A STRATEGIC MODEL OF INTERNATIONAL STUDENTS' IMPACT ON EDUCATIONAL SATISFACTION AND CAREER PATHS : AN EMPIRICAL STUDY OF PROVINCIAL PUBLIC UNIVERSITIES IN SHANDONG, CHINA

WANG XIAOLIN

A dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in Management
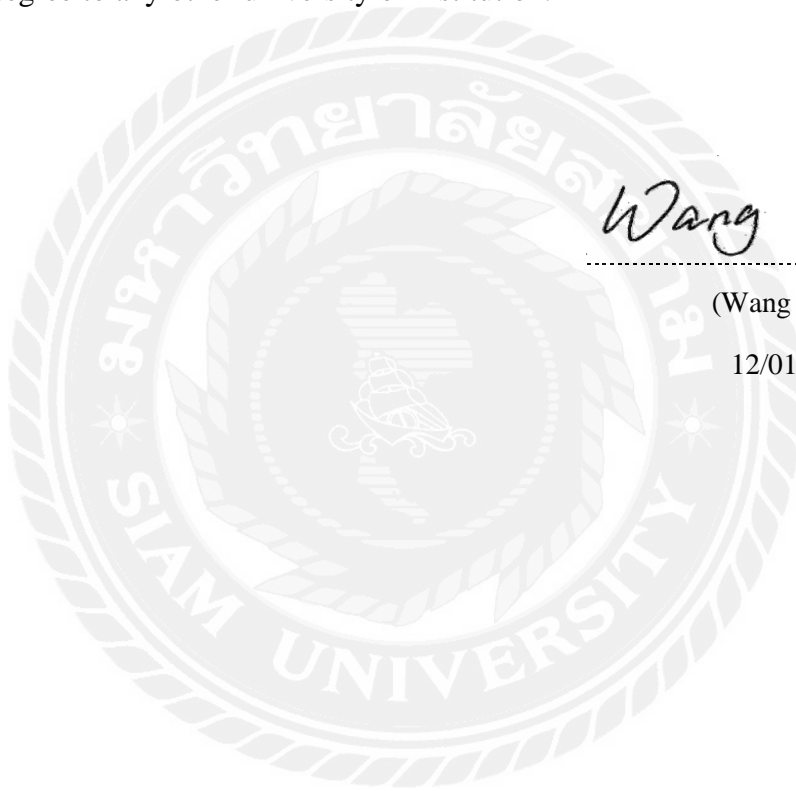The Graduate School, Siam University
2024

DECLARATION

I, Wang Xiaolin, hereby certify that the work embodied in this dissertation entitled "A Strategic Model of International Students' Impact on Educational Satisfaction and Career Paths: An Empirical Study of Provincial Public Universities in Shandong, China" is the result of original research and has not been submitted for a higher degree to any other university or institution.

Wang Xiaolin

....

(Wang Xiaolin)

12/01/2024

Dissertation Approval Form

Graduate School, Siam University

Doctor of Philosophy in Management

Dissertation Title:	A Strategic Model of International Students' Impact on Educational Satisfaction and Career Paths: An Empirical Study of Provincial Public Universities in Shandong, China
Author:	Mrs. Wang Xiaolin
Student ID:	6419200012

The examining committee approved this dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Management

Chairperson

(Associate Professor Dr. Jun Jiang)

Committee Member

(Associate Professor Dr. Chalermkiat Wongvanichtawee)

Committee Member

(Dr. Jidapa Chollathanrattanapong)

**Committee Member /
Advisor**

(Assistant Professor Dr. Maneekanya Nagamatsu)

**Committee Member /
Co-Advisor**

(Dr. Sarun Widtayakornbundit)

(Associate Professor Dr. Chaiyanant Panyasiri)
Dean of the Graduate School of Management

Dated 6 DEC / 24

Abstract

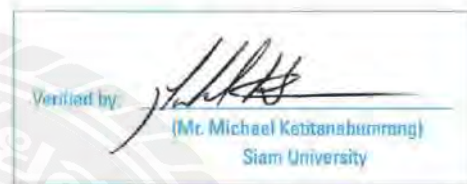|		
Title	:	A Strategic Model of International Students' Impact on Educational Satisfaction and Career Paths: An Empirical Study of Provincial Public Universities in Shandong, China
By	:	Mrs. Wang Xiaolin
Degree	:	Doctor of Philosophy
Major	:	Management
Advisor	:	

Maneekanya Nagamk, Phd.

(Assistant Professor Dr. Maneekanya Nagamatsu)

Sarun Wid.

(Dr. Sarun Widtayakornbundit)

This study explores the integration of international student satisfaction and career pathways into the strategic management model of higher education institutions (HEI). It considers international student engagement, equity, and well-being intermediary factors and suggests more effective strategies and policies. The recommendations are motivated by promoting the internationalization of provincial public universities in Shandong, China. A quantitative research approach was applied, using structural equation modeling and confirmatory factor analysis to test the hypotheses. Valid surveys, 358, were gathered from provincial public universities in Shandong Province, China.

The findings indicate that the HEI internationalization strategy positively influences international students' satisfaction and career paths. It also significantly affects international students' engagement, equity, and well-being. The results imply that intermediary factors, engagement, equity, and well-being positively mediate HEI internationalization strategies and international students' satisfaction and career paths. By

II

promoting these aspects among international students, HEIs can amplify the beneficial effects of the internationalization strategy. Further research should be considered, and this study can be used to provide valuable insight.

Keyword: HEI internationalization strategy, engagement, equity, well-being, satisfaction, career path

Verified by:

(Mr. Michael Ketitanabumrung)
Siam University

ACKNOWLEDGEMENT

TABLE OF CONTENTS

TABLE OF TABLES

TABLE OF FIGURES

Page

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Good management is a vital necessity for today's colleges and universities. Now the profound changes facing higher education no longer allow campuses to evade the necessity.

In the last two decades, European higher education institutions (HEIs) have faced a number of challenges: reduced public funding, increased competition from foreign and private universities, constant pressures and demands for their greater quality, and constant changes of education laws and legal regulations. For Australian universities, the government grants as a proportion of revenue have been declining, from 50.8% in 1998, to 33.25%in 2019 and 40.9%in 2022 (Howard, 2021). The only way for fast adjustment of HEIs to the new competitive conditions is to explore all possibilities for effective implementation of some of the most popular management concepts (Eftimov, Trpeski, Gockov, & Vasileva, 2016), etc.. Liu Qiang (2019), the main point of view of strategic management theory in universities is the management process of formulating strategic goals, implementing strategies, and evaluating strategies through comprehensive analysis of their own internal resources and conditions.

With strategic planning and thoughtful constructed alternations in governance, colleges and universities can be both more efficient and more effective (Keller, 1983).What remains crucial for the coming decade is the need to move from short-term neoliberal approaches to long term societal interests, from international education as a benefit for a small elite toward global learning for all, and from a Western paradigm to a global and equal concept (De Wit, 2024).

While HEIs exploring efficient strategic management model, rapid changes are taking place in internationalization of higher education, which have increased in range

and complexity over the past decade. Key changes in higher education globally are its massif cation, the global knowledge economy, and the emphasis on reputation and rankings (de Wit, 2019). Once the privilege of an elite social class, gross enrollment ratios in post-secondary education have mushroomed to more than 50% in many countries. There are more than 200 million students studying globally at an untold number of institutions focusing on every specialization possible. In much of the world, massif cation is a key phenomenon. Emerging economies, including China, India, and Latin America and the Caribbean (with gross enrollment ratios of 37%, 22% and 35 %, respectively), are expanding their enrollment rates toward 50% or more as is common in the developed world. Even countries in Africa, still at the elite phase of less than 15% of GRE, the demand for higher education as a result of improved primary and secondary education and an emerging middle-class, is rapidly expanding(de Wit, 2019). In China,

According to the data of the Organization for Economic Cooperation and Development, OECD (2012), from 1975 to 2010, the number of international students in the world increased from 800,000 to 4.1 million; in the decade from 2000 to 2010, the number of international students soared from 2.1 million to 4.1 million, with an increase of 99%, while higher education enrollment grew by only 77% during that decade. It is predicted that by 2025, more than 7 million new international students will be enrolled worldwide.

With exceeding enrollment ratio, there is an ongoing demand for quality higher education. The increased international student's enrollment caused by rapid globalization now requires universities to evaluate, alter or devise new and innovative strategies which will enable them to boost their international activities. There is a need to gain a competitive advantage in attracting more local and international students, involving staff in international exchange programs, conducting joint research, establishing collaborative degree and exchange programs, etc. (Alpenidze, 2015).

Global learning through an internationalized curriculum(Leask, 2015) calls for deep, even radical engagement—behaviorally, emotionally and intellectually. Students' engagement should be viewed as a long-term commitment between the student and the HEI organization, each supporting the other in an era of increasing international

operations. 'Student's engagement', defined as students' involvement with activities and conditions likely to generate high-quality learning, is increasingly understood to be important for higher education quality. The concept provides a practical lens for assessing and responding to the significant dynamics, constraints and opportunities facing higher education institutions. It provides key insights into what students are actually doing to learn, a structure for framing conversations about quality, and a stimulus for guiding new thinking about best practice. This Special Issue draws attention to new research work on student's engagement and explores how it might shape strategic model of high education institutions (Edwards, 2008). In fact, engagement is an important strategy for long-term organizational sustainability in international markets (Taneja, Sewell, & Odom, 2015). Organizational engagement should be viewed as an important factor involving all the levels of organization (Jha & Kumar, 2016). Student's engagement in the international education and university life are crucial to provide holistic effort to the enrichment of HEI internationalization strategy (Chaplin & Wyton, 2014; Phan, Tran, & Blackmore, 2019; Qiang, 2003).

Since the 2000s, there has been a strong interest in educating for personal well-being, Thorburn (2020) reported that countries like Australia, England, New Zealand, and Scotland, in different ways, try to incorporate issues related to students' well-being in their national curricular reforms (Thorburn, 2020). As stated by Matthews et al. (2015), well-being is represented in educational policy when schools display the ability to answer to societal concerns for students' mental, emotional, social, and physical needs (Matthews, Kilgour, Christian, Mori, & Hill, 2015). Norway is an example since it believes that, even in difficult economic circumstances, schools can help to make young people lives more rewarding and meaningful (Bauer, 2022; Howard, 2021).

With United Nations' Sustainable Development Agenda 2030 went into effect on January 1, 2016, 17 sustainable development goals were set up. These intended to build, by 2030, a world with equitable and universal access to quality education at all levels, to health care and social protection, where physical, mental and social well-being are assured (United Nations, 2015), emphasizing that no one, whether from developed or developing nations, would be left behind. Concerning education, especially goals three and four, pointed to "ensure healthy lives and promote well-being for all at all

ages and ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (United Nations, 2015).

Policymakers and educators across the globe strive to provide equitable opportunities and outcomes for all students (Datnow & Park, 2018). And fairness is conceived in a number of different ways. The National Center for Research in Mathematical Sciences Education in the United States identifies six different conceptions of equity: concern for the whole child; a safety net for individual differences; the same treatment for everyone; compensation for social justice; triage, focusing on students whose success or failure depends upon their school experience; and maximum return on minimal investment, or concentrating our resources on students most likely to succeed (Phan et al., 2019; Thorburn, 2020). Equity is furthermore, in the context of excellence, conceived as an opportunity to learn, an equalizing of outcomes, and a vision of a community of learning (NCREL, 2000). Closer examination of each of these perspectives tells us that all students have the ability to learn, regardless of individual differences, and that as a community of learners, each student is valued. It is important for New Zealand's social well-being and economic development that all people succeed in education and that levels of achievement keep rising. Too many people do not achieve in education. A substantial closing of the gap is needed between individuals, schools, and communities that do not achieve well and those that do (Green, 2019; Liu et al., 2019).

On the other hand, although there are researchers advocating that personal well-being and psycho-social competences are critical for young people to make the most out of their university education (Wu et al., 2019), both public and scientific attentions to this issue have been inadequate. Besides, the development of psychosocial competences among young people has been largely overlooked. In the research of Hong Kong youngsters' well-being, it was mentioned with more and more psychological and behavioral problems being identified among Hong Kong youngsters (Calvert, 2021; Tiro et al., 2021), we have to admit that students' prior academic development cannot guarantee their achievement in university. Moreover, concerning the great proportion (i.e., nearly one-fifth) of Chinese people in the world's population, studying the relationship between personal well-being and student learning achievement among

Chinese people is indispensable to provide answers to the universality of such relationship.

Neto (2022) points out that students' satisfaction with their academics is a significant element that should be given considerable attention by educators in their policy-making because students' satisfaction has bearing on retention and financial capacity of institutions. According to Palmié et al. (2023), the researchers believes that substantial participation in campus life and satisfaction with the college experience by students are essential if development is to occur. The authors highlight that wide and diverse interactions among faculty and students to foster their holistic development, suggesting that students need to see faculty in a variety of situations involving different roles and responsibilities (Lukács, 2021).

More essentially, with international students it has been established that the tertiary education institutions' reputation, inclusive of the quality of teaching, learning and research is one of the key determinants of students' preference of a university they wish to study in. According to Gbollie and David (2014), the prominence of universities is often counted based on the quality of teaching and research. In order for this to happen, the testimonies or confessions of students regarding how much they are satisfied with the educational services being rendered by particular universities can have an indelible impact (Ding, 2016). Consequently, some universities occasionally seek to inquire about their students' satisfaction mainly through various assessments to determine the level of impact they are making on the lives and academics of their students aimed at making informed decisions to enhance service delivery.

Furthermore, one of the world's goals regarding sustainable human development is to develop people with various skills because it is necessary for the changes in the world in the present era to be prepared for the rapid changes occurring in global society (Assembly, 2015). Higher education institutions are highly sensitive to the talent market as the main resource of personnel training and education. HEIs are responsible to cultivate students with capability of career planning and professional skills.

By 2024 statistical data from the Ministry of Education of China, the number of higher education graduates in 2024 is expected to reach 11.79 million, an increase of 210,000 (Ministry of Education of the People's Republic of China, 2024b). There is an imbalance between supply and demand in some industries. The number of new material industry and biomedical industry recruits is less than the recruitment demand (the ratio is 1:2.7 and 1:2.3, respectively), and there is a large gap in personnel demand and recruitment difficulties. In the new generation of information technology and high-end equipment manufacturing industries, the ratio of suitable talent delivery and recruitment demand reached 15:1 and 12:1 respectively, and the competition for talents was fierce, and the competition pressure for job seekers was greater. The supply and demand of general-purpose talents and technology research and development talents are unbalanced (China Youth Daily, 2024). Without appropriate support during students' time at university, students may not translate interest and motivation into career identity or commitment, and they may not develop realistic career goals or job-seeking strategies. Many final year students and Fresh Graduates still experience confusion in determining career choice, and it isn't easy to make decisions in choosing future careers.

However, career choice has lately become a very complicated science, considering that the decision is influenced by numerous factors. Yet, choosing the right career is important in ensuring that individuals lead rewarding lives, are motivated at their jobs and can achieve remarkable productivity, thus setting the stage for organizational success and sustainability. Given the importance of making the right career choice, it is imperative that individuals are aware of the factors that influence such weighty decisions and do so from a point of knowledge. Nowadays, Career Planning is treated as one major course and a compulsory part of the educational curriculum in almost all universities (Nyamwange, 2016). Prior knowledge is crucial for one to make feasible career choice. Being a higher education student, the main career knowledge is expected to be acquired in the education process. As international students, the school's international curriculum and internationalization strategy impact their career path. The moderating mechanism between school strategy and international students' career path has feasible value to research.

The provincial public universities are the main force of the higher education system in China. But there is apparent gap in internationalization level among different universities located in different province. For example, as Ministry of Education of the People's Republic of China. (2024a) statistics, Shandong Province is the province which owns the largest number of provincial public universities in China. And Shandong Province is the 2nd most populous province in China with 101,630,000 populations and 3rd economically developed province in China with GDP 9,206,900 million Yuan in 2023 (Beijing Daily, 2024). However, its number of international students are the lowest among the top 10 economically developed provinces in 2023. Other economically developed provinces far outperform Shandong in terms of international education and international students' population. There are 42 provincial public universities affiliated in the administration of Shandong province, accounting for 60 percent of the total 70 universities (bachelor and above education) located in Shandong province (Ministry of Education of the People's Republic of China, 2024a).

As the dynamics of globalization continue to evolve and competition intensifies, there remains significant room for improvement in teaching quality and campus services. The level of school management has consistently lagged behind the demands of higher education in a globalized context. To bridge this gap, HEIs must proactively explore various management concepts to effectively adapt to new competitive conditions (Gustavsson et al., 2021; Lee et al., 2021).

By the same time, global learning calls for deep, even radical engagement of international students. Sustainable development of HEIs requires students' engagement provides a practical lens for assessing and responding to the significant dynamics and opportunities facing higher education institutions. However, the multi-angle and targeted research on students' engagement is still lacking, and its impact on schools remains to be further discussed.

As United Nations' Sustainable Development Agenda 2030 stated, concerning education, especially goals three and four, pointed to "ensure healthy lives and promote well-being for all at all ages and ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." In the consideration of sustainable

development, it is an crucial part of university policy and management to establish a teaching atmosphere and school environment conducive to promoting equity and well-being of students. In the current era of globalization, Chinese universities should make long-term plans and take sustainable development as their development strategy (Mohammed et al., 2021).

In comparison with global trends, Chinese universities seldom proactively conduct satisfaction surveys among international students to identify and address deficiencies in their management services. The growing number of international students presents significant challenges for colleges and universities in managing and servicing this diverse student population. Given the distinct academic and daily life needs of international students, there is a pressing need for universities to establish a new management system tailored specifically for them. Therefore, the study aims to investigate the satisfaction levels among international students as part of research with the expectation of proposing policy recommendations for the improving of management services, and the advancement of internationalization of HEIs in China (Fomicheva, 2020; Truss, 2014).

Above all，higher education institutions' management strategy, international students' engagement, and international students' equity and well-being, have impressive impact on the international students satisfaction and career path, and as a whole, affect the sustainable and international development of universities. Higher education institutions should take all these factors into consideration and develop organizational strategic management model, which will provide a framework of strategic management for Provincial Public Universities in China.

1.2 Significance of the Study

This study aims at exploring the integration of international students' satisfaction and career path into organizational strategic management model, with international students' engagement, equity and well-being as the mediating factors, providing recommendations for a more efficient strategic management model of internationalization for the Provincial Public Universities in China.

As the statement of United Nations' Sustainable Development Agenda 2030, concerning education, especially goals three and four, pointed to "ensure healthy lives and promote well-being for all at all ages and ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations, 2015, p. 17), the Higher Education Institutions (HEIs) have increasingly embraced their vital role in fostering sustainable development (Canaj et al., 2022), which is not limited to the demonstration of a sustainable campus but also a cornerstone in the education practice for HEIs (Jamil et al., 2020). Through Ajmal et al's research in 2018, their findings suggest that core social factors including fairness and equality, poverty, health, education, delinquencies, demography, culture, and employee engagement within an organization drive its economic and environmental sustainability (Ajmal et al., 2018).

With more emphasis on sustainability in the development of international education concepts and goals, in the last two decades, the scale of accepting international students in China is constantly expanding. From the domestic educational administration level, China set up strategic plan for international education (González-Bonilla et al., 2021). The "Study in China Plan" announced by the Ministry of Education in 2010 proposed to make China the largest destination for studying in Asia by 2020 to achieve the target of 500,000 foreign students studying in China. According to statistics from the Ministry of Education, the number of students studying in China in 2019 was 580,300, basically exceeding the expected target (Ministry of Education of the People's Republic of China,2024b.). This has brought new challenges for Chinese HEIs' management capability and provide opportunities for universities to obtain competence of long term sustainability in development (Gudz et al., 2019).

The internationalization of education in China has made significant progress, but there still exists an imbalance in the level of development. The degree of internationalization in developed economic regions and prestigious universities surpasses that in underdeveloped areas and ordinary institutions (Gudz et al., 2019). Provincial colleges and universities face relative weaknesses in terms of operational funding, faculty resources, and academic research capabilities. These institutions bear the responsibility of driving regional economic growth, nurturing talent, and addressing regional disparities. Therefore, it is crucial for provincial universities to devise viable

strategies for internationalization to meet the new challenges in higher education development and achieve distinctive growth, ultimately serving the needs of local economic advancement and talent cultivation (González-Bonilla et al., 2021).

Despite significant progress in internationalization of higher education in China over the past 20 years, there still remains a substantial gap between the goal of sustainable development in higher education and the reality of limited academic research in internationalization of higher education (Sá & Serpa, 2020). According to online survey of the most influential search platform for academic articles in China, Chinese CNKI website(in the division of Chinese research paper and journal platform), as searching for "study in China and satisfaction" and "international students(studying in China) and satisfaction", there are 28 related research papers; as searching for "study in China and engagement" and "international students (studying in China) and engagement", there are 13 related research papers; as searching for "study in China and well-being" and "Study in China and equity", there are 2-3 direct related research papers (retrieved date 2024 August, 16th). There is big gap between the rapid development of educational internationalization and the academic research in China. The research on concepts related to internationalization of higher education still needs to be strengthened and improved.

With internationalization of higher education, student's engagement draws on new ways of thinking, which position students as active, critical, and agentic contributors to all aspects of university life(Green, 2019). For more than a decade, "student's engagement" has been quite a crucial topic in higher education policy, research, and practice. They challenge universities to address the reasons why students disengage from the process of internationalization (Green, 2019). While searching "international students' engagement" in google scholar website, there are more than 4,500,000 related papers (retrieved on August 16th, 2024), searching on Chinese CNKI website of academic paper in Chinese division, the related research paper is still very limited. In this regard, China's research on the engagement of international students in the educational environment still requires great effort to address the deficiency in development. Through the strengthening of academic research, Chinese universities will acquire a deeper understanding of international students' engagement in terms of

management concepts and adopt more effective strategies to enhance students' engagement (Tamtik & Guenter, 2019).

In 2023, the National Bureau of Statistics released the Statistical Communique of the People's Republic of China's National Economic and Social Development, the total number of universities graduates that year was 10,470,000, while the total number of university students reached 37,750,000. Studies found that university students were confronted with multiple kinds of pressure from role changes, study tasks, interpersonal relationships, employment, etc. It is of critical importance for higher education institutions to understand students' well-being in order to offer proper guidance and support (Liu, Ping, & Gao, 2019). For a long time, China has been attaching importance to the cultivation of youth well-being. Although plans and policies have been formulated, no scientific evaluation system of student's well-being has been formed. At present, there is also a lack of systematic and overall evaluation model for the assessment of students' well-being. Nor is the well-being level of Chinese students in an international context compared to other countries (Shi, 2021). Taking the well-being of university students as the research object holds significant practical implications for enhancing students' learning and life quality. The improvement of students' well-being will facilitate their all-round development at the personal level and boost their sense of identity at the school level.

On the other hand, the talent market relates tightly with higher education institutions as the main resource of personnel training and education. HEIs are responsible to cultivate students with capability of career planning and professional skills. However, the talent cultivation model of provincial public universities lacks distinctiveness of professional training. The predicament of provincial public universities in talent training lies in the convergence of talent cultivation modes. The result is the graduates possess no distinguish capabilities or skills from others in career selection. Regardless of whether it is a key university or a general undergraduate university, the talent training goals lack their own unique characteristics and positioning, and there is a deficiency of quality standards that differ from those of other universities. Therefore, after clearly recognizing their own hierarchical positioning, provincial public universities need to further determine the type of talents they should

cultivate, and subsequently optimize and adjust the talent training mode and career guidance program of the university, enabling the cultivated students to meet the demands of local economic and social development and construction, and enhance the school-running characteristics of talent cultivation of the university. Finally, benefits could result at the societal level if career guidance leads to greater efficiency in the allocation of human resources (Te Wierik et al., 2015). For the sustainable development of HEIs, to develop characteristic, feasible and fruitful talent training and career guidance education are necessary and crucial part of its strategic management.

As the destination of the largest number of international students in Asia and yearly graduates of bachelor degree being the largest in the world, it is of great significance to have the Chinese higher education institutions as the focus of this research. The provincial public universities are the main force of higher education in China, which play a crucial role in regional economic development, talent reserve, international exchanges and reputation. It is of great significance to improve the overall internationalization strategic management level of provincial public universities (Li R., 2016). However, due to the lack of accurate positioning, most provincial public universities copy the school-running mode of national affiliated universities for the fast expansion of scale since the massif cation of higher education, so that they constantly face various development difficulties in the process of running schools, and do not play their due role (Li, 2016). With the enlarging scale of international students' enrolment, how to develop characteristic internationalization strategy is also the crucial issue for provincial public universities to have in-depth research.

In the above context, Strategic Management of HEIs., international students' engagement factors, social sustainability of equity and well-being in HEIs, international students' satisfaction and career path had been discussed, the interaction effect between them is of great study value. Specifically, this dissertation takes Provincial Public Universities as the research object, takes the relationship between internationalization strategies and international students satisfaction and career path as the main research issue, introduce social sustainability factors of equity and well-being, and international students' engagement as the intermediate factors. It is expected to put forward

recommendations for the practical strategic model for the internationalization development of the provincial public universities in China.

1.3 Research Questions

1. What is the level degree of Shandong's provincial public universities' internationalization strategies' implementation, international student's engagement, international student's well-being, international student's equity, international student's satisfaction and career path?

2. What is the direct impact of HEI internationalization strategy on international student's engagement, well-being, equity, satisfaction and career path；and what is the mediating effect of international student's engagement, equity and well-being on the relationship between the internationalization strategy of HEI and the satisfaction and career path of international student?

3. What are the recommendations for innovative practical strategies and policies aiming at fostering the internationalization development of provincial public universities?

1.4 Research Objectives

1. To study the level degree of China's provincial public universities' internationalization strategies and find the disadvantaged sides of the internationalization management.

2. To study the direct impact of HEI internationalization strategy on international student's engagement, well-being, equity, satisfaction and career path; and to study the mediating effect of international student's engagement, equity and well-being affecting the relationship between HEI internationalization strategy and satisfaction and career path of international students.

3. To propose recommendations for innovative practical strategies and policies aiming at fostering the internationalization development of provincial public universities in Shandong, China.

1.5 Expected Results

1. To summarize the HEI Internationalization Strategies' direct impact on international student's engagement, equity, well-being, satisfaction and career path.

2. To summarize the mediating impact of international student's engagement, equity and well-being on the relationship between HEI internationalization strategy and international student's satisfaction and career path.

3. To recommend a more effective strategic model that can promote internationalization development of Provincial Public Universities.

4. To recommend practical suggestions for innovative practical policies and strategies of HEI Internationalization and for strengthening competence of Provincial Public Universities.

1.6 Research Benefits

1. The study recommends practical suggestions that will help provincial public universities in China to enhance their internationalization management, especially in international students' education.

2. Findings from the study are pertinent to other provincial public universities. The institutions can utilize the research findings as exemplary cases for further research.

3. The results from this research, concerning perspectives in international student's engagement, equity, well-being, satisfaction and career path, can serve as a reference for future researchers interested in strategic model of internationalization management in higher education institutions.

1.7 Definition

(1) Provincial Public University

Provincial public institutions of higher education refer to those universities established by administration under the jurisdiction of province, and most of them rely on provincial financial support and are constructed and managed by provincial administrative departments.

(2) Strategic Management

The strategic management theory is a dynamic management process that determines strategic goals, plans and implements strategies to achieve the goals, continuously manages and controls during the strategy implementation process, and finally evaluates the implementation results.

(3) Higher Education Strategic Management Theory

Through comprehensive analysis of HEI's internal resources as well as the external conditions, HEI can realize strategic planning with the target of optimizing its own characteristics in various dimensions including teaching quality, academic research, reputation, or campus construction, with the process of formulating strategic goals, implementing strategies, and evaluating strategies,

(4) Higher Education Internationalization Strategic Management

It is a long-term strategic management process for the establishment of overseas links for the purposes of student mobility, staff development and curriculum innovation of higher education, encompassing organizational change for the purposes of achieving excellence in teaching and research internationally. In reference to the United Nations' Sustainable Development Agenda 2030, social sustainable development factor should be considered in the in the HEIs internationalization, emphasizing "promote well-being for all at all ages and ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations, 2015, p. 17).

(5) Engagement

Engagement is a form of positive thinking related to completing the workload of the individual. This refers to a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.

(6) Social Sustainability

Social sustainability is a quality of society that encourages durable circumstances for human well-being, particularly for susceptible persons or groups, which includes human welfare, quality of life, social justice, social cohesion, cultural diversity, democratic rights, gender issues, worker's rights, broad participation, social capital development, and individual capabilities in the definition of social sustainability.

(7) Equity

It is defined in three social justice categories: (1) fair distribution, conceived as fair distribution of resource and chances, with a particular attention on the most vulnerable; (2) democratic involvement, conceived as participation in decision-making, collective action, and capacity to influence; and (3) social inclusion, conceived as different social groups being recognized and being able to participate in society on equal terms.

(8) Well-being

The well-being can be summarized in two sectors: Physical Well-being including material living standards, health, physical security, stable ecosystems; and Emotional and Social Well-being including social relationships, identity, work & leisure, education, political voice, and economic security.

(9) International Students' Satisfaction

The study of university students' satisfaction originated in Western countries and has evolved from the 1960s to the present which focus more on exploring the factors that influence satisfaction. From the perspective of universities, all aspects of management provided to international students can be regarded as a kind of service, the key factor including educational quality (teaching quality and academic research

quality), campus international service (campus hardware and software condition, staff work efficiency and culture compatibility), scholarship and career guidance, etc. This kind of service can be assessed through the method of evaluating the satisfaction of international students, which can be used to analyze the feasibility of management services in universities.

