作時間:

(1) 您本學期**每週**的　**教學課時量**　大概是　＿＿＿＿＿節（**課時**）。

(2) 您本學期**每週**大概有　＿＿＿＿＿　小時用於進行　**科研工作**　。

(3) 您本學期**每週**大概有　＿＿＿＿＿　小時用於處理　**行政工作**　。

6. 請勾選您目前的專業職稱：
□　助教　　　□　講師　　　□　副教授　　　□　教授

7. 您目前工作的單位性質屬於：
□　公立院校
□　民辦院校
□　公立院校下屬的獨立學院 (傳統三本)

8. 您覺得您目前的工資收入讓您滿意麼？
□　相當不滿意
□　不滿意
□　勉強湊合
□　滿意
□　非常滿意

9. 您覺得在每個學期，通過工作學到新的專業知識的機會多麼？
□　有非常多的學習機會
□　有一些學習機會
□　有少量的學習機會
□　一點學習機會都沒有

六. 以下問題僅限退休返聘教師作答:

1. 自從您參與返聘工作以來，已經有多少年了？

2. 您目前所工作的單位，與您參與返聘前的單位是否是同一個？
□ 是　　□ 否

3. 在退休前，您是否也是一名教師?
□ 是的
□ 不是的，我退休以前是一名

4. 對比您退休前的工作量，現在您每週的工作量
□ 大幅度上升了
□ 中等幅度上升了
□ 小幅度上升了
□ 還是和原來一樣
□ 小幅度下降了
□ 中等幅度下降了
□ 大幅度下降了

5. 對比您退休前的工作收入，現在您的工作收入
□ 大幅度上升了
□ 中等幅度上升了
□ 小幅度上升了
□ 還是和原來一樣
□ 小幅度下降了
□ 中等幅度下降了
□ 大幅度下降了

Appendix 4-1: Information on Each Factor and the Subordinate Items under Each Factor in the Original TPW Structure

1. Factor 1: Professional Competence
(1) Item 1: I always have a way to make students understand my lecture and get their attention.
(2) Item 2: I am good at stimulating students' learning interest through my own way of teaching.
(3) Item 3: I always have a way to solve problems related to my professional work.
(4) Item 4: I could carry out well the professional tasks assigned to me by the school.
(5) Item 5: I could complete my professional tasks through efforts even under relatively unfavorable circumstances.
(6) Item 6: Generally speaking, I think I am competent to do my professional work with sufficient knowledge and skills.

2. Factor 2: Job Satisfaction
(1) Item 7: My job makes me proud.
(2) Item 8: If i had to choose again, i would still choose to become a teacher.
(3) Item 9: I feel happy during the most time of my work.
(4) Item 10: I am satisfied with my work environment.
(5) Item 11: I really enjoy the feeling of sharing knowledge with students.
(6) Item 12: Generally speaking, I am satisfied with my job.

3. Factor 3: Aspiration
(1) Item 13: I have made a lot of plans to improve my professional competence.
(2) Item 14: I do not find the problems and challenges at work are troubles; instead, I find them as a way for growth.
(3) Item 15: I am very eager to have achievements in my professional work.
(4) Item 16: Even at my age, I still put a lot of efforts into pursuing achievements in my professional work.
(5) Item 17: I am eager to seek new challenges in my professional work.
(6) Item 18: Generally speaking, I have aspirations for my professional work.

4. Factor 4: Recognition
(1) Item 19: My students told me that my class was very interesting, where they have learned a lot of helpful knowledge.
(2) Item 20: My students respect me.
(3) Item 21: My superiors consider me competent.
(4) Item 22: My colleagues consider me a good teacher.
(5) Item 23: Compared to most professions in society college teaching is highly respected.
(6) Item 24: Generally speaking, my professional competence is recognized by the people around me.

5. Factor 5: Autonomy

(1) Item 25: Under the principle of following the syllabus, I could make decisions on the teaching progress and contents.

(2) Item 26: My superiors have not interfered in my professional work too much.

(3) Item 27: My superiors offered me some overall work instructions, but I could independently consider the specific actions.

(4) Item 28: I am free to be creative in my professional work.

(5) Item 29: The Code of Conduct for students in my classroom are set primarily by me.

(6) Item 30: Generally speaking, the school has given me sufficient professional work autonomy.

6. Factor 6: Work Support and Relationships

(1) Item 31: When doing my professional work, my colleagues are happy to help me if I asked.

(2) Item 32: My superiors have taught me a lot of things to help improve my professional competence.

(3) Item 33: Generally speaking, my colleagues take good care of me.

(4) Item 34: Generally speaking, my superiors take good care of me.

(5) Item 35: I really like to work with my current colleagues.

(6) Item 36: I think my colleagues have offered me sufficient help to do my professional work.

(7) Item 37: I think my superiors have offered me sufficient guidance and support for my professional work.

7. Factor 7: Burnout

(1) Item 38: I feel tired at the end of each work day, because my work drains my energy.

(2) Item 39: I feel very stressful at work, and sometimes it makes me depressed.

(3) Item 40: I feel that I give more than what I can get back in my work.

(4) Item 41: I find it very exhausting to manage my students in class every day because they are quite disobedient.

(5) Item 42: I think that my work has become a pain for me.

(6) Item 43: I feel I cannot relax during work, and I remain stressful even after my work.

(7) Item 44: Generally speaking, my work has brought me a strong sense of fatigue.

Appendix 4-2: Information on Each Factor and the Subordinate Items under Each Factor in Model 2 of TPW Structure

1. Factor 1: Professional Competence
(1) Item 1: I always have a way to make students understand my lecture and get their attention.
(2) Item 3: I always have a way to solve problems related to my professional work.
(3) Item 4: I could carry out well the professional tasks assigned to me by the school.
(4) Item 5: I could complete my professional tasks through efforts even under relatively unfavorable circumstances.

2. Factor 2: Job Satisfaction
(1) Item 8: If I had to choose again, I would still choose to become a teacher.
(2) Item 9: I feel happy during the most time of my work.
(3) Item 10: I am satisfied with my work environment.
(4) Item 12: Generally speaking, I am satisfied with my job.

3. Factor 3: Aspiration
(1) Item 14: I do not find the problems and challenges at work are troubles; instead, I find them as a way for growth.
(2) Item 15: I am very eager to have achievements in my professional work.
(3) Item 16: Even at my age, I still put a lot of efforts into pursuing achievements in my professional work.
(4) Item 17: I am eager to seek new challenges in my professional work.

4. Factor 4: Recognition
(1) Item 20: My students respect me.
(2) Item 21: My superiors consider me competent.
(3) Item 22: My colleagues consider me a good teacher.
(4) Item 24: Generally speaking, my professional competence is recognized by the people around me.

5. Factor 5: Autonomy
(1) Item 27: My superiors offered me some overall work instructions, but I could independently consider the specific actions.
(2) Item 28: I am free to be creative in my professional work.
(3) Item 29: The Code of Conduct for students in my classroom are set primarily by me.
(4) Item 30: Generally speaking, the school has given me sufficient professional work autonomy.

6. Factor 6: Work Support and Relationships
(1) Item 31: When doing my professional work, my colleagues are happy to help me if I asked.
(2) Item 33: Generally speaking, my colleagues take good care of me.

(3) Item 34: Generally speaking, my superiors take good care of me.

(4) Item 36: I think my colleagues have offered me sufficient help to do my professional work.

7. Factor 7: Burnout

(1) Item 41: I find it very exhausting to manage my students in class every day because they are quite disobedient.

(2) Item 42: I think that my work has become a pain for me.

(3) Item 43: I feel I cannot relax during work, and I remain stressful even after my work.

(4) Item 44: Generally speaking, my work has brought me a strong sense of fatigue.

Appendix 4-3: Interviewees' Original Comments that Related to the Seven Overarching Themes

I. Interviewees' comments related to 'professional competence'

The following five sub-themes were synthesised from comments that interviewees made regarding the theme, 'professional competence':

1. Self-perceived professional knowledge
2. Self-perceived teaching skills
3. Self-perceived work attitude and effort
4. Self-perceived moral quality
5. Self-perceived capability to manage relationships with students

Note: for the following contents, the words in the parenthesis indicate the sub-theme that the comment aligns with.

1. 01-I-Pvt-30-2

Positive expression:

Some courses could only be taught by me, as, in this college, not many teachers are like me and have practical experience in the film-making industry. (Self-perceived professional knowledge)

Negative expression:

As a novice teacher, it is hard for me to find a suitable 'extent' in terms of the relationship with students. I cannot be too tough with the students, but if I were too friendly and lenient, then students would no longer treat me as their teacher, and then it would be hard for me to make them obedient. (Self-perceived capability to manage relationships with students)

2. 02-I-Pvt-26-0.6

Positive expression:

(1) One of my colleagues just left her job, and all her work was shifted to me. At the very beginning, I found the work was quite bothersome and I could only do it slowly, but, through repeatedly practicing, now I can handle it easily and quickly. (Self-perceived work attitude and effort)

Negative expression:

I have some troubles in my teaching…... students in a single classroom have different levels of learning foundations. Some students' foundation is good, while some students cannot even understand the most basic knowledge. It is hard for me to maintain a balance. (Self-perceived teaching skills)

3. 03-I-Pub-32-10

Positive expression:

(1) When I was in the induction period, I had no teaching experience at all, so I

tried many ways to improve myself. For example, I practiced eloquence every day, and I observed other teachers' classes to learn how they teach. Finally, I gradually developed my own ways of teaching. (Self-perceived work attitude and effort; Self-perceived teaching skills)

(2) It is a skilled work to manage relationships with students. You need to be friendly to them, but, meanwhile, you have to maintain your authority as a teacher so that you can make sure they will respect you. Now I have over ten years of teaching experience, and I think I have been doing quite well in this aspect. (Self-perceived capability to manage relationships with students)

(3) Because of the shortage of teaching staff, I was arranged to teach a course which was not actually related to my profession. That was a big challenge for me, but I made that course quite attractive, as I had endeavoured a lot and had done lots of preparation work for the course. (Self-perceived work attitude and effort; Self-perceived teaching skills)

Negative expression:
Not mentioned

4. 04-I-Pub-32-6
Positive expression:

(1) I got my first job because I was quite familiar with the latest development of the China CET (College English Test) at that time, and I also did very well in giving the trial lectures. (Self-perceived professional knowledge; Self-perceived teaching skills)

(2) I used to be very insecure about my professional capability. Compared to other teachers who were recruited in the same period as me, I was the only English teacher who did not have any overseas learning experiences. Over the years, I have been trying very hard to improve myself. If rating on a scale of 1–10 regarding professional competence, I would give 7 points to my professional knowledge, 8 points to my teaching skills, and 10 points to my effort level. (Self-perceived work attitude and effort)