(10) Career Paths

Career paths can be defined as the career plan at the beginning of a person's career; and as to one's career development, it can be defined as the occupational position held by an individual for one's entire lifetime.
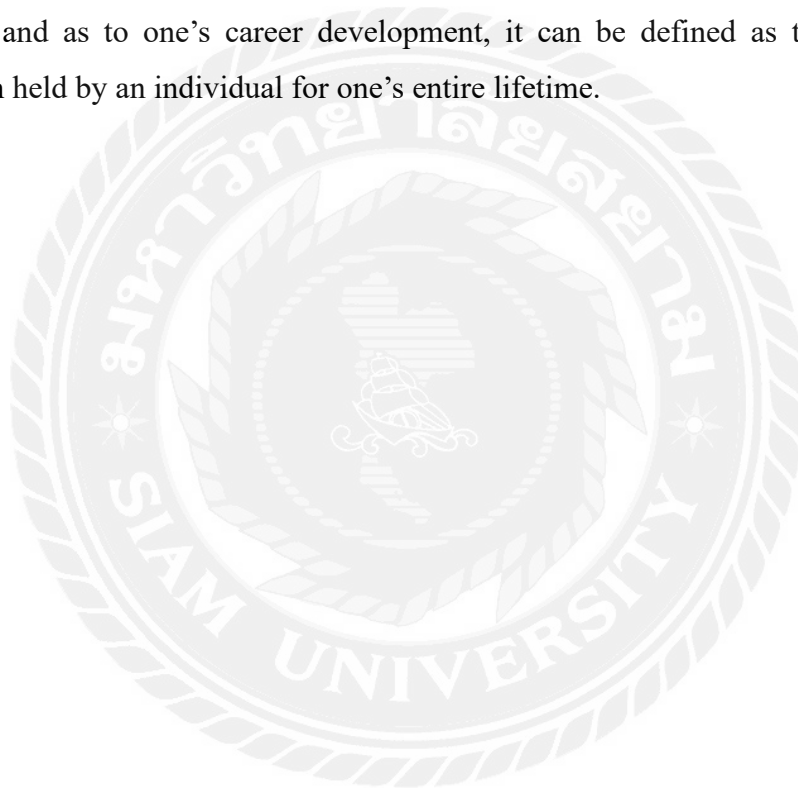
CHAPTER 2
LITERATURE REVIEW

The detail in this chapter would be separated into parts as follows:

2.1 Introduction

2.2 Provincial Public Universities in China

2.3 Higher Education Internationalization

2.4 Strategy and Strategic Management

2.5 Strategic Management of Internationalization in Higher Education

2.6 Engagement

2.7 Equity and Well-being as Key Indicators of Social Sustainability

2.8 Student's Satisfaction

2.9 Student's Career Path

2.10 Relationship Between Variables

2.11 Conceptual Framework

2.12 Conclusion

2.1 Introduction

Strategic Model of Internationalization process implies three major phases, as Ayoubi elaborated (Sá & Serpa, 2020; Tamtik & Guenter, 2019). The first phase is to set up the design of internationalization (this would be mainly represented by the strategic intent, mission statement, strategic vision, corporate strategy and strategic plan). The second phase is to choose the best ways to activate the design with real actions (this is represented by the organizational steps taken by management to

implement the design). The third phase is to evaluate this process by comparing the design with the implementation (this could be done by comparing real internationalization achievements with the intended initial strategy design) (Jones et al., 2021).

In the context of corporate sustainability being highlighted and the huge international student mobility emerging, HEIs are exploring efficient strategic management model for sustainable development. Based on longitudinal and sustainable evaluation of their international strategy, feasible indicator should be included to develop an internationalization strategic model. HEIs' Internationalization Strategy, International Student's Engagement, Equity and Well-being, Student's Satisfaction and Career Path are critical concepts worth exploring systematically (Jones et al., 2021; Zucker et al., 2022).

2.2 Provincial Public Universities in China

According to the relationship of administrative affiliation, China's institutions of higher education are divided into state-affiliated institutions and provincial-affiliated institutions (Susanto et al., 2023). State-affiliated colleges and universities refer to colleges and universities directly managed by the state central ministries, such colleges and universities are supported by the state finances and have strong strength in education funds, teaching staff, and school-running conditions. For example, domestic universities such as Tsinghua University, Peking University, Renmin University of China, and University of Science &Technology Beijing, etc. are all directed by the Chinese Ministry of Education. And some state affiliated universities are located in different provinces. Such as, among the universities in Shandong Province, there are three universities affiliated to the Ministry of Education: Shandong University, Ocean University of China, and China University of Petroleum (East branch in China) (Susanto et al., 2023; Zyberaj et al., 2022).

At present, in HEIs' provincial governance, the types of school-running include provincial public universities (including undergraduate, graduate or doctor degree education), private colleges, independent colleges, and higher vocational colleges

(Dong, 2019). Provincial Public Universities refer to those universities established by administration under the jurisdiction of province (also of autonomous regions, municipalities) directly under the Central government. Most of them rely on provincial financial support and are constructed and managed by provincial administrative departments, as defined by (Tang Jiajun, 2014).

The above-mentioned state-affiliated HEIs and types of provincial-affiliated HEIs are summarized in the following table:

Table 2.1 Number of HEIs under Different Administrative Divisions

No.	Municipals and Provinces	HEIs Offering Degree Programs	State Affiliated HEIs	Private HEIs/ Chinese-Foreign Cooperative HEIs	Provincial Public HEIs	Percentage of Provincial Public HEIs
1	Beijing	67	39	6	22	0.33
2	Tianjin	30	3	11	16	0.53
3	Hebei	61	4	21	36	0.59
4	Shanxi	34	0	8	26	0.77
5	Inner-Mongolia	17	0	2	15	0.88
6	Liaoning	63	5	22	36	0.57
7	Jilin	37	2	12	23	0.62
8	Heilongjiang	39	3	12	24	0.62
9	Shanghai	40	9	9	22	0.55
10	Jiangsu	78	11	28	39	0.50
11	Zhejiang	60	2	23	35	0.58
12	Anhui	46	2	15	29	0.63
13	Fujian	39	2	16	21	0.54
14	Jiangxi	45	0	18	27	0.60
15	Shandong	70	3	25	42	0.60
16	Henan	58	1	20	37	0.64
17	Hubei	68	8	32	28	0.42
18	Hunan	52	3	21	28	0.54
19	Guangdong	69	4	30	35	0.51
20	Guangxi	38	0	12	26	0.68
21	Hainan	9	0	4	5	0.56
22	Chongqing	27	2	9	16	0.59
23	Sichuan	53	6	18	29	0.55
24	Guizhou	29	0	8	21	0.72
25	Yunnan	32	0	9	23	0.72

26	Tibet	4	0	0	4	1.00
27	Shanxi	57	6	23	28	0.49
28	Gansu	22	2	3	17	0.77
29	Qinghai	4	0	1	3	0.75
30	Ningxia	8	1	4	3	0.38
31	Xinjiang	19	0	2	17	0.90
In total		1275	118	424	733	0.57

(Sources from website of Education Ministry: http://www.moe.gov.cn/jyb_sjzl/moe_560/2022/quanguo/202401/t20240110_1099530 .html[i],retrieved on 15 June 2023）

The provincial public universities accounts for 57.49% of all HEIs（bachelor degree education and above）in China (Magnano et al., 2021). As the main force of higher education in China, the discipline in construction of provincial public universities would combine the national and regional development strategic planning, combine the discipline advantages with the transformation and upgrading of regional industries, rely on the talent training, scientific and technological innovation and technology transformation platforms of universities, strengthen the integration of discipline construction and regional industrial development needs, improve the supporting force and contribution of schools to regional economic development. In the service of society, the provincial public universities need to constantly improve their own school strength and level (Liang et al., 2020)

2.2.1 Provincial Public Universities in Shandong

Among the 31 municipals and provinces, we can find Shandong Province owns 42 Provincial Public Universities, the largest number of Provincial Public Universities among the 31 provinces and municipals in China. Shandong Province is the 3rd economically developed province in China with GDP 9,206,900 million Yuan in 2023 (as in Table 2.2), and the 2nd most populous province in China with 101,630,000 populations (as in Table 2.4) (Liang et al., 2020; Zhang, 2021). However, its number of international students are the lowest among the top 10 economically developed provinces (as in Table 2.3). Other economically developed provinces far outperform Shandong in terms of international students' education and international student population (Zhang, 2021).

Table 2.2 Top 15 Provinces of GDP in China in 2023

Ranking	Province	GDP (100 million YUAN)	Growth Rate
1	Guangdong	135673.16	4.8%
2	Jiangsu	128222.2	5.8%
3	Shandong	92069	6.0%
4	Zhejiang	82553	6.0%
5	Sichuan	60132.9	6.0%
6	Henan	59132.39	4.1%
7	Hubei	55803.63	6.0%
8	Fujian	54355	4.5%
9	Hunan	50012.85	4.6%
10	Shanghai	47218.66	5.0%
11	Anhui	47050.6	5.8%
12	Hebei	43944.1	5.5%
13	Beijing	43760.7	5.2%
14	Shanxi	33786.07	43%

(Source: Beijing Daily
https://baijiahao.baidu.com/s?id=1789657839047690724&wfr=spider&for=pc)

Table 2.3 Top 15 Provinces of International Students Number in China in 2023

Ranking	Province	IS Number
1	Beijing	80786
2	Shanghai	61400
3	Jiangsu	45778
4	Zhejiang	38190
5	Liaoning	27879
6	Tianjin	23691
7	Guangdong	22034
8	Hubei	21371
9	Yunnan	19,311
10	Shandong	19078
11	Guangxi	15,217
12	Sichuan	13,990
13	Heilongjiang	13,429
14	Shanxi	12,919
15	Fujian	10,340

(Source:
https://baijiahao.baidu.com/s?id=1784956864274333645&wfr=spider&for=pc)

Table 2.4 Top 15 Provinces of Population in China in 2023

Ranking	Province	Population
1	Guangdong	126012510
2	Shandong	101527453
3	Henan	99365519
4	Jiangsu	84748016
5	Sichuan	83674866
6	Hebei	74610235
7	Hunan	66444864
8	Zhejiang	64567588
9	Anhui	61027171
10	Hubei	57752557
11	Guangxi	50126804
12	Yunnan	47209277
13	Jiangxi	45188635
14	Liaoning	42591407
15	Fujian	41540086

(Source:

https://baijiahao.baidu.com/s?id=1699438009093133822&wfr=spider&for=pc)

The internationalization of provincial higher education is an important index to evaluate the development of local internationalization level as it is evaluated as a crucial role in regional economic development, talent reserve, international exchanges and reputation. As the provincial public universities are the main force of local higher education institutions and represent the internationalization level of local higher education (Sahin & Kirdok, 2018), this dissertation takes the provincial public universities as the research subjects. As the province owns the largest number of provincial public universities, the research subject studied in this dissertation refers to the provincial public universities in Shandong Province (Boardman & Vining, 2020).

Higher education institutions in Hong Kong and Macao Special Administrative Regions are not included in this study, because the educational system managed by the government of the Special Administrative Region has different development background and context, which is not suitable to conduct similar research with other Provincial Public Universities in mainland of China.

2.3 Higher Education Internationalization

Successful internationalization must address the social dimension, issues related to accessibility, equality and quality, and long-term capacity building worldwide. Higher education institutions and organizations must demonstrate responsibility for their key role, as clearly stated by UN, in reaching the goals of Agenda 2030 and the Sustainable Development Goals and building a sustainable future. Therefore, institutions and organizations must cooperate to: promote and defend the fundamental principles of higher education: academic freedom, and institutional autonomy; promote the necessary link between research and education; promote the social responsibility of higher education; promote research and education to meet the local and global needs of society; ensure inclusiveness, equity and ethics; promote involvement of students in higher education development (de Wit & Deca, 2020).

Key changes in higher education globally are its massification, the global knowledge economy, and the emphasis on reputation and rankings. In much of the world, massification is a key phenomenon. Emerging economies, including China, India, and Latin America and the Caribbean (with gross enrollment ratios of 37%, 22% and 35 %, respectively), are expanding their enrollment rates toward 50% or more as is common in the developed world. While in the places, for demographic and other reasons, the supply of tertiary places in particular in STEM fields is starting to become higher than demand. The other key element in higher education development and in internationalization in the past half-century has been the impact of the global knowledge economy—the increasingly technology and science based globalized set of economic relations that requires high levels of knowledge, skills, and sophisticated international relations. At last, national, regional and global university rankings are driving the internationalization agenda of institutions and national governments (De Wit, 2019).

There are tensions between a short term neoliberal approach to internationalization, focusing primarily on mobility and research, and a long term comprehensive quality approach, global learning for all (De Wit, 2019).

According to de Wit, Hunter, Howard, and Egon-Polak (2015), internationalization needs to evolve into a more comprehensive, more intentional, and less elitist (for all students and staff) process, less focused on mobility and less economically driven, with the goal to enhance the quality of education and research and make a meaningful contribution to society (Kusumawati et al., 2020).

Although internationalization has evolved in complicated globalization context, different scholars witnessed its development over the past 30 to 40 years. And the scholars defined the internationalization of higher education in comprehensive aspects.

The International University Federation of UNESCO (2015) has a relatively comprehensive definition of the internationalization of higher education, namely: "The internationalization of higher education is the integration of teaching, research, and social service in the perspective and atmosphere of cross-border. The process of combining the main functions is an all-encompassing change process, including changes inside the school and outside the school; changes from the top level to the basic level of the system; and the school's own policy-oriented changes." Internationalization is a developing process that puts the country's higher education work in a cross-border, cross-ethnic, and cross-cultural international background and constantly pursues excellence.

Maringe & Foskett (2012), universities in all countries have responded to the increased transnational mobility of students through strategies ranging from direct marketing to the provision of overseas campuses and the establishment of student mobility partnerships. While this is partly(even predominantly)driven by economic motives, there is an important element of this mobility driven by the desire to share cultures and emphasize the global nature of the academic enterprise (Godet, 2022).

Hitt (2021) argued that in current context of higher education, campuses incorporated the people of different nations and countries and dissolved the man-made barriers of communication, knowledge, and services. Sax & Andersen (2020) claimed that internationalization was a process to initiates policies to adapt various cultural knowledge and competencies and their practices in campus community.

Foskett (2010) has summarized the aims of a sample of university internationalization strategies, and shows that the common themes are:

1. Recognition that 'being international has both geographical and quality dimensions, in that it involves both working with organizations and people from other countries and ensuring that the quality of research and education in the institution is of a standard that would be seen as 'international' in peer evaluation.

2. For universities with a strong research profile, a clear aim that the university should be engaged in leading research/academic debate at international levels in some or all of its disciplines.

3. A view that the university, through its leading academics, should be contributing to political, economic, social, and technological developments internationally.

4. An explicit aim that the institution should provide an education (curriculum) for all of its students (whether from the home country or overseas) that is international in quality and equips graduates to be both global citizens and employable in a globalized economy.

5. An aim to develop organization, systems and culture within the university that promote an international community, attractive to and meeting the needs of students and staff (both faculty and professional service staff) from both the home country and from overseas (Foskett, 2010).

Johnsen (2020) believes that the internationalization of higher education can be defined from the methods of activities, abilities, spiritual temperament and process. The activity method defined the internationalization of higher education from specific activity dimensions such as courses, personnel flow, cooperative scientific research, and technical assistance; the ability method emphasizes the internationalization of people, and attaches importance to the international attitudes, international knowledge and skills of students, teachers and administrators; the cultivation and development of the spiritual temperament method focuses on building a cross-cultural, cross-country and regional spiritual outlook and cultural atmosphere in universities; the process

method refers to the integration of international dimensions or concepts into the teaching and scientific research of colleges and universities.

Many scholars have discussed the connotation of higher education internationalization, among which the most cited concept is proposed by Canadian educator Jane Knight, who had more than 30 years' research in the education internationalization domain. Jane Knight (1993) believes that higher education internationalization is the process of integrating "international, intercultural, global" dimensions into higher education and research at the institutional and national levels. "International" refers to the relationship among different countries, nations and cultures; "cross-cultural" refers to groups with two or more different cultural backgrounds, emphasizing cultural diversity; "global" refers to providing an international vision. "International, cross-cultural, and global" reflects the breadth and depth of internationalization of higher education (Bromiley et al., 2020).

American scholars Arum and Water (1992) believe that the internationalization of higher education mainly includes these three important aspects: first, courses with international characteristics; second, teachers and students can flow internationally; third, technical assistance and collaborative research conducted between universities of mufti-nationalities. They defined the internationalization of higher education as practical activities such as international study, international education, and international technical cooperation related to various educational exchanges and international research (Barak & Yuan, 2021).

Japanese scholar Kitamura Kazuyuki (1984) believes that the internationalization of higher education should have three characteristics: universality, communicativeness and openness. Universality means that higher education can be recognized and accepted by other countries and nations, and can be used by them; communicativeness means that higher education can conduct two-way communications and exchanges between universities from different countries; openness means that higher education should be open to people from different cultural backgrounds and accommodate differences between different cultural backgrounds.

China, Beijing Normal University Professor Gu Mingyuan (1990) believes that the internationalization of higher education is a trend in the development of world education, which is manifested in the increase of international educational exchanges and cooperation, and the scope of cooperation between higher education in various countries is enhanced through exchanges and cooperation, and jointly research, etc.

Through reviewing the definition and connotation description of internationalization of higher education by different scholars, this dissertation believes that higher education Internationalization is driven by the trends of economic globalization, technological integration, and cultural diversification, based on serving the sustainable development needs of politics, economy, culture, and society, and cultivating competitive international talents through international exchanges and cooperation in education, so as to promote the development process of national higher education and serve the country's construction and development. It is a process of mutual reference, integration, penetration, and integration, including higher education internationalization policies, cooperative educational institutions and projects, international students' mobility, overseas establishment of colleges and universities and internationalization of classrooms, teaching staff and students, teaching technology and many other forms.

Table 2.5 Internationalization of Higher Education Research Dimension

Scholars	Research Dimension
De Wit (2019)	Key changes in higher education globally are its massif cation, the global knowledge economy, and the emphasis on reputation and rankings. There are tensions between a short-term neoliberal approach to internationalization, focusing primarily on mobility and research, and a long-term comprehensive quality approach, global learning for all

Scholars	Research Dimension
De Wit & Deca, HANS DE WIT2020; United Nation (2015)	Successful internationalization must address the social dimension, issues related to accessibility, equality and quality and long-term capacity building worldwide. Higher education institutions and organizations must demonstrate responsibility for their key role, as clearly stated by UN, in reaching the goals of Agenda 2030 and the Sustainable Development Goals and building a sustainable future.
De Wit, Hunter, Howard, and Egon-Polak (2015)	Internationalization needs to evolve into a more comprehensive, more intentional, and less elitist (for all students and staff) process, less focused on mobility and less economically driven, with the goal to enhance the quality of education and research and make a meaningful contribution to society Equity from the middle: associating with resources and the efficiency of education
University Federation of UNESCO (2015)	The internationalization of higher education is the integration of teaching, research，and social service in the perspective and atmosphere of cross-border… The process of combining the main functions is an all-encompassing change process, including changes inside the school and outside the school; changes from the top level to the basic level of the system; and the school's own policy-oriented changes.
Jane Knight (1993)	Higher education internationalization is the process of integrating "international, intercultural, global" dimensions into higher education and research at the institutional and national levels. "International" refers to the relationship among different countries, nations and cultures; "cross-cultural" refers to groups with two or more different cultural backgrounds, emphasizing cultural diversity; "global" refers to providing an international

Scholars	Research Dimension
	vision. "International, cross-cultural, and global" reflects the breadth and depth of internationalization of higher education.

2.4 Strategy and Strategic Management

2.4.1 Strategy

At ancient times, the word strategy originated from the military field, that is, the strategy of combat. The word strategy comes from the Greek word "strategies" translated as "general", and its extended meaning is the art and science of commanding troops (Garrido, 2016). Since modern times, strategy has gradually extended from military to economic, political, technological and social fields. With the continuous expansion in various application fields, its essential meaning has become more and more extensive. Whether on the battlefield or in business, the realized strategy is always one part intended (the plan as conceived beforehand) and one part emergent (an adaptation to the conditions encountered) (Yang, 2020).

Strategy is a quest for superior performance, the principal dimension of which is profitability (or, to be more precise, maximizing the value of the firm). There are two major inputs into strategic decisions: analysis of the business environment of the firm, and analysis of the internal environment of the firm. The central aspect of the business environment is the firm's industry environment, which is defined by the business relationships of the firm (competitors, suppliers, and customers). The internal environment of the firm comprises three major elements: the goals and values of the firm (the primary goal, being profitability); the resources and capabilities (the firm owns or controls and can deploy within its industry environment); the organizational structure and management systems (that the firm will use to implement its strategy) (Grant, 2021). As showed in Figure 2.1:
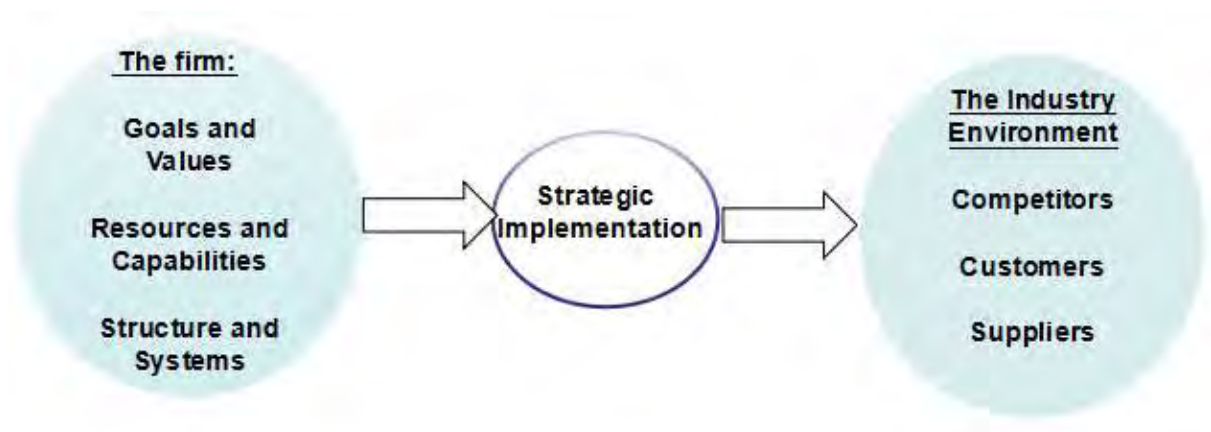
Figure 2.1 The Basic Framework: Strategy as the Link Between the Firm and its Environment

Alfred D. Chandler, Jr.,author of Strategy and Structure, the classic study of the relationship between an organization's structure and its strategy, defined strategy as "the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources for carrying out these goals." (Chandler Jr, 1969)

Kenneth Andrews, (1980), long-time Harvard professor and editor of the Harvard Business Review, published the book, The Concept of Corporate Strategy, which defined strategy as "the pattern of decisions in a company that determines and reveals its objectives, purposes or goals, produces the principal policies and plans for achieving those goals, and defines the range of businesses the company is to pursue, the kind of economic and human organization it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers, and communities." (Dou et al., 2021)

George Steiner, (1979), a co-founder of the California Management Review, and author of" Strategic Planning: What Every Manager Must Know: observed that there was little agreement on terms or definitions and confined his discussion of the definition of strategy to a lengthy footnote. But, nowhere does he define strategy in straightforward terms (Sun, 2020).

Michael Porter, another Harvard professor, became well known with the publication of his 1980 book, Competitive Strategy. Porter defined competitive strategy as "a broad formula for how a business is going to compete, what its goals should be, and what policies will be needed to carry out those goals."(Porter, 1980)

Being published in 1980, was Top Management Strategy, by Benjamin B. Tregoe (of Kepner-Tregoe fame), and John W. Zimmerman, who defined strategy as "the framework which guides those choices that determine the nature and direction of an organization." (Divinska, 2022)

Although there are many similarities in the definitions above, there are also different aspects of views. It comes to the definition commonly illustrated as, "Strategy refers to a general plan of action for achieving one's goals and objectives." A strategy or general plan of action might be formulated for broad, long-term, corporate goals and objectives, for more specific business unit, goals and objectives, or for a functional unit.

2.4.2 Strategic Management

In the middle of 1950s, many American firms were confronted with disturbing symptoms which could not be readily remedied by available management techniques and which had no precedent in recent experience. For some firms the market demand began to level off and could not be restimulated by even the most energetic marketing and pro-motion. For others the demand began to decline in the face of substitute products offered by new technologies. Still others saw their traditional markets invaded by vigorous foreign competitors (Lee, 2020; Manokhina, 2024).

The managerial techniques of long-term budgeting, financial control, even the then popular long-term planning, appeared inadequate for dealing with the new symptoms. In the inventive tradition of American business, firms turned their energies to development of new management approaches to the new perplexing problems. A number of leading firms and consulting companies, working independently, found themselves converging on a new approach towards the end of the fifties. The result, which developed through trial, error and exchange of experiences, became known as strategic planning (Lee, 2020).

Beginning in the 1960s, the idea of strategy was gradually applied to the field of business, and the word "corporate strategy" was introduced. The term "corporate strategy" was used in the book Enterprise Strategy published by American scholar Ansoff (1999), which gave the definition of corporate strategy. In the concept of management, the enterprise strategy refers to the overall planning and decision-making of the overall, long-term and major goals of the organization or enterprise based on the analysis of the external environment and internal resource conditions in order to seek long-term survival and development. The category of macro management has six main characteristics: overall, long-term, guiding, competitive, systematic and risky (Lee, 2020; Smolentseva, 2020).

"Acquiring competitive advantage", Barney (1991), is a key point of corporate strategy, and the fundamental goal of an enterprise is to take advantage of the existing resources of the enterprise concentrated in the market competition to occupy the target customers, to maximize the development and growth of the enterprise in the fiercely competitive market, and to maximize profits. Therefore, what we call "enterprise strategy" includes strategies in all aspects of the enterprise, such as enterprise development strategy, marketing strategy, brand strategy, competition strategy, financing strategy, talent development strategy, technology development strategy and resource development strategy. The basic nature of all these strategies is the same. No matter what aspect of strategy, as long as it involves the overall, long-term and basic strategy of the enterprise, it belongs to the category of enterprise strategy. The difference is only the perspective of planning (Barney, 1991)..

The significance of enterprise strategic management lies in the realization and maintenance of the enterprise's competitive advantage. Since the external and internal environments affecting the enterprise are constantly changing, the strategic management process should be dynamic and continuous. Therefore, the establishment of corporate strategic planning needs to follow the following principles, as illustrated by Tony Morden (2016):

1) Guiding principles. Enterprise strategic planning defines the business development direction and vision, and at the same time clarifies the operating policy and action

guidelines, and the enterprise develops and implements business operations based on this goal.

2) Principles of globalist and complexity. Enterprise strategic management is a systematic project, based on the enterprise's own resources to conduct in-depth analysis of the future, involving international, domestic, political, economic, commercial and cultural fields, to make a comprehensive plan for the long-term development of the enterprise.

3) Long-term, dynamic principles. Enterprise strategic planning takes the survival and long-term development of the enterprise as the goal, and realizes it through various macro-management measures. This requires a continuous and long-term process, and local adjustments based on the changed external environment are inevitable. Yes, but the overall strategic plan should be long-term and stable.

4) The principle of competition. In the emerging market economy, an unavoidable problem for all enterprises is competition. When the enterprise strategy faces fierce competition, it should start from the needs of the enterprise, analyze the internal and external environment of the enterprise, and plan a business model suitable for the enterprise. Based on the company's core competitiveness, it will remain invincible in the fierce market competition.

5) Systematic and hierarchical principles. Enterprise strategic planning is a systematic project. There are overall strategies at the company level, functional strategies at the functional department, and business strategies at the business level. However, the overall strategy is a guiding strategy and the core of corporate strategy.

6) The principle of risk. For any decision, there are potential risks in every strategy. Only on the basis of fully understanding the market, customers and the environment, grasping the market trend, and effectively mobilizing the resources of the enterprise, can we formulate a stable development strategy and control the risk to a minimum (Morden, 2016).

In present corporate context, the great majority of successful innovations originate in firms and emerge through the interplay of numerous individuals (Schilling, 2017; White & Bruton, 2011). At the same time, innovations are becoming more and more essential for the ongoing competitiveness and long-term prosperity of firms (Audretsch, Coad, & Segarra, 2014) (Nguyen-Phung, 2023; Smolentseva, 2020) .

In consequence, firms need answers to two interrelated questions to thrive in today's business landscape: (1) Which actions and interactions of their employees can improve firm performance and which (inter)actions are detrimental? (2) How can fruitful (inter)actions and their translation into firm performance be encouraged and supported (Palmié, Rüegger, & Parida, 2023)? Generally speaking, the strategic management literature has recently developed a strong interest in studying how organizations affect individuals and how individuals, in turn, affect organizations. Studies of such inter-dependencies belong to an emerging field that has been called the "micro-foundations movement in strategy and organization theory", which emerged in 2003 and has gained traction since 2010 (Nguyen-Phung, 2023; Saunders et al., 2020; Smolentseva, 2020).

2.4.3 Strategic Management Theory in Higher Education

With the development of society and economy, social demand for high-quality higher education became more and more vigorous, which promoted the reform and development of various universities and educational institutions, and strategic management theory was gradually introduced in the field of higher education management, it has become an important management tool for colleges and universities to adapt to changes in the internal and external environment (Fan, 2017).

In 1983, American scholar George Keller put forward the theory of strategic management of universities in his book "Academic Strategy: The Revolution of American Higher Education", and introduced the theory of strategic management into the management of higher education. George Keller (1983) believed that universities should pay attention to internal analysis of the conditions and external environment, and make strategic plans based on the opportunities and challenges we face, so as to

promote the school to develop better. This book is a classic work of strategic management research in universities, and its theories and methods are widely used in the management of universities, Liu (2019). The main point of view of strategic management theory in universities is the management process of formulating strategic goals, implementing strategies, and evaluating strategies through comprehensive analysis of their own internal resources and conditions, as well as the external conditions they face as shown in Figure 2-1 (Liu, 2019).
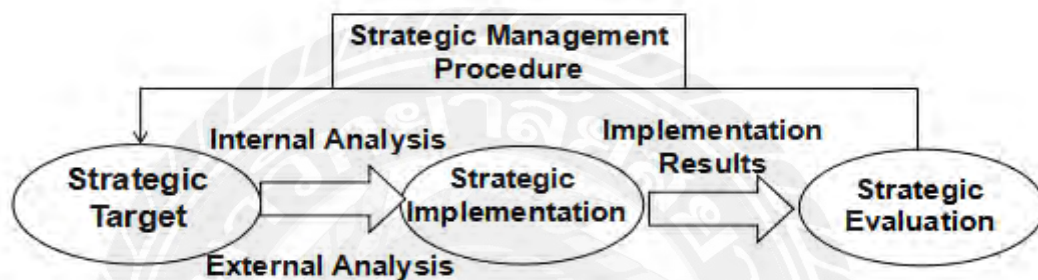
Figure 2.2 Strategic Management Procedure

In 2003, Margaret Preedy (2003) and others edited and published the book "Strategic Leadership and Educational Development", which collected university strategic management research articles from different countries and authors and organized them into a system. The results of the research show that each university can realize strategic planning by optimizing its own characteristics. The advantages of strategic management exist in various dimensions including knowledge, specialty, reputation, or campus construction (Pitarch-Garrido, 2018; Saunders et al., 2020).

2.5 Strategic Management of Internationalization in Higher Education

In 1995, Rudzki from University of Newcastle defined HEI internationalization as "a long-term strategic policy for the establishment of overseas links for the purposes of student mobility, staff development and curriculum innovation." and explained it further as "a defining feature of all universities, encompassing organizational change, curriculum innovation, staff development and student mobility, for the purposes of achieving excellence in teaching and research" (Bauer, 2022).

Canadian scholar, who specialized in the research of higher education internationalization for more than 30 years, Jane Knight believes that how to transform strong international beliefs into comprehensive and operable strategies to integrate the international dimension into the university system and internalize its values are important issues facing universities. Jane Knight proposed six stages of developing an internationalization strategy: awareness (needs for internationalization of goals, awareness of its benefits); concept (strong support from senior leaders, faculty, students, etc.) ; planning (planning of goals, objectives, priorities, etc.); implementation (scholarly activities and organizational strategies, etc.); reflection (monitoring and evaluating the quality and impact of internationalization activities and strategic processes) and strengthening (establishing incentive mechanisms to encourage faculty and staff involved in international affairs). Jane Knight's model is more integrate and coherent, and emphasize the mutual influence between the consequent stages, and the periodicity is more obvious (Liang & Yoon, 2023).

Jane Knight summarized internationalization strategy systematically and developed the theory comprehensively with world educational internationalization evolution. The following discussion about motivation of HEI internationalization strategy, target of HEI internationalization strategy, construction of HEI international strategy and evaluation of HEI international strategy will be based on Jane Knight's domain of research

2.5.1 Motivation of HEI Internationalization Strategy

As to motivation of HEI internationalization strategy of local colleges and universities, Jane Knight and Witt proposed four dimensions of motivation for internationalization of higher education: social/cultural, political, academic, and economic. The first column in Table 2.6 lists the four dimensions of motivating factors updated by Witt in 2002. The innovation and improvement of this analysis is that the third column in the table presents a new way of analyzing important motivating factors at the country and institution levels. This motivational analysis framework provides a more detailed guidance for the analysis of the reasons of the internationalization to higher education systems and institutions around the world (Liang & Yoon, 2023; Vatovec & Ferrer, 2019). Table 2.6 (Jane Knight, 2011) is as following:

Table 2.6 Motivation for Internationalization of Higher Education

Fundamental drivers	Existing drivers	Current important drivers
Society/culture	National cultural identity Understanding of different files Citizenship development Social and community group development	**National level** Human resource development Strategic alliance Income generating/commercial trading Nation building / school building Social/cultural development and mutual understanding
Politics	Foreign policy National security Technical assistance Peace and mutual understanding International recognition Regional identity	
Economy	Economic growth and competition Labor market Financial motivation	**College level** International image and reputation Quality improvement/international standards Student and staff development Economic income generation Strategic alliance Research and knowledge products
The academic	Expand academic horizons College construction Image and status Quality improvement International academic standards The international dimension of research and teaching	

Internationalization is an important measure for higher education to serve the country, and it is also a strategic requirement for universities to become world-class universities. Many top universities in the world perfectly match their strategic goals and strategy implementation when formulating their internationalization strategies. China's promotion of higher education internationalization is an important measure to serve the national strategy of "Study in China Plan", Ministry of Education of the PRC (2010), and "Promoting the joint construction of the Belt and Road Education Initiative" Ministry of Education of the PRC (2016).

As of December 2020, China has established educational cooperation and exchange relations with 188 countries and regions and 46 important international organizations, and signed agreements on mutual recognition of higher education degrees with 54 countries. With the implementation of the "Promoting the Joint Construction of the 'Belt and Road' Educational Action", China has signed agreements on the mutual recognition of higher education degrees with 24 countries along the "Belt and Road" region. International students from countries and regions along the "Belt and Road" who study in China account for more than 50% of foreign students in China (China Education News Network, 2022).

2.5.2 Target of HEI Internationalization Strategy

After countries and institutions have a sufficient understanding of the necessity of internationalization of higher education, it is particularly important to construct reasonable internationalization goals with an international perspective, and to guide and implement related work. Different regions and universities have different angles for internationalization strategic goals.

According to Cristina LópezDuarte (2021), for more extensive global competencies of future regional economic sustainability and societal integration, Europe founded the Bologna Process, which was launched in 1999 and encompassed a wide range of agreements and coordinated policies among European countries in the Higher Education that aimed at establishing a completer and more far-reaching Europe.

Its objective is to rely on Higher Education to turn the EU into the most competitive economy and knowledge-based society of the 21st century (Ramdhan et al., 2022).

The California government promotes the development of internationalization of higher education by formulating educational policies and regulations. Since 1950, the "California Higher Education General Plan" which has undergone many reviews and revisions has guided and regulated the development of higher education in California. With the development of economic globalization, in 2010, the "California Higher Education General Plan" clearly stated that it is necessary to increase the proportion of international students admitted, expand the geographical diversity of the main body of students, and cultivate talents with international vision to adapt to the development of globalization.

The presidents of University of California Berkeley have paid great attention to the development of internationalization of higher education. One of the directions is to "develop UC Berkeley into a world-known academic exchange center for the development of UC Berkeley itself, Berkeley city, California state, the United States and the world." (Guo，,2016).

Yale University formulates its international strategic goals around the three dimensions of students, scholars, and institutions. It is committed to helping students play a role in world affairs, attracting the most talented students and scholars from all over the world, and building Yale into a global university (Li, & Zhu. 2007).

In May 2019, the 121st anniversary of the founding of Peking University, China, it was proposed "to promote Peking University to further open up to the outside world, serve the national strategy, build a world-class academic and knowledge highland, and devote itself to cultivating world-class talents and global governance talents." (source: https://www.sohu.com/a/321807146_162522), with reference to Beijing University Internationalization Strategy stipulated in 2019.

Different countries and regions propose international development goals based on economic, political, and cultural development needs. Under the guidance of national

or regional internationalization policies, colleges and universities establish their own development goals in terms of scientific research, student training, and teacher training.

2.5.3 Construction of HEI Internationalization Strategy

When discussing the internationalization of higher education, Canadian scholar Jane Knight (2007) said, "Although the country will have an important impact on the internationalization of higher education through policies, funds, projects and regulations, the institution level and the individual level are usually the most important factors. The place where internationalization really happens." Moreover, in order to prevent internationalization from becoming a fad, internationalization should be incorporated into the culture, policy, planning and organizational process of universities to achieve sustainable development of internationalization.

"Internationalization Strategy" mainly includes two parts: "Project Strategy" and "Organization Strategy". Among them, "project strategy" includes elements such as academic projects, research cooperation, external contacts and extracurricular activities; "organization strategy" includes elements such as planning management, organizational structure, resource allocation, communication mechanism, student services and human resources.

Canadian scholar Jane Knight's classification of internationalization strategies of universities——project strategies and organizational strategies are shown in the table2.6 and 2.7, which provides a conceptual framework for scholars to study internationalization strategies. However, this does not mean that the conceptual framework can be applied to any specific research environment. Because the determination of the specific research dimensions should also be combined with the specific purpose and specific conditions of the researcher, and sometimes even some adjustments or modifications are required to make the conceptual framework more operable. Jane Knight's classification of internationalization strategies of universities (Jane Knight, 2007) is illustrated in Table 2.7 and Table 2.8:

Table 2.7 Classification of Internationalization Strategy

Project Strategies	
External Relations	**Domestic** -community-based partnerships with NGO groups or public/private sector groups -community service and intercultural project work -customized education and training programs for international partners and clients
	Cross-border: -international development assistance projects -cross-border delivery of education programs (commercial and non-commercial) -international linkages, partnerships and networks -contract based training and research programs and services -alumni abroad programs
Extra-curricular	-student clubs and associations -international and intercultural campus events -liaison with community based cultural and ethnic groups -peer support groups and pro grams

Table 2.8 Classification of Organizational Strategy

Organizational Strategies	
Governance	-expressed commitment by senior leaders -active involvement of faculty and staff -articulated rationale and goals for internationalization -recognition of international dimension in institutional mission/mandate statements, and in planning, management and evaluation policy documents
Operations	-integrated into institution-wide and department/college level planning, budgeting and quality review systems -appropriate organizational structures -systems (formal and informal) for communication, liaison and co-ordination -balance between centralized and decentralized promotion and management of internationalization -adequate financial support and resource allocation systems
Services	-support from institution-wide service units—i.e., student housing registrar, fundraising, alumni, information technology -involvement of academic support units—i.e., library, teaching and learning, curriculum development, faculty and staff training, research services -student support services for incoming and outgoing students—i.e. orientation programs, counseling, cross-cultural training, visa advice

Human Resources	-recruitment and selection procedures which recognize international expertise -reward and promotion policies to reinforce faculty and staff contributions -faculty and staff professional development activities -support for international assignments and sabbaticals

2.5.4 Evaluation of HEI Internationalization Strategy

Jane Knight (2010) defined the evaluation of internationalization as reflection, monitoring and evaluating the quality and impact of internationalization activities and strategic processes. In order to ensure that international students can enjoy high-quality education and expand the competitiveness of their own education for studying abroad, each major destination countries actively carry out education quality assessment activities.

As to Zhang J. P. (2015) summarized, the United Kingdom established the Higher Education Quality Assurance Agency to regularly evaluate the teaching quality and academic research of colleges and universities, and the evaluation results are open to the public; the Russian government stipulates that colleges and universities must be evaluated every five years to confirm whether the content, level and quality of student training are in line with the national standard (Jeon & Min, 2021). According to the requirements of educational standards, colleges and universities that have passed the national assessment are eligible to issue diplomas to international students. Australia's Tertiary Education Quality and Standards Agency (TEQSA) and Australian Universities Quality Agency, France's Higher Education Evaluation Committee and other institutions will regularly evaluate the teaching and scientific research of higher education institutions. At the same time, the EU has also taken some measures to ensure the quality of education in member states, such as in 2005, the ESG standard system (European Standards and Guidelines) was established, and in 2008, the European Higher Education Quality Certification Committee was set up and so on (Cieślik & van Stel, 2017).

In addition, since the university rankings are also an important means of monitoring and evaluating the quality of higher education, the higher the ranking, the

higher the quality, so international students will choose target institutions based on the university rankings. With reference to Marconi G. (2013), taking the 2015 QS University Rankings as an example, the United States and the United Kingdom have 28 and 19 universities in the world's top 100 respectively. High quality and ranking education is an important guarantee for the United States and the United Kingdom maintaining the first and second largest destination countries for studying abroad.

With the huge international student mobility figures highlighted, HEI internationalization strategy are closely related and affected by the engagement and satisfaction of international students.

The core content of international student's satisfaction of academic service is the comprehensive evaluation indicators. From the academic satisfaction point of view, the QS World University Rankings, Academic Rankings of World Universities, Times Higher Education Rankings and US News University Rankings are the most recognized tools. The major rankings have selected indicators such as course internationalization, paper citations, and faculty strength as the main index (QS Top Universities, 2015).

From the more comprehensive campus service perspective, the current existed evaluation category and indicators are ex-amplified by The International Student Barometer (ISB) completely, which is the existing widely accepted and frequently consulted authoritative evaluation system for international students of colleges and universities world-wide. It is developed by the I-graduate International Insight company, that tracks and compares the decision-making, expectations, perceptions and intentions of international students from application to graduation (graduate, 2015), the indicator includes arrival, teaching quality, campus service and facility, and support in social and personal field.

International students' satisfaction is the reflection of HEI international level and internationalization strategy implementation. As a result of satisfying study experience, students' study motivation is likely to be sustained and strengthened. For international students' study in China, their satisfaction is of paramount concern not only to the students themselves, but also to the institutions they attend. The efficiency

of the international strategy is evaluated and the feed-back of students will promote the strategy plan progressing in internationalization of the school (Charles Gbollie, 2019).

The provincial public universities are the main force of higher education in China, which play a crucial role in regional economic development, talent reserve, international exchanges and reputation. It is of great significance to improve the overall internationalization strategic management level of provincial public universities (Li R., 2016), and how to enhance the competence and sustainability of HEIs also needs in-depth analysis.

2.5.5 Indicators of HEIs' Internationalization Strategy Evaluation

In order to make a comprehensive study of the indicators of HEIs' Internationalization Strategy Evaluation, this part will illustrate the indicators in 3 parts: 1) case analysis on HEIs' Internationalization Strategy, 2) determinants of international students' HEI choice, 3) "Index of Internationalization Level of Higher Education in Shandong Province" and "The Index System of Higher Education Quality Certification for Foreign Students Study in China".

2.5.5.1 Case Analysis of HEI Internationalization Strategy

In the process of internationalization of higher education, classic internationalization development cases enable researchers to form a deeper understanding of the internationalization strategy choices of universities.

California is a state with the highest level of internationalization of higher education in the United States. The state's higher education system is complete. There are many well-known public and private universities in California. The most famous universities are 3 public institutions of higher learning, including UC Berkeley, UC Davis, and UC San Francisco, and 1 private institution of higher learning, Stanford University (Ou,2019).

The California government promotes the development of internationalization of higher education by formulating educational policies and regulations. Since 1950, although the **"California Higher Education General Plan"** has undergone many

reform and revisions, it has guided and regulated the development of higher education in California in an orderly manner. In 1959, California planned to carry out structural reform and functional differentiation of the higher education system, and effectively solved the society's surging demand for higher education at that time. Initially, the "California Plan" set strict application conditions for students outside the California area in order to give priority to meeting the needs of local people for higher education. However, with the development of economic globalization, higher education is also involved with the international trend. In 2010, the "California Higher Education General Plan" clearly stated that it is necessary to increase the proportion of international students admitted, expand the geographical diversity of the main body of students, and cultivate talents with international vision to adapt to the development of globalization (Guo,, 2016).

The following analysis is based on the specific strategies taken by the University of California Berkeley and Stanford University to implement the internationalization of higher education.

The presidents of UC Berkeley have paid great attention to the development of internationalization of higher education. One of the directions is to "develop UC Berkeley into an world-known academic exchange center for the development of UC Berkeley itself, Berkeley city, California state, the United States and the world." It is to develop diverse and excellent teaching and scientific research across different cultures and national boundaries, and absorb international excellent concept, experience and talents (Qian, & Meng, 2017).

1) Advanced internationalization concept

From 1960s, UC Berkeley developed *Multicultural Education Plan* to encourage students to actively participate in various forms of cross-cultural communication and learning at home and abroad, and encourage students to think and innovate from an international perspective, so as to form international thinking, acquire rich knowledge reserves, and grow into international students with global outlook and innovative ability (University of California, Berkeley, 2020b).

2) Cultivation of pragmatic and professional skills and innovative spirit

As to cultivate students who are prepared for the "real world life", Stanford University has adhered to the "pragmatism" school-running philosophy since its inception, focusing on the cultivation of students' pragmatic skills and innovative spirit. Stanford University caters for the needs of technical talents, continued to innovate teaching methods, increase practical opportunities for teachers and students through cooperation with enterprises. The formation of Silicon Valley has also benefited from Stanford University's pragmatic and innovative curriculum design. Furthermore, with the development of economic globalization, Stanford University has established the educational philosophy of "combining prestige with broadness in knowledge" (Jeon & Min, 2021; Mohd Rasdi & Ahrari, 2020).

The idea is to cultivate knowledgeable and innovative talents for the new century (Cao, S., 2018). In this concept of internationalization, Stanford University has made great achievements in scientific research and academic fields, and has cultivated many students who have played a great role in society(Mohd Rasdi & Ahrari, 2020).

3) Curriculum internationalization

UC Berkeley is the most famous public comprehensive research-type university in California. In terms of international curriculum, UC Berkeley offers nearly 600 international courses, such as Foreign Language courses, courses related to International Cases, and Global Issues courses, etc.. The courses can be conducted online or offline to meet the needs of different nationalities' student (University of California, Berkeley, 2020a).

Stanford University continues to improve its curriculum system. In addition to professional basic courses, it also provides students with a variety of Foreign Language courses, International Human Rights and other interdisciplinary International curriculum systems. Students can choose according to their own interests (Cao, S., 2018).

4) Teaching staff internationalization

In terms of the internationalization of teaching staff, excellent teachers come from different nationalities and fields. There are 198 academicians of the National Academy of Arts and Sciences, 136 academicians of the American Academy of Sciences, 87 academicians of the American Academy of Engineering, and 140 Guggenheim Award winners, 22 MacArthur Award winners, and 3 Pulitzer Prize winners. These excellent teachers are the cornerstone of the school's internationalization development. UC Berkeley attaches great importance to the training of teachers and encourages teachers to actively carry out international cooperation and research (Angwaomaodoko, 2024).

5) Student internationalization

In August 2019, UC Berkeley welcomed 1,552 new international students accounting for about 14% of the total number of new students. These international students have excellent grades, and more than half of them have a GPA of 3.90-4.00. The source of students is also very diverse, with students from 74 countries including China, Japan, and the United Kingdom (University of California, Berkeley. 2022a).

Stanford University currently has 6,994 undergraduates and 9,390 postgraduates, of which international students account for about 9% of the total number of Stanford students. These students come from 77 countries and have different experiences, backgrounds and cultures, forming a high-quality and diversified student group (University of California, Berkeley, 2022a).

6) Exchange program internationalization

UC Berkeley also provides students with many short-term or long-term overseas exchange programs, such as Summer Abroad, Global Internships, etc. (University of California, Berkeley, 2022b). The International Office is responsible for developing and managing international academic and exchange activities focusing on systematization and effectiveness. For example, summer overseas study activities are implemented for all students and from second term, freshman students can apply for it and multiple times

applications are allowed to encourage students to actively participate overseas practice, broaden their international horizons, and improve their comprehensive skills. For graduates, UC Berkeley has also launched a global internship program to strengthen the training of graduates' vocational skills, to enhance student's ability to adapt to the world-wide career challenge;

Stanford University attaches great importance to the development of international students communicating activities. It has set up an International Student Community Committee and a central activity room to provide rich activities for international students, and the family members of international students can also participate in the projects, Stanford University, Bechtel International Center. (2023), thus welcoming and attracting many outstanding students from different countries, different ethnic groups, and different cultural backgrounds to join the communication; on the other hand, Stanford University also actively develops cooperation with overseas universities and encourages students to study in overseas universities.

7) Teacher's training internationalization

In addition, the University of California Berkeley also promotes overseas study visit programs and overseas university alliance programs to strengthen exchanges and cooperation among high-quality teachers, and jointly promote the improvement of academic and scientific research capabilities. The cooperation countries and regions are also very extensive, including Canada, UK, China, and France, nearly including 50 countries and regions. (Li, 2019)

8) Establishment of overseas branches

In addition, Stanford University actively opened branch campuses around the world. For example, in 2004, Stanford University cooperated with Peking University to establish Stanford's 9th overseas branch campus. Professors from the two universities jointly taught courses to strengthen international exchanges and cooperation between teachers and students (Lucy Effeh Attom, 2024). Stanford University also actively encourages its students to study in overseas universities.

From the above analysis, we can conclude that the advanced internationalization concept of local governments provides prominent direction for the higher education, and universities will carry out targeted internationalization strategies under the guidance of local government.

2.5.5.2 Determinants of International Students' HEI choice

In the international competition for talents, countries, either developing or developed, are facing tough challenges on how to design the best-fit policies to compete for talents, to make up for the talent gap in the process of national economic development and innovation (OECD 2008). This leads to some questions that need to be addressed. What are the major determinants for international talent flow? What are the determinants for different types of countries to attract talents? What are the differences between the determinants for developing countries and developed ones? (Bromiley et al., 2020)

Sami Mahroum (2000) divided international talent into 5 groups, they are: (i) Man- agers & Executives, (ii) Engineers &Technicians, (iii) Academics & Scientists, (iv) Entrepreneurs, and (v) Students, and students are considered as main supply channels to these groups. This paper focuses on the segmentation—international students of higher education level. Such students are chosen as the main study object of this paper because: (1) international students of higher education level are a key component of international talent and the flow, the study of which can properly represent a broader population; (2) compared with international students, other international talent flow of non-student types tend to be less mobile and relevant data is scarce (Barak & Yuan, 2021).

McMahon (1992) notes that the number of international students of an inflow country closely relates to the economic integration between countries, the economic development and the education level of an outflow country. Yang (2020) point out that the quality of higher education, the desire to learn about a foreign culture, and the immigration possibilities after graduation are the main determinants. Lindsay and Pramod (2001) think that the per capita income gap between the outflow and inflow

countries, exchange-rate adjusted tuition level, and the education quality of outflow countries are determinants. Johnsen (2020) again point out that the determinants also include the student's understanding about foreign educational institutions and programs, their familiarity with the foreign culture, and connections between the two societies. Dou et al. (2021) points out that tuition fees, the language of instruction and the quality of the higher education institutions affect international student mobility. Lee (2020) found that the number of faculties, the resources invested in student aid, and the socio-economic conditions of the area have a positive impact on the competitiveness of a university, the distance from the area of residence to the destination plays a deterrent role. Nguyen-Phung (2023) believed that tuition, government support for education, and population size of the younger generation in outflow countries are crucial to international talent flow. Manokhina (2024) found that the quality of a country's higher education system has a positive and significant effect on the size and direction of the flow of students, at the graduate level, however, the driving force for student mobility appears to be the lack of educational opportunities in the home country. Brezis and Soueri (2011) point out that educational quality outweighs income level in the students' decision-making process. Lee (2020) conclude that among higher education policies especially the quality of higher education institutions and the availability of programs taught in the English language can act as an important tool to attract international students.

In explaining the determinants of international students' mobility, one of the most widely used frameworks in the domain of student mobility is the push-pull model. Bauer (2022) presented the push-pull model to explain that some students are pushed by unfavorable conditions in their home countries, while others are pulled by scholarships and other opportunities in destination countries.

Liang & Yoon (2023) expounded that the push factors operate within the home country, initiating student's decision to study overseas, whereas pull factors function within the host country to make that country more attractive than other potential destinations. According to Yulianti Y et al. (2023), the `push-pull' theory postulates that there are negative factors in home country (`push factors) and attractive factors in host country (`pull factors).

Relative to specific aspects considered by international students in line with the push-pull Model, it highlights that mobility cost, employment and income in the host country, geographical distance, climate environment, quality of host institutions, financial aid, and future career prospects are among pull factors, while the economic status of home country, language and intercultural training of home institutions, impact from parents, and interest in mobility constitute push factors (Manokhina, 2024; Nguyen-Phung, 2023). Similarly, Mazzarol and Soutar (2002) presented a model of push and pull factors as presented in Figure 2.3.
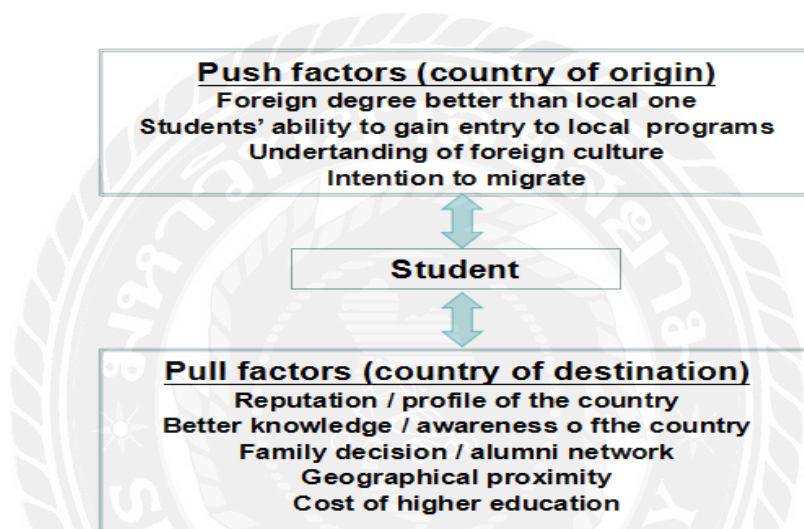
Figure 2.3 Mazzarol and Soutor's (2002) Pull and Push Model

The model predicts that before embarking on the journey to study overseas, the student tends to conduct a situational analysis of circumstances at home ranging from educational quality, entry possibilities, understanding a different culture to chances of migration in relation to the push factors (Mazzarol&Soutar, 2002). At the same time, they stressed that the student is likely to look at the university reputation/country profile, better knowledge, family decision, proximity and costs of education, which according to them constitute pull factors.

Modified on this model, Ramdhan et al. (2022; Yulianti Y et al. (2023) provided an extended version of the Push-Pull Model and suggested that push factors broadly include economic wealth, educational opportunity, educational standards, family influence, and demographic issues while exploring the impact of aspirations and expectations on foreign students' study abroad. Azmat and colleagues named pull

factors to encompass university reputation, quality and choice of programs, staff quality and permanent residency (Azmat et al., 2013).

With the analyzing of Push-Pull Model, study abroad determinants are somehow reflected in the model that presumably based on these factors, students are likely to develop their motivations to pursue education overseas. With reference to the push-pull factors and coupled with previous studies, Anderson and Lawton (2015) characterized international students' study abroad motivation into four distinct dimensions, including world enlightenment, personal growth, career development and entertainment. As it can be noted from the explanation of these dimensions, all the ramifications to study at home or go abroad were considered (Qamhieh et al., 2020).

Many researchers have used Push-pull Model in their studies (Jeon & Min, 2021; Lucy Effeh Attom, 2024; Mohd Rasdi & Ahrari, 2020; Qamhieh et al., 2020). In a study using this model, Eder and colleagues researched on three push factors (personal growth, language, and career) and three pull factors (college issues, physical geography, and U.S. culture) to determine the influence of choice on chosen selected country and institution. The study found personal growth as the most important push factor, while college issues were most significant with respect to pull factors.

Pan (2013) presupposed that motivations to study abroad are in pursuit of academic and professional growth, economic benefit, individual internationalization, and enhanced social status. It mentioned that African and Asian international students possess certain motivational factors, which need to be unearthed to enhance programs and interventions to perfectly fit would-be recipients.

As from the above research, the determinants of international students' study abroad can be summarized as following table 2.4, The most frequently indicated factors are education quality factors, economic factors and personal career prospect factors. Indicators from country level, institutional level and personal level are all listed, and for this dissertation, the research level is in the domain of institutional and individual level.

Table 2.9 Summary of the Indicators of Determinants of International Student Mobility

Determinants	Indicators
Educational factors	*Country level*
	the education levels government support for education foreign degree better than local one better knowledge/awareness of the country educational opportunity
	Institutional level
	quality of higher education, the education quality educational standards, quality and choice of programs university reputation staff quality, the number of faculties, the language of instruction availability of programs taught in the English language
Economic factors	*Country level*
	the economic development of the host country the socio-economic conditions economic benefit; economic wealth per capita income gap
	Institutional level & personal cost
	exchange-rate adjusted tuition fee level cost of higher education the resources invested in student aid government support for education financial aid mobility cost
Personal factors	*Country level*
	familiarity with the foreign culture connections between the two societies better knowledge/awareness of the country
	Career aspiration & personal growth
	future career prospects employment and income in the host country, career development personal growth pursuit of academic and professional growth individual internationalization the desire to learn about a foreign culture
	Immigration & residence
	the immigration possibilities intention to migrate permanent residence interest in mobility constitute
	Family influence

Determinants	Indicators
	family decision/alumni network impact from parents family influence
	Study ability
	students' ability to gain entry to local programs the student's understanding about foreign educational institutions and programs, understanding of foreign culture language
Other factors	Geographical proximity demographic

(Source: the researcher, 2023)

As the most eminent indicator of international students' determinations on HEI choice, **the educational quality** is the most concerned issue of international students around the world. Students choose the university with reference to the world HEI ranking tools, such as QS Stars University Ratings, International Student Barometer, Study Portals, and National Survey of Student's engagement, which conduct all-round evaluation of teaching quality. As the most accepted ranking, QS (QS Top Universities, 2015) uses six metrics to compile the rankings:

1) Academic Reputation (40%): Based on questionnaire responses from more than 151,000 academics.