(3) I put myself in students' shoes and care about their personal growth. Many times, I worked voluntarily to help students, even though I knew there was no payment for that. (Self-perceived moral quality)

Negative expression:
Not mentioned

5. 05-I-Pub-38-16
Positive expression:

(1) One student in my class wanted to drop out because he thought college study was meaningless. The school leaders had talked with him many times but still could not change his mind…I did not try to persuade him; instead, I invited him to my dance class…I did this because I have been teaching dance for over ten years, and I

knew this sport makes people feel happy. This week, he came to my office alone to express his gratitude. He said he had given up the idea of dropping out, and it was me who let him experience the pleasure of college life. At that moment, I felt so proud to be a teacher. I also realised that, as a teacher, aside from professional knowledge, you also need to have a loving heart, as well as high emotional intelligence, which helps you to understand your students. (Self-perceived moral quality; Self-perceived professional knowledge)

(2) I feel that, as teachers, we should always keep learning…the pace of change is too fast compared to the students of the past; nowadays, students are smarter and they have higher demands on teachers, so we must try our best to keep up with the times. (Self-perceived work attitude and effort)

(3) I feel that I have a personality charm which enables me to convince students. Even for those rebellious students, I can always find a way to communicate with them, to understand them, and to change them. I can guarantee all of the students are well-behaved in front of me. (Self-perceived capability to manage relationships with students)

(4) I care deeply about my teaching quality, because I do not want to let my students down. I have been working very hard to learn new things…I think that if students lack interest in a course, it is actually the fault of that course's teacher, because that teacher has failed to update his or her teaching philosophy and method to the newest trend, which has consequently diminished the students' learning motivation. (Self-perceived teaching skills; Self-perceived work attitude and effort)

Negative expression:
Not mentioned

6. 06-I-Pub-33-5
Positive expression:
(1) I feel happy every time I can use my professional knowledge to answer students' questions, to inspire the students, and to facilitate their growth. (Self-perceived professional knowledge)

Negative expression:
Not mentioned

7. 07-I-Pub-31-10
Positive expression:
Not mentioned

Negative expression:
(1) I feel my research capability is really insufficient. Many of my peers have already had lot of publications by now, and I feel frustrated when I compare my research achievements to theirs. (Self-perceived professional knowledge)

8. 08-I-Ind-29-3

Positive expression:

(1) Sometimes, the graduated students who I used to teach contacted me to seek my advice on profession-related issues that they encountered at work. (Self-perceived professional knowledge)

(2) I have worked very hard to improve my teaching skills; till now, I have overcome many weaknesses that I used to have when I first entered the teaching profession. (Self-perceived work attitude and effort)

Negative expression:
Not mentioned

9. 09-I-Ind-42-10

Positive expression:

(1) Many of my students are quite outstanding; some of them have been graduated for years and are now studying in a master's or even doctoral degree program. Many of them have contacted with me to ask questions that relate to my profession, which makes me so happy, as I feel I have the knowledge to supervise those gifted students. (Self-perceived professional knowledge)

(2) I think a good college teacher should have a balanced capability in both teaching and research; therefore, I have been working very hard to simultaneously improve my capabilities in these two areas. (Self-perceived work attitude and effort)

(3) As a teacher, I have to be considerate, tolerant, and patient, because the college students are still too young. Although they are adults and should be responsible for themselves, their values are still in the shaping stage. I have to be cautious about my words and deeds, as I know they could have a strong impact on students' psychological health. (Self-perceived moral quality)

(4) I am good at not only keeping a good relationship with my students, but also maintaining the relationships between students. My classroom environment is always harmonious and friendly. My students are always willing to help each other. (Self-perceived capability to manage relationships with students)

10. 10-R-Pub-60-34(4)

Positive expression:

(1) I feel that the emotion between teacher and students is mutual. You have to be sincere and friendly to your students if you want them to truly respect you. I treat my students as my children, so I can understand most of their naughty behaviours that are not involved in matter of principle, and I can give them useful recommendations based on my personal life experience. In return, most of them are very respectful and friendly to me. (Self-perceived capability to manage relationships with students; Self-perceived moral quality)

(2) I know the subjects that I teach (statistics, mathematics) are quite abstract, and even boring for many students, so I have always instantiated the theoretical knowledge points with cases and stories. The students all like this way of teaching.

(Self-perceived teaching skills)

(3) Generally, I believe I have been devoting myself to my work. Even after retirement, I have continued learning the cutting-edge theories in my professional area. (Self-perceived work attitude and effort)

(4) The reemployment work gives me the chance for continuous learning, so, in a sense, I feel my professional knowledge is even richer than before. (Self-perceived professional knowledge)

Negative expression:
Not mentioned

11. 11-R-Pub-62-39(7)
Positive expression:

(1) Some of my students were from poor families, and I found they even could not afford to buy nutritious food in the canteen. So, every week, I cooked a lot of meat dishes and brought them to the students. I have also helped many of them find on-campus part-time jobs. (Self-perceived moral quality)

(2) My students are just like my children, and many of them call me 'godmother'. I do have a close relationship with my students. (Self-perceived capability to manage relationships with students)

Negative expression:
Not mentioned

12. 12-R-Pub-61-40(1)
Positive expression:

(1) Many students came to seek my advice for their profession-related problems, including those who had been graduated for many years. I feel so proud of this. (Self-perceived professional knowledge)

(2) I became a teacher because of a series of coincidences…I did not receive any formal pedagogy training before entering into the teaching profession, as at that time, the Great Cultural Revolution had just finished and there was a shortage of teachers. To become a qualified teacher, I made a great effort to improve myself. I used my personal time to study in a teacher training school (night school) and was always humbled to learn from those experienced teachers. (Self-perceived work attitude and effort)

(3) As a rehired teacher, I think I have irreplaceable working experience and professional knowledge. (Self-perceived professional knowledge)

(4) My lectures are always highly welcomed by my students, and I feel my teaching skills are also recognised by my colleagues. (Self-perceived teaching skills)

Negative expression:
Not mentioned

13. 13-R-Pub-61-38(6)

Positive expression:

(1) I love teaching. I teach mathematics. Sometimes, for a complicated planimetry question, I can stay up for one whole night to figure it out. (Self-perceived work attitude and effort)

(2) When I first came to this college, I found that, among my peers, there were not many people like me who had received official pedagogical training before, so I felt that I had superiority in teaching at that time. (Self-perceived teaching skills)

(3) I am always sincere to my students. I have been devoting myself to the students, as I believe it is the intrinsic requirement of the teaching profession…maybe also for this reason, I have maintained a good interpersonal relationship with my students. (Self-perceived moral quality; Self-perceived capability to manage relationships with students)

Negative expression:
Not mentioned

14. 14-R-Pvt-73-53(13)

Positive expression:

(1) My professional area is engineering…I became a teacher in 1963, so, when the Great Cultural Revolution started, I was delegated to the rural area as 'educated youth'. Luckily, I was able [to return] back to the school for teaching before the termination of the Revolution, because the political leaders realised that, if there were no engineering science teachers, there would soon be no engineering talents, and everything would go wrong. Therefore, they had to let us go back to our positions. (Self-perceived professional knowledge)

(2) I have added many experimental practices to my lecture, as I found many students do not like purely theoretical things, but students generally like to do experiments. (Self-perceived teaching skills)

Negative expression:
Not mentioned

15. 15-R-Pub-61-35(1)

Positive expression:

(1) At that time, I was basically the only teacher who specialised in computer science at this college, so I was in charge of all of the work related to computers. I wrote the textbooks, taught a course about computer theory, and engaged in the construction of a computer room. (Self-perceived professional knowledge)

(2) Actually, my major during school time is mathematics. I was arranged to teach computer theory because, in the early 1980s, there was a desperate shortage of computer talents, and my knowledge in algorithm allowed me to learn computer theory quickly…I have made a great effort to become competent in this job.

(Self-perceived professional knowledge; Self-perceived work attitude and effort)

(3) I am so happy when I am with my students. Although I am over 60 now, I still feel like a young man. I have participated in many students' activities, like playing basketball and KTV singing. (Self-perceived capability to manage relationships with students)

Negative expression:
Not mentioned

16. 16-R-Pub-60-34(0.7)
Positive expression:
(1) I feel a sense of achievement every time I solve an issue at work through my personal capability and effort. (Self-perceived work attitude and effort)

(2) Aside from teaching, I also have many administration commitments, and I found that the required professional competences for teaching and for administration work are totally different…the administration work needs me to consider complicated teaching-related affairs, for instance, the designing of the syllabus, the appropriateness of the course arrangement and schedule, and the coordination between teachers and students… I felt happy when I found that, regarding these affairs, I could comprehensively consider all the related conditions and make a reasonable arrangement. (Self-perceived professional knowledge)

Negative expression:
Not mentioned

17. 17-R-Ind-71-41(5)
Positive expression:
(1) My lecture is always well attended, and students are always in high spirits. Some students even told my superiors that they would like me to teach more courses. My superiors were quite surprised by this situation, because I teach subjects like ideological and political education, and history of the Communist Party of China, which are commonly considered to be unattractive and boring…I think this is because I really understand the information that I am teaching, I am good at illustrating those theories with lively cases, and I know how to motivate students' learning interest. (Self-perceived professional knowledge; Self-perceived teaching skills)

(2) My perception of teachers' professional wellbeing is, if one's professional competence is worthy of him or herself as a teacher, and can live up to the students' expectations, then this is 'wellbeing' for the teacher… I have an honourable reputation among the students, and I appreciate myself, because I earned this reputation through my personal effort. In my perspective, students have the ability to judge what kind of teacher can truly give them the knowledge that they need, so I have to try my best to guarantee I can indeed fulfil the students' needs. (Self-perceived work attitude and effort; Self-perceived moral quality)

Negative expression:
Not mentioned

II. Interviewees' comments related to work autonomy

Four sub-themes were extrapolated from the interviewees' comments related to autonomy:

1. Autonomy in selecting teaching materials
2. Autonomy in arranging extracurricular time
3. Autonomy in designing lecture content
4. Autonomy in choosing the instructional mode

1. 01-I-Pvt-30-2

Positive expression:

Not mentioned

Negative expression:

(1) I have little freedom in arranging my extracurricular time. I was required to stay in my office even when I did not have a lecture on that day. (Autonomy in arranging extracurricular time)

(2) We are required to submit our teaching plan and lecture notes for the next semester at the end of the current semester. Then, in teaching practice, we are neither allowed to change the scheduled teaching plan a bit, nor discuss any topic that goes beyond the scope of the syllabus. (Autonomy in designing lecture content)

(3) Our school has very strict requirements on teachers' instructional mode. We are required to bring the prescriptive teaching tools and supplementary materials to every lecture. The teaching supervisors observe my class and check those prescriptive materials quite frequently. (Autonomy in choosing the instructional mode)