2) Employer reputation (10%): Based on survey responses from more than 99,000 employers about the relationship between universities and graduate employability.

3) Citations per faculty paper (20%): Measures research impact by dividing the total number of citations to a university's research papers over a five-year period by the number of faculty at that university.

4) Teacher-student ratio (20%): Represents the scale of teaching, obtained by dividing the number of students by the number of faculty members, and is used to refer to the class size of the selected university for the global student population and other indicators.

5) Proportion of international faculty (5%): One of QS's two internationalization indicators, it measures the proportion of non-national faculty in a university.

6) Proportion of international students (5%): The second of QS' two internationalization indicators, this measures the proportion of a university's non-domestic student population, which can also indicate a university's ability to attract talent from around the world.

The **2022** QS also adds two new unweighted indicators:

1) Employability Outcome (0%): Used to assess students' employability.

2) International research networks (0%): Analysis of international research collaborations and knowledge transfer.

As to QS ranking, it is well-known academic rankings for universities, the most weighted indicators are academic reputation (40%), citations per faculty paper (20%), and teacher-student ratio (20%), which all related to the academic indicators.

With respect to economic factors, financial aid and tuition fee, they are important initiative to attract international students by higher education institutions. As to the top seven destination countries of international students, universities in the United States, UK and other top destination countries have mature and flexible scholarship programs. For example, the University of Aberdeen awards scholarships to international students by reducing or exempting tuition and accommodation fees, while the University of Kent, Newman University, and University of Stirling implement a tuition-free policy. In the United States, colleges and universities are an important source of scholarships for international students. According to data released by Open Doors, in the 2017-2018 academic year, the proportion of international students receiving scholarships from American universities was 15.8%(Jeon & Min, 2021; Lucy Effeh Attom, 2024; Mohd Rasdi & Ahrari, 2020; Qamhieh et al., 2020). In China, the scholarship program is mainly attributed by central and provincial government. At present, local universities are also authorized to sponsor school scholarship with more open policy to grant scholarship according to its internationalization level with

comprehensive indicators such as academic structure, school conditions, university rankings, international student academic performance, and international students' scientific research conditions into the scope of investigation and evaluation. A rational and mature scholarship system has not been established yet, and universities are required to undertake further research and investigation to develop a scholarship system that is suitable for Chinese universities.

Employ-ability and employer reputation is a crucial indicator in university academic reputation and ranking in the world. For international graduates, employment and career prospect is the reward for their academic effort and investment, which also is the concern for the families supporting them. Furthermore, Personal fulfillment or career aspiration are needs identified as the fifth level of personal needs, that is defined as self-actualization (level 5, the highest level) in Maslow's Hierarchy of Needs Theory, entails the quest of reaching one's full potential as a person as this need is never fully satisfied. Personal fulfillment, which can be social status, career aspiration and academic anticipation, is an essential motivation for personal pursuit in further academic accomplishment (Gbollie & Gong, 2020).

From above review, the main determinants of international students HEI choice will be educational quality & school reputation, tuition fee & scholarship, and career aspiration including related factors. From these three aspects, in the consideration of the determinants of international students HEI choice, it is concluded that it provides meaningful context guidance for the internationalization strategy construction, and in the supposition that international students' engagement and satisfaction are affected by the determinants of studying abroad.

2.5.5.3 Two Key Index Systems of HEIs' Internationalization Level

The key research object of this paper is to recommend feasible internationalization strategy for provincial public universities in Shandong Province, China. The higher education internationalization policy of Shandong Province has practical guiding significance for this research. In 2014, Shandong province formulated the **"Index of Internationalization Level of Higher Education in Shandong**

Province" （Seminar on Provincial Higher Education Internationalization Index System of Shandong, 2014 ）. It provides guidelines for the choice of internationalization strategy. In the perspective of international students' education, this dissertation summarized the 7 levels of the internationalization strategy indicator and the key testing points for each level. The main content is illustrated in Table 2.10.

Table 2.10 The Key Index of Internationalization Level of Higher Education in Shandong Province

First-level indicators	Second-level indicators	Third-level indicators
1.School-running philosophy and strategy	1.1 Development goals, concepts, strategies and atmosphere	1.Strategic planning internationalization as key considerations
		2.Formulating medium and long-term plans
		3.International atmosphere throughout the school
	1.2 Degree of importance	1.Holding a foreign affairs work conference every 1-2 year
		2.Number of staff in the International Exchange and Cooperation Office of the school
		3.The number of friendly schools and research institutions at home and abroad
		4.The number of agreements signed by the school with universities at home and abroad each year
		5.Quantitative assessment indicators for each department of the school in terms of internationalization
		6.The department designated a leader or secretary responsible for international exchanges and cooperation
		7.Considering overseas education experience as one of the factors when promoting cadres and evaluating professional
2. Organization and system	2.1 Organizational guarantee	1.international exchange and cooperation committee or leading group
		2.independent International Exchange and Cooperation Office or Foreign Affairs Office
		3.international exchange college or similar institutions to manage international students
	2.2. System guarantee	1.management regulations on domestic and foreign joint training of undergraduates and postgraduates
		2.management regulations for rewarding teachers for

First-level indicators	Second-level indicators	*Third-level indicators*
		publishing articles in important international academic journals
		3.management regulations for international students in China
		4.management regulations for foreign teachers
		5.regulations on the management of teachers and students going abroad (territory) on business
		6.management regulations for granting honorary titles to foreign personnel
		7.foreign affairs reception procedures and management regulations
3. Basic conditions	**3.1 Hardware conditions**	1.apartments for foreign students
		2.apartments for foreign experts and teachers
		3.international conference lecture hall
		4.a wealth of foreign language books and e-book resources
		5.internationalization of the school in terms of office space and office conditions
	3.2 Software conditions	1.English web-page
		2.brochures, CDs, etc. in English
		3.English version of undergraduate and graduate training programs
		4.international activities, such as lectures, parties, etc.
4. Internationaliz ation of personnel flow	**4.1 School staff**	1.teaching staff who have short-term study visits or cooperative research abroad
		2.teaching staff who have short-term study abroad or cooperative research (more than 1 week) abroad
		3.teachers who went abroad (overseas) to attend international academic conferences and read papers
		4.teachers who attended international academic conferences abroad and presented papers
		5.funds for faculty and staff to go abroad (territory) to study degrees or study abroad
		6.teaching staff who have obtained a degree or study abroad
		7.teachers employed with honorary academic titles abroad
	4.2 Foreign scholars	1.foreign (overseas) scholars who came to the school
		2.foreign (overseas) scholars for short-term lectures, cooperative research, academic or international conference
		3.foreign experts and teachers who came to the school to visit or work for a long time
		4.funds invested by the school in introducing foreign

First-level indicators	Second-level indicators	Third-level indicators
		experts and teachers
		5.overseas high-end talents and academic teams introduced
		6.scholars employed by the school with honorary academic titles
		7.providing better living and working conditions for foreign experts and teachers
	4.3 Students of the school	1.students who went abroad (territory) for study, exchange or joint training
	4.4 Foreign students	1.students who went to the country (territory) to participate in academic conferences or competitions
		2.current students and graduates who went overseas as volunteers
		3.foreign (overseas) personnel who came to the school to engage in postdoctoral research and the proportion of postdoctoral personnel in the school (fill in by the postdoctoral mobile station school)
		4.foreign students in the school and the proportions of visiting students, undergraduate students, master students and doctoral students in the total number of foreign students
		5.the school is qualified to accept foreign students with Chinese government scholarship
		6.the eligibility to accept Shandong Provincial Government Scholarship foreign students
		7.school offer scholarships for foreign students.
5. Curriculum and teaching	**5.1Curriculum and teaching**	1.languages of foreign language elective courses the school provide for students
		2.courses taught in English and its proportion to the total number of courses
		3.bilingual courses taught in schools and the proportion of the total number of courses
		4.English-taught majors for foreign students
		5.Schools using original textbooks
6. Cross-border education	**6.1 Sino-foreign cooperative education**	1.Sino-foreign cooperative education programs at the undergraduate level, and postgraduate level
		2.Chinese-foreign cooperative education institutions in the school
		3.projects with foreign (territory) diplomas and degrees introduced
	6.2 Overseas Education Situation	1.foreign (territory) school-running projects
		2.Confucius Institutes established by schools abroad
		3.Confucius Classrooms Established by Schools Overseas
		4.international aid projects for Chinese teaching and

First-level indicators	Second-level indicators	*Third-level indicators*
		education owned by the school
7. Research cooperation	**7.1 International scientific research cooperation projects**	1.teachers of the school conducting cooperative research in foreign research institutes
		2.national or intergovernmental scientific and technological cooperation projects and talent introduction projects
		3.province-level scientific and technological cooperation projects
		4.municipal science and technology cooperation projects and talent introduction projects
	7.2 Sino-foreign joint research institutions	1.laboratories jointly built with foreign (territory) universities or institutions on campus
		2.research centers jointly established with foreign (territory) universities or institutions
	7.3 Hold international academic conferences	3.international academic conferences or bilateral academic conferences held by the school
		4.international academic conferences or bilateral academic conferences held by the school

In 2018, Chinese education administration stipulated **The Index System of Higher Education Quality Certification for Foreign Students Study in China** (China Education Association for International Exchange, 2018). Internationalization strategies in accordance with the international students' education is classified and illustrated in a abbreviated summary in the table 2.11. This document is a necessary compensation of key indicators to ensure the comprehensiveness investigation of the HEI internationalization strategy.

Table 2.11 The Index System of Higher Education Quality Certification for Foreign Students Study in China

Fist level indicator	*Second level indicator*	*Testing points*
Teaching, teaching evaluation & field-trip	Teaching staff	Chinese teachers with more than 3 months of overseas study, training, and work experience accounts for no less than 70% of the total number of teachers.
	Curriculum management	Focus on improving the internationalization level of majors and courses and support the construction of foreign language-taught majors and courses.

Fist level indicator	Second level indicator	Testing points
	Practice and cross-culture communication	The school has necessary bases for experiments, practice, and internships. The ratio of the number of the internship bases to the size of students is reasonable.
		Combining with the training objectives, the school organizes social practice activities for international students in China.
		The school organizes international students in China to Participate in China's national and cultural experience activities and organizes exchange activities for Chinese and foreign students.
Management and service	Branch and Staff division	The school is fully equipped with full-time management personnel for international students in each training unit.
	Students recruiting	The school has a special recruitment agency or post to carry out recruitment promotion and provide consulting services;
	Tuition fee & scholarship	The school formulates the charging method in accordance with the relevant regulations of the state
		The school has established a scholarship, and pays attention to the incentives and exemplary leading role of scholarships;
		To attract international students to participate in student associations on campus and play a role in association activities and school construction and development.
	Career orientation	The school provides guidance and services for international students in employment and entrepreneurship; the school establishes an alumni contact mechanism for international students and organizes Alumni Events.

Through comparison of these two systems of index, on the basis of "Index of Internationalization Level of Higher Education in Shandong Province" and "The Index System of Higher Education Quality Certification for Foreign Students Study in China", with reference to Table 2.9 Summary of the Indicators of Determinants of International Student Mobility, this dissertation summarized the internationalization

strategy indicator system of HEIs in Shandong Province (in the perspective of international student education) in the table 2-7.

Table 2.12 Internationalization Strategy Indicator System of HEIs in Shandong Province

Category	Indicators & testing points
1.School-running philosophy and strategy	1. In the school's strategic planning, is internationalization one of the key considerations? 2 Has the school formulated medium and long-term plans and implementation plans for international development? 3. Does the school consciously create an international atmosphere throughout the school? 4. Does the school hold a foreign affairs work conference every 1-2 year? 5. Does the school consider overseas education experience as one of the factors when promoting cadres and evaluating professional titles?
2.Organization and system	6. Has the school set up an independent International Exchange and Cooperation Office or Foreign Affairs Office? 7. Has the school formulated management regulations for rewarding teachers for publishing articles in important international academic journals? 8. Does the school formulate regulations on the management of teachers and students going abroad (territory) on business? 9. The school is fully equipped with full-time management personnel for international students in each training unit. 10. The school has a special recruitment agency or post to carry out recruitment promotion and provide consulting services;
3.Basic conditions	11. Is there an apartment and canteen for foreign students? 12. Does the school provide efficient office space, office conditions, classroom facilities for international work? 13. Does the school have a wealth of foreign language books? 14. Does the school have e-book resources and English websites for academic research?
4. Internationalization of personnel and research	15. In the past year, the annual growth rate of the total number of teachers who attended international academic conferences abroad, presented papers and published papers in important international academic journals 16. The amount of funds invested by the school each year for faculty and staff to go abroad (territory) to study degrees or study abroad

Category	Indicators & testing points
	17. The number of school teaching staff who have obtained a degree or study abroad for more than three months abroad (territory) and the proportion of the total number of teaching staff 18. In the past year, the total amount of funds invested by the school in introducing foreign experts and teachers 19. The total number of foreign (territory) scholars employed by the school with honorary academic titles 20. In the past 3 years, the annual growth rate of the number of foreign students and the number of visiting students, undergraduates, masters and doctoral students in the school 21. In the past 3 years, the annual growth rate of the number of international academic conferences or bilateral academic conferences held by the school
5. Curriculum and teaching	22. The number of courses taught in English and its proportion to the total number of courses 23. The number of bilingual courses taught in schools and the proportion of the total number of courses 24. The school offers several English-taught majors for foreign students 25. Focus on improving the internationalization level of majors and courses and support the construction of foreign language-taught majors and courses.
6. Cross-border education	26. Number of foreign (territory) school-running projects carried out by the school 27.Number of Confucius Institutes(classroom) established by schools abroad
7.Tuition fee and scholarship	28. The school formulates the scholarship method in accordance with the relevant regulations of the state 29. Whether the school is qualified to accept foreign students with Chinese government scholarship 30. Does the school have the eligibility to accept Shandong Provincial Government Scholarship foreign students? 31. Does the school offer scholarships for foreign students?
8.Career orientation	32. The school provides guidance and services for international students in employment and entrepreneurship 33. The school has necessary bases for experiments, practice, and internships. The ratio of the number of the internship bases to the size of students is reasonable.

This indicator system sets 8 categories and 33 indicator & testing points, focusing on the study of Shandong Provincial Public universities from the aspects of

school-running philosophy and strategy, organization and system, basic conditions, internationalization of personnel and research, curriculum and teaching, cross-border education, tuition fee and scholarship, and career orientation in the perspective of international students' education.

2.6 Engagement

The concept of engagement in management dimension first developed in corporate context. Employee engagement is appositive fulfilling work related state of mind that is characterized by Vigour, dedication and absorption(Mishra & Aithal, 2023), as showed in Table 2.13:

Table 2.13 Determinants of Employee Engagement (1)

Vigor
Vigor indicates high levels of energy at work, resilience both physical and mental, time and strategy invested in actual work and high level of perseverance even during difficult times. Vigor has a positive influence on employee performance. An individual with vigor will do good things for the organization that would contribute towards bigger success.
Dedication
Dedication at work refers to the disciplined behavior of an employee at work. A dedicated employee will always follow rules, comply with the policies, work hard to meet goals and take initiatives to initiate new things. This individual takes pride in his or her responsibilities, duties and feels important and meaningful in the organization. In the role efficacy scale the individual goes from role entering to role centering.
Absorption
Absorption happens in employee engagement when an individual has perseverance and can absorb the instructions, roles and job descriptions better. The individual is more concentrated on work and escapes surrounding disturbances. The individual is not a clock watcher and stays focused in fulfilling his job obligations.

Employees who are enthusiastic about work, immersed in work activities, and persistent when dealing with challenges and obstacles are the characteristics of employees who have high work engagement (Lucy Effeh Attom, 2024) and will ultimately raise the level of job satisfaction.

Kahn saw engagement as arising when "people bring in ...their personal selves during work-role performances" in terms of their cognitive, emotional and physical expression, and argued that disengagement involved the 'uncoupling' of people's authentic selves from their work experiences. Thus, engagement is associated with the "needs-satisfying" approach to motivation (Mohd Rasdi & Ahrari, 2020). William Kahn has widely been regarded as the "founding father" of the field with his extensively-cited paper on personal engagement published in the Academy of Management Journal in 1990.

Employee engagement is a set of favorable and un-favorable feelings with which employees view their jobs, the place of work, and the nature of job they do, the quality of supervision the received, co-workers pay and perks and promotional agencies (Shani & PS, 2011). The Determinants of Employee Engagement (Shani & PS, 2011) is summarized in Table 2.14:

Table 2.14 Determinants of Employee Engagement (2)

Determinants of employee engagement	
Work environment	Quality policy
Work place with openness and trust, matching physical facilities, flexibility is quite conducive for satisfaction and job performance.	It is an enhancement to the traditional way of doing business. These expectations are based on the intended use and selling price.
Relationship with superiors and colleagues	Individual's growth opportunities
They develop and apply beliefs, attitudes and valves derived from the group of superiors and colleagues with whom they are associated.	An employee particularly the achievement-oriented one, seeks growth through his work.

Determinants of employee engagement	
Motivation and recognition	Goals and responsibilities
Motivation is a process of stimulating people to attain to accomplish the desired goals.	When an individual enters the organization, the job description should be clearly explained by the management.
Welfare facilities	Image of the organization
Welfare measures to overcome employees' occasional problems such as illness, absenteeism and any other hardships.	An organization has its own images which are reflected in the form of collective values of individuals who join it.
Job security	Training and development
It attempts to design a job in such a way that it becomes more interesting and challenging so that job holder makes meaning out of that.	Training is a process of learning a sequence of programmed behavior. Development is a long term educational process utilizing a systematic or organized procedure by which managerial personnel learn conceptual and theoretical knowledge for general purpose.
Grievance handling	Promotions
It helps the employees to get opportunity to express their feelings and views	It covers a change and calls for greater responsibility and conditions of service and therefore a higher status or rank.

Vigor refers to "high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of

difficulties"; Dedication is characterized by "being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge"; whereas absorption refers to "being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work" (Schaufeli, Bakker, & Salanova, 2006).

Employee involvement is a form of positive thinking related to completing the workload and can be characterized by vigor, dedication, and absorption (Smolentseva, 2020).

Accordingly, vigor and dedication are considered direct opposites of the core burnout dimension Engaged employees "have high levels of energy and mental resilience, are willing to invest effort, have persistence, are involved in their work, experience enthusiasm and pride, and identify strongly with their work" (Lee, 2020; Smolentseva, 2020).

According to Maslach and Leiter (1997) engagement is characterized by energy, involvement, and efficacy - the direct opposites of the three burnout dimensions. They argue that in the case of burnout energy turns into exhaustion, involvement turns into cynicism, and efficacy turns into ineffectiveness (Divinska, 2022; Sun, 2020).

The conceptual framework researches of employee engagement provided standards to evaluate the level of institutional employee engagement, as showed in Table 2.15.

Table 2.15 Four Main Types of Conceptual Framework of Employee Engagement

1.The Utrecht Work Engagement Scale
the UWES is built around a particular understanding of what engagement means, ie that it comprises three states: vigor, dedication and absorption (Wilmar B Schaufeli, Salanova, González-Romá, & Bakker, 2002).
2.The Needs-Satisfying Approach
According to the Needs satisfying approach, engagement is the expression of one's preferred self in task behaviors. William Kahn (1990) defined personnel engagement as "the harnessing of organization members" to their work roles; where, people employ and express themselves physically, cognitively, and emotionally during role performance (Bakker & Demerouti, 2007, 2014; Schaufeli

& Bakker, 2010).
3.The Satisfaction Engagement Approach
Satisfaction-engagement approach, in which engagement is a more technical version of job satisfaction, evidenced by The Gallup Company's own Q12 engagement survey (Blizzard, 2004).
4.The Multidimensional Approach
This approach makes a clear distinction between job and organizational engagement, usually with the primary focus on antecedents and consequences to role performance rather than organizational identification.

The Utrecht Work Engagement Scale (UWES) is well-established as the most widely-used academic measure of engagement around the world and is adopted in many studies of engagement. However, the UWES is built around a particular understanding of what engagement means, i.e. that it comprises three states: vigor, dedication and absorption (Schaufeli, Bakker, & Salanova, 2003; Truss, 2014).

Schaufeli et al. (2002) conceptualize "work engagement "as the positive opposite of psychological burn out. They defined engagement as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption". This perspective refers to feelings of vigor (e.g. energy), dedication (e.g. enthusiasm), and absorption (e.g. feeling immersed) (Kusumawati et al., 2020).

"The Utrecht Work Engagement Scale" was developed by (Schaufeli, Salanova, González-Romá, & Bakker, 2002)assesses three dimensions: vigor, dedication, and absorption. In the questionnaire survey, there are six questions for vigor and absorption and five questions for dedication, creating a total of 17 questions. Participants rate their levels of employee engagement or student's engagement on a 7-point Likert scale (0=Never to 6=Always/Every day). The research formed two questionnaires, one is for employee and another one is for student (Godet, 2022).

2.6.1 International Student's engagement

The concept of engagement has much to offer the field of international education (Green, 2019). Different researchers have offered various terms and coverage of engagement in student's engagement.

In terms of students' participation and identification with school, Skinner, Kinder Mann, & Furrier (2009) defined engagement as the quality of students' participation or connection with the schooling endeavor and hence with activities, values, people, goals, and place that comprise it (Godet, 2022; Zhang, 2021). Audas & Willms (2002) defined engagement as the extent to which a student participates in academic and non-academic related activities as well as identifies with and values the goals of studying (Godet, 2022). Skinner, Wellborn, & Connell (1990) defined engagement as student's initiation of effort, action, and persistence in schoolwork as well as his ambient emotional states during learning activities (Hitt, 2021; Sax & Andersen, 2020).

In terms of students' psychological investment to academic work, Wehlage, Rutter, Smith, Lesko, & Fernandez (1989) defined engagement as the psychological investment needed to master and understand skills and knowledge explicitly taught in educational institutions (Wehlage, 1989). Newmann, Wehlage, & Lamborn (1992) defined engagement as students' psychological effort and investment toward learning, understanding, or mastering the skills, crafts, or knowledge that the schoolwork is intended to promote (Johnsen, 2020).

In terms of schoolwork engagement, the conceptualization stemmed from the research of Schaufeli et al. (2002) in work engagement which was defined as "a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption" in the occupational context (Yang, 2020). Analogously to work engagement, study engagement is characterized by feeling vigorous, being dedicated to one's studies, and being absorbed in study-related tasks (Dou et al., 2021). Schaufeli discussed that from a psychological point of view, a student's tasks and activities can be considered as work (Sun, 2020). Like an employee, the student is involved in coercive, structured tasks and activities (e.g., completing assignments and projects, attending class) that are targeted toward a particular aim (e.g., passing examinations, getting job) (Divinska, 2022).

In the concept of schoolwork engagement, the research dimension in Schaufeli's conceptualization has been defined as following:

Vigor, refers to students' sense of high levels of mental resilience and energy while studying, their willingness to exert and invest effort into their academic-related activities, their persistence in the face of obstacles, and their positive approach to learning (Divinska, 2022; Lee, 2020; Manokhina, 2024; Nguyen-Phung, 2023; Smolentseva, 2020).

Dedication, is characterized by students' sense of enthusiasm, inspiration, significance, challenge, and pride for engaging in their studies, as well as their perception of school-related activities as meaningful (Divinska, 2022; Lee, 2020; Manokhina, 2024; Nguyen-Phung, 2023; Smolentseva, 2020).

Absorption is defined as students' sense of being deeply engrossed and fully concentrated in their studies, with time passing (Arcagni et al., 2021; Bauer, 2022; Liang & Yoon, 2023; Nguyen-Phung, 2023; Smolentseva, 2020; Vatovec & Ferrer, 2019).

In validation studies, Schaufeli and colleagues (Arcagni et al., 2021; Ko & Lee, 2021; Nguyen-Phung, 2023; Ramdhan et al., 2022; Smolentseva, 2020; Vatovec & Ferrer, 2019) tested the factorial structure of the UWES in employees and university students and suggested that the structure is fitted the data for student's measurement in reliability and validity indices.

In the internalization of higher education institutions, global learning through an internationalized curriculum (Ko & Lee, 2021; Nguyen-Phung, 2023; Ramdhan et al., 2022; Smolentseva, 2020) calls for deep, even radical engagement—behaviorally, emotionally and intellectually (Ramdhan et al., 2022). This dissertation takes the concept of schoolwork engagement as the research dimension, which would have the survey of international students' engagement in schoolwork. As the research of Shani & PS (2011), engagement was influenced by environment, relationship, quality policy, individual growth opportunity and goals and responsibility, etc. In the research model of this dissertation, the various components of university internationalization policy and support services will be assessed to determine their impact on the schoolwork engagement of international students.

Table 2.16 Conception of Engagement

Scholars	Conception of Employee Engagement
Mishra & Aithal, 2023	Employee engagement is appositive fulfilling work related state of mind that is characterized by vigor, dedication and absorption
Bakker & Leiter, 2017	Employees who are enthusiastic about work, immersed in work activities, and persistent when dealing with challenges and obstacles are the characteristics of employees who have high work involvement
K. Truss, 2014	Kahn saw engagement as arising when "people bring in ...their personal selves during work-role performances" in terms of their cognitive, emotional and physical expression, and argued that disengagement involved the 'uncoupling' of people's authentic selves from their work experiences.
Shani & PS, 2011	Employee engagement is a set of favorable and un-favorable feelings with which employees view their jobs, the place of work, and the nature of job they do, the quality of supervision the received, co-workers pay and perks and promotional agencies
Wilmar B Schaufeli, Bakker, & Salanova, 2003; K. Truss, 2014	the UWES is built around a particular understanding of what engagement means, i.e. that it comprises three states: vigor, dedication and absorption
Scholars	**Conception of Students' engagement**
Schaufeli, & Le Blanc, 2013	From a psychological point of view, a student's tasks and activities can be considered as work, in the schoolwork engagement, which comprises three states: vigor, dedication and absorption.
Skinner, Kindermann, & Furrer(2009)	Engagement was defined as the quality of students' participation or connection with the schooling endeavor and hence with activities, values, people, goals, and place that comprise it.
Newmann, Wehlage, & Lamborn (1992)	Engagement was defined as students' psychological effort and investment toward learning, understanding, or mastering the skills, crafts, or knowledge that the schoolwork is intended to promote.
Approach for Assessment of Engagement	
Wilmar B Schaufeli, Bakker, & Salanova, 2003; K. Truss, 2014	the UWES is built around a particular understanding of what engagement means, i.e. that it comprises three states: vigor, dedication and absorption

2.6.2 Vigor

The Profile o Mood States (Spielberger, 1972) was one of the earliest measures of any positive mood, and included, among the six subscales of different moods, an eight-item subscale gauging vigor, using items like feeling cheerful, lively, alert, active and vigorous. The instructions ask the respondent to describe "How have you been feeling during the past week including today." However, as with other affect measures, the timescale can be varied (Ramdhan et al., 2022; Smolentseva, 2020).

Oatley and Johnson-Laired (1987) argued that there is a close relation between mood and emotion, in that they represent object-less and object-directed versions of the same processes. Vigor as a mood state and vigor as an affect state share many similarities, like being both positive affect, having an analogous approach function, being quite central and not peripheral affective experiences, and being controlled by similar processes (Yulianti Y et al., 2023).

The physical strength subscale is based upon Thayer's work on moods (Thayer, 1996), and includes the items of "I feel energetic", "I feel full of pep", and "I feel vigorous". The emotional energy subscale includes the items of: "I feel able to show warmth to others", "I feel able to be sensitive to the needs of coworkers and customers", and "I feel I am capable of investing emotionally in coworkers and customers". The cognitive liveliness subscale includes the items of: "I feel I am able to contribute new ideas", "I feel I can think rapidly", and "I feel able to be creative" (Lucy Effeh Attom, 2024).

Burnout is often viewed as an affective reaction to ongoing stress whose core content is the gradual depletion over time of individuals' intrinsic energetic resources, comprising of emotional exhaustion, physical fatigue, and cognitive weariness (Jeon & Min, 2021).

Vigor, like most other positive effects, facilitates goal-directed behavior (Carver & Scheier, 1990)or approach behavior (Jeon & Min, 2021; Lucy Effeh Attom, 2024; Mohd Rasdi & Ahrari, 2020) and therefore could be expected to prompt individuals to engage with their job and work environment.

Vigor represents an affective state that individuals attribute to their job and workplace when asked about it and do so spontaneously, in contrast to emotional traits like positive affectivity that refers to the tendency to experience positive affect across situations and times (Dou et al., 2021)

Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties (Angwaomaodoko, 2024).

Vigor represents an affect experienced at work. The proposed measure of vigor, the Shirom - Melamed Vigor Measure (SMVM measure that gauges the three factors that comprise vigor, namely physical strength, emotional energy, and cognitive vividness), clearly refers to experienced affect and is not confounded by cognitive components of attitudes or evaluative judgments (Divinska, 2022).

Feeling vigorous is probably directly related to one's appraisal of relevant job demands and available coping resources, as proposed by Lazarus appraisal theory (Manokhina, 2024).

Vigor is characterized by high levels of energy and mental resilience while working and by the willingness and ability to invest effort in one's work (Schaufeli et al., 2003). In practice, however, it is likely that burnout and engagement are substantively negatively correlated (Lee, 2020).

The vigor increases the effect of both informational and authentic leadership styles on engagement. The results indicate that AL and TFL are positively perceived by employees as creating a climate of energy that acts as a resource (both organizational and personal). Practitioners could enhance employees' vigor at work and engagement by promoting these two leadership styles (Lopez-Zafra et al. 2022).

Specifically, vigor at work has greater involvement in physical health, leading to lower high-sensitivity C-reactive protein levels, fibrinogen levels, hyperlipidemia risk, diabetes mortality risk and physical symptoms, as well as health-related behavior,

leading to less insomnia, more physical activity and more physical exercise (Cortés-Denia et al. 2023).

And in the article of Schaufeli et al, 2002, it compared the engagement scales used for students and for employee. The engagement items are supposed to reflect three underlying dimensions: Vigor (VI) (6 items; e.g., 'When I get up in the morning, I feel like going to class/work'), as showed in Table 2.17(Schaufeli et al., 2002):

Table 2.17 The Engagement Scales of Vigor

THE ENGAGEMENT SCALES	
Student Version	**Employee Version**
Vigor (VI)	**Vigor (VI)**
1. When I get up in the morning, I feel like going to class.	1. When I get up in the morning, I feel like going to work.
2. When I'm doing my work as a student, I feel bursting with energy.	2. At my work, I feel bursting with energy.
3. As far as my studies are concerned, I always persevere, even when things do not go well.	3. At my work I always persevere, even when things do not go well.
4. I can continue studying for very long periods at a time.	4. I can continue working for very long periods at a time.
5. I am very resilient, mentally, as far as my studies are concerned.	5. At my job, I am very resilient, mentally.
6. I feel strong and vigorous when I'm studying or going to class.	6. At my job I feel strong and vigorous.

Table 2.18 Research Dimension of Vigor

Scholars	Research Dimension of Vigor
Cortés-Denia, Lopez-Zafra, & Pulido-Martos, 2023	Specifically, vigor at work has greater involvement in physical health, leading to lower high-sensitivity C-reactive protein levels, fibrinogen levels, hyperlipidemia risk, diabetes mortality risk and physical symptoms, as well as health-related behavior, leading to less insomnia, more physical activity and more physical exercise
Lopez-Zafra, Pulido-Martos, & Cortés-Denia, 2022	The vigor increases the effect of both informational and authentic leadership styles on engagement. Practitioners could enhance employees' vigor at work and engagement by promoting these two leadership styles.
Bilgel, Bayram, Ozdemir, Dogan, & Ekin, 2012	Vigor is characterized by high levels of energy and mental resilience while working and by the willingness and ability to invest effort in one's work.
Shirom, 2003	The notion of vigor that emerges from the review of past

Scholars	Research Dimension of Vigor
	attempts to define and measure this construct is that it has been conceptualized and measured primarily as a mood state assessed primarily in clinical- psychological studies, in contrast to the current focus on vigor as an affective experience at work.
Carver & Scheier, 1990; Fredrickson & Joiner, 2002; Watson, 2002	Vigor, like most other positive effects, facilitates goal-directed behavior and therefore could be expected to prompt individuals to engage with their job and work environment.
Fox & Spector, 2002	Vigor represents an affective state that individuals attribute to their job and workplace when asked about it and do so spontaneously, in contrast to emotional traits like positive affectivity that refers to the tendency to experience positive affect across situations and times
Schaufeli et al., 2002	Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties
Oatley and JohnsonLaired, 1987	Vigor as a mood state and vigor as an affect state share many similarities, like being both positive affects, having an analogous approach function, being quite central and not peripheral affective experiences, and being controlled by similar processes.
Spielberger, 1972	The Profile o Mood States was one of the earliest measures of any positive mood. The instructions ask the respondent to describe "How have you been feeling during the past week including today."

2.6.3 Dedication

Dedication is characterized by a sense of significance, enthusiasm, inspiration, pride, and challenge. Instead of involvement we prefer to use the term dedication. Although, involvement-like dedication-is usually defined in terms of psychological identification with one's work or one's job (Smolentseva, 2020).

Dedication is defined as a strong psychological involvement or identification with one's work (Schaufeli et al., 2002), whereas job involvement denotes an individual's psychological identification with a particular job or with work in general (Bauer, 2022).

Dedication was presumed to be the prerequisite of vigor and absorption and thus the main component of work engagement. A dedicated employee is strongly involved

in his or her work and experiences a sense of significance, enthusiasm, inspiration, pride, and challenge (Liang & Yoon, 2023).

Dedication can be linked to job involvement. According to Mauno, Kinnunen, and Ruokolainen, dedication has conceptual similarities with job involvement (Arcagni et al., 2021).

Dedication appears to be a broader phenomenon than job involvement because dedication contains feelings of enthusiasm, inspiration, pride, and challenge, while job involvement focuses strictly on the psychological importance of the job in an individual's life (Ramdhan et al., 2022)

Engagement is characterized by energy, involvement, and efficacy which are considered the direct opposites of the three burnout dimensions' exhaustion, cynicism, and lack of professional efficacy, respectively (Yulianti Y et al., 2023).

Dedication or involvement in work also increases by confirming the importance of work objectives to which employees are personally attracted (Qamhieh et al., 2020).

According to Spreitzer et al. (2010), too much dedication or absorption might have negative consequences for employees as well as for organizations. For example, too high level of dedication to the leader or the organization may create "yes" people who fail in questioning of challenging the status quo (Mohd Rasdi & Ahrari, 2020).

Fostering work engagement optimally through dedication requires minimizing the factors that diminish it. According to the findings of the present study, the affairs that diminish the experience of dedication (significance, enthusiasm, and pride) among the case company's consultants can be divided into nine themes: Lack of appreciation; Challenges in work management; Problems in social relationships or in cooperation; Poor success; Insignificance of tasks; Lack of trust; Wrong challenge level in one's projects; Consultant's personal characteristics; Lack of support for innovative activities and thoughts (Arcagni et al., 2021).

Dedication at work refers to the disciplined behavior of an employee at work. A dedicated employee will always follow rules, comply with the policies, work hard to

meet goals and take initiatives to initiate new things (enthusiasm). This individual takes pride in his or her responsibilities, duties (pride) and feels important and meaningful in the organization (significance). In the role efficacy scale the individual goes from role entering to role centering (Mishra & Aithal, 2023).

And in the article of Schaufeli et al, 2002, it compared the engagement scales used for students and for employee. The dedication items (Schaufeli et al., 2002) are as showed in Table 2.19.

Table 2.19 The Engagement Scales of Dedication

THE ENGAGEMENT SCALES	
Student Version	**Employee Version**
Dedication (DE)	**Dedication (DE)**
1. To me, my studies are challenging.	1. To me, my job is challenging.
2. My study inspires me.	2. My job inspires me.
3. I am enthusiastic about my studies.	3. I am enthusiastic about my job.
4. I am proud of my studies.	4. I am proud on the work that I do.
5. I find my studies full of meaning and purpose.	5. I find the work that I do full of meaning and purpose.

Table 2.20 Research Dimension of Dedication

Scholars	Research Dimension of Dedication
Mishra & Aithal, 2023	Dedication at work refers to the disciplined behavior of an employee at work. A dedicated employee will always follow rules, comply with the policies, work hard to meet goals and take initiatives to initiate new things (enthusiasm). This individual takes pride in his or her responsibilities, duties (pride) and feels important and meaningful in the organization (significance). In the role efficacy scale the individual goes from role entering to role centering.
Kuntsi, 2014	Minimizing the affairs that diminish the experience of dedication (significance, enthusiasm, and pride) among the case company's consultants can be divided into nine themes: Lack of appreciation; Challenges in work management; Problems in social relationships or in cooperation; Poor success; Insignificance of tasks; Lack of trust; Wrong challenge level in one's projects; Consultant's personal characteristics; Lack of support for innovative activities and thoughts
Spreitzer, Lam, &	Too much dedication or absorption might have negative

Fritz, 2010	consequences for employees as well as for organizations. For example, too high level of dedication to the leader or the organization may create "yes" people who fail in questioning of challenging the status quo
Leiter & Maslach, 2010	Dedication or involvement in work also increases by confirming the importance of work objectives to which employees are personally attracted.
Mauno et al., 2007	Additionally, both concepts are regarded as fairly stable phenomena, although the difference between the concepts has not been clearly argued. However, dedication appears to be a broader phenomenon than job involvement because dedication contains feelings of enthusiasm, inspiration, pride, and challenge, while job involvement focuses strictly on the psychological importance of the job in an individual's life.
Schaufeli et al., 2002	Dedication was presumed to be the prerequisite of vigor and absorption and thus the main component of work engagement. A dedicated employee is strongly involved in his or her work and experiences a sense of significance, enthusiasm, inspiration, pride, and challenge

2.6.4 Absorption

Absorption is argued to be central to an understanding of the nature of subjective experience as well as to aspects of cognition and behavior. Absorption is defined as a characteristic that involves an openness to experience emotional and cognitive alterations across a variety of situations (Roche & McConkey, 1990).

Trait absorption reflects (a) a motivational readiness to engage in experiential, non-instrumental functioning and (b)distinctive cognitive capacities to efficiently identify and richly elaborate objects of attention(Wild, Kuiken, & Schopflocher, 1995) .

With respect to cognition, absorption reflects individual differences in a distinctive way of conceiving attentional objects: the efficient identification of ambiguous perceptual, imaginal, or felt objects, and rich within-and cross-modal elaboration of those objects. These aspects of cognition are easily overlooked or downplayed in studies whose primary emphasis is on how thought and personality serve instrumental functions such as planning, decision making, and goal setting (Arcagni et al., 2021).

The absorption factor refers to being happy, and fully concentrated in one's work so that time passes quickly, with difficulty detaching from work (Ramdhan et al., 2022).

It appeared particularly that the cognitive engagement and absorption scales are strongly related, whereas the physical engagement and the vigor scales are only weakly related, with the emotional engagement and dedication scales somewhere in between (Yulianti Y et al., 2023).

Absorption happens in employee engagement when an individual has perseverance and can absorb the instructions, roles and job descriptions better. The individual is more concentrated on work and escapes surrounding disturbances. The individual is not a clock watcher and stays focused in fulfilling his job obligations (Mishra & Aithal, 2023).

And in the article of Schaufeli et al, 2002, it compared the engagement scales used for students and for employee. The Absorption items (Schaufeli et al., 2002)are as showed in Table 2.21:

Table 2.21 The Engagement Scales of Absorption

THE ENGAGEMENT SCALES	
Student Version	**Employee Version**
Absorption (AB)	**Absorption (AB)**
1. When I am studying, I forget everything else around me.	1. When I am working, I forget everything else around me.
2. Time flies when I am studying.	2. Time flies when I am working.
3. I get carried away when I am studying.	3. I get carried away when I am working.
4. It is difficult to detach myself from my studies.	4. It is difficult to detach myself from my job.
5. I am immersed in my studies.	5. I am immersed in my work.
6. I feel happy when I am studying intensely.	6. I feel happy when I am working intensely.

Table 2.22 Research Dimension of Absorption

Scholars	Research Dimension of Absorption
Mishra & Aithal, 2023	Absorption happens in employee engagement when an individual has perseverance and can absorb the instructions, roles and job descriptions better. The individual is more concentrated on work and escapes surrounding disturbances. The individual is not a clock watcher and stays focused in fulfilling his job obligations (Mishra & Aithal, 2023)
Viljevac et al., 2012	It appeared particularly that the cognitive engagement and absorption scales are strongly related, whereas the physical engagement and the vigor scales are only weakly related, with the emotional engagement and dedication scales somewhere in between (Viljevac et al., 2012).
Council, 2004	The absorption factor refers to being happy, and fully concentrated in one work so that time passes quickly, with difficulty detaching from work (Council, 2004).
Roche & McConkey, 1990	Absorption is argued to be central to an understanding of the nature of subjective experience as well as to aspects of cognition and behavior. Absorption is defined as a characteristic that involves an openness to experience emotional and cognitive alterations across a variety of situations (Roche & McConkey, 1990).

2.7 Equity and Well-being as Key Indicators of Social Sustainability

Sustainable development is an overarching paradigm of the United Nations (UN). It was defined in the 1987 Brundtland Commission Report as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Imperatives, 1987)

Furthermore, sustainable development has often been (and still is) represented by the Triple Bottom Line proposal suggested by Elkington in 1997 about corporate social responsibility (CSR) practices, i.e., the simultaneous consideration of the environment, society and the economy, and achieving a balanced integration of these three elements (Qamhieh et al., 2020).

Sustainable corporate development has become essential for many enterprises in the context of economic globalization and fierce technological competition. In fact, it is being tackled at a strategic level by most companies (Ahmad et al., 2021).

Schönborn et al discussed the elusive social aspect of sustainability and its influence on successful business has been under-investigated in corporate culture literature so far. The paper examined whether a correlation can be found between corporate social sustainability culture and the financial success of a company. The empirical results show that four specific success-related social sustainability dimensions of corporate culture are predictors of a company being classified as financially successful. These are: Sustainability strategy and leadership; Mission, communication and learning; Social care and work life; and Loyalty and identification (Schönborn et al., 2019).

Sustainability covers the following characteristics (Azapagic, 2003): fair pay, equal opportunities, good health and safety conditions, gratification system, securing ideas for the improvement of the Triple Bottom Line, competence development and training, career plans and ethical organizational behavior.

By the Triple Bottom Line, environmental, economic, and social sustainability, specifically, social sustainability is a quality of society that encourages durable circumstances for human well-being, particularly for susceptible persons or groups (Hollander et al., 2016).

In the organizational and corporate dimension, the social sustainability is defined by different researchers:

The fulfillment of corporate social responsibility (CSR) is significant in building a corporate image, improving brand competitiveness, and promoting sustainable corporate development (Ahmad et al., 2021).

Social sustainability is quite common in corporate social responsibility in the context of concerns for companies to develop strong and sustainable relationships with customers, employees, suppliers, stakeholders and last but not least, the social enterprise community (Pirnea, Olaru, & Moisa, 2011).

Social sustainability encompasses the management of the impact that the organizations cause on the social systems by its operational activities. In summary, it

incorporates questions related to human development (education, training, occupational health, workplace safety and competence development), to equality (fair salaries and benefits, equal opportunities and absence of workplace discrimination) and to ethical considerations (human rights, cultural values, intergeneration and intrageneration justice) (Munck, Munck, & Souza, 2011).

The social dimension – the new strand of corporate sustainability – centers on the impact of the organization on the social systems within which it operates. The social bottom line incorporates issues of public health, community issues, public controversies, skills and education, social justice, workplace safety, working conditions, human rights, equal opportunity, and labor rights (Jamali, 2006).

The Social Organizational Sustainability covers the following characteristics (Azapagic, 2003): fair pay, equal opportunities, good health and safety conditions, gratification system, securing ideas for the improvement of the Triple Bottom Line, competence development and training, career plans and ethical organizational behavior.

Human capital refers mainly to aspects such as skills, motivation and loyalty of employees and business partners. It obliges the company to internalize the social costs, maintaining and providing the growth of the social capital; avoid exploiting the individual, giving incentive to auto-renewable structures; promoting democracy, amplifying the scope of personal choices and distributing resources and property rights in a fair manner (Lucy Effeh Attom, 2024).

Related with public and community, the social sustainability is defined by more general indicators:

Social sustainability is a quality of society that encourages durable circumstances for human well-being, particularly for susceptible persons or groups (Hollander et al., 2016).

To achieve social sustainability at the public scale, organizations should promote well-being and not only meet basic needs of their employees (Mitlin & Satterthwaite, 2014).

Boström (2012) includes human welfare, quality of life, social justice, social cohesion, cultural diversity, democratic rights, gender issues, workers' rights, broad participation, social capital development, and individual capabilities in the definition of social sustainability (Jeon & Min, 2021).

Spangenberg and Omann (2006) propose a system dynamics concept of social sustainability, writing that it is a qualitative criterion that requires multi-criteria assessment to be fairly captured in economy, society and population (in a European, and particularly a German, policy context). Their work suggested the following criteria for social sustainability: self-determined life and mixed work; satisfaction of basic needs; reliable and sufficient security system; equal opportunities, participation, democracy; social innovations; inter-generational equity; objective and subjective basic needs; objective and subjective social resources; objective and subjective equal opportunities; subjective participation; objective sustaining oneself; cultural diversity; and solidarity and tolerance (Bauer, 2022).

Littig and Grießler (2005) stressed the significance of nature and society by highlighting the fact that social sustainability would be guaranteed if tasks within the general public and the related institutional courses of action fulfill a broadened set of human needs and are formed in a way that nature and its regenerative abilities are safeguarded over a drawn-out stretch of time and the regularizing cases of social equity, human pride, and cooperation are fulfilled (Smolentseva, 2020).

Baines and Morgan (2004) and Sinner et al, (2004) covers basic needs, personal disability, needs of future generations, social capital, equity, cultural and community diversity, empowerment and participation in the definition of social sustainability (Bauer, 2022; Liang & Yoon, 2023).

McKenzie, (2004), defined Social sustainability as: a life-enhancing condition within communities, and a process within communities that can achieve that condition. The following features are indicators of the condition, and steps towards their establishment and implementation are aspects of the process (Divinska, 2022; Sun, 2020):

1) equity of access to key services (including health, education, transport, housing and recreation)

2) equity between generations, meaning that future generations will not be disadvantaged by the activities of the current generation

3) a system of cultural relations in which the positive aspects of disparate cultures are valued and protected, and in which cultural integration is supported and promoted when it is desired by individuals and groups.

4) the widespread political participation of citizens not only in electoral procedures but also in other areas of political activity, particularly at a local level

5) a system for transmitting awareness of social sustainability from one generation to the next

6) a sense of community responsibility for maintaining that system of transmission

7) mechanisms for a community to collectively identify its strengths and needs

(McKenzie, 2004)

Table 2.23 Social Sustainability Conception

Scholars	Conception of Social Sustainability
Social sustainability defined in organizational and corporate dimension	
Ahmad et al., 2021	The fulfillment of corporate social responsibility (CSR) is significant in building a corporate image, improving brand competitiveness, and promoting sustainable corporate development
Schönborn et al., 2019	The paper examined whether a correlation can be found between corporate social sustainability culture and the financial success of a company. Four specific success-related

Scholars	Conception of Social Sustainability
	social sustainability dimensions are: sustainability strategy and leadership; mission, communication and learning; social care and work life; and loyalty and identification.
Pirnea, Olaru, & Moisa, 2011	Social sustainability is for companies to develop strong and sustainable relationships with customers, employees, suppliers, stakeholders and last but not least, the social enterprise community.
Munck, Munck, & Souza, 2011	It incorporates questions related to human development (education, training, occupational health, workplace safety and competence development), to equality (fair salaries and benefits, equal opportunities and absence of workplace discrimination) and to ethical considerations (human rights, cultural values, intergeneration and intrageneration justice)
Jamali, 2006	The social bottom line incorporates issues of public health, community issues, public controversies, skills and education, social justice, workplace safety, working conditions, human rights, equal opportunity, and labor rights
Azapagic, 2003	The Social Organizational Sustainability covers the following characteristics (Azapagic, 2003): fair pay, equal opportunities, good health and safety conditions, gratification system, securing ideas for the improvement of the Triple Bottom Line, competence development and training, career plans and ethical organizational behaviour
Dyllick & Hockerts, 2002	The company are obliged to internalize the social costs, maintaining and providing the growth of the social capital; avoid exploiting the individual, giving incentive to

Scholars	Conception of Social Sustainability
	auto-renewable structures; promoting democracy, amplifying the scope of personal choices and distributing resources and property rights in a fair manner
Social sustainability defined in public scale and community dimension	
Hollander et al., 2016)	Social sustainability is a quality of society that encourages durable circumstances for human well-being, particularly for susceptible persons or groups.
Mitlin & Satterthwaite, 2014	To achieve social sustainability at the public scale, organizations should promote well-being and not only meet basic needs of their employees
Boström, 2012	Boström (2012) includes human welfare, quality of life, social justice, social cohesion, cultural diversity, democratic rights, gender issues, workers' rights, broad participation, social capital development, and individual capabilities in the definition of social sustainability.
Spangenberg & Omann, 2006	The criteria for social sustainability: self-determined life and mixed work; satisfaction of basic needs; reliable and sufficient security system; equal opportunities, participation, democracy; social innovations; inter-generational equity; objective and subjective basic needs; objective and subjective social resources; objective and subjective equal opportunities; subjective participation; objective sustaining oneself; cultural diversity; and solidarity and tolerance
Littig & Griessler, 2005	Littig and Grießler (2005) stressed fulfillment of human needs and nature and its regenerative abilities are

Scholars	Conception of Social Sustainability
	safeguarded, and the regularizing cases of social equity, human pride, and cooperation are fulfilled
Baines & Morgan, 2004; Sinner et al., 2005	Their research covers basic needs, personal disability, needs of future generations, social capital, equity, cultural and community diversity, empowerment and participation in the definition of social sustainability
McKenzie, 2004	McKenzie, (2004), defined Social sustainability as: equity of access to key services; equity between generations; cultural integration; political participation of citizens; transmitting awareness of social sustainability; community responsibility; identification of its strengths and needs

With aim to investigate the understandings of the social sustainability in higher education institution, this research discussed the social sustainability defined in public scale and community dimension and will encompass the key indicators of social sustainability as an impact factor to study the strategic model of higher education institutions.

2.7.1 Equity

1. Equity as the crucial component of social sustainability

Equity is considered a crucial component of social sustainability because of the increasing evidence that societies with lower levels of disparity have longer life expediencies, less homicides and crime, stronger patterns of civic engagement and more robust economic vitality (District, 2004).

Equity in social programs reflects how fair resources are distributed according to the population needs and the characteristics of the goods or services provided (Divinska, 2022; Manokhina, 2024).

In moral philosophy, the task is to devise an overarching conception of justice that can accommodate both defensible claims for social equality and defensible claims for the recognition of difference. In social theory, the task is to understand the complex relations between class and status, economy and culture (Manokhina, 2024).

Social equity means redressing injustices and remediating damages that were previously incurred, fully incorporating all segments of the community in the political decision-making process and establishing measures to prevent future inequities from occurring (Nguyen-Phung, 2023).

Equity considerations are primary in order to have the resources to reduce poverty and increase well-being in developing countries (Saunders et al., 2020).

Equity can be broadly understood as a general sense of egalitarianism, or narrowly, as strict equality of income and wealth, although income distribution is a necessary but insufficient metric of equality (Yulianti Y et al., 2023).

There is no doubt that addressing inequity and other social impacts requires a strong role by government in the provision of a number of key instrumental freedoms, including social opportunities, economic facilities, transparency guarantees, protective security, deliberative participation and ecological surety (Bauer, 2022).

Such efforts include expanding opportunity and promoting equal access to public services, providing equal service quality, ensuring procedural fairness, and striving for equal opportunity in such areas as education, health, and employment. The social equity dimension of sustainability refers to how burdens and benefits of different policy actions are distributed in a community (Lucy Effeh Attom, 2024).

Equity, or justice, inclusively addresses social, environmental, and economic justice and fairness issues in all developing and developed societies (Eizenberg & Jabareen, 2017).

Equity encompasses three dimensions: recognition, which "revalues unjustly devalued identities", redistribution, which suggests that the remedy for injustice is some form of economic restructuring, and parity of participation, which promotes substantive public involvement in the production of space. These efforts may, in turn, reduce alienation and enhance civility and a sense of community and place attachment (Eizenberg & Jabareen, 2017).

Table 2.24 Three Dimensions of Equity in Fraser's Conceptual Work

Redistributive: "The politics of redistribution focuses on injustices it defines as socioeconomic and presumes to be rooted in the economic structure of society", as Fraser put it (Fraser, 1996, p. 6). These injustices include but are not limited to economic marginalization, or deprivation, and being denied an adequate material standard of living (Fraser, 1996, p. 7). Thus, the politics of redistribution suggest that the remedy for injustice is economic restructuring of some sort. Such efforts might involve redistributing income, reorganizing the division of labor, or transforming other basic economic structures (Fraser, 1996, p. 8).
***Recognition*:**   Vulnerable groups in all countries not only bear a disproportionate share of both environmental burdens, benefits and opportunities but also lack recognition and the voice of the disadvantaged and the vulnerable in policies that determine their lives (Fraser, 2008; Holifield, Porter, & Walker, 2010; Pulido, 2014). Equity policy should be concerned with the principles and outcomes of social, economic, and environmental policy decisions and the ensuing effects on different social and ethnic groups (Kramer, 2013).
***Participation*:**   We propose that participatory justice is significant for developing human spaces that favorably reflect the efforts of sustainability. Following Fraiser (Fraser, 2008) (pp. 30–31), we suggest that her concept of *parity of participation*, which assumes that "justice requires social arrangements that permit all (adult) members of society to interact with one another as peers", is crucial for achieving social sustainability.

Therefore, drawing on Fraser's (Pulido, 2014; Satterthwaite, 2008) seminal work, we use social justice as coterminous with social sustainability, as requiring social arrangements which make it possible for all to participate in social life on equal terms, bearing in mind that this should be read as an ideal to strive for, rather than a reality that can be achieved. This allows us to distill three discernible social justice categories: (1) equity, conceived as fair distribution of goods and life chances, with a particular attention on the most vulnerable; (2) democratic engagement, conceived as participation in decision-making, collective action, and capacity to influence; and (3)

social inclusion/cohesion, conceived as the importance of different social groups being recognized, being treated fairly, and being able to participate in society on equal terms (Saunders et al., 2020).

2. Equity as the crucial component of educational institution

The concept of equity is balancing between aspects of social justice on the one hand and aspects of outcomes-based governing of the school on the other hand (Wahlström, 2022).

An equitable system provides compensating resources for those who need further support so that each student can reach his or her social and intellectual potential. Since education should be adapted to students' individual needs, justice is linked to quality of education. Research on equity focused on school improvement, access to education, student disabilities, race and teacher attitudes (Jurado De Los Santos et al., 2020)

According to Luke, Woods & Weir (2013), civil rights, feminism and post-colonial education have influenced the definition of equity in education. Equity means that students should have equal opportunities to achieve their optimal abilities without being restricted by their community background or dispositional characteristics. When it comes to the technical aspects of the education curriculum, the performance of the students and the knowledge and values acquired should be considered as well (Luke, Woods, & Weir, 2013)(Ling & Nasri, 2019).

The OECD (2018c) claimed that its Programmed for International Student Assessment (PISA) measures equity in education through two related principles: inclusion and fairness. Inclusion means that all students, particularly those from disadvantaged backgrounds, have access to high-quality education and attain at least a basic level of approved skills. Fairness refers to the realizing of every student's potential by removing obstacles to equal access to educational resources and school environments (Ko & Lee, 2021; Ramdhan et al., 2022).

The National Center for Research in Mathematical Sciences Education in the United States identifies six different conceptions of equity: concern for the whole child; a safety net for individual differences; the same treatment for everyone; compensation for social justice; triage – focusing on students whose success or failure depends upon their school experience; and maximum return on minimal investment, or concentrating our resources on students most likely to succeed (Ramdhan et al., 2022).

Unterhalter (2009) distinguished between equity from below, equity from above and equity from the middle. first, equity from below concerns treating all individuals respectfully and on equal terms in a school daily activity. Equity from above is manifested in the regulations that govern a school's education, while equity from the middle is associated with resources and the efficiency of education (Yulianti Y et al., 2023). These three interrelated levels can contribute to analyses of equity in national school systems by highlighting aspects of equity significant at different levels.

According to Walker and Unterhalter (2007), the opportunities for individuals to reach functioning and form capabilities can be amplified by social resources and social arrangements. To examine aspects of education from a capability approach, Unterhalter and Brighouse (2007) developed a model based on three different values embedded in education. First, education has an instrumental value that concerns what individual students have the chance to learn at school and the implications of achieving certain levels of knowledge (Ramdhan et al., 2022; Yulianti Y et al., 2023). A second, overlapping field is the intrinsic value that emphasizes the potential for self-development and self-realization through education. Positional values, finally, are about an individual's success relative to others. Achieved grades is a typical example of a positional value because it can enable a student to continue to study in a program, he or she values. Positional values also comprise 'cultural' values such as gender and ethnicity, revealing otherwise often invisible forms of discrimination (Ko & Lee, 2021; Ramdhan et al., 2022; Yulianti Y et al., 2023).

Nancy Fraser's three criteria of justice, namely redistribution, recognition and representation are also useful in evaluating equitable educational opportunities (Ramdhan et al., 2022; Yulianti Y et al., 2023). The theory focused on an institutional

level, which includes the allocation of resources, recognition across social and cultural differences and participation on equal terms in community.

As Lingard and Keddie (2013) emphasized, distributive principles are also included in the dimension of intellectual quality of education. An emphasis on intellectual demandingness and rigor in education, as critical reflections and deep understanding in the study of a subject, creates environments that support distributive justice in the sense that less privileged students can achieve intellectual qualities and grades to eventually gain greater access to the material benefits in society (Lucy Effeh Attom, 2024; Qamhieh et al., 2020). The dimension of recognition is embedded in the creation of a learning environment which supports relevant and meaningful learning for all students, including those who experience themselves or are perceived by others as marginalized. The dimension of participation was transferred by Lingard and Keddie (2013) to the area of education by emphasizing the need to create democratic and inclusive spaces in learning environments where respectful relations are encouraged.

Table 2.25 Research Dimension of Equity

Scholars	Research Dimension of Equity
Jurado De Los Santos et al. (2020)	School improvement Access to education Student disabilities Race and teacher attitudes
The OECD (2018)	Inclusion: all students have access to high-quality education and attain at least a basic level of approved skills. Fairness: realizing of every student's potential.
Nancy Fraser (2008)	Distributive justice: creates environments that support distributive justice

Scholars	Research Dimension of Equity
Lingard and Keddie (2013)	Recognition: the creation of a learning environment which supports relevant and meaningful learning for all students

Participation: the need to create democratic and inclusive spaces in learning environments where respectful relations are encouraged |
| Unterhalter (2009) | Equity from below: treating all individuals respectfully and on equal terms in a school's daily activities.