(4) We are not allowed to take a seat when giving lectures or when monitoring exams. (Autonomy in choosing the instructional mode)

2. 02-I-Pvt-26-0.6

Positive expression:

(1) I am invited to participate in the editing work of the textbooks that our school is going to use. (Autonomy in selecting teaching materials)

(2) We are required to submit one-third of the documents that related to the teaching plan at the beginning of each semester, and, in teaching practice, we are allowed to modify the plan according to the practical situation. (Autonomy in designing lecture content)

(3) The teaching supervisors observed my lectures at times, but they seldom interfered in my teaching, as long as my course content did not deviate from the syllabus too much. (Autonomy in designing lecture content)

Negative expression:

(1) All of the teachers at our school are required to undertake some administrative duties, so we have to stay at the office our during extracurricular time. (Autonomy in arranging extracurricular time)

3. 03-I-Pub-32-10

Positive expression:
None

Negative expression:

(1) I don't think I have too much freedom in arranging my work during extracurricular time, as the school's management is inflexible. (Autonomy in arranging extracurricular time)

(2) I like to sit down when giving lectures, and I was allowed to do so when I worked in my last university, but the current college's regulations are rigid, and I have to stay standing during the lecture. (Autonomy in choosing the instructional mode)

(3) Our school's surveillance on teaching is too strict. I feel the administrators don't actually trust us, because they observe our class and check our teaching plan and lecture notes too frequently. (Autonomy in designing lecture content)

(4) We are required to punch in and out four times every day, and if we are assigned to monitor students' night-time self-study activity, then we have to punch in and out six times. (Autonomy in arranging extracurricular time)

4. 04-I-Pub-32-6

Positive expression:

(1) I can freely choose the method of teaching that I like, and I think my school generally does not care about my method of teaching. (Autonomy in choosing the instructional mode)

(2) I design the course content by myself. It is my choice whether to prepare the teaching plan and lecture notes in advance. Usually, the school does not intervene in my teaching. (Autonomy in designing lecture content)

Negative expression:
Not mentioned

5. 05-I-Pub-38-16

Positive expression:

(1) My understanding of 'freedom' is that the administrators accept your preferred way of teaching under the condition that you indeed work in earnest. From this perspective, I guess I can be regarded as free. (Autonomy in choosing the instructional mode; Autonomy in designing lecture content)

(2) Besides the knowledge point that the syllabus asks me to teach, I also like to share something new I recently learned with my students. I think my school gives me a lot of freedom in terms of my teaching, for instance, the school does not require me to completely follow the syllabus, so I can teach flexibly as long as I can guarantee the general orientation of my course content does not diverge from its original setting. (Autonomy in designing lecture content)

(3) I can decide what I should do during the extracurricular time. Sometimes, I

find that the official course time is not enough for me to finish the course content that I believe is indeed important for the students, so I use my personal time to tutor the students. I do not care there is no payment for such overtime work. (Autonomy in arranging extracurricular time)

Negative expression:
Not mentioned

6. 06-I-Pub-33-5
Positive expression:
(1) I choose the textbooks myself. (Autonomy in selecting teaching materials)
(2) I think I am quite free in terms of my teaching, as long as I follow the instruction of the syllabus and the teaching plan. (Autonomy in designing lecture content)

Negative expression:
Not mentioned

7. 07-I-Pub-31-10
Positive expression:
Not mentioned

Negative expression:
(1) Besides regular teaching tasks, I have also been assigned a lot of administrative duties…because of this administrative work, I feel I am not as free as other teachers…I have been planning to conduct some research projects, but the administrative work is too time consuming and leaves me little time for engaging in research. (Autonomy in arranging extracurricular time)

8. 08-I-Ind-29-3
Positive expression:
(1) I think my school's level of surveillance is not very strict in terms of our execution of the scheduled teaching progress and syllabus, as long as we don't say something unreasonable…I prepare my own teaching plan and lecture notes based on the syllabus. I can also add some interesting cases and stories to the originally planned lecture content. (Autonomy in designing lecture content)

Negative expression:
Not mentioned

9. 09-I-Ind-42-10
Positive expression:
(1) I have many other types of work in addition to teaching, but I can freely arrange when and where to do this work. The school does not care too much, as long

as I can finish those tasks on time. (Autonomy in arranging extracurricular time)

Negative expression:

(1) I was required to give lectures entirely based on syllabus, and the teaching supervisors frequently observed my class to check whether my lecture content and teaching progress were in accordance with the syllabus and the scheduled teaching plan. (Autonomy in designing lecture content)

(2) I don't have the right to choose the textbooks for my course. The textbooks are usually uniformly appointed by the Teaching Affairs Office. (Autonomy in selecting teaching materials)

(3) The teaching superiors even comment on teachers' clothing and teaching posture at times; in my opinion, they are overly strict. (Autonomy in choosing the instructional mode)

(4) For lectures that are given in small classrooms, teachers are not allowed to use microphones. (Autonomy in choosing the instructional mode)

10. 10-R-Pub-60-34(4)
Positive expression:

(1) I think my superiors are quite lenient, because they told me that I can design the course content myself, as long as I can design my lectures to cover all the required knowledge points in the syllabus. (Autonomy in designing lecture content)

(2) I feel really grateful that my school hardly places any limitations on my method of teaching. The dean told me that I can choose any mode of instruction that I prefer, as long as I can guarantee that he will not receive any complaints from my students. (Autonomy in choosing the instructional mode)

Negative expression:

(1) Textbooks are stipulated by the school; I don't have the right to choose them. (Autonomy in selecting teaching materials)

11. 11-R-Pub-62-39(7)
Positive expression:

(1) Some courses that I teach belong to the GE courses, so the textbooks have to be uniformly assigned by the Teaching Affairs Office. For other courses, I can choose the textbooks myself. (Autonomy in selecting teaching materials)

(2) I make my teaching plans myself, and my superiors seldom intervene in my teaching, perhaps because they think I am an old teacher, so I am considered to be trustworthy. (Autonomy in designing lecture content)

Negative expression:
Not mentioned

12. 12-R-Pub-61-40(1)
Positive expression:

(1) I am quite free in designing the course content and choosing my teaching style…Hardly any people come to observe my class. (Autonomy in designing lecture content; Autonomy in choosing the instructional mode)

Negative expression:

Other than teaching, I still have to do much administrative work, which occupies me a lot of the time. Although I have been retired for more than one year, my school has not finished the handover procedure of my administrative work. That said, I think I am a special case. Not many rehired teachers have these kinds of issues. (Autonomy in arranging extracurricular time)

13. 13-R-Pub-61-38(6)

Positive expression:

(1) I think in my school the teachers' execution of the syllabus is flexible. In practice, after group discussion, my colleagues and I can modify the scheduled teaching plan based on the actual situation. (Autonomy in designing lecture content)

(2) Our school management encourages teachers to add to their course content with cutting-edge theories…Our teaching is not constrained by the syllabus. (Autonomy in designing lecture content)

Negative expression:

(1) The textbooks are assigned by the Teaching Affairs Office, and we are not allowed to make our own choices. (Autonomy in selecting teaching materials)

14. 14-R-Pvt-73-53(13)

Positive expression:

(1) As rehired teachers we are all conscientious, so the school trusts our teaching quality. We teach based on the syllabus, and, of course, we can moderately modify the scheduled course content and the teaching plan according to the students' learning capacity. (Autonomy in designing lecture content)

Negative expression:
Not mentioned

15. 15-R-Pub-61-35(1)

Positive expression:

(1) I use the textbooks that I wrote myself, because I feel more comfortable when using my own creations. (Autonomy in selecting teaching materials)

(2) In terms of my work, I feel that, as a college teacher, I am quite free in arranging my [extracurricular] work based on my personal convenience. (Autonomy in arranging extracurricular time)

Negative expression:
Not mentioned

16. 16-R-Pub-60-34(0.7)
Positive expression:

Given that I am now retired, I can make my own decisions regarding my [extracurricular] work schedule. (Autonomy in arranging extracurricular time)

Negative expression:

I feel that the college students are becoming tougher and tougher nowadays. As a teacher, we have to be very careful about our statements and behaviours, because network technology is too advanced, and students can easily record what you have said and done when you were giving lectures and then post it online. Therefore, compared to the old days, I feel that teaching is not as free as it used to be. (Autonomy in designing lecture content; Autonomy in choosing the instructional mode)

17. 17-R-Ind-71-41(5)
Positive expression:

(1) Those days of working on time are gone. Now I am retired, so I have much more free time. I can freely decide when and where to carry out my work. (Autonomy in arranging extracurricular time)

(2) I have my own way of teaching, and it is welcomed by both school leaders and students. (Autonomy in choosing the instructional mode)

(3) I know I am teaching a subject that is thought to be boring, so I added many classical stories and cases to my course content that are not on the syllabus. (Autonomy in designing lecture content)

Negative expression:
Not mentioned

III. Interviewees' comments related to self-perceived recognition

Five sub-themes have emerged from comments that interviewees made regarding their perception of recognition:

1. Recognition in the form of the students' grateful or respectful attitude
2. Recognition from administrators
3. Recognition from peers
4. Recognition in the form of receiving a profession-related award
5. Recognition in terms of occupational identity

1. 01-I-Pvt-30-2

Positive expression:
Not mentioned

Negative expression:

1. I felt depressed when the students told me they were not interested in the subjects that I taught. They said they were here, in this school, because they had no choice. (Recognition in the form of the students' grateful or respectful attitude)

2. I feel that, in this college, the teaching supervisors don't respect teachers at all. When they observe our class, they usually break into the classroom suddenly, and check our lecture notes while we are giving lectures…and they take pictures of the classroom with a flashlight, which makes me feel like we are monkeys in a zoo. (Recognition from administrators)

3. Some students are very troublesome and even offensive. They believe that they are the customers, because they have paid tuition, and we are supposed to behave like attendants. (Recognition in the form of the students' grateful or respectful attitude)

2. 02-I-Pvt-26-0.6

Positive expression:
(1) As a novice teacher, I feel glad that the feedback from my superiors is mostly positive regarding my teaching quality. (Recognition from administrators)

Negative expression:
Not mentioned

3. 03-I-Pub-32-10

Positive expression:
(1) In my memory, my happiest moment was on one International Teacher's Day when I received seven fruit baskets from the students. I felt astonished, because I only taught seven classes during that semester, so that means all of the classes that I taught at that semester recognised my teaching capability. I can still remember my colleagues telling me they were so envious, because most of them only received one or two gifts on that day. (Recognition in the form of the students' grateful or respectful attitude)

(2) My superiors also appreciate my [administrative] capability. I have successfully dealt with many emergencies. (Recognition from administrators)

Negative expression:
Not mentioned

4. 04-I-Pub-32-6
Positive expression:
(1) I can sense that my students really like and respect me. My SET scores have always been excellent since I entered into the teaching profession. (Recognition in the form of the students' grateful or respectful attitude)

(2) I have twice won awards from provincial-level teaching competitions, and I have guided many students to win provincial-level or even national-level English competitions. Now, those superiors who did not recognise my capability in the past have a completely new appraisal of me. (Recognition in the form of receiving a profession-related award; Recognition from administrators)

Negative expression:
(1) When I was a novice teacher, I once participated in a competition that was organised by my school. I failed the primary election, and one administrator, who was also a judge of the competition, told me that, regarding professional capability, there was a clear gap between my peers' and mine. At that moment, I felt really frustrated. (Recognition from administrators)

5. 05-I-Pub-38-16
Positive expression:
1. Many teaching supervisors have observed my class, and all of them have been quite satisfied with my teaching quality. They told me that they could feel that I am a self-disciplined teacher who indeed devotes myself to teaching. (Recognition from administrators)

2. I can feel that my students truly like me…just a few minutes ago, a student told me he was really grateful for my help. (Recognition in the form of the students' grateful or respectful attitude)

Negative expression:
Not mentioned

6. 06-I-Pub-33-5
This interviewee did not mention anything related to recognition.