Equity from above: manifesting in the regulations that govern a school's education

Equity from the middle: associating with resources and the efficiency of education |
| Walker and Unterhalter (2007) | Instrumental value: the chance to learn at school and achieving certain levels of knowledge.

Intrinsic value: the potential for self-development and self-realization through education

Positional values: an individual's success relative to others (achieved grade), and culture values such as gender and ethnicity (discrimination) |
| The National Center for Research in Mathematical Sciences | Safety net for individual differences

Same treatment for everyone

Compensation for social justice |

Scholars	Research Dimension of Equity
Education in the US (2000)	Focusing on students whose success or failure depends upon their school experience Maximum return on minimal investment Concentrating resources on students most likely to succeed

Fraser's framework of social equity has been developed, discussed and applied in various research fields by different scholars. According to the citation record on the Google Scholar website (retrieved in August 2024), Fraser's conceptualization of equity, encompassing redistribution, recognition, and participation, has been cited in various versions over 4,000 times and up to 9,000 times.

The theory has been applied in educational field, which is testified as an effective model for analyzing equity in education, such as, *Redistribution, Recognition and Representation: Working against Pedagogies of Indifference (Lingard & Keddie, 2013), Critical Studies in Educational Leadership, Management and Administration Series* (Blackmore, 2016), *Schooling and Social Justice through the Lenses of Nancy Fraser* (Keddie, 2020), and *the Political Economy of Language Education Research (or the lack thereof): Nancy Fraser and the Case of Translanguaging (Block, 2020).*

As the Lingard & Keddie (2013)' s research report, Australian government commissioned research study that documented classroom pedagogies in twenty-four Queensland schools. The model sought to develop a conception of productive pedagogies that would strengthen schooling as a good in its own right, as well as in positional terms (redistribution), work with and value cultural difference (recognition) and accord students a voice (representation)(Lingard & Keddie, 2013). The focus was on both academic and social outcomes from schooling. Considering that the focus of this study is on the institutional level of higher education, this dissertation chooses

Fraser and Lingard & Keddie's equity research concept. This dissertation followed the concept to formulate its questionnaire of international students' equity in education.

2.7.2 Well-being

1. Well-being as the crucial component of social sustainability

Sustainability must be defined to include meeting human physical, emotional and social needs (Rogers et al., 2012). Social sustainability emphasizes living in ways that can be sustained because they are healthy and satisfying for people and communities. This requires providing for material, social and emotional needs, avoiding behaviors that result in poor health, emotional distress and conflict, and ensuring that we do not destroy the social structures (such as families and communities), cultural values, knowledge systems and human diversity that contribute to a vibrant and thriving human community. In other words, social sustainability means meeting the needs for human well-being (Ko & Lee, 2021).

Human needs that must be met include the physical as well as the emotional or social. Both are necessary to well-being, the wellbeing can be summarized in two sectors: Physical Well-being including material living, standards, health, physical security, stable ecosystems and Emotional and Social Well-being including: Political voice and agency, Social relationships, work & leisure, education, and health. economic security (Ramdhan et al., 2022).

Research on happiness has found that happiness is not always closely associated with income or other objective indicators of well-being such as physical health (Yulianti Y et al., 2023). The role of social and emotional constituents such as self-esteem, identity, equity, and social relations has also been shown to affect the happiness and health of individuals.

The primary social and economic change required to move towards environmental sustainability — altering priorities, especially in the developed world, away from ever-increasing material consumption and towards more rewarding human

relationships — may also be the change that will do most to increase human well-being (Vatovec & Ferrer, 2019).

Waterman et al. (2010) constructed a questionnaire aimed at measuring Eudemonic Well-Being. The Questionnaire for Eudemonic Well-Being involves six dimensions; "(1) self-discovery, (2) perceived development of one's best potentials, (3) a sense of purpose and meaning in life, (4) investment of significant effort in pursuit of excellence, (5) intense involvement in activities, and (6) enjoyment of activities as personally expressive" (Arcagni et al., 2021)(Waterman et al., 2010) .

Clark (2003) conducted two surveys of people in a rural South African village and urban township. The people interviewed indicated a concern with(1) the practical side of survival and development in poor countries — that is to say the need for education to improve practical skills, the need for a safe working environment, job security, reasonable working hours and effective legal protection, emotional and economic support from family and kin, as well as hygienic living conditions and physical security; (2) the psychology of human well-being, that is, mental functioning, pleasure, joy, avoiding stress and frustration, self-confidence and status; and (3) some of the 'better things' in life such as recreation, time for sleep and rest, leisure, and being with family and friends (Ko & Lee, 2021; Vatovec & Ferrer, 2019).

Ryff (1989) reviewed previous literature she derived six dimensions reflecting psychological well-being. These six dimensions are; (1) self-acceptance, (2) positive relations with others, (3) autonomy, (4) environmental mastery, (5) purpose in life, and (6) personal growth. These dimensions constitute the scales of psychological well-being (Liang & Yoon, 2023).

In the research of Rogers in 2012，the elements which contribute to comprehensive well-being are summarized, being universal in concept but context-specific in implementation. The natural environment, provides many of the important elements of well-being, both physical and emotional as well as social. Cultural values and personal circumstances also affect what leads to happiness. Thus, the elements of

well-being will vary from person to person, place to place, and culture to culture (Ko & Lee, 2021), as showed in following Table 2.24:

Table 2.26 Elements of Comprehensive Well-being

| Box 1 Elements of comprehensive well-being.

Human needs that must be met include the physical as well as the emotional or social. Both are necessary to well-being. |
| --- |
| Physical well-being

nutritious food

clean water

adequate shelter

health (protection from disease, provision of elements needed for

good health, health care & birth control)

security (protection from inflicted physical harm, crime, conflict,

and disasters)

material goods needed for decent life

energy source (solar, wind, water, animal, fuel)

work or means of earning a living

exercise, relaxation and rest

hope for the future |
| Emotional and social well-being |

strong families

strong community and social interactions

social equality with others (non-discrimination)

ability to trust others

identity, autonomy, and self-determination

freedom to move about and choose job, home, and social

relationships

political voice and empowerment

education, knowledge

fulfillment and creative outlet

time and space for recreation

connection with nature and beauty; belief system and sense of meaning

2. Well-being as the crucial component of HEI's education

University students have been identified as an "at-risk" population, because the age at which most young people start higher education coincides with the age of onset of a range of problem behaviors (e.g., substance abuse and internet addiction) and mental health problems (e.g., depression and anxiety; Wynaden et al., 2013). These psychosocial problems have been progressively highlighted for not only their increased incidence and severity, but also the close link to negative quality of life, such as poor academic performance, decreased life satisfaction, and even suicidal thoughts (Saunders et al., 2020).

At a personal level, previous studies have shown that personal well-being such as interpersonal confidence, social and emotional skills, and self-esteem were

associated with better adjustment and learning achievement (Bauer, 2022). Hence, focusing on these attributes represents a promising approach to enhance university students' learning gains. Usually, individuals' well-being in work settings is closely related to organizational functioning.

According to college impact models, student learning achievement is the "output" of college impact, and the so called "input" factors can either directly affect "output" or indirectly influence it via the "process" factor (Liang & Yoon, 2023). Theoretically, students' personal well-being in terms of competences is among the "input" factors because well-being constitutes one aspect of students' personal situation at the beginning of university life. Likewise, student internal university engagement, which represents how they involve in and the extent they devote themselves to university learning, can in part index the "process" factor. In this sense, we could expect that students' personal well-being as the "input" will affect their learning achievement (i.e., output) through the influence of internal engagement (i.e., process). In other words, students with a high level of personal well-being may be more engaged in university learning and thus obtain greater learning gains (Yu, Shek, & Zhu, 2017).

Community settings often make ideal units of analysis through which to study the overlay between individual well-being and social sustainability in particular, and have increasingly been studied in both respects (Agger 2010). In the paper by Magee, Scerri, & James (2012) about measuring social sustainability (a community-centered approach), the research of Social Sustainability Survey concluded with an outline of a revised sustainability assessment instrument that has application for research looking to bridge the gap between psychological orientations towards well-being, on the one hand, and sociological or organizational studies on sustainability (Liang & Yoon, 2023) .

The Community Sustainability Survey has been applied to approximately 3,300 members of various communities in the Middle East, South and Southeast Asia between 2006 and 2010. The questionnaire is developed on a theoretical model, the Circles of Sustainability, elaborated in earlier work (Arcagni et al., 2021), and the survey shares common features with the psychometric perspectives of the Australian Unity Well-

being Index (Bauer, 2022; Gopal & Nagendra, 2014; Liang & Yoon, 2023).World Values Survey (Vatovec & Ferrer, 2019) and World Database of Happiness (Veenhoven, 2009), and indeed certain constructs of the Well-being Index and World Values Survey are incorporated into the indicator set (Magee et al., 2012).The Questionnaire Structure in the Community Sustainability Survey is showed in Table 2.27:

Table 2.27 The Questionnaire Structure in the Community Sustainability Survey

1.Demographic Variables	
2.Well-Being Satisfaction Level	
3.Political level	Questions in 3 dimensions:
4.Ecological level	Sense of Trust
5.Economic level	Sense of Concern
6.Cultural level	Sense of Optimism About the Future

The research not only measured individual's responses concerning their own well-being, but also measure attitudinal assessment of the communities they belong to, reflecting Sirgy's observation (Sirgy et al., 2010) that community is both equal to and more than the sum of its parts. The approach was differentiated by looking to measure the inter-subjective and future character of a community—how members of that community not only feel about themselves in the present, but also about their broader social and natural environment, and about the future prospects of that environment.

Table 2.28 Research Dimension of Well-being

Scholars	Research Dimension of Well-being
Rogers et al.（2012）	(1) Physical Well-being ： material living, standards, health, physical security, stable ecosystems and Emotional (2) Social Well-being：political voice and agency, social relationships, work & leisure, education, health, and economic security
Waterman et al. (2010)	(1) self-discovery (2) perceived development of one's best potentials (3) a sense of purpose and meaning in life (4) investment of significant effort in pursuit of excellence (5) intense involvement in activities (6) enjoyment of activities as personally expressive
Clark (2003)	(1) the practical side of survival and development in poor countries (2) the psychology of human well-being (3) some of the 'better things' in life such as recreation, time for sleep and rest, leisure, and being with family and friends
Ryff (1989)	(1) self-acceptance, (2) positive relations with others, (3) autonomy, (4) environmental mastery, (5) purpose in life, and (6) personal growth
M a g e e, Scerri, & James (2012); The Community	(1) Well-Being Satisfaction Levels (2) Political (3) Ecological (4) Economic

Scholars	Research Dimension of Well-being
Sustainability Survey	(5) Cultural

In view of the above summary, the Community Sustainability Survey has been applied to approximately 3,300 members of various communities. In the structure of the indicators, well-being items are sourced from the Australian Unity Wellbeing Index. The set of indicators/questions has been extracted and testified in wide range of empirical studies and communities. Based on the community category of higher education institutions, this study chose the 6 well-being assessment items as the well-being survey questions of this study. Satisfaction of well-being in various aspects is interpreted, including life as a whole, involvement with community, personal relationships, the environment, and sense of safety. The question is moderately adjusted, based on the research context of higher education institutions.

2.8 Student's Satisfaction

In the 1990s, under the planning framework of the World Trade Organization (WTO), higher education was regarded as a service field with investment and consumption attributes. Article 1 of the GATS stipulates in "Scope and Definitions": "'Services' includes any service in any sector, except services provided in the exercise of government functions"; and provided in the exercise of government functions "Service" means any service that is neither provided on a commercial basis nor competes with one or more service providers"1. Therefore, any educational activities that charge tuition fees and are commercial in nature fall within the scope of trade in educational services. UNESCO's "World Higher Education Declaration" also believes that "higher education should be regarded as a public service"; "students should be regarded as the main partners and responsible stakeholders in the development of higher education", Song, C. F. (2003).

From the perspective of universities, all aspects of management provided to international students can be regarded as a kind of service, and this kind of service can be measured through perception, that is, we can analyze the feasibility of management

services in universities through the method of evaluating the satisfaction of international students. Wan, Y. Y. (2016).

Compared with China, there are more studies on student satisfaction surveys abroad, and the United States is the most. In the foreign language databases such as ProQuest, searched with "international student satisfaction" as the key word, and found 19 related papers. Including 4 dissertations and 15 academic journal papers (the website survey was done on 2023 February).

In 2016, Faizan Ali, Zhou Yuan, etc. explored the relationship between the service quality of Malaysian public universities and international student satisfaction, institutional image and loyalty. The survey found five dimensions of higher education service quality (non- Academics, Academics, Reputation, Informatization, Access) all affect student satisfaction, which in turn affects the image of the institution, as well as student loyalty, (Lucy Effeh Attom, 2024).

J. Douglas (2015) studied students' satisfaction with the quality of higher education in his doctoral dissertation "Student satisfaction and dissatisfaction: a study in the higher education context", mainly driven by motivation, praise/reward, social inclusion, usefulness, and the value of student behavior were surveyed. The research was finally given to front-line teaching (and other) personnel in higher education from teaching practice and policy documents.

The Office of the Vice President (Student Affairs) of Purdue University in the United States launched an internal student satisfaction survey in 2012. The report states that 15 percent of the university's undergraduates and 38 percent of its graduate students are from abroad. The evaluation team of the student affairs department of the school conducted a questionnaire survey and data analysis on the international students in the school. The results of the study found that compared with domestic students' satisfaction with the school's educational service quality, international students' satisfaction is low (Jeon & Min, 2021).

In 2008, Wongpaiboon's doctoral dissertation "A study of international student satisfaction with the academic environment, social environment, and services of

International Programs for Students office at the University of South Carolina", discussed International students at the University of South Carolina conducted a satisfaction study on the academic environment, social environment, and services provided by the school's International Cooperation Office to determine the degree of satisfaction of international students, Investigate which issues create difficulties for international students (Mohd Rasdi & Ahrari, 2020).

In 2007 and 2008, the University of Texas conducted a satisfaction survey of international students on its schools. The main targets are: International Program Office, Study Abroad Programs Office and Sponsored Student Programs Office. The content of the questionnaire mainly includes the overall satisfaction with the administrative department, the attitude of the administrative department staff, whether the administrative department staff provides perfect services and whether there is any dereliction of duty, whether the administrative department staff responds to emails and phone calls in a timely manner (Angwaomaodoko, 2024).

In reference to the national reports released by major countries in the study abroad industry (the United States, New Zealand, Australia, the United Kingdom, etc.), they actively conducted nationwide satisfaction surveys of international students. In the 2014 Global International Student Education Survey Report released by I-graduate, New Zealand College of Business scored full marks in many indexes of the Global International Student Barometer (The International Student Barometer, hereinafter abbreviated as ISB). In other aspects, it provides high-quality services for international students. In terms of accommodation services, the school provides international students with an excellent living environment, security, campus environment, scholarship support, etc. At the same time, the school also received a high score of 4 in daily services such as pick-up and drop-off services, registration, and assistance with bank card processing (Saunders et al., 2020).

Through the analysis of foreign literature related to satisfaction, it is not difficult to find that overseas surveys on the satisfaction of international students are relatively mature, and the survey levels are very diverse. Some surveys are aimed at universities and countries, and are often conducted by administrative personnel of countries and

universities' international student service departments. The survey is carried out for the purpose of investigating the current situation of international student education and improving the quality of international student education services; there are also regional surveys, which are generally entrusted to educational evaluation service companies, such as i-graduate companies, which are for profit and serve the country Or higher education institutions in a certain region provide education evaluation data and analysis reports for international students. Of course, there are many academic researchers who conduct surveys because they are interested in the education of international students, and often systematically propose new theories of satisfaction with international students through surveys.

In the perspective of institution's strategy planning and development, Asare-Nuamah (2017) points out that students' satisfaction with their academics is a significant element that should be given considerable attention by educators in their policy-making because students' satisfaction has bearing on retention and financial capacity of institutions (Asare-Nuamah, 2017).

Checkering believes that substantial participation in campus life and satisfaction with the college experience by students are essential if development is to occur. The authors highlight that wide and diverse interactions among faculty and students to foster their holistic development, suggesting that students need to see faculty in a variety of situations involving different roles and responsibilities (Bauer, 2022; Liang & Yoon, 2023).

In the consideration of institution's reputation, with international students it has been established that the tertiary education institutions' reputation, inclusive of the quality of teaching, learning and research is one of the key determinants of students' preference of a university they wish to study in. According to Gbollie and David (2014), the prominence of universities is often counted based on the quality of teaching and research. In order for this to happen, the testimonies or confessions of students regarding how much they are satisfied with the educational services being rendered by particular universities can have an indelible impact (Gbollie & David, 2014). Consequently, some universities occasionally seek to inquire about their students'

satisfaction mainly through various assessments to determine the level of impact they are making on the lives and academics of their students aimed at making informed decisions to enhance service delivery (Ramdhan et al., 2022; Yulianti Y et al., 2023).

Garrett (2014) and Ding (2016) agree that there is a close correlation between satisfaction and preparedness to recommend an institution. Hence, university administrators must be concerned about what their students think whether it is in terms of the institution itself, the course or available opportunities for development as it is of keen interest to them (Ammigan, 2019).

2.8.1 International Students' Satisfaction Indicators

The core content of international student's satisfaction of academic service is the comprehensive evaluation indicators. The university rankings can intuitively show the key evaluation categories and indicators of each university's academic quality. At present, among the hundreds of university rankings in the world, the QS World University Rankings, Academic Rankings of World Universities, Times Higher Education Rankings and US News University Rankings are the most recognized. In order to better reflect the quality of each university, the major rankings have selected indicators such as internationalization, paper citations, and faculty strength.

Table 2.29 lists the academic indicators of QS University Rankings, Academic Ranking of World Universities and other rankings (Yang, Z., 2019). In these rankings the academic quality is most emphasized and weighted in the indicators (QS World University Rankings, 2018).

Table 2.29 QS University Rankings, Academic Ranking of World Universities and other Ranking Indicators

Category of Ranking System	Evaluation Indicator	Weight
QS Stars University Ratings	Academic Reputation	40%
	Employer reputation	10%
	Citations per faculty paper	20%
	Teacher-student ratio	20%
	Proportion of international faculty	5%

Category of Ranking System	Evaluation Indicator	Weight
	Proportion of international students	5%
	Employ-ability Outcome (new indicator from 2022)	unweighted
	International research networks (new indicator from 2022)	unweighted
Academic Ranking of World Universities	Number of alumni who have won Nobel Prizes and Fields Medals	10%
	The equivalent number of teachers who won the Nobel Prize in Science and the Fields Medal	20%
	Highly cited scientist	20%
	Nature and S*cience* published papers	20%
	Number of papers indexed by Science Citation Index and Social Science Citation Index	20%
	The average of the above five scores	10%
Times Higher Education Rankings	Teaching	30%
	Scientific research	30%
	Paper cited rate	30%
	Economic Activity and Innovation	2.5%
	Globalization	7.5%
US News World University Rankings	Global Academic Reputation	12.5%
	Regional Academic Reputation	12.5%
	paper published	10%
	books	2.5%
	Meeting	2.5%
	Paper Citation Impact Index	10%
	Citations	7.5%

From the more comprehensive campus service perspective, the current existed evaluation category and indicators are ex-amplified by The International Student Barometer (ISB) completely, which is the existing widely accepted and frequently consulted authoritative evaluation system for international students of colleges and universities world-wide. It is developed by the company I-graduate International Insight company, that tracks and compares the decision-making, expectations, perceptions and intentions of international students from application to graduation, (I-graduate, 2015). It enables institutions to make informed decisions to enhance the international student experience and drive successful recruitment and marketing strategies. The indicators (I-graduate, 2015) are illustrated as in table 2.30:

Table 2.30 The International Student Barometer Evaluation Indicators

Category	Indicators	
Learning	1.Average satisfaction with our learning experience; 2.Assessment; 3.Performance feedback 4.Marking Criteria; 5.Course organization;	6.Quality lectures; 7.Topic selection on postgraduate courses; 8.Careers advice; 9.Physical library; 10.Technology; 11.Learning spaces
Living	1.Overall average satisfaction with the living 2.Living costs; 3.Accommodation costs; 4.Campus buildings; 5.Financial support; 6.Campus security; 7.Environmental awareness;	8.Campus Environment; 9.Transportation from campus to surrounding areas; 10.Religious worship facility; 11.Visa Application Guidance; 12.Campus network; 13.Dormitory network
Social life	1.Social activities; 2.Social facilities;	3.Building Future Networking for Students; 4.Make friends from the same country;
Support	1.Average satisfaction with support; 2.Careers Service; 3.Union; 4.Catering (on campus eating outlets); 5.Student support services; 6.Dormitory; 7.Technology;	8.Master's research support; 9.Faith Religious Services; 10.Personal counseling; 11.Disability services; 12.International student advisory; 13.Advisory; 14.Student advice
Facilities	1.Physical library facilities; 2.Learning space; 3.Learning Technology Support; 4.University laboratory;	5.Online learning materials; 6.Online learning environment; 7.Online library; 8.Campus Facilities Use
Arrival	1.Overall satisfaction with arrival; 2.Accommodation office on arrival; 3.Social activities on arrival; 4.Meeting staff on arrival; 5.Registration; 6.Welcome ceremony;	7.Residential Team Orientation Service; 8.Academic Team Orientation; 9.Online Admissions Service; 10.Introduction to campus and facilities; 11.Financial Team Services;

Chinese researchers' survey illustrated the main categories and indicators additionally. They provide the specific research domain in China and showed the eminent indicators that international students concerned with most in Chinese higher education institutions. By Chinese journal query system CNKI, through searching the key words of "international student satisfaction of education quality", there are 23 related articles, including 2 doctoral theses, 18 master's theses, and 3 journal articles (the website survey work was on February 2023). The main research categories and indicators of academic quality evaluation are summarized by the researcher in the table 2.31, the order of category and indicator is listed by the rate of recurrence of the concept from the most to the least.

Table 2.31 Indicators of International Student's Education Satisfaction in Chinese Research

Category	Indicators (in order of its rate of recurrence from most to least)
1.The quality of teaching	1 The quality of the course content 2 Teachers teaching skill and competence (including English level and professional guidance ability) 3 Teachers can provide academic consultation 4 Teacher's professional level 5 Teaching methods 6 Course Evaluation 7 Teaching atmospheres; Professional training plan; thesis guidance; cultural experience activities; teaching materials
	Teacher's academic research level is especially emphasized in satisfaction evaluation of Master and PhD degree students.
2.Campus service quality	1 Teaching equipment 2 Network resources 3 Libraries 4 Laboratories 5 Enthusiasm and work efficiency of school staff 6 Canteen 7 Accommodation 8 Sports and entertainment facilities 9 Solutions to life problems 10 Admission guidance 11 Campus safety In addition, campus learning atmosphere; admission procedures; entrance ceremony; banking affairs; visa

Category	Indicators (in order of its rate of recurrence from most to least)
	processing; school hospital
3.Finance	1 Tuition fee is reasonably priced 2 Study cost (living, study) 3 Scholarship 4 Scholarship Application Procedures 5 Scholarship Evaluation System 6 Tuition fee reduction
4. Personal development	Career planning guidance (only two papers mentioned this indicator)
5.The quality of research	1 The ability of teachers to guide students' academic research 2 Teachers' own scientific research level (It is listed in the Master degree student's questionnaire)

In table 2.31, we can find the key indicators of international students' satisfaction are in mutual inclusion with Table 2.29 QS University Rankings, Academic Ranking of World Universities and other ranking indicators and Table 2.30 The International Student Barometer Evaluation Indicators.

In the Chinese researcher's context, the quality of teaching is the most emphasized, and the teacher's academic research level is emphasized especially in the educational satisfaction questionnaire for master degree students and PhD students' investigation. In these 23 investigations, the career orientation and employ-ability is only tested by 2 researchers. The research about career prospect of international students in China is still very limited. Employment prospect is international students' crucial concern. Employer satisfaction and students' career prospects are also important indicators for the evaluation of major destination countries ranking. Understanding the international students' expectations of career guidance is crucial for the improvement of international education quality.

As 2.5.5.2 discussed, the educational quality is the most concerned issue of international students around the world in HEI choice. Also, with respect to economic factors, financial aid and tuition fee, they are important initiative to attract international students by higher education institutions. As the major destination countries of international students, the United States and UK have matured and flexible scholarship

programs. For universities in China, the scholarship system still needs to be further developed with the globalization context. Besides, employ-ability and employer reputation are crucial indicators in university academic reputation and ranking in the world.

Based on the above research, with evaluation of the proportion of overall indicators in different satisfaction evaluation systems, **Educational quality, Campus international service, Scholarship** and **Career guidance** would be surveyed as the evaluation indicators of international students' satisfaction in this research.

2.9 Students' Career Path

Career path is defined by Yusoff et al. as a lifelong journey which should be planned at the beginning of a person's career (Qamhieh et al., 2020). On the other hand, Joseph et al. defined career path as an occupational position held by an individual for his or her entire lifetime (Lucy Effeh Attom, 2024).

For university students, career path refers to the choices of jobs and occupational positions an individual may choose to hold. The findings of the study suggest that undergraduate accounting students are more influenced by intrinsic motivation and career exposure in selecting their career paths, whereas third parties and extrinsic motivation are less likely to influence undergraduate accounting students' career choices (Jeon & Min, 2021).

It is conceived that career paths have become nonlinear and discontinuous, and with more forces coming into play in labor market and career development, individuals are now required to take more control of their career development (Liang & Yoon, 2023; Vatovec & Ferrer, 2019).

The recent interest in the career choices by students and university graduates can be attributed to several factors. First, in a number of developed countries but also developing ones, there has been a substantial increase in the share of population with university education, resulting in growing numbers of university graduates entering the labor market. Second, human capital has become an important growth factor in the

knowledge-based innovation-driven economies and therefore efficient use of the highly educated segment of population has become a highly relevant policy issue (Liang & Yoon, 2023; Vatovec & Ferrer, 2019).

In the research of Cieślik & Van Stel, 2017, the paper is to predict future career paths of university students, distinguishing between paid employment, running one's own independent business and running a family business. The main predictor is the students' current mode of entrepreneurial exposure, both in terms of the students running their own business, and in terms of their parents running their own business (Cieślik & Van Stel, 2017).

In today's world, the formation of new firms is crucial for the vitality of national economies (Lindholm Dahlstrand, 2007; Saarenketo, Puumalainen, Kuivalainen, & Kyläheiko, 2009). According to Fritsch (2008), the main supply-side effects of entry of new businesses lie in their contribution to securing efficiency, stimulating productivity, accelerating structural change, amplified innovation and providing a greater variety of products and solutions to problems. Initialization and support of new business ventures are important tasks for both policy makers and academics. Hereby, higher education institutions play a fundamental role (Fritsch, 2008).

On the other hand, the labor market today is grossly affected by technological advancement and globalization (Lent & Brown, 2013).The boundary lessens and protean nature of careers today demands that individuals become more flexible and adaptive to best manage their career development (Liang & Yoon, 2023; Vatovec & Ferrer, 2019) to work even in unfamiliar environments.

Career mobility is a feasible alternative in today's globalized and increasingly service-driven economy. This alternative presents two work opportunities; expatriation and entrepreneurship. There is also possibility of combining both mobility alternatives; that is expatriates who are engaged entrepreneurship (expatriate entrepreneurship) (Arcagni et al., 2021).

Both expatriation and entrepreneurship not only provide opportunities for early career professionals to work towards achieving autonomy and career progress (Lucy

Effeh Attom, 2024), they are important for long-term social and economic development through new business developments and knowledge spillover effects (Vance et al., 2016). It is already well researched that entrepreneurship is an important contributor to economic development (Qamhieh et al., 2020). Similarly, expatriation makes valuable contribution to hosting organizations and economies (Yulianti Y et al., 2023).

2.9.1 Students' Career Prospects

One of the world's goals regarding sustainable human development is to develop people with various skills because it is necessary for the changes in the world in the present era to be prepared for the rapid changes occurring in global society (Assembly, 2015). Higher education institutions are highly sensitive to the talent market as the main resource of personnel training and education. HEIs are responsible to cultivate students with capability of career planning and professional skills.

In today's employment environment, systematic career planning is of extraordinary significance to college graduates. In 1999, Chinese government began to apply new talent cultivation policy to enlarge the enrollments, in order to satisfy increasing demand of educated labor (Education Revitalization Action Plan, 1999). As a result of national policy, the average rate of increase of new graduates in every year has been 30% since 2002, so graduating students have faced multi-choices and pressure of huge job-seeking population.

By 2024 statistical data from the Ministry of Education of China, the number of higher education graduates in 2024 is expected to reach 11.79 million, an increase of 210,000. There is an imbalance between supply and demand in some industries. The number of new material industry and biomedical industry recruits is less than the recruitment demand (the ratio is 1:2.7 and 1:2.3, respectively), and there is a large gap in personnel demand and recruitment difficulties. In the new generation of information technology and high-end equipment manufacturing industries, the ratio of suitable talent delivery and recruitment demand reached 15:1 and 12:1 respectively, and the competition for talents was fierce, and the competition pressure for job seekers was greater. The supply and demand of general-purpose talents and technology research and

development talents are unbalanced. From the perspective of job types, the proportion of general positions such as customer service, sales and administration is higher, the competition ratio is more than 25:1, and the recruitment gap of skill talents is larger. Although the average salary of technical research and development talents is 32%-57% higher than that of ordinary positions, the ratio of recruitment and recruitment demand is only 1:1.8, and the mismatch between supply and demand still needs to be improved (China Youth Daily, 2024)

The increasing number of students holding a higher education degree has amplified the importance of one's chosen field of study as a key determinant of graduates' success in the labor market (Qamhieh et al., 2020; Ramdhan et al., 2022).