7. 07-I-Pub-31-10
Positive expression:
1. To me, the source of professional wellbeing is acceptance and recognition from my students. I feel wonderful when the graduated students tell me, 'Wow, I miss

those days of attending your lectures so much' or 'Compared to other teachers, you are so outstanding'. (Recognition in the form of the students' grateful or respectful attitude)

2. My superiors and peers in this department do respect and appreciate me. I can feel that they are sincere, not just polite. (Recognition from administrators; Recognition from peers)

Negative expression:

There was one time I was responsible for preparing the paperwork for an international exchange project of teachers. I had tried my best to handle the paperwork, but the project was still behind schedule due to some uncontrollable factors. The sad thing is, after a few months, I overheard some teachers who had participated in that project speak ill of me. They said the reason the project was not conducted on time was simply because I was incompetent. I felt so frustrated at that time. (Recognition from peers)

8. 08-I-Ind-29-3
Positive expression:

To me, the happiest moments in my career are always related to the students, like when they tell me that they really like me or appreciate me. I remember there was one student who majored in journalism who told me that he planned to go into the advertising industry after he graduated, because I teach advertising and it was me who let him experience the meaning of this subject. (Recognition in the form of the students' grateful or respectful attitude)

Negative expression:
Not mentioned

9. 09-I-Ind-42-10
Positive expression:

(1) I feel that college teacher is a respectable occupation. This occupation is not only about a job, but also a symbol of one's excellent scholastic achievement. (Recognition in terms of occupational identity)

(2) I once won the President's Award for outstanding performance in research. That year, I was really productive and had published many journal articles. I felt so proud of myself at that time. (Recognition in the form of receiving a profession-related award)

Negative expression:
Not mentioned

10. 10-R-Pub-60-34(4)
Positive expression:
(1) I was once granted the laurel 'Most Excellent Teachers of the Year' by the

university, and I felt so happy for that whole year. (Recognition in the form of receiving a profession-related award)

(2) My students are so nice. They really respect me and have offered me a lot of help. (Recognition in the form of the students' grateful or respectful attitude)

(3) Many young teachers have asked me whether they could observe my class to learn my teaching methods. I am so honoured that I can still make some contribution after retirement. (Recognition from peers)

(4) I choose to engage in the teaching profession because I believe teacher is a respectable profession. My parents are both teachers, and I am always proud of them. (Recognition in terms of occupational identity)

Negative expression:
Not mentioned

11. 11-R-Pub-62-39(7)
Positive expression:

(1) I was twice granted the laurel 'Most Excellent Teacher of the Year in Jiangxi Province' by the Jiangxi provincial government, and I cannot remember how many times I won this award in terms of the university level. I am also the 'Model Worker [勞模]' of Jiangxi province. (Recognition in the form of receiving a profession-related award)

(2) I was told by my superiors that my SET scores were always at the best level. (Recognition in the form of the students' grateful or respectful attitude; Recognition from administrators)

Negative expression:
Not mentioned

12. 12-R-Pub-61-40(1)
Positive expression:

(1) I can feel the social status of teachers has been improving…during the Great Cultural Revolution, teaching was considered to be an underprivileged occupation…then, in the 1980s, the whole country began to increasingly value the teaching profession. (Recognition in terms of occupational identity)

(2) I have won many awards, but there is a special one. I attended a teaching skill competition organised by the Nanchang government, and I finally won the second prize. What astonished people around me was that I was a mathematics teacher at that time, but I won the second prize for the English teaching competition. People were surprised by my talent. (Recognition in the form of receiving a profession-related award)

(3) Students like my lectures so much…I especially like June, because that is graduation time for students. Every year, there are many students who express their gratitude to me. Their words indeed give me a strong sense of achievement.

(Recognition in the form of the students' grateful or respectful attitude)

Negative expression:
Not mentioned

13. 13-R-Pub-61-38(6)
Positive expression:

(1) I believe teaching is always a respectable career. I adopted this idea when I was very young, as I was born into a family of teachers…I really enjoy teaching, and I think becoming a teacher is the wisest choice that I have ever made. (Recognition in terms of occupational identity)

(2) The students really like me. I receive many gifts from my students during each festival, and I find the number of gifts that I receive is always much more than my colleagues. I think this is because I have dedicated myself to teaching, so I have successfully obtained students' recognition. (Recognition in the form of the students' grateful or respectful attitude)

(3) When I retired, my superiors told me the school still needed me, so I was invited to be a rehired teacher…Besides teaching, I was also invited to be a member of the 'teaching supervision expert team'…In my perception, being rehired is an honourable thing, because that means your capability is recognised by the school. (Recognition from administrators)

Negative expression:
Not mentioned

14. 14-R-Pvt-73-53(13)
Positive expression:

(1) Students who have been graduated for many years still visit me at times. They invite me to join group meals and activities. They always tell me that they appreciate the knowledge I have taught them. I feel so happy for having so many kind students. (Recognition in the form of the students' grateful or respectful attitude)

(2) When I was retired, I received an invitation from a university leader. He said his university desperately needed teachers like me who have practical experience in mechanical and electronic engineering. (Recognition from administrators)

(3) Sometimes, young teachers seek my advice regarding the profession-related issues they encounter. (Recognition from peers)

Negative expression:
Not mentioned

15. 15-R-Pub-61-35(1)

(1) The school leaders always trust me. I can still remember when I first came to this college, which was about 35 years ago; the college bought two computers. At that time, the computer was a super-luxury product, and I was the only person in the

college who had the authority to use it for teaching purposes. (Recognition from administrators)

(2) I have been teaching for so many years, and, of course, I have encountered some really problematic students. But, generally speaking, students respect me very much. (Recognition in the form of the students' grateful or respectful attitude)

Negative expression:
Not mentioned

16. 16-R-Pub-60-34(0.7)
Positive expression:
Not mentioned

Negative expression:
(1) Students are becoming tougher these days…I feel they are not as respectful to teachers compared to students in the past. (Recognition in the form of the students' grateful or respectful attitude)

17. 17-R-Ind-71-41(5)
Positive expression:
(1) I used to be a secondary school teacher. In the 1980s, I completed an application to change my job to a university teacher. The paperwork was quite complicated, and that university's leaders helped me a lot in the process, because they said they truly needed me. (Recognition from administrators)

(2) After retirement, I have worked at many different universities, and my lectures have won unanimous praise from all of the students I have taught. (Recognition in the form of the students' grateful or respectful attitude)

(3) I was the first female full professor at this university in my professional area. I felt a strong sense of accomplishment when I was granted the full professor title, because I knew that meant my superiors, peers, and students all recognised my competence. (Recognition in the form of the students' grateful or respectful attitude; Recognition from administrators; Recognition from peers)

(4) One time, I was on a train, having a conversation with the trainman, and he suddenly became very respectful towards me when he heard I was a college teacher. (Recognition in terms of occupational identity)

Negative expression:
Not mentioned

IV. Interviewees' comments related to work aspiration

Three sub-themes were assigned to the aspiration theme based on the interviewees' comments:

1. Ambition for job achievements and promotions
2. Aspiration for professional knowledge or qualification enhancements
3. Interest in the current and future work

1. 01-I-Pvt-30-2

Positive expression:

Not mentioned

Negative expression:

I am now considering job-hopping. I don't think I can utilise my professional competence at this university…I don't have much enthusiasm in terms of the current work. (Interest in the current and future work)

2. 02-I-Pvt-26-0.6

Positive expression:

I hope that, in the near future, I can publish more articles so I can receive the 'lecturer' title. (Ambition for job achievements and promotions)

Negative Expression:

If I have the chance, I will probably job-hop to the public universities, because, compared to those teachers in public universities, my work income is unsatisfactory. Besides, in this college, teachers do not have winter and summer break. (Interest in the current and future work)

3. 03-I-Pub-32-10

Positive expression:

(1) I feel that my career in this university is stable, and I no longer need to work part-time to earn a living since getting this job…Now, I put all of my focus on preparing lectures, because this university takes much account of student evaluations, so I would be in trouble if I received a low SET score. (Interest in the current and future work)

(2) This university encourages teachers to pursue advanced studies for their doctoral degree, and I also have this plan. (Aspiration for professional knowledge or qualification enhancements)

Negative Expression:

Not mentioned

4. 04-I-Pub-32-6

Positive expression:

(1) I have won awards for outstanding performance in teaching many times, but,

until now, I have not received any awards related to research achievement. So, I am going to spend more time on writing papers. (Ambition for job achievements and promotions)

(2) My school has recently recruited many teachers with PhD degrees, and I found they are really good at doing research, so I also have a plan to go study for my doctorate, because I want to learn more advanced research skills through the doctoral study. (Aspiration for professional knowledge or qualification enhancements)

Negative expression:
Not mentioned

5. 05-I-Pub-38-16
Positive expression:

(1) I love the feeling of being a teacher…Sometimes, I find that the official course time is not enough for me to finish the course content that I believe is indeed important for the students, so I use my personal time to tutor the students, and I do not care that there is no payment for such overtime work…If I find I have not provided my students with the knowledge that they are supposed to learn, I would feel my teaching is imperfect. (Interest in the current and future work)

(2) I am always eager to learn new knowledge, and I like to share the knowledge I have newly learned with my students. I think this job [as a teacher] encourages me to keep learning; that is why I like being a teacher! (Aspiration for professional knowledge or qualification enhancements)