Above all, to own constructive career guidance and practical employment information is of practical significance for university students. College students' career prospects related closely with the stock of human capital, social capital, and labor market outcomes.

Career choice has lately become a very complicated science, considering that the decision is influenced by numerous factors. Yet, choosing the right career is important in ensuring that individuals lead rewarding lives, are motivated at their jobs and can achieve remarkable productivity, thus setting the stage for organizational success and sustainability. Given the importance of making the right career choice, it is imperative that individuals are aware of the factors that influence such weighty decisions and do so from a point of knowledge (Jeon & Min, 2021).

Nowadays, Career Planning is crucial for the undergraduates' personal development and Career Guidance is treated as one major course and a compulsory part of the educational curriculum in almost all universities.

2.9.2 HEI's Function in Forming Students Career Path

For universities, from admission profession guidance to career guidance during school study, HEI's guidance owns the responsibility to help promote necessary reforms in teaching curriculum and improve employment rates for their graduates. Solving the

problem of employment is not only related to university students and their families, but also to the universities' reputations, and even to the country's politics, construction of the economy, and maintaining a harmonious society.

The motivation to study at university has many potential influences including social factors, prior experience, self-perceptions, intrinsic or personal utility values, or simply the prospect of a good salary. Students' choice of university major has similar influences; however, many learners select their major and enter university without having thought about possible career pathways. As such, without appropriate support during their time at university, students may not translate interest and motivation into career identity or commitment, and they may not develop realistic career goals or job-seeking strategies. Many final year students and Fresh Graduates still experience confusion in determining career choice, and it isn't easy to make decisions in choosing future careers (Pascariati & Ali, 2022).

According to the OECD (2004), career guidance refers to services intended to assist people, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers. Whilst personal interviews are still the dominant tool, career guidance includes a wide range of other services, such as group discussions, printed and electronic information, career education classes, structured experience, telephone advice and online help. The potential effects of career guidance can be thought of at the individual, organizational and societal levels(Guidance)..

Wen (2009) interpreted the significance of career guidance in university contexts from two perspectives, (i) the needs of students, and (ii) development of the university. For students, career planning can help them set personal goals and decide upon current and future career directions. Such career guidance is helpful to them in overcoming any misunderstandings in choosing careers, in selecting their study paths, and in identifying their potential strengths to enhance their competitiveness for positions. Effective career guidance provides guidelines with a long-term vision for career planning, from which students can benefit by realizing their true potential in life (Guo 2009).

At the individual level, potential benefits could result from people being better able to manage their choices of learning and work, thereby maximizing their potential. At the organizational level, potential benefits could flow to education and training providers if learners were assisted to identify and enter learning programs which meet their needs and aspirations. Finally, benefits could result at the societal level if career guidance leads to greater efficiency in the allocation of human resources, for example by enhancing the motivation of learners and workers or reducing dropouts from education and training (Cieślik & van Stel, 2017; Jeon & Min, 2021).

Concerning career guidance, Tinto (1993) argued that the utilization of counselling and advising programs during the student career underlines the fact that not all students enter college with clearly held goals. For that reason, institutions have allocated many resources to advising and counselling programs whose intent is to help guide individuals along the path of goal clarification. According to Tinto, these programs tend to be most effective when advising and counselling is required for students and when these programs are systematically linked to the other student services and programs on campus. The effectiveness is further enhanced when they are an integral part of the educational process which all students are expected to experience (Qamhieh et al., 2020).

The term "career guidance" is used to refer to services and activities that aim to help individuals manage their life course and make education, training, and occupational choices that are meaningful for them, based on a definition often used in the literature (Cedefop et al., 2019).

An important element of career guidance is to inform students about the content of the profession, working conditions, professionally important qualities, training and employment opportunities (Rezapkina, 2018a).

The tasks of the modern stage include the search for new forms and methods of conducting career guidance activities that will allow us to develop different, methodically structured, systematization of ideas about professional orientation for various age groups (Erokhina & Terin, 2017).

As discussed in paper Programs of Career Guidance Work at the Krasnoyarsk State Agrarian University (2020), for the purpose of professional orientation and the market promotion of educational services in agricultural education, Krasnoyarsk State Agrarian University works with students at schools and educational institutions of secondary vocational education actively. Vocational guidance among the population in the whole region is carried out in accordance with the big plan-the strategy for the development of professional attitudes in the Krasnoyarsk territory, which was approved by the Government of the region. The strategy is designed to include career guidance in the system of providing the economy with high quality personnel (Keler & Martynova, 2020). The main principles of the strategy are:

Table 2.32 Krasnoyarsk State Agrarian University Strategy of Career Guidance (2020)

Krasnoyarsk State Agrarian University Strategy of Career Guidance (2020)
1.Connection of career guidance work with the training system and the labor market, which provides assistance to a person in professional self -determination in unity with the regional needs for qualified agronomic personnel;
2.Availability of professional and other information necessary for choosing or changing a profession, form of training and employment;
3.Equal opportunities to receive career guidance services, regardless of place of residence, school, age, gender.
Practical methods: introduction of new approaches to the content and forms of vocational guidance organization, including the use of professional samples, information and telecommunications technologies; the system improvement of professional training and retraining of agricultural personnel, providing vocational guidance.

As the research *The Importance of a Coordinated Career Guidance System in Addressing the Rural NEETs* (neither in employment nor in education or training Issue) discussed, the overall goal of Career Guidance is to develop individuals' CMSs. It achieves this through activities that help people access services, resources, and experiences related to employment, further education, and training. These activities include career education, employer engagement, individual and group counselling, career information, skills assessment, psychometric testing, and developing skills for job search and self-employment (Cedefop et al., 2021). These activities can be grouped into three broad categories: career education, career counselling, and career information (OECD, 2021a; Watts, 2009). In addition to these three factors, we considered inclusivity and quality control important. Indeed, an essential feature of effective CG is to ensure that services are accessible to all those who need them (Cedefop et al., 2021). Furthermore, trained professionals and appropriate standards (i.e., quality service delivery) are essential for career guidance to achieve its aim (Bálint, Telegdy, & Lázár, 2024). These are presented as table 2.33:

Table 2.33 Coordinated Career Guidance System in Addressing the Rural NEETs (2021)

Career Guidance Activities of Effective Career Guidance
Career Education
CMSs included in the school curricula from the primary education level Opportunities for young people to gather practical experience Collaboration with employers.
Career counselling
The opportunity for individual career counselling to students (post‑primary education)

Career Guidance Activities of Effective Career Guidance
Programs designed explicitly for disadvantaged youth Teachers contribute to educational and vocational guidance.
Access to career
The existence of an online national CG portal information.
Inclusive Career Guidance
Services open to all adults Activities to reach disadvantaged groups Activities to raise awareness about the availability and usefulness of CG services
Quality check
Tertiary level training and qualifications for CG counsellor The existence of qualitative standards Monitoring activities, impact research

As Windesheim University of Applied Science's research in 2010 discussed, the university tried to facilitate students to direct their own learning process by setting up their personal learning goals. Based on these new educational standards, the main changes from September 2006 included a stronger "work-field orientation", a more applicative and multidisciplinary nature of the curriculum, and a stronger orientation towards practice-based research (Yulianti Y et al., 2023). Regarding the guidance and counselling of students, the emphasis turned from supporting those students who fell short of expectations or even threatened to dropout, to guiding all students to design and direct their own learning career and preserving them from dropout. Furthermore,

in guiding and assessing students a link was established between the personal learning process and the career guidance process, thus enabling students to assume a more self-regulated approach to learning. The guidance is offered by a small professional staff together with specially assigned faculty and is a comprehensive system which spans the entire four years of student life from admissions to graduation. This guidance can be seen as integral career guidance in which all instruments for guidance, such as the intake procedure, personal development plan, assessments, reports that demonstrate student reflection, and the portfolio, have been assimilated (Lucy Effeh Attom, 2024).

After one-year guidance in first year, the career guidance teacher assessed both the portfolio as well as the personal development plan. If the portfolio was passed, an independent judge subsequently assessed the letter of application based on an interview with the student. Both assessments had to be passed, otherwise the student was dismissed by virtue of a so-called binding study advice because of unsatisfactory first-year achievement (taking into account any impeding personal circumstances) (Jeon & Min, 2021; Mohd Rasdi & Ahrari, 2020).

In this program, another task of career guidance is to teach students how to gather their own information and to transform this information – by developing 5 career competencies – into meaningful knowledge and actions with regard to self, work and career. At last, an overall career guidance grade was calculated by attaching weights to the grades in individual competencies.

Table 2.34 Windesheim University of Applied Science's Career Guidance (2010)

Windesheim University of Applied Science Methods of Career Guidance (2008-2009)
1. Personal achievement in the Career Guidance evaluated by teachers
2. Personal development plan in the Career Guidance evaluated by teachers
3. Training of 5 distinctive career competencies in the program:

1) <u>Capacity reflection</u> (observation of capabilities that are important for one's career);

2) <u>Motivation reflection</u> (observation of wishes and values that are important for one's own career);

3) <u>Work exploration</u> (researching job possibilities);

4) <u>Career directedness</u> (making thoughtful decisions and taking actions that allow work and learning to correspond with one's capabilities and motivation and challenges at work);

5) <u>Networking</u> (building and maintaining contacts focused on career development)

In reference to the Key project of the "14th Five-Year Plan" of Education Science in Heilongjiang Province in 2022: "Model Construction and Application of Blended Teaching in College Career Guidance Courses", the method of career guidance is summarized as following:

From 2007, the General Office of the Ministry of Education issued "the Teaching Requirements for Career Development and Employment Guidance Courses for College Students". In the same year, Harbin Engineering University opened a general course on college career and career development planning. For more than ten years, the teaching team has continuously polished the curriculum and built a three-dimensional teaching system of "the whole process of career guidance", "education coverage from surface to point" and "learning influence from outside to inside", which presented the background and history of career guidance education development with the direction of national policy.

The curriculum was first learned and being introduced from other universities in 2007; in 2010, the teaching content was revised according to the characteristics of the school; in 2014, according to the needs of career development of students in

different grades, the original one course was expanded to multiple courses; in 2016, the course combines theoretical teaching with after-class practice to build a "one lesson, one activity" career planning curriculum system for college students; in 2018, the curriculum was built in flipped classroom, and the teaching mode was changed from teacher-lecturing to student-thinking; in 2019, the school formed a career planning teaching system covering the whole process of undergraduate students' growth; in 2020, the curriculum were further improved with a blended teaching model. The curriculum system development of Harbin Engineering University (Wang J. N. & Chen R., 2023) is summarized as Table 2.35:

Table 2.35 Summary of Chinese Universality--Harbin Engineering University's Career Guidance

Teaching Syllabus
First-year courses focus on self-characteristic exploration; Second-year courses focus on the anchoring of academic goals; Third-year courses focus on professional quality improvement; Fourth-year courses focus on career path practice. The 4 career courses are in-depth and promoted step by step, which runs through the whole process of students' growth.
Teaching Method
Through MOOCs, the teaching team realizes systematic theoretical teaching and comprehensive resource support. In off-line classes, student-centered teaching methods such as game experience, career interview, scenario simulation and case analysis are added. Teachers participate in and control the direction.
Evaluation of the Course

> The assessment of the course is divided into three parts:
>
> Online MOOCs account for 40%, understanding theoretical knowledge;
>
> Class participation accounted for 40%, personal thinking;
>
> Action reports account for 20%, and action plans are implemented.

The sense of achievement that career planning brings to students comes from the incremental progress towards the goal. Every year, Harbin Engineering University transfers talents to the main service fields and key areas of national development core field, accounting for more than 40% of the employment number, which is in the forefront of similar universities (Wang J. N. & Chen R., 2023).

2.9.3 Career Choice of Work in One's Profession

Having prior knowledge prepares an individual to what one is about to enter and therefore a decision will be made while well aware of what one is to expect, what work habits are expected of them and the potential earnings (Jeon & Min, 2021; Mohd Rasdi & Ahrari, 2020).

The study of Tetteh et al. (2021) uses social cognitive career theory (SCCT) to explore the driving and restraining factors that students consider in selecting auditing as a career. This research was conducted based on the interview with respondents who were final year undergraduate accounting students of six top-ranked universities in Ghana that offer accounting programmer. The study revealed that the students were aware that acquiring the requisites knowledge and skills in accounting and having being mentored by an audit firm can smooth out the journey to becoming an auditor. The study also revealed that some of the students were aware that possessing professional ethical values and being able to work as a team and having excellent knowledge in the use of accounting software could enhance their chances of meeting their career goals in auditing. It also came to light that students first identified contributing and inhibiting factors that would influence their career choice. This experience is acquired as a result

of combination of academic and professional programs being mounted by universities. All the participants who were in favor of pursuing auditing as a career were talking about working with the big four audit firms in Ghana after graduation. (Tetteh, Agyenim-Boateng, Kwarteng, Muda, & Sunu, 2021).

Being a higher education student, the main career knowledge is expected to be acquired in the education process. Career path is decided by personal motivation. Generally, motivation is divided into intrinsic motivation and extrinsic motivation. Intrinsic motivation refers to something or an activity which brings personal satisfaction (Ryan and Deci, 2000). Ryan and Deci (2000) further explained that intrinsic motivation is a positive experience a person has when he acts out of his own interest or challenge. It is not influenced by external factors such as pressures, rewards, or enforcement. On the other hand, Jackling and Keneley (2009) defined intrinsic motivation as a personal contentment achieved from chasing and searching for some activity. Intrinsic motivation includes two components, namely, personal interest and personal choice.

The study conducted by Odia and Ogiedu (2013) inspected factors affect accounting students' career choice decisions in Nigerian universities. The test analysis showed that intrinsic motivation was an important factor for accounting students. Findings found that intrinsic motivation can positively affect students' career paths. Students prefer accounting simply because accounting is interesting. The students are also confident in getting good results and are addicted to numbers and figures. These factors had intrinsically motivated students to study accounting (Liang & Yoon, 2023). The study by Said et al. (2004) shows that interest in the accounting profession is one of the factors driving students' career choices in pursuing an accounting-related profession (Arcagni et al., 2021). In addition, the McDowall and Jackling (2010) study shows that students who find accounting fascinating and would like to pursue accounting-related jobs have a positive attitude towards the accounting profession. The authors further clarify that if students are interested in a field, they are likely to be successful because interest in the field will give rise to a high degree of motivation (Yulianti Y et al., 2023).

As the research of Omani Tourism and Hospitality Students Employment Intentions and Job Preferences discussed universities have had a major role to play in structuring graduates' expectations of the work they can expect to perform, their pay and promotion prospects, and the degree of freedom and discretion they may have within an organization (Atef & Al Balushi, 2017). Pang (2011) additionally identified the following factors that may entice students to join and stay in the tourism and hospitality industry:

(1) Teachers' knowledge, perception of and outlook for the industry;

(2) Curriculum, academic (classroom-based, guest speakers) or field based (i.e. site inspections and field trips);

(3) Internship programs and strong links to the industry; Appropriate facilities and resources:

(4) The offering of computer-aided hospitality related programs, actual restaurants, mock-up hotel rooms and hotels; and reputation of the educational organization (Pang, 2011).

Cieslik and Stel (2017) highlighted in their research that learning environment needs to be designed in line with students' future needs in order to increase students' motivation and success. Students can also utilize the extracurricular activities in higher education as a means to build their skills and experience. Learning environment has positive influence on current knowledge enhancement and students' career choice. Learning environment which is well designed will be able to stimulate students' interest to gain knowledge all their lives so that they have the qualification required for work (Cieslik & Stel, 2017).

Educators and classmates are part of subjective norms and social support in which these close people are considered having big influence not only on students' career choice but also on supporting the intention to enhance knowledge. (Hatane et al., 2021)

In the research of Hatane et al. 2021, Learning environment are defined as which covers all facilities and activities related to learning. The facilities can be non-physical, for instance, curriculum, learning methods, teaching methods, and can be physical, such as classroom, laboratory, and library (Lancaster & Milia, 2015). In addition, the learning environment also covers social relation of people involved in the learning such as teachers and friends (Hopland & Nyhus, 2016). The results of this research indicate that accounting students possess positive attitude both towards the intention to enhance the current knowledge and choosing their accounting career. The learning environment includes educators and friends who give significant influence on students' intention. There are 503 useable responses collected with the effective response rate of 72 per cent (Hatane et al., 2021).

Table 2.36 Career Choice of Profession Research Model

Scholars	Research Model
Tetteh et al.,2021	Social cognitive career theory (SCCT) was used to explore the driving and restraining factors that students consider in selecting auditing as a career. The study revealed that the students were aware that acquiring the requisites knowledge and skills in major and having being mentored by an audit firm can smooth out the journey to becoming an auditor.
Odia and Ogiedu, 2013	The study inspected factors affect accounting students' career choice decisions in Nigerian universities. Findings found that intrinsic motivation can positively affect students' career paths, such as positive attitude, interest in profession, and outcome expectation.
Hatane, Setiono, Setiawan, Semuel, & Mangoting, 2021	In the study, learning environment are defined as which covers all facilities and activities related to learning. The facilities can be non-physical, for instance, curriculum, learning methods, teaching methods, and can be physical, such as classroom, laboratory, and library (Lancaster & Milia, 2015). In addition, the learning environment also covers social relation of people involved in the learning such as teachers and friends (Hopland & Nyhus, 2016).

The questionnaire of Hatane et al's research applied 4 questions to survey university students' intention to choose profession as career (e.g., I will choose accounting as my future career; It is likely I will choose accounting as my career; Choosing accounting as my job is a good idea; Choosing accounting as my job is a good decision), which was applied first in the research of Croasdell et al (Qamhieh et al.,

2020). All students are asked to respond in five-point Likert scale, in which 1 is for strongly disagree and 5 for strongly agree. This category of 4 questions will be applied in the "profession as career" questions in this dissertation with suitable adjustment according to the research domain of higher education institutional context.

2.9.4 Career Choice of Entrepreneurship

In today's world, higher education institutions play an ever-increasing role. Besides their traditional teaching, they are challenged to endow their students actively with the appropriate motivation, knowledge and abilities for firm creation, often articulated as relevance or the third mission of universities (Bromiley et al., 2020). Universities are considered as a source of fostering innovation and entrepreneurial spirit. Universities can play a significant role in positively manipulating students' intentions and efforts toward entrepreneurship and making them able to develop a new venture (Barak & Yuan, 2021).

Therefore, we believe that universities are a hub of nurturing entrepreneurial passion in students. In the research of Anjum, et al. (2020), the moderation mechanism of perception of university support on perceived creativity disposition and entrepreneurial intentions was also developed and analyze. It was found the perception of university support has a vital role in increasing intention and creativity. university can provide a stable platform to take the initiative. This study also encourages universities to take over various capacities to initiate and encourage young graduates to start businesses (Anjum, Farrukh, Heidler, & Díaz Tautiva, 2020).

Universities can provide support in specific ways by instilling the skills and knowledge necessary for business creation. Universities can also provide targeted support to the students. The targeted support may include support in concept development and business development (Ali & Abou, 2020). Although creativity is conceptualized as personality traits; however, literature advocates that creativity could be responsive to the environment, which means the external factor may influence creativity (Yang, 2020). Therefore, creativity may be portrayed as an outcome of personal and environmental/external settings.

The rise of university-wide entrepreneurship education (EE) programs in the past two decades is witnessed both in developed and developing regions. The 'Mass Entrepreneurship and Innovation' strategy introduced in China in 2014 and series of policies issued afterwards highlight the increasing importance of entrepreneurship, and the parallel promotion of university-wide EE throughout the country. Based on a semi-structured interviews and policy document reviews, this article interrogates the issues and challenges in university-wide EE programmed implementation in China, with special reference to Zhejiang province. This study identified four key issues and challenges: the struggle of pursuing 'legitimacy', varied models-development of EE, lack of entrepreneurship faculty staff and experts, and the lack of cooperation among stakeholders. This article recommends the need for an interdisciplinary development of EE and an active engagement of various stakeholders to promote a sustainable EE programmed in China.(Mei & Symaco, 2022)

In the research of Guerrero, Urbano, & Gajón, (2020), by adopting Douglas and Shepherd's utility-maximizing function, the influence of one entrepreneurial university ecosystem on graduates' career choices was tested using a sample of 11,512 graduates from the Monterrey Institute of Technology and Higher Education (ITESM) in Mexico. The objective of this paper was to provide insights into how the graduates' career choices (i.e. academic entrepreneur, self-employed or paid employed) are influenced by the entrepreneurial university ecosystem (i.e. incubators and entrepreneurship education programs). The first contribution relates to the effects of entrepreneurial university ecosystem on the graduates' career choices. Our results showed the role of educational programs on the acquisition of specific skills/abilities (i.e. the identification of business opportunities and work under uncertainties) that are essential for achieving the highest level of work effort tolerance required to becoming an academic entrepreneur. In this regard, these results provide particular insights about the effectiveness of educational programs on entrepreneurial action of graduates. Therefore, these entrepreneurial university conditions are needed to establish an academic entrepreneurship spirit across graduates communities (Guerrero, Urbano, & Gajón, 2020).

In the research of Cieślik & Van Stel (2017), The study is based on a comprehensive survey held in May 2013 among1,490 business and law students of Kozminski University in Warsaw, Poland. To predict future career expectations in ten years' time, multinomial logit regressions were employed. The authors find that, among students with a family business background, those students who are actively involved in their parents' business are significantly more likely to pursue joining the family firm, rather than starting their own business. In order to stimulate business succession, universities with a large proportion of students with family business background may consider launching dedicated programs promoting the interest of students in the businesses run by their parents.

Table 2.37 Career Choice of Entrepreneurship Research Model

Scholars	Research Model
Mei & Symaco, 2022 Guerrero, Urbano, & Gajón, 2020	The research surveyed influence of one entrepreneurial university ecosystem on graduates' career choices was tested using a sample of 11,512 graduates from the Monterrey Institute of Technology and Higher Education (ITESM) in Mexico to find how the graduates' career choice snare influenced by the entrepreneurial university ecosystem.
Cieślik & Van Stel,2017	The study is based on a comprehensive survey held in May 2013 among1,490 business and law students of Kozminski University in Warsaw, Poland. To predict future career expectations in ten years' time.
Mei & Symaco, 2022 (Mass Entrepreneurship and Innovation' strategy introduced in China in 2014)	This article interrogates the issues and challenges in university-wide entrepreneurship education program implementation in China, with special reference to Zhejiang province. This study identified four key issues and challenges: the struggle of pursuing 'legitimacy', varied models-development of EE, lack of entrepreneurship faculty staff and experts, and the lack of cooperation among stakeholders.

The questionnaire applied in this research is in reference to Cieślik & Van Stel (2017), included measurement of students' future career expectations related with entrepreneurship based on the respondent's assessment of his or her occupational status in ten years' time, as given by the six answers:

Choose the statement (only one), which describes the best your situation in ten

years' time:

(1) I shall be an employee of a large company or bank.

(2) I shall be an employee of an institution of public administration.

(3) I shall be an employee of a small- or medium-sized enterprise without family connections.

(4) I shall be actively involved in running a family business.

(5) I shall run my own business (eventually with a business partner).

(6) I shall not be active professionally. (Cieślik & Van Stel, 2017).

This category of 6 choices will be applied in the career expectations related with entrepreneurship in this dissertation with suitable adjustment according to the research domain. As recent decades have witnessed an immense growth in establishing entrepreneurial education program as an academic and instituting entrepreneurship courses at all higher educational levels in China and world-wide, the entrepreneurship culture and education is a crucial indicator to reflect higher education institutions internationalization level and career guidance level.

2.9.5 Career Choice of Working Expatriate

For many countries, expatriation is of paramount importance, especially because it brings in knowledge and talent from abroad, strengthening the competitive advantages of regions and cities within countries (Ridgway & Robson, 2018), and it may even improve a country's global economic status (Caligiuri & Bonache, 2016). Many countries therefore adopt national and regional strategies to attract talent.

Also, China welcomes branch campuses of international universities to attract academics from the United Kingdom, Australia and Germany, thus strengthening the country's human capital (Cai & Hall, 2016). By the same time, China has become the largest destination country for international students in Asia, attracting talents from all over the world to study and work in China. This dissertation takes the expatriate career

intention of international students as the research indicator and aims to investigate the expatriate career intention of international students in China. The motivation of expatriate career intention is developed on the ground of the students' acceptance of the expatiate country's study and working environment, and on the other hand, the students developed the capability to adapt to the expatriate working environment.

Expatriate career intentions have been operationalized as the wanting and the motivation to have a career in another country (Presbitero, in press). Traditionally, careers have been confined, in terms of an individual's relationship to his or her employing organization, to his or her home country (Sullivan & Baruch, 2009). However, globalization has changed the way careers are conceived and conceptualized. Many individuals, for example, have ventured into global careers (Dou et al., 2021) where the focus is to work beyond the boundaries of one's home country while transcending different cultures and geographic locations (Presbitero & Quita, 2017).

In the article of Arifa, El Baroudi, & Khapova (2021), it used the categories career, economy, politics and culture to analyze and report the findings regarding the motivations of self-initiated expat and assigned expat to go abroad and the processes underlying these motivations. Its career category involves motivations related to the subjective career, which is an individual's sense or evaluation of his or her own career needs and development; this concept refers to career aspirations, employment security and access to learning and development (Arthur et al., 2005). This category also involves motivations related to one's objective career, which refers to visible indicators of individuals' career positions, situations and status (Arthur et al., 2005); it involves income, family situation, task attributes, mobility and job level (van Maanen, 1977, p. 9) (Manokhina, 2024).

As in the research of Presbitero & Quita (2017), aside from extrinsic motivations (i.e., economic rewards) of an overseas career, the importance of intrinsic motivations needs to be highlighted. University should guide students to understand their personal qualities in relation to their capability to adapt in expatriate careers, as well as their capability to adapt to new cultural environments. Doing so would ensure that, on graduation, university students would stay motivated and interested in

expatriate careers despite the many associated challenges and hurdles. The provision of training programs or counselling sessions in universities, particularly in "third world" countries, is needed. Such programs could help university students clarify why they want to venture into expatriate careers, and aid them with the necessary adaptive resources and intercultural skills to be successful in their expatriate careers (Presbitero & Quita, 2017).

In the research of Presbitero & Quita (2017), a total of 514 students in a private university based in Manila, the Philippines participated in the study. First, this study aims to examine career adaptability, as a self-regulatory competency, and the underlying mechanisms through which it facilitates an individual's intention to build an expatriate career. Career adaptability as one of the potential individual-level characteristics that influence the formation of the intention to have an overseas career among university students. Career adaptability refers to an "individual's resources for coping with current and anticipated tasks, transitions and traumas in their occupational roles that, to some degree large or small, alter their social integration" (Savickas & Porfeli, 2012, p. 662). Second, this study aims to establish the interaction effects between career adaptability (as a self-regulatory resource) and cultural intelligence (as an intercultural capability) in bringing about higher levels of intentions to seek global careers among university students. Cultural intelligence that is asserted in this study is drawn from the Intelligence Theory (Sternberg & Detterman, 1986; Sternberg, 1999) which highlights that intelligence is an enabler for individuals to effectively learn and, consequently, adapt to the changing needs and demands of their environment. Third and last, this study aims to offer practical insights to assist career counsellor in universities to focus not only on highlighting the extrinsic motivator (i.e., economic) but also on the role of intrinsic assets in sustaining interest in overseas careers. Doing so would ensure that university students are well-prepared and have the capacities and resources needed to successfully venture into expatriate careers (Presbitero & Quita, 2017).

Table 2.38 Career Choice of Expatriate Research Model

Scholars	Research Model
Arifa, El Baroudi, & Khapova, 2021	It analyzed the findings regarding the motivations of self-initiated expat and assigned expat, and the motivations of one's own career needs: career aspirations, employment security and access to learning and development.
Presbitero & Quita, 2017	This study aims to examine how career adaptability and cultural intelligence facilitate individual's intention to build an expatriate career. It also offers practical insights to assist career counsellor in universities to prepare students' capacity in successful overseas careers.

In the research of Presbitero & Quita (2017), the third category of questionnaire deals with the respondent's prediction regarding the probability of working abroad in ten years' time. The category of questions was first applied in the research of Sieger et al. (2016). Measurement of students' probability of working abroad is based on the respondent's assessment of his or her occupational status in ten years' time, as given by the following choices:

Define the probability of pursuing your career in 10 years' time in a home country or abroad:

Definitely in a home country/Rather in a home country

Rather abroad/Definitely abroad (Sieger et al., 2016)

The category of 2 choices will be applied in the expatriate working intention survey questions in this dissertation with suitable adjustment according to the research domain.

2.10 Relationship Between Variables

2.10.1 The Impact of Internationalization Strategies on International Students' Satisfaction and Career Paths

The internationalization strategy of HEIs (Higher Education Institutions) encompasses multiple aspects, including internationalization concepts and management, international faculty and curriculum, international research and cooperation, and

campus support services (Canaj et al., 2022). These strategies collectively contribute to the educational environment and services of HEIs, ultimately influencing students' satisfaction with the quality of education. International students will perceive support and recognition (Jamil et al., 2020). It is imperative to provide a diverse and inclusive environment to raise international students' satisfaction. The implementation of an internationalization strategy can boost the satisfaction of international students. International scientific research collaborations not only enhance the academic abilities of international students but also provide them with direct access to global professional networks (Gudz et al., 2019). This strategy fosters an international perspective among international students, prompting them to favor international-related positions or enterprises in their career planning. The strong support network can help international students adapt to a new environment (González-Bonilla et al., 2021). Such a comprehensive support system directly influences the career paths of international students. Career guidance and professional training, as the internationalization strategy of HEIs, can offer students more resources and opportunities that align with their future career paths.