(3) I am quite active in doing research. For the past few years, I have tried to apply to basically every project in my [professional] area that has been announced by the Department of Academic Research, and I write earnestly for every application proposal…in the future, I am going to study for my doctorate, because, according to my university's regulations, only teachers with a doctorate can apply for the 'professor' title. (Ambition for job achievements and promotions)

Negative expression:
Not mentioned

6. 06-I-Pub-33-5
Positive expression:

My aspiration is simple: I just want to concentrate on the academic topics that I am interested in…In the future, I would like do research on policy history, which is the subject that I have been learning [since my doctoral studies]. Many people have told me this subject might not be a good choice for research, because it is hard to complete research achievements in a short time within this subject. But, I don't really mind that, because I love this subject. (Aspiration for professional knowledge or qualification enhancements; Interest in the current and future work)

Negative expression:

It might sound impractical, but these are my real thoughts: I will not strive for fame or wealth or academic titles, because I feel contented with myself as long as I can earn my living. I don't mind retiring only with a 'lecturer' title. Finally, my specialised area requires me to be patient and cautious; however, it seems that, nowadays, the research world is too utilitarian, like everyone is thinking about how to make achievements quickly…I feel I am more like a hermit. (Ambition for job achievements and promotions)

7. 07-I-Pub-31-10
Positive expression:

(1) I now study part-time for a PhD programme in Korea. The first reason is that I don't like administrative work, but, according to my university's regulations, only after I obtain the doctorate can I get rid of the administrative work assignment. The second reason is that I enjoy learning because it gives me the sense that I am continuously self-improving. (Aspiration for professional knowledge or qualification enhancements)

(2) Many of my peers have already [achieved] a lot of publications by now; sometimes, I feel frustrated when I compare my research achievements to theirs…I am going to work harder on doing research. (Ambition for job achievements and promotions)

Negative expression:

(1) I feel okay about teaching, but I think I am really not suited to handling administrative work, because I am not good at social things, and I don't like to flatter others. (Interest in the current and future work)

8. 08-I-Ind-29-3
Positive expression:

I plan to engage in advanced study for a PhD degree in the near future. (Aspiration for professional knowledge or qualification enhancements)

Negative expression:

I plan to study for a doctoral degree, because I would like to leave this university and find a position at a public university, but, you know, the situation is different now…I mean, nowadays, public universities basically only recruit people with doctoral degrees. (Interest in the current and future work)

9. 09-I-Ind-42-10
Positive expression:

(1) I am now applying to be a visiting scholar. I have been communicating with a university in United States for several months. If the application were approved, I could get financial support from the China Scholarship Council, and my university will still keep my position…as far as I am concerned, the visiting scholar experience is very important in teachers' professional title evaluation. (Aspiration for

professional knowledge or qualification enhancements; Ambition for job achievements and promotions)

(2) I bought many online training courses to learn research skills…I have just bought a guide book for the Stata software. (Aspiration for professional knowledge or qualification enhancements)

(3) I was just informed that I can teach my favourite course, 'Human Resource Management', next semester. I am now working very hard to do the preparation work for this course. (Interest in the current and future work)

Negative Expression:
Not mentioned

10. 10-R-Pub-60-34(4)
Positive expression:
(1) Even though I am now retired, I am continuing to learn the new theories in my professional area…I think I will keep learning for the rest of my life. (Aspiration for professional knowledge or qualification enhancements)

Negative expression:
(1) I am an old woman now, so I don't have any future plans regarding my work. Perhaps I will stop working after the birth of my grandson or granddaughter, because I will need to take care of the baby. (Interest in the current and future work)

11. 11-R-Pub-62-39(7)
This interviewee did not mention anything related to work aspiration.

12. 12-R-Pub-61-40(1)
Positive expression:
Not mentioned

Negative expression:
I am not the kind of teacher with great ambitions at work…life is short, and I want to enjoy my post-retirement life, so, once the guy who is going to take over my job comes, I will stop working… (Interest in the current and future work)

13. 13-R-Pub-61-38(6)
Positive expression:
(1) As long as I have the energy, I will keep working but will scale back the workload. In the future, I will focus on teaching, and, if I have spare time, I will do some research…I feel that, as long as I keep on working, I will always be young and active. (Interest in the current and future work)

(2) I like to incorporate cutting-edge theories into my course content, so I have to keep learning those new theories in my [professional] area. (Aspiration for professional knowledge or qualification enhancements)

Negative expression:
Not mentioned

14. 14-R-Pvt-73-53(13)
Positive expression:
Not mentioned

Negative expression:
In the future, I will try another way of life…Now, I am also learning courses at an elderly university. I heard that this university will open many interesting new courses in the coming year, so I will gradually stop working and spend more time on studying at the elderly university. (Interest in the current and future work)

Note: as described by this interviewee, the courses that he is currently learning at the elderly university are irrelevant to his profession, so such experience is not regarded as relating to the sub-theme, 'Aspiration for professional knowledge or qualification enhancements'.

15. 15-R-Pub-61-35(1)
Positive expression:
I do like my work…I will keep working as long as this university needs me, maybe till the day I don't have the required energy for work. (Interest in the current and future work)

Negative expression:
Not mentioned

16. 16-R-Pub-60-34(0.7)
Positive expression:
(1) I have received invitations from some private colleges to work as a rehired expert, but, currently, I still prefer to work at this university, and I will proceed with my work here until I finish all the matters at hand…I have been working at this university for such a long time, and I am currently still engaged in many projects and administrative affairs at this university, so I don't want to leave these affairs to others and just walk away. (Interest in the current and future work)

Negative expression:
Not mentioned

17. 17-R-Ind-71-41(5)
Positive expression:
I do believe in the proverb, 'Teaching and learning benefit each other'. I feel that, as long as I am teaching, I am also learning, and I will always keep learning new knowledge…In my opinion, knowledge is the foundation of self-reliance and

self-confidence. (Aspiration for professional knowledge or qualification enhancements)

Negative expression:

I think it is a good thing for the retired teachers to engage in rehiring activities, but only for those teachers around 60–70 years old. I feel that, now, I am kind of old to keep on working. (Interest in the current and future work)

V. Interviewees' comments related to work burnout

Four sub-themes were extrapolated from the interviewees' comments related to burnout:

1. Burnout caused by a heavy workload
2. Burnout caused by student misbehaviour
3. Burnout caused by frequent overtime
4. Burnout caused by meaningless work assignments

1. 01-I-Pvt-30-2

Positive expression:
Not mentioned

Negative expression:
(1) We are frequently required to work overtime, and the work is usually informed around the knock off time. (Burnout caused by frequent overtime)

(2) I feel really tired recently, because I was arranged to supervise undergraduate students' graduation projects. Our college requires students to prepare a thesis, as well as a comprehensive project, which results in a huge workload not only for the students, but also for the teachers. You know, some students' theses are basically unreadable. Their writing ability is so awful, and some of them even have ambiguous expressions in every single sentence. (Burnout caused by a heavy workload)

(3) This college has a very ridiculous regulation. They set a bag at the front door of each classroom. Before entering, students are required to put their cell phones into that bag. Teachers are responsible for examining whether each student has indeed followed this regulation. If the superiors found there were students using cell phones in the classroom, then the teacher would be punished. This activity is so meaningless, as I think we are working at a university, not a high school. (Burnout caused by meaningless work assignments)

2. 02-I-Pvt-26-0.6

Positive expression:
Not mentioned

Negative expression:
(1) All of the teachers in our college are required to undertake some administrative duties…these jobs are trivial and take up much of our time that is supposed to be spent on preparing lectures or doing research…Generally speaking, our workload is heavy. (Burnout caused by a heavy workload)

(2) We are also required to work during summer and winter break; even though, during that period, there are no students on campus, we still have to stay in the office and wait for job assignments. (Burnout caused by frequent overtime)

3. 03-I-Pub-32-10

Positive expression:

Not mentioned

Negative expression:

(1) Students at this college are really difficult to manage. They play [on their] mobile phones in class, and it is hard to make them behave. (Burnout caused by student misbehaviour)

(2) We often get overtime work during summer and winter break, and sometimes over the weekends. This overtime work is compulsory, and there would be a deduction in wages if we did not come to work. (Burnout caused by frequent overtime)

4. 04-I-Pub-32-6
Positive expression:
Not mentioned

Negative expression:

(1) I am arranged to supervise undergraduate students' graduation theses. Each thesis is about 5,000 words long, and I usually need to read it at least 3–4 times for its revision. Some students' theses are totally unreadable, and it takes me a lot of time to do the supervision work. However, the compensation is just around 400 RMB for one student's thesis, which is unworthy of my effort. (Burnout caused by a heavy workload)

(2) I need to teach five categories of courses this semester…maybe my university really lacks English teachers, because all teachers in this school [School of Foreign Language] are overloaded with work. (Burnout caused by a heavy workload)

(3) I feel exhausted, because I found some students were lying to me. Some students' graduation theses were full of grammatical mistakes, and it took me a lot of time to correct the mistakes and write the comments. Some students lied to me and told me they had already followed my comments and made the revisions; however, after I read the 'revised' versions, I found they did not make any changes compared to the previous version, so it was a waste of my time. (Burnout caused by student misbehaviour)

(4) Our university is currently under Education Quality Evaluation, so many external experts have come to our university to inspect our archives over the years. Some of their comments are quite dilettante, because they are not familiar with our professional area. However, we have to follow their advice and do a lot of useless and meaningless work. That makes me feel so tired. (Burnout caused by meaningless work assignments)

5. 05-I-Pub-38-16
Positive expression:

(1) I often work overtime, but it is my free will to do that…Sometimes, I find that the official course time is not enough for me to finish the course content which I believe is indeed important for the students, so I use my personal time to tutor the

students and do not care that there is no payment for such overtime work…If I were to find I have not provided my students with the knowledge that they were supposed to learn, I would feel my teaching is imperfect. (Burnout caused by frequent overtime)

(2) This semester, I have nearly 30 teaching hours per week, so my workload is really heavy. I remember there was one semester I had even more than 30 weekly teaching hours. I am a diligent person, and I will always try my best to maintain my teaching quality, so sometimes I don't even have time to enjoy a good meal. But maybe I am 'masochistic' because I feel I am engaging in a meaningful job and I can keep growing by doing such work. I don't think the work fatigue once had or will have any negative influence on my sense of wellbeing. (Burnout caused by a heavy workload; Burnout caused by meaningless work assignments)

Negative expression:
Not mentioned

6. 06-I-Pub-33-5
Positive expression:
Not mentioned

Negative expression:
(1) Those meaningless trifles make me feel tired, usually in relation to administration affairs…In my opinion, administrative work is a waste of a human's life. (Burnout caused by meaningless work assignments)
(2) I felt so disappointed when I discovered some students were cheating on an exam, and they hardly realised this was serious misconduct. (Burnout caused by student misbehaviour)

7. 07-I-Pub-31-10
Positive expression:
Not mentioned

Negative expression:
(1) Besides regular teaching tasks, I have also been assigned a lot of administrative duties, so my workload is heavy…I feel the administrative duties have drained my energy and have brought me many troubles and unpleasant experiences. (Burnout caused by a heavy workload)

8. 08-I-Ind-29-3
Positive expression:
Not mentioned

Negative expression:
We are required to handwrite the lecture teaching plan; it is real, the school does not accept the printed version…It is really a big job for me, because this semester I

have to teach five categories of courses, so I feel so tired…I feel this [handwriting] work is meaningless, because if the school accepted the printed version, I could then use the soft copy to prepare my lecture PowerPoint – that way, no time would be wasted. (Burnout caused by a heavy workload; Burnout caused by meaningless work assignments)

9. 09-I-Ind-42-10
Positive expression:

Generally speaking, I feel my work is not stressful compared to my career life in the private enterprise. Although my superiors sometimes give me emergent and additional jobs, I think the overall workload is fine for me. (Burnout caused by a heavy workload)

Negative expression:

Although problematic students are always the minority, once there are 1 or 2 troublesome students in your class, you feel your sense of wellbeing could easily decline to an extremely low level. Some students talk loudly during class time, and they are totally disrespectful to me when I try to restrain them. I feel so exhausted dealing with such kinds of students. (Burnout caused by student misbehaviour)

10. 10-R-Pub-60-34(4)
Positive expression:

Now, each week, I have around 4–6 teaching hours. I think this workload is not too much for me. (Burnout caused by a heavy workload)

Negative expression:
Not mentioned

11. 11-R-Pub-62-39(7)
Positive expression:

Compared to pre-retirement, my workload has largely decreased now. (Burnout caused by a heavy workload)

Negative expression:
Not mentioned

12. 12-R-Pub-61-40(1)
Positive expression:
Not mentioned

Negative expression:

Unlike most rehired teachers, I still have many administrative commitments…currently, the administrative jobs are my main source of fatigue, because I think they are unrelated to my teaching and I can hardly find any meaning

from them. (Burnout caused by meaningless work assignments)

13. 13-R-Pub-61-38(6)

Positive expression:

(1) Compared to pre-retirement, my workload has largely decreased. (Burnout caused by a heavy workload)

(2) I can feel that the quality of students has gotten better in recent years…the students' professional foundation is more solid than that of the past. Therefore, our teaching is becoming more and more relaxed and eased. (Burnout caused by student misbehaviour)

Negative expression:

Not mentioned

14. 14-R-Pvt-73-53(13)

Positive expression:

Not mentioned

Negative expression:

I have 13–14 teaching hours per week, and I also undertake many administrative duties, as I have been rehired as a member of the Teaching and Research Section. Sometimes, I feel a little bit tired. (Burnout caused by a heavy workload)

15. 15-R-Pub-61-35(1)

Positive expression:

(1) I have fewer teaching hours now. In the past, I used to have more than 20 teaching hours per week, but now I only have around 12. Therefore, I feel more at ease now. (Burnout caused by a heavy workload)

(2) I don't think my work makes me feel tired, because I am really interested in these things I have been doing. (Burnout caused by meaningless work assignments)

Negative expression:

(1) Compared to students in the past, nowadays, students are smarter and more active, but seem less interested in learning. In the past, I did not need to spend too much time maintaining class discipline, but the situation is different now. (Burnout caused by student misbehaviour)

16. 16-R-Pub-60-34(0.7)

Positive expression:

Not mentioned

Negative expression:

I feel weary about teaching, because I have to face the students…nowadays, students are tougher, so the student management work is not as easy as before…I have

to be cautious about my words and actions during lecture. (Burnout caused by student misbehaviour)

17. 17-R-Ind-71-41(5)

Positive expression:

(1) Now, I am not as tired as [I was] pre-retirement, because I no longer need to work according to a schedule…many jobs will not be assigned to us [rehired teachers], for example, exam monitoring. (Burnout caused by a heavy workload)

Negative expression:

Not mentioned

VI. Interviewees' comments related to work support and relationships

Two sub-themes were extrapolated from the comments that related to the 'support and relationships' theme:

1. Support from and relationship with superiors
2. Support from and relationship with peers

1. 01-I-Pvt-30-2

Positive expression:

(1) My colleagues are so nice…I believe my sense of wellbeing is directly determined by my relationship with my colleagues…My colleagues are like my friends; every day, I go to work happily, because I feel I am just on a trip to visit my friends. (Support from and relationship with peers)

Negative expression:

(1) Many teaching supervisors are very dilettante. They are not familiar with our professional area and make unreasonable comments about our lectures. (Support from and relationship with superiors)

(2) Some superiors at this university have very little knowledge about my professional area, but they like to make indiscreet remarks or criticisms about my work. (Support from and relationship with superiors)

2. 02-I-Pvt-26-0.6

Positive expression:

(1) My college hired some retired experts as the teaching supervisors, and they have observed my class at times. They seldom make criticisms; instead, they generally give me encouragement. In addition, they also share their teaching skills and experience with me. (Support from and relationship with superiors)

(2) My colleagues are so sweet…Our relationship is really close. (Support from and relationship with peers)

Negative expression:
Not mentioned

3. 03-I-Pub-32-10

Positive expression:
Not mentioned

Negative expression:

(1) I have to be cautious about my words at work, because there are some tensions between people within this college. People don't completely trust each other in this college, so we are afraid that, if we say something wrong, then someone else would tell on us to the administrators. (Support from and relationship with peers)

4. 04-I-Pub-32-6

Positive expression:

(1) My dean is awesome. She has a strong management capability. She has created many professional development opportunities for the young teachers. Under her leadership, we have made many academic achievements. (Support from and relationship with superiors)

(2) My colleagues and I cooperate very well. (Support from and relationship with peers)

Negative expression:
Not mentioned

5. 05-I-Pub-38-16
This interviewee did not mention anything related to support and relationship.

6. 06-I-Pub-33-5
This interviewee did not mention anything related to support and relationships.

7. 07-I-Pub-31-10
Positive expression:

(1) My colleagues are really sincere and friendly to me. (Support from and relationship with peers)

(2) I feel so lucky, because my superiors and peers are quite helpful. They are always willing to share their knowledge with me and help me to overcome issues at work. (Support from and relationship with superiors; Support from and relationship with peers)

Negative expression:
Not mentioned

8. 08-I-Ind-29-3
Positive expression:
Not mentioned

Negative expression:
Speaking of unhappy experiences at work, I think it is related to one colleague of mine. It is really a painful experience to work with her, because she only cares about her personal interest. When we work together, she always picks out those gravy jobs for herself, then leaves the rest to me. (Support from and relationship with peers)

9. 09-I-Ind-42-10
Positive expression:

(1) My colleagues are great. We are always working together in a harmonious and friendly atmosphere. We help each other at work, and, on our days off, we often hang out together. (Support from and relationship with peers)

Negative expression:

My superiors are capricious. They like to make regulations that annoy teachers…In most cases, I feel their instructions are disturbing our work, instead of supporting. (Support from and relationship with superiors)

10. 10-R-Pub-60-34(4)
Positive expression:

(1) To me, the biggest reason for engaging in rehiring is that I am unable to let go of the students, as well as my colleagues. They are my most unforgettable memory. (Support from and relationship with peers)

(2) My superiors and colleagues really take care of me…There was one semester that I needed to go to hospital for a health check almost every morning. When my superiors and colleagues heard about this, they communicated with the Teaching Affairs Office to adjust [my] course schedule. (Support from and relationship with superiors; Support from and relationship with peers)

Negative expression:
Not mentioned

11. 11-R-Pub-62-39(7)
Positive expression:

I have a good relationship with my colleagues. They have helped me a lot, not only at work, but also in life…My health condition was not good at the time when my university began to decorate staff apartments, and it was my colleagues who helped me to manage all the decoration affairs. I hardly spent any energy on the decorations. (Support from and relationship with peers)

Negative expression:
Not mentioned

12. 12-R-Pub-61-40(1)
Positive expression:

My colleagues are quite friendly to me. They are very cooperative at work. (Support from and relationship with peers)

Negative expression:
Not mentioned

13. 13-R-Pub-61-38(6)
Positive expression:

(1) I am willing to be rehired because my health condition is good, I love teaching, and I really like my colleagues…We do have a wonderful relationship…When I was about to reach my statutory retirement age, they all said to

me, 'Please, don't leave us, we would be sad if you were not here'. (Support from and relationship with peers)

(2) The president is quiet good to me. (Support from and relationship with superiors)

Negative expression:
Not mentioned

14. 14-R-Pvt-73-53(13)

This interviewee did not mention anything related to support and relationships.

15. 15-R-Pub-61-35(1)

Positive expression:

My colleagues are quite friendly. The reason I love to work at this university is because people here are generally humble and friendly. (Support from and relationship with peers)

Negative expression:
Not mentioned

16. 16-R-Pub-60-34(0.7)

Positive expression:

I feel satisfied with the support from the management level. (Support from and relationship with superiors)

Negative expression:

After retirement, I sometimes feel my work is not going as smoothly as before…I feel satisfied with the school-level support, but, in practice, I have some difficulties managing my interpersonal relationships with others. (Support from and relationship with peers)

17. 17-R-Ind-71-41(5)

Positive expression:

The school [management] really takes good care of me given that I am aged. The [management] generally respects my personal convenience when arranging [my] course schedule and has cut down much of my workload. (Support from and relationship with superiors)

Negative expression:

I think one shortcoming of this university is that it lacks an atmosphere of humanistic care; people here are kind of indifferent to each other. (Support from and relationship with peers)

VII. Interviewees' comments related to job satisfaction

Six sub-themes were extrapolated from the interviewees' comments related to job satisfaction:

1. Satisfaction with the hardware facility
2. Satisfaction with the academic atmosphere
3. Satisfaction with work income and welfare
4. Satisfaction with job stability
5. Satisfaction with campus location and transportation
6. Satisfaction with career prospects

1. 01-I-Pvt-30-2

Positive expression:

(1) I used to work in a local private enterprise; one day, it suddenly went out of business and I lost my job…I feel that now, as a college teacher, my job is stable and at least I do not need to worry about suddenly losing my job. (Satisfaction with job stability)

(2) As a college teacher, I have winter and summer break. This is a recessive welfare for college teachers. (Satisfaction with work income and welfare)

(3) This college's teaching facility is quite modern. Many classrooms are totally new. (Satisfaction with the hardware facility)

Negative expression:

(1) Our campus is very far from the city centre, and the transportation situation is awful...The school bus schedule is unreasonable. (Satisfaction with campus location and transportation)

(2) The library's book collection is desperately insufficient, many books are 'private copies', and I can feel the college thinks little of the function of the library. (Satisfaction with the hardware facility)

(3) Students generally lack learning interest. Many of them have claimed that they are here because they have no choice…Students' absence rate is very high…Many students' graduation theses are totally unreadable, and I know some students even paid 'essay agencies' to write theses for them. (Satisfaction with the academic atmosphere)

(4) My work income is unsatisfactory compared to public university teachers. (Satisfaction with work income and welfare)

(5) We have very few mid-career studies or training opportunities. (Satisfaction with career prospects)

2. 02-I-Pvt-26-0.6

Positive expression:

(1) The school offers me a good staff quarters. (Satisfaction with work income and welfare)

Negative expression:

(1) The teaching facility is unsatisfactory, and the number of classrooms is not enough. (Satisfaction with the hardware facility)

(2) Working in this school, I do not have winter break, and the duration of summer break is only around one month. (Satisfaction with work income and welfare)

(3) My work income is much lower than [that of] many of my friends who are working in other universities. (Satisfaction with work income and welfare)

(4) I feel worried about the outlook of this university, because its management [approach] gives me a sense that it is a company, not a university. (Satisfaction with career prospects)

3. 03-I-Pub-32-10

Positive expression:

(1) Now, my work [as a college teacher] is stable, because I have 'Bianzhi'.[4] (Satisfaction with job stability)

(2) One good thing is that now I have winter and summer break at this university…Life was so busy when I was working at the previous university, as we were required to work during break (Satisfaction with work income and welfare)

(3) My work income at this university is much better than that of my last job. (Satisfaction with work income and welfare)

(4) The teaching facility is simple, but brand new, and is generally enough for my teaching. (Satisfaction with the hardware facility)

(5) I can feel this university has great potential regarding its future development, and I know the Nanchang government has ascribed great importance to this university. (Satisfaction with career prospects)

Negative expression:

(1) Students generally lack learning enthusiasm. (Satisfaction with the academic atmosphere)

4. 04-I-Pub-32-6

Positive expression:

(1) This job provides me with 'Bianzhi'. (Satisfaction with job stability)

(2) Most students have strong learning enthusiasm. (Satisfaction with the academic atmosphere)

Negative expression:

The teaching facility is awful, which limits my teaching methods. (Satisfaction with the hardware facility)

5. 05-I-Pub-38-16

Positive expression:

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[4] 'Bianzhi' is officially translated as 'authorised strength'. In the traditional sense, in government sectors or other government-funding institutes, employees with 'Bianzhi' are considered as 'formal employees'. Hence, many people take 'Bianzhi' as a symbol of a 'stable job'.

(1) My students are clever, obedient, and eager to learn. (Satisfaction with the academic atmosphere)

(2) My school has a good academic atmosphere, which encourages teachers and students to learn consciously. (Satisfaction with the academic atmosphere)

(3) I can feel that my work is meaningful, and this job offers me a lot of learning and training opportunities. (Satisfaction with career prospects)

Negative expression:
Not mentioned

6. 06-I-Pub-33-5
Positive expression:
Not mentioned

Negative expression:
There is a fickle and utilitarian ambience over the campus. Both teachers and students are concerned only about how to use the shortest time to produce the greatest research outcomes. They do research only for publication purposes, rather than based on their personal interests. (Satisfaction with the academic atmosphere)

7. 07-I-Pub-31-10
Positive expression:
(1) This job is stable; as a public university, it offers me 'Bianzhi'. (Satisfaction with job stability)

(2) I'm grateful for the university's teacher mid-career study policy, which allows me to temporarily leave the job for full-time PhD study while still keeping my job position and basic salary. I feel so happy, because this policy also offers me a chance to take a long break, as well as to enhance my professional knowledge and research capability in the future. (Satisfaction with career prospects)

Negative expression:
(1) I feel unhappy, because I can see my future regarding the administrative work, because I feel I have hit a glass ceiling. I do not think I have the potential to be a school leader…I just want to focus on teaching and research, but I cannot get rid of the administrative assignments yet. (Satisfaction with career prospects)

(2) My university has many campuses. To conduct my work, I have to practise between two different campuses, which are a bit far from each other. This has lost me a lot of time. (Satisfaction with campus location and transportation)

(3) Compared to other public universities in Nanchang, this university's level of payment is kind of low. (Satisfaction with work income and welfare)

8. 08-I-Ind-29-3
Positive expression:
Not mentioned

Negative expression:

(1) The university's campus is small, the teaching facility is outdated, the classroom network is unstable, and projectors in many classrooms are broken. (Satisfaction with the hardware facility)

(2) This semester, we moved to the new campus, which is super far away from the city centre. Now, the school location issue has become a major stressor that has diminished my level of wellbeing, because, in the past, I only needed 20 minutes to get to work, but now I have to wake up at 6 a.m. every morning to catch the school bus, because it takes us one and a half hours to reach the new campus. Every day, I get back home around 8 p.m. This is so disturbing. Many teachers have resigned because of the campus location issue. (Satisfaction with campus location and transportation)

9. 09-I-Ind-42-10

Positive expression:

(1) As a college teacher, I have winter and summer break. (Satisfaction with work income and welfare)

(2) The academic atmosphere is generally good; most students are eager to learn. (Satisfaction with the academic atmosphere)

Negative expression:

(1) The teaching facility is unsatisfactory; no air conditioning in most classrooms, and computers are full of viruses. (Satisfaction with the hardware facility)

(2) I have successfully applied to be a visiting scholar in the USA, but my university did not allow me to leave…I think teachers' professional development is underemphasised by the leaders of this university. (Satisfaction with career prospects)

(3) Relatively speaking, the job payment is not good. (Satisfaction with work income and welfare)

10. 10-R-Pub-60-34(4)

Positive expression:

(1) Generally speaking, the learning atmosphere is good. (Satisfaction with the academic atmosphere)

(2) Actually, my income got higher after I retired, because now I simultaneously have pension and salary…I am rather satisfied with my salary, maybe because I don't have many places to spend money now, unlike the young people. (Satisfaction with work income and welfare)

(3) My university might have the best school bus system in Nanchang. It has nearly 20 routes which cover the whole city area, so it is convenient for us to go to work. (Satisfaction with campus location and transportation)

Negative expression:

Some classrooms do not have air conditioning, and I have trouble writing with

chalk because of the cold weather…Some classrooms are located on high floors, but there is no elevator. (Satisfaction with the hardware facility)

11. 11-R-Pub-62-39(7)
Positive expression:

After retirement, I have a generous level of pension; meanwhile, because I am still working and engaging in many research projects, my total income is definitely higher than that of pre-retirement. (Satisfaction with work income and welfare)

Negative expression:
Not mentioned

12. 12-R-Pub-61-40(1)
Positive expression:

The students are quite outstanding…they have a strong volitional quality and study really hard. (Satisfaction with the academic atmosphere)

Negative expression:

My work income has greatly decreased after retirement, because retired staff no longer enjoy the 'performance welfare' like in-service staff. (Satisfaction with work income and welfare)

13. 13-R-Pub-61-38(6)
Positive expression:

(1) As a professor, I feel my pension is quite satisfactory. I currently have teaching work; meanwhile, I also play the role of a teaching supervisor, so my work income is much higher than before. (Satisfaction with work income and welfare)

(2) I can feel that the quality of students has gotten better in recent years…they are eager to learn. (Satisfaction with the academic atmosphere)

Negative expression:
Not mentioned

14. 14-R-Pvt-73-53(13)
Positive expression:

My pension is at approximately the same level as my pre-retirement salary. Besides pension, I also have additional income from the rehiring work. (Satisfaction with work income and welfare)

Negative expression:
Not mentioned

15. 15-R-Pub-61-35(1)
Positive expression:

Not mentioned

Negative expression:

(1) Compared to students in the past, nowadays, students are smarter and more active but seem less interested in learning. (Satisfaction with the academic atmosphere)

(2) As a computer teacher, I feel that our computer facilities cannot keep up with the rising demands of students. However, the university does not have enough funding to upgrade the computer facilities. (Satisfaction with the hardware facility)

16. 16-R-Pub-60-34(0.7)
Positive expression:
Not mentioned

Negative expression:

My major is Traditional Chinese Medicine, but I found that, nowadays, students are not interested in this ancient knowledge…nowadays, students are tougher, so the student management work is not as easy as before. (Satisfaction with the academic atmosphere)

17. 17-R-Ind-71-41(5)
Positive expression:

(1) The academic environment at this university is good...the school has an impeccable surveillance system to control students' academic misconduct, like plagiarism and exam cheating. (Satisfaction with the academic atmosphere)

(2) Compared to pre-retirement, my fixed salary has decreased, but, because now I work part-time at different universities, and I am invited to be an examiner of some research projects at times, I also have other income [sources]. Generally speaking, my [post-retirement] work income is higher than before. (Satisfaction with work income and welfare)

Negative expression:
Not mentioned

Appendix 4-4: Original Comments that Related to the Areas in which Rehired Teachers Perceived Differences between Pre- and Post-Retirement Work

Note: for the following contents, the words in the parentheses indicate the sub-themes that the comment aligns with.

I. Job satisfaction

10-R-Pub-60-34(4)

(1) Along with aging, some issues that I did not care about before have gradually become troublesome. For example, some classrooms are located on high floors, but there is no elevator on this campus; some classrooms do not have air conditioning, and I have trouble writing with chalk due to the cold weather. (Higher sensitivity to physical facility)

(2) Actually, my income got higher after I retired, because now I simultaneously have pension and salary…I am rather satisfied with my salary, maybe because I don't have many places to spend money now, unlike the young people. (Work income change)

11-R-Pub-62-39(7)

After retirement, I have a generous level of pension; meanwhile, I am still working and engaging in many research projects, so my total income is definitely higher than that of pre-retirement. (Work income change, higher)

12-R-Pub-61-40(1)

My work income has greatly decreased after retirement, because retired staff no longer enjoy 'performance welfare' like in-service staff. (Work income change, lower)

13-R-Pub-61-38(6)

As a professor, I feel my pension is quite satisfactory. I currently have teaching work, and, meanwhile, I also play the role of a teaching supervisor, so my work income is much higher than before. (Work income change, higher)

14-R-Pvt-73-53(13)

My pension is at approximately the same level as my salary pre-retirement. Besides pension, I also have additional income from the rehiring work. (Work income change, higher)

15-R-Pub-61-35(1)

Not mentioned

16-R-Pub-60-34(0.7)

Not mentioned

17-R-Ind-71-41(5)

Compared to pre-retirement, my fixed salary has decreased, but, because now I work part-time at different universities, and I am invited to be an examiner of some research projects at times, I also have other income [sources]. Generally speaking, my [post-retirement]

work income is higher than before. (Work income change, higher)

II. Autonomy

10-R-Pub-60-34(4)

As a rehired teacher, because the administrators trust my ability, I have been provided with a high level of autonomy…The dean told me that I can choose any method of instruction that I prefer, as long as I can guarantee that he will not receive any complaints from my students. (More autonomy and freedom from surveillance)

11-R-Pub-62-39(7)

(1) I am more free now. Before retirement, I had to go to work every day, nine to five, but now I go to school only when I need to give lectures. (More flexible work schedule)

(2) My superiors seldom intervene in my teaching, maybe because they think I am an old teacher, so I am considered to be trustworthy. (More autonomy and freedom from surveillance)

12-R-Pub-61-40(1)

(1) Before retirement, I was the vice president of this college, so I felt my time did not belong to myself. But, now, I am quite free. I have more time to prepare my lectures. (More flexible work schedule)

(2) As a rehired teacher, there is hardly any external disturbance for me, because people generally trust rehired teachers' capabilities, so the surveillance on my teaching is quite loose. (More autonomy and freedom from surveillance)

13-R-Pub-61-38(6)

I do not perceive any significant difference between my pre- and post-retirement work. Of course, there are some differences, but I think those are quite minor.

14-R-Pvt-73-53(13)

[As rehired teachers] we are all conscientious, so the school trusts our teaching quality…seldom do people observe my class (More autonomy and freedom from surveillance)

15-R-Pub-61-35(1)
Not mentioned

16-R-Pub-60-34(0.7)

Although, sometimes, I still need to take care of the administrative duties that I used to engage in before retirement, I can make my own decisions regarding my work schedule. (More flexible work schedule)

17-R-Ind-71-41(5)

Now, I am much more free…I can freely arrange my work time…The school

[management] generally respects my personal convenience when arranging my course schedule (More flexible work schedule)

III. Recognition

10-R-Pub-60-34(4)

I feel people around me have become more polite and respectful towards me, perhaps because I am an old lady now, and people respect their elders…Many young teachers have asked me whether they can observe my class to learn my teaching methods. I am so honoured that I can still make some contribution after retirement. (More respect from others; More trust from others)

11-R-Pub-62-39(7)

Not mentioned

12-R-Pub-61-40(1)

I think that, in the future, more and more retired teachers will join in the reemployment activity, because I feel this society needs us. There is an increasing number of educational institutions, but there is a growing shortage of experienced teachers…People generally trust rehired teachers' capabilities. (More trust from others)

13-R-Pub-61-38(6)

When I was retired, my superiors told me the school still needed me, so I was invited to be a rehired teacher…Besides teaching, I was also invited to be a member of the 'teaching supervision expert team'…In my opinion, being rehired is an honourable thing, because that means your capability is recognised by the school. (More trust from others)

14-R-Pvt-73-53(13)

(1) Compared to pre-retirement, I feel the people around me have become more respectful towards me. Students are more polite to me, and, sometimes, young teachers seek my advice regarding the profession-related issues they encounter. (More respect from others)

(2) When I was retired, I received an invitation from a university leader. He said his university desperately needed teachers like me who have practical experience in mechanical and electronic engineering…I feel the school trusts our [rehired teachers'] teaching quality. (More trust from others)

15-R-Pub-61-35(1)

Not mentioned

16-R-Pub-60-34(0.7)

Not mentioned

17-R-Ind-71-41(5)

My colleagues have become more respectful towards me, and also more considerate…The school [management] generally respects my personal convenience when

arranging [my] course schedule. (More respect from others)

IV. Professional competence

10-R-Pub-60-34(4)

(1) The reemployment work gives me the chance to continue to learn. I feel that my professional knowledge and teaching experience are richer than before. (Richer teaching experience)

(2) I put more effort into improving my teaching quality than before, because, after retirement, I no longer need to do any research or administrative work, so I can spend all my energy on teaching now. (More time to improve teaching quality)

11-R-Pub-62-39(7)

Not mentioned

12-R-Pub-61-40(1)

(1) In my perspective, rehired teachers have irreplaceable working experience and professional knowledge…even for myself, my knowledge and experience are definitely richer than what I possessed when I was young. (Richer teaching experience)

(2) During in-service time, we had to do many 'trash' administrative jobs, but, now, there is hardly any external disturbance to my teaching. I just need to put all of my effort into satisfying the students. (More time to improve teaching quality)

13-R-Pub-61-38(6)

Not mentioned

14-R-Pvt-73-53(13)

Not mentioned

15-R-Pub-61-35(1)

Not mentioned

16-R-Pub-60-34(0.7)

Not mentioned

17-R-Ind-71-41(5)

Not mentioned

V. Aspiration

10-R-Pub-60-34(4)

I am an old woman now, so I don't have any future plans regarding my work. Perhaps I will stop working after the birth of my grandson or granddaughter, because I need to take care of the baby. Anyway, before retirement, I have received the full professor title, and that is all I've wanted since I came to this university, so I am already very satisfied with myself. (Reduced work aspirations because of aging)

11-R-Pub-62-39(7)

Not mentioned

12-R-Pub-61-40(1)

I am not as impassioned as [I was] when I was young…life is short, and I want to enjoy my post-retirement life. So, once the guy who is going to take over my job comes, I will stop working. (Reduced work aspirations because of aging)

13-R-Pub-61-38(6)

Not mentioned

14-R-Pvt-73-53(13)

Not mentioned

15-R-Pub-61-35(1)

Not mentioned

16-R-Pub-60-34(0.7)

Not mentioned

17-R-Ind-71-41(5)

I think it is a good thing for the retired teachers to engage in rehiring activities, but only for those teachers around 60–70 years old. I feel that, now, I am kind of old to keep on working. (Reduced work aspirations because of aging)

VI. Absence of burnout

10-R-Pub-60-34(4)

(1) Before retirement, I remember my weekly teaching hours could reach 30 at most. Now, I only have six. (Scaled-back workload)

(2) Since being rehired, I no longer undertake any research or administrative work. I don't have that energy. (Fewer types of professional work)

(3) I can feel the negative influence from aging. My memory is getting bad – sometimes, the students remind me that I am teaching course content that I have already taught at the last lecture. So, although the workload is light, I still feel tired at times. (More age-related fatigue)

11-R-Pub-62-39(7)

(1) Before retirement, my life was busy…I was a middle-level university leader, so I had many administrative commitments. Meanwhile, I also needed to give lectures and engage in research projects. But, now, I only give lectures. (Fewer types of professional work)

(2) My university has many requirements for in-service teachers' research achievements; for example, I am a full professor, so, before retirement, I was required to publish at least three core papers and two regular papers each year, and I also needed to maintain a certain

number of teaching hours. But, now, as a rehired teacher, the university does not have such requirements for me. (Scaled-back workload)

12-R-Pub-61-40(1)

The in-service teachers have to do many meaningless jobs that are totally irrelevant to their profession. Ironically, these jobs are unavoidable and unpaid but have a higher priority than teaching. These works occupy much of the teachers' personal time for preparing their lectures or doing research. But, rehired teachers are not required to engage in these works, so we can just focus on teaching… (Fewer types of professional work)

13-R-Pub-61-38(6)

Before retirement, my weekly working hours [including hours spent on teaching, research, and administrative work] could be more than 40. But now, each week, I just go to work for 2–3 days, and, in total, I only have 8–12 lectures and a small amount of administrative work every week…so, generally speaking, my workload has largely decreased. (Scaled-back workload)

14-R-Pvt-73-53(13)

Not mentioned

15-R-Pub-61-35(1)

I have fewer teaching hours now; in the past, I used to have more than 20 teaching hours per week, but now I only have around 12, so I feel much more at ease. (Scaled-back workload)

16-R-Pub-60-34(0.7)

Not mentioned

17-R-Ind-71-41(5)

Now, I am not as tired as I used to be before retirement…I no longer need to work according to schedule…Many trivial duties will not be assigned to rehired teachers. (Fewer types of professional work)

VII. Support and relationship

10-R-Pub-60-34(4)

Not mentioned

11-R-Pub-62-39(7)

Not mentioned

12-R-Pub-61-40(1)

Not mentioned

13-R-Pub-61-38(6)

Not mentioned

14-R-Pvt-73-53(13)
Not mentioned

15-R-Pub-61-35(1)
Not mentioned

16-R-Pub-60-34(0.7)
After retirement, sometimes I feel my work is not going as smoothly as before…I feel satisfied with the school-level support, but, in practice, I have some difficulties managing my interpersonal relationships with others.

17-R-Ind-71-41(5)
The school [management] really takes good care of me, given that I am aged. The [management] generally respects my personal convenience when arranging [my] course schedule and has cut down much of my workload.

Appendix 4-5: The Rotated Component Matrix from EFA for Model 2 of TPW Structure

Rotated Component Matrix[a]							
	Component						
	1	2	3	4	5	6	7
17. I am eager to seek new challenges in my professional work.	.879						
16. Even at my age, I still put a lot of efforts into pursuing achievements in my professional work.	.875						
15. I am very eager to have achievements in my professional work.	.871						
14. I do not find the problems and challenges at work are troubles; instead, I find them as a way for growth.	.830						
42. I think that my work has become a pain for me.		.900					
44. Generally speaking, my work has brought me a strong sense of fatigue.		.894					
43. I feel I cannot relax during work, and I remain stressful even after my work.		.882					
41. I find it very exhausting to manage my students in class every day because they are quite disobedient.		.873					
33. Generally speaking, my colleagues take good care of me.			.876				
36. I think my colleagues have offered me sufficient help to do my professional work.			.873				
31. When doing my professional work, my colleagues are happy to help me if I asked.			.823				
34. Generally speaking, my superiors take good care of me.			.808				
29. The Code of Conduct for students in my classroom are set primarily by me.				.842			
30. Generally speaking, the school has given me sufficient professional work autonomy.				.826			
27. My superiors offered me some overall work instructions, but I could independently consider the specific actions.				.810			
28. I am free to be creative in my professional work.	.304			.800			

5. I could complete my professional tasks through efforts even under relatively unfavorable circumstances.						.801	
3. I always have a way to solve problems related to my professional work.						.800	
4. I could carry out well the professional tasks assigned to me by the school.						.795	
1. I always have a way to make students understand my lecture and get their attention.						.747	
8. If i had to choose again, i would still choose to become a teacher.							.784
9. I feel happy during the most time of my work.							.776
10. I am satisfied with my work environment.							.770
12. Generally speaking, I am satisfied with my job.							.753
22. My colleagues consider me a good teacher.							.807
21. My superiors consider me competent.							.760
24. Generally speaking, my professional competence is recognized by the people around me.							.730
20. My students respect me.							.717
Extraction Method: Principal Component Analysis.							
Rotation Method: Varimax with Kaiser Normalization.							
a. Rotation converged in 6 iterations.							

Note: for clarity, factor loadings less than 0.3 were not shown in this table.