2.10.2 The Impact of Internationalization Strategies on International Students' Engagement, Equity and Well-Being

International students' engagement is influenced by the educational environment, encompassing the intricate interplay among interpersonal relationships, learning activities, and the learning environment, all of which are intimately tied to the internationalization strategy of higher education institutions (HEIs) (Canaj et al., 2022). The higher the level of engagement and competence students demonstrate within the learning community, the more likely they are to channel this energy back into their studies. Cross-cultural exchanges and interactions embedded in the internationalization strategy offer international students' opportunities to forge connections with peers and faculty from diverse cultural backgrounds (Susanto et al., 2023). HEIs leverage their internationalization strategies to introduce a rich array of curriculum designs and academic activities, thereby encouraging the active participation of international students. The internationalization of the learning environment fosters an optimal atmosphere for enhancing student's engagement (Zyberaj et al., 2022). As an

indispensable supporting framework in this process, the internationalization strategy promotes student's engagement by fostering a diverse learning environment.

Students should have equal opportunities to achieve their optimal abilities without being restricted by their community background or dispositional characteristics. Equity can be equal terms in a school's daily activities, the regulations that govern a school's education (Sá & Serpa, 2020), the resources distribution, and the efficiency of education, all of which are closely related to the internationalization strategy of HEIs (Tamtik & Guenter, 2019). Besides physical well-being, the social and emotional well-being constituents such as self-esteem, identity, equity, and social relations also affect the well-being of individuals. For international university students, ensuring well-being is crucial (Canaj et al., 2022), and it hinges on factors such as educational quality, the environment, and effective internationalization strategies (Jones et al., 2021). These elements play a pivotal role in creating a supportive and enriching experience for students.

2.10.3 The Impact of International Students' Engagement on International Students' Satisfaction and Career Paths

International students' engagement significantly influences their satisfaction with the educational experience. This engagement encompasses academic activities and socio-cultural integration, participation in campus events, and interaction with teachers and peers (Dong, 2019). Research indicates that a high level of engagement enhances international students' sense of belonging and identity (Dong, 2019; Susanto et al., 2023; Zyberaj et al., 2022), subsequently bolstering their satisfaction with the support and resources provided by the institution (Zyberaj et al., 2022). Engagement facilitates international students' adaptation to new cultural environments, mitigating feelings of loneliness and cultural shock, and elevating their learning experience and satisfaction (Zucker et al., 2022). Moreover, international students' engagement has an impact on their career development. By actively engaging in classroom discussions, extracurricular practical activities, and internship opportunities, they accumulate invaluable experiences, skills, and networks, laying a solid foundation for their future careers. Engagement also strengthens their cross-cultural adaptability and global

perspective, which are crucial in today's competitive international job market (Susanto et al., 2023). Furthermore, through participating in career development activities or interacting with industry professionals, international students gain a deeper understanding of the demands and career paths within their target industries, enabling them to plan their careers more strategically.

2.10.4 The Impact of International Students' Equity on International Students' Satisfaction and Career Paths

Understanding international students' expectations regarding organizational social responsibility is fundamental to creating and implementing successful strategies and programs (Santos et al., 2020), and the outcome will impact students' satisfaction. In the paper of Kilpatrick et al. (2016), the research aimed to provide the theoretical framework for ranking Australian higher education institutions on their 'equity performance'. The accessibility of teaching facilities, availability of textbooks in libraries, administrative service quality, reliability of university examinations, perceived learning gains, and quality of students' welfare services were significantly and directly related to students' satisfaction (Gustavsson et al., 2021). To ensure an adequate level of career development, schools are expected to take the initiative by particularly aiming at equal treatment for all students (Lee et al., 2021). Previous studies have argued that school resources can effectively support underserved students, closing the gap in educational outcomes.

2.10.5 The Impact of International Students' Well-Being on International Students' Satisfaction and Career Paths

Under the backdrop of the internationalization of higher education, the relationship between international students' well-being and satisfaction has become a focal point of researchers' attention (Magnano et al., 2021). The well-being of international students significantly shapes their learning, integration, and overall satisfaction, making it a crucial factor in their mental health. When international students feel psychologically and emotionally fulfilled, their satisfaction with the learning environment and school support services increases markedly, thereby fostering

a higher sense of identification with the international educational institutions they attend (Sahin & Kirdok, 2018). Furthermore, well-being plays a pivotal role in the career development of international students. Research indicates that mental health and positive emotional experiences facilitate students' optimal performance during their studies and impact their career choices and development paths (Mohammed et al., 2021). International students with higher well-being levels tend to demonstrate stronger career self-confidence and planning skills in the international job market. A positive mental state helps them develop more open-minded career perspectives, enhancing their competitiveness and professional fulfillment in the context of globalization.

2.10.6 The Mediating Effects of International Students' Engagement, Equity and Well-Being

The influence of HEIs' Internationalization strategy has gradually expanded to international students' learning experience and career development. Research indicates that the internationalization policies of universities are not merely strategies aimed at curriculum design or cross-cultural exchanges (Susanto et al., 2023; Zyberaj et al., 2022); they are crucial factors influencing international students' overall engagement, satisfaction, and career development paths. Students' engagement plays a pivotal intermediary role, enhancing their sense of belonging to academic and social adaptability, improving overall satisfaction, and broadening career options (Canaj et al., 2022; Gudz et al., 2019). Meanwhile, international students' perception of equity significantly impacts their satisfaction and career development, particularly in resource allocation, equality of opportunity, and cultural inclusiveness (Magnano et al., 2021). This sense of equity shapes their learning experiences and exerts a vital cognitive value effect in career development decision-making. The well-being of international students influences their satisfaction and career planning (Sá & Serpa, 2020; Tamtik & Guenter, 2019). Therefore, the internationalization strategy indirectly enhances international students' satisfaction by improving engagement, equity, and well-being, laying a solid foundation for their future career paths.

2.11 Conceptual Framework and Explanation of Hypotheses

Based on a survey of the literature and an analysis of relevant research models, the research model and related hypotheses for this research are provided. The independent variable is the internationalization strategy of HEIs; the mediating variables are international students' engagement, equity and well-being; and the dependent variable is international students' satisfaction and career path. The research is based on survey data from provincial public universities in Shandong Province, China. The study aims at investigating the effect of internationalization strategy of HEIs on international students' satisfaction and career path, with international student's engagement, equity and well-being as the mediating factors, to provide recommendations for a more effective strategic management model for internationalization at Provincial Public Universities in China.

Internationalization strategy encompass various components including international concept and management, international teaching staff and curriculum, international research and co-operation, and campus support service. These strategies collectively contribute to the overall educational environment and services offered by HEIs, ultimately influencing students' satisfaction with the quality of education provided by the institution. Furthermore, it is important to recognize that the overall quality of teaching, particularly in terms of professional training and career guidance courses, significantly impacts students' career choice. Therefore, this dissertation posits that HEIs' internationalization strategy has a direct impact on the satisfaction of international students (hypothesis 1), and HEIs' internationalization strategy has a direct impact on international students' career paths (hypothesis2).

International student's engagement is influenced by the educational setting, including the complex interplay of relationships, learning activities and the learning environment, all of which are closely related to the internationalization strategy of HEIs. The more students are engaged and empowered within their learning community, the more likely they are to channel that energy back into their learning. This dissertation posits that HEIs' internationalization strategy has a direct impact on international students' engagement (hypothesis 3).

Students should have equal opportunities to achieve their optimal abilities without being restricted by their community background or dispositional characteristics. The equity can be equal terms in a school's daily activities, the regulations that govern a school's education, the resources distribution and the efficiency of education, all of which are closely related to the internationalization strategy of HEIs. This dissertation posits that HEIs' internationalization strategy has a direct impact on international students' equity (hypothesis 4).

Besides physical well-being, the social and emotional well-being constituents such as self-esteem, identity, equity, and social relations also affect the well-being of individuals. For international students in universities, all of the well-being constituents are related with educational quality and environment as a whole and thus closely related with management strategy of internationalization. This dissertation posits that HEIs' internationalization strategy has a direct impact on international students' well-being (hypothesis 5).

Individuals who measure engagement using Schaufeli, Salanova, et al.'s (2002) approach and are engaged in their work are likely to feel more satisfied (Wefald & Downey, 2009). In Howson et al. (2021) research, the paper highlights how combining these two approaches in student experience surveys can support policy decisions and institutional enhancement (Kandiko Howson & Matos, 2021). This dissertation posits that international students' engagement has a direct impact on international students' satisfaction (hypothesis 6)

In the research of Grier-Reed et al., the research found that higher levels of student's engagement corresponded to higher levels of career decision self-efficacy (Grier-Reed, et al., 2012). On the other hand, academic engagement scale is positively related to early career earnings for students in non-STEM fields (Hu & Wolniak, 2010). This dissertation posits that international students' engagement has a direct impact on international students' career path (hypothesis 7).

Understanding customers' expectations regarding organizational social responsibility is fundamental to creating and implementing successful strategies and

programmed (Santos et al., 2020), and the outcome will impact students' satisfaction. In the paper of Pitman et al. (2019), the research aimed to provide theoretical framework for ranking Australian higher education institutions on their 'equity performance'. The accessibility of teaching facilities, availability of textbooks in libraries in the universities, administrative service quality, reliability of university examinations, perceived learning gains and quality of students' welfare services were significantly and directly related to students' satisfaction (Kara et al., 2016). This dissertation posits that international students' equity has a direct impact on international students' satisfaction (hypothesis 8).

To ensure an adequate level of career development, schools are expected to take the initiative by particularly aiming at equal treatment for all students (Lee et al., 2021). Previous studies have argued that school resources can effectively support underserved students, closing the gap in educational outcomes. This dissertation posits that international students' equity has a direct impact on international students' career path (hypothesis 9).

Students satisfaction can be measured with the score of life-as-a-whole. Feelings of well-being are composed of a cognitive-evaluative factor(satisfaction) and an affective factor (happiness) (Vermunt, Spaans, & Zorge, 1989). This dissertation posits that international students' well-being has a direct impact on international students' satisfaction (hypothesis 10).

Students' well-being resources embodying the consequences of career well-being, affect career decision-making difficulty directly (Mohammed, Kumar, & Padakannaya, 2021). The pre-existing levels of well-being and confidence influence occupational choice (Creed, Muller, & Patton, 2003). This dissertation posits that international students' well-being has a direct impact on international students' career path (hypothesis 11).

As above discussion, in the hypothesis that the independent variables have direct impact on mediating variables and dependent variables, and the mediating variables has direct impact on dependent variables, the hypotheses of the mediating

construct are proposed. This dissertation posits that international students' engagement has mediating effect on international students' satisfaction (hypothesis 12) ; international students' engagement has mediating effect on international students' career path (hypothesis 13) ; international students' equity has mediating effect on international students' satisfaction (hypothesis 14) ; international students' equity has mediating effect on international students' career path (hypothesis 15); international students' well-being has mediating effect on international students' satisfaction (hypothesis 16); International students' well-being has mediating effect on international students' career path (hypothesis 17).

The conceptual framework is summarized in the following Figure 2.6:
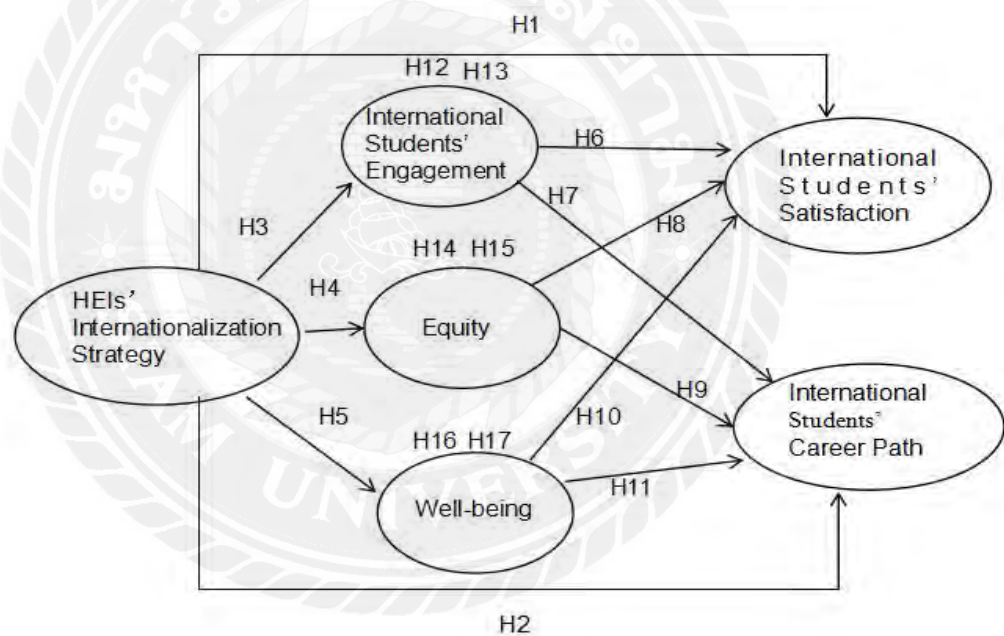
Figure 2.6 Conceptual Framework

The Hypotheses is summarized in the following Table 2.39

Table 2.39 Hypotheses of the Dissertation

NO.	Hypotheses
H1	Internationalization strategy has a direct impact on international students' satisfaction.
H2	Internationalization strategy has a direct impact on international students' career path.
H3	Internationalization strategy has a direct impact on international students' engagement.
H4	Internationalization strategy has a direct impact on international students' equity.
H5	Internationalization strategy has a direct impact on international students' well-being.
H6	International students' engagement has a direct impact on international students' satisfaction.
H7	International students' engagement has a direct impact on international students' career path.
H8	International students' equity has a direct impact on international students' satisfaction
H9	International students' equity has a direct impact on international students' career path.
H10	International students' well-being has a direct impact on international students' satisfaction.
H11	International students' well-being has a direct impact on international students' career path.
H12	International students' engagement has mediating effect on international students' satisfaction.
H13	International students' engagement has mediating effect on international students' career path.
H14	International students' equity has mediating effect on international students' satisfaction.
H15	International students' equity has mediating effect on international students' career path.
H16	International students' well-being has mediating effect on international students' satisfaction.
H17	International students' well-being has mediating effect on international students' career path.

2.12 Conclusion

This chapter first illustrated the concept of provincial public universities, internationalization of higher education, strategy and strategic management theory and strategic management in higher education. Furthermore, the review focused on the international students' engagement, equity and well-being, international students' satisfaction and career path.

The objective of this chapter is to contribute to the significance of theoretical concepts in the strategic management in higher education internationalization, international students' engagement, equity and well-being, and international students' satisfaction and career path; and define the relationship between them. Through the literature review, the research domain and indicator of the concepts of variables were summarized and the conceptual framework about the impact between them was illustrated. This study aims at exploring the integration of international students' satisfaction and career path into organizational strategic management model, with international students' engagement, equity and well-being as the mediating factors, providing recommendation for a more effective strategic management model of internationalization for the Provincial Public Universities in China.

CHAPTER 3

RESEARCH METHODOLOGY

The detail in this chapter would be separated into 5 parts as follows:

3.1 Introduction

3.2 Research Design

3.3 Population and Sample

3.4 Research Tools

3.5 Data Collection Strategy and Procedure

3.6 Data Analysis

3.7 Research Ethics

3.1 Introduction

Research study on "A strategic model of international students' impact on educational satisfaction and career paths: an empirical study of provincial public universities in Shandong, China", mainly applied quantitative research methods, in order to understand the relationship between HEIS' internationalization strategy and international students' satisfaction and career path, with inter-mediate impact from international students' engagement, equity and well-being.

Quantitative research methods can provide rigorous, reliable and comparable results, and provide a robust, data-driven foundation for the research. This study mainly adopts questionnaire survey as the collection method of research data, including but not limited to HEIs Internationalization Strategies; International Students' Engagement, Equity and well-being; and International Students' Satisfaction and career path factors.

The main research object of this paper is the Provincial Public Universities in Shandong.

The research will provide valuable reference suggestions for HEIs' Internationalization Strategies, and effective strategic model for university internationalization development. By bridging the gap between theoretical strategic models of organizations and their practical application, especially in the context of international students' education in the Provincial Public Universities of Shandong, China, this study aims at providing contribution to the field of HEIs' organizational management of Provincial Public Universities in China, and recommend the strategic model for HEIs' internationalization development.

This chapter discusses the method used, the population and sampling methods, data collection, operationalization of variables, the questionnaire pretest, research hypotheses, the analytical model, and the statistical method of analysis.

3.2 Research Design

This research will use a quantitative research as a major methodology to support the result from the major research. Steps to do as the research will be as follows:

3.2.1 Documentary Research

This research is conducted by the method of researching academic documents, articles, journals, thesis, dissertations, including research reports and information from the internet. The main research object of this paper is the Provincial Public Universities in Shandong, China, so there are still a lot of basic information data derived from the website data collection of the Chinese government, Chinese education departments and universities. Through extensive collection and review of Documentary, this study has a clear and comprehensive understanding of HEIs Internationalization Strategies;

International Students' Engagement, equity and well-being; and International Students' Satisfaction and career path variables, related background, influencing factors, the relationship between each other and other related theories, which has laid a theoretical foundation for the research design and implementation of this study.

3.2.1 Empirical Research

In the empirical study of this dissertation, 500 international students from Provincial Public Universities in Shandong, China were selected as empirical data samples. This study will get quantitative data from these questionnaires to obtain the key variables of (1) HEIs' Internationalization Strategies, including International concept and management, International teaching staff and curriculum, International research and cooperation, Support service; (2) International Students' Engagement, including students' vigor, dedication, absorption; (3) International Students' Equity, encompassing the allocation of resources, recognition across social and cultural differences and participation on equal terms in community; (4) International Students' well-being, including the physical as well as the emotional or social well-being; (5) International students' satisfaction, including educational quality (including quality of teaching and research) ; campus international service; scholarship; and career guidance ; (6) International Students' Career Path, including intention to choose one's profession as career, entrepreneurial work intention, expatriate work intention.

According to the results of the data analysis, it can explain the degree, direction and statistical significance of the influence of HEIs' Internationalization Strategies on International Students' Satisfaction and Career path, with intermediate impact from international students' engagement, equity and well-being. By obtaining quantitative and scientific conclusion, this study provides practical guidance and suggestions for strategic model for organizational management, policy making, sustainable development and students' engagement etc.

3.3 Population and Sample

3.3.1 Population

Research population and institutions: The survey was conducted in Shandong Province of China. According to China's Ministry of Education releases data (2023), as of 29 December, 2023, there are total 1275 Higher Education Institutions (bachelor degree and above education) in China (Special administrative Regions, Hong Kong and Macao not included), among which there are 733 Provincial Public Universities. Shandong Province owns 42 Provincial Public Universities, which is the largest number in the 31 provinces and municipalities, as shown in Table 2.1.

Among the 31 municipals and provinces, in Shandong province there are 42 provincial public universities, which is the largest number of provincial public universities among the 31 provinces in the country. Shandong Province is the 3rd economically developed province in China with GDP 9,206,900 million Yuan in 2023 (as shown in Table 2.2), and the 2nd most populous province in China with 101,630,000 populations (as shown in Table 2.4). However, its number of international students are the lowest among the top 10 economically developed provinces (as shown in Table 2.3). Other economically developed provinces far outperformed Shandong in terms of international students' population.

In 2023, there is a total of 19,078 international students in Shandong province as presented in table 2.3. Among the 42 provincial public universities in Shandong province, the education of international students exhibits imbalanced development. The top 10 provincial public universities in terms of comprehensive strength in Shandong province have achieved a relatively high level of international education management, academic profession development, teacher training, and campus services. The majority of international students are concentrated in these top-ranking universities while others

have yet to reach a significant scale of international education; their comprehensive management and service systems is still not optimal. Over the past five years, five of the top 10 provincial public universities have consistently maintained an international student population exceeding 500-1000 (only in 2023 spring term, the student population at SDN university decreased to 350 as a result of the pandemic). Meanwhile, other schools' international student population scales are limited to approximately 100-300 international students. The international education programs at the 5 provincial public universities in Shandong province represent a relatively advanced and mature stage of development compared to other universities in Shandong province. The 5 provincial public universities represent a high level of maturity and sophistication in the field of international education within the province. The international student education of these five schools represents the mature international development level of Shandong Province and serves as a benchmark for other provincial universities to learn from and investigate international development. This paper will adopt these 5 provincial public universities as the research objects. The total number of international students in these five universities is 5270 (retrieved in March, 2024, by contacting schools' international office), as shown in Table 3.1:

Table 3.1 List of Top Five Universities with the Largest International Students Number Among the Provincial Public Universities in Shandong

No.	University	International Students' Population
1	SDFM University	2000
2	QD University	1700
3	SDT University	682
4	SDST University	538
5	SDN University	350 (lower than 500 for the pandemic)
Total		5270

3.3.2 Sample for Quantitative Research

This study is mainly using the structural equation modeling statistical tools to test the hypotheses and the validity of the proposed model. My selection of samples is from the top 5 universities ranked by international students' numbers, with a total of international students' population of 5270. The ever-increasing demand for research has created a need for an efficient method of determining the sample size needed to be representative of a given population. The sample choosing table is from DARYLE W. MORGAN (Texas A. & M. University). In the article "Small Sample Techniques," the research division of the National Education Association published the formula for determining sample size (Krejcie & Morgan, 1970).

$$s = \frac{X^2 \, N \, P \, (1-P)}{d^2 (N-1) + X^2 P (1-P)}.$$

Where, s = required sample size; X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841); N = the population size; P = the population proportion (assumed to be .50 since this would provide the maximum sample size); d = the degree of accuracy expressed as a proportion (.05). The formula was used to determine the confidence level and sampling error. In the sample calculation of this research, the N is 5270, through the calculation, the sample size should be 358 cases.

$$\frac{3.841*5270*0.5*(1-0.5)}{0.05*0.05*（5270-1）+3.841*0.5*(1-0.5)}$$

$$=5060.5175$$

13.1725+0.96025

=5060.5175

14.13275

=358.070262 ≈358

It should be noted that as the population increases the sample size increases at a diminishing rate and remains relatively constant at slightly more than 358 cases.

Finally, when the study determined the appropriate sample size, it was also necessary to consider the incidence and response rate of the survey method, not every questionnaire could be collected. The researcher will visit or call the universities' international students' administration office to clarify the purpose of study and ask for the permission to collect data among the international students, providing project proposal and questionnaire documents as reference. On the premise of being completely voluntary, volunteers in data collection will be recruited by posters without undue influence. To ensure that more than 358 valid questionnaires were collected, 500 questionnaires were expected to be distributed.

3.4 Research Tools

Research Instrument for this research together with Data collection tools used for data analysis and other convenience tools are outlined as follows.

3.4.1 Quantitative Questionnaire

Tools used in quantitative studies will be questionnaire. Questionnaires are a tool for collecting data. Collection of questionnaire data in order to receive information which contains facts of the informant. The researchers paid special attention to the

surveyed population, which were all international students studying in the provincial public universities being chosen as the sample collection identities. The international students should have been studying in the universities for more than 1 year. The international students include undergraduate graduate, and graduate students. The university's management, teaching method, teaching facility, community culture, campus environment, support service is all part of international students' life. International students are engaged in the teaching and learning activity, association with university's teachers and staff, campus culture and activity, and local community social life. School management strategy, rules and regulations, and campus culture are all experienced by international students. They engaged in the organizational activity and they have a sufficient understanding of the values and management policy of the organization and can measure their consistency.

The instrument is structured around a 5-point Likert scale. It features a 5-level assessment scale. From most agreeable (5 points) to most disagree (1 point), offering a spectrum of response options ranging from "Strongly Agree" to "Strongly Disagree", with only the exception of international students' engagement questions offering a spectrum of response option ranging from "Always/Every Day to Rarely".

5	score	means	Strongly agree
4	score	means	Agree
3	score	means	Undecided
2	score	means	Disagree
1	score	means	Strongly Disagree

Strongly Agree (5): This rating is indicative of a high degree of concurrence with the statement.

Agree (4): A score in this category suggests that the respondent generally concurs with the statement.

Neutral (3): This midpoint score indicates ambivalence or uncertainty about the statement, meaning respondents neither agree nor disagree with the statement in the question.

Disagreeing (2): This category of responses reflects a disagreeing position, indicating that respondents didn't agree with the statement in the question.

Strongly disagree (1): This rating indicates a strong disagreement with the statement in the question.

While for the international students' engagement, the spectrum of response option ranging from "Always/Every Day to Rarely" 5-point Likert scale means:

5 score means Always/Every Day

4 score means Often

3 score means Sometimes

2 score means Occasionally

1 score means Rarely

Always/Every Day (5): It indicates that the respondents' engagement is always in good state.

Often (4): It indicates that the respondents' engagement is often in good state.

Sometimes (3): It indicates that the respondents' engagement is sometimes in good state.

Occasionally (2): It indicates that the respondents' engagement is occasionally in good state.

Rarely (1): It indicates that the respondents' engagement is rarely in good state.

The interpretation of the mean score for the importance of factors affecting the key indicators:

1.00 – 1.80   There is the lowest level of engagement.

1.81 – 2.60   There is a low level of engagement.

2.61 – 3.40   There is a medium level of engagement.

3.41 – 4.20   There is a high level of engagement.

4.21 – 5.00   There is the highest level of engagement.

The questionnaire is divided into the following 3 parts:

Part 1 General Personal Characteristics Questionnaire, comprising five items, is a checklist format that includes gender, nationality, major, grade, and type of study program. This questionnaire is formulated in reference to previous surveys' model and developed by the researcher in accordance with the research target of this dissertation.

Part 2 Questions of the indicators: (1) HEIS internationalization strategy, (2) International Students' Engagement, (3) Equity, (4) Well-being, (5) Satisfaction and (6) Career Path :

Table 3.2 The Measurement of Research Variable

Variable	*Description*	*Question No.*
Independent variable		
1.HEI Internationalization Strategy	"Internationalization Strategy" mainly includes two parts: "Project Strategy" and "Organization Strategy". Among them, "project strategy" includes elements such as academic projects, research cooperation, external contacts and extracurricular activities; "organization strategy" includes elements such as planning management, organizational structure, resource allocation, communication mechanism, student services and human resources (Knight, 2007).	**20 questions in all**
1) The university's international concept and management	Concept is the strong support for internationalization policy from senior leaders, faculty, students, etc.; management is planning management, organizational structure, resource allocation, communication mechanism, student services and human resources	1-5 questions
2) The university's international teaching staff and curriculum	Internationalized teaching staff means teachers' experience of overseas study, training, and work, number of foreign teachers, attendance of international academic conference and articles publishing in international journals. Internationalized curriculum focus on improving the internationalization level of majors and courses, and support the construction of foreign language-taught majors and courses.	6-10 questions
3) The university's international research and cooperation	International research and cooperation means school's scientific research cooperation projects, Sino-foreign joint research institutions, articles' publishing in	11-15 questions

Variable	Description	Question No.
	international journal, and holding international academic conferences.	
4) The university's support service	Support service means international hardware conditions (department, canteen, classroom, lab, library and foreign language books and resources, etc.); and international software conditions (English school website and academic online resources, English degree programs, social and cultural activities, etc.).	16-20 questions
Intermediate variable		
2.International Student's engagement	Engagement is simply the psychological and physical presence of the individual while performing the role. Student's engagement is the energy and effort that students employ within their learning community. This refers to the emotional involvement of a person in the work assigned to him	**15 questions in all**
1) Vigor	Vigor is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties.	1-5 questions
2) Dedication	Dedication is defined as a strong psychological involvement or identification with one's work.	6-10 questions
3) Absorption	The absorption factor refers to being happy, and fully concentrated in one's work so that time passes quickly, with difficulty detaching from work.	11-15 questions
Key components of social sustainability	Well-being and equity are considered as crucial components of social sustainability, a quality of society that encourages durable circumstances.	**10 questions in all**
3.International Student's Equity	Nancy Fraser's three criteria of justice, namely redistribution, recognition and representation are also useful in evaluating equitable educational opportunities. The theory focused on an institutional level, which includes the allocation of resources, recognition across social and cultural	1-5 questions

Variable	Description	Question No.
	differences and participation on equal terms in community.	
1) Allocation of resources	Distributive justice in the sense that less privileged students can achieve intellectual qualities and grades to eventually gain greater access to the material benefits in society.	1-2 questions
2) Recognition across social and cultural differences	The dimension of recognition is embedded in the creation of a learning environment which supports relevant and meaningful learning for all students, including those who experience themselves or are perceived by others as marginalized.	3-4 questions
3) Participation on equal terms in community	The dimension of participation was transferred by Lingard and Keddie (2013) to the area of education by emphasizing the need to create democratic and inclusive spaces in learning environments where respectful relations are encouraged.	5 question
4.International Student's well-being	Well-being is the comprehensive human needs that must be met include the physical as well as the emotional or social.	6-10 questions
1) Emotional or social well-being	The role of social and emotional constituents such as self-esteem, identity, equity, and social relations has also been shown to affect the happiness and health of individuals.	7,8,10questions
2) Physical well-being	Physical Well-being including material living, standards, health, physical security, stable ecosystems.	6,9 questions
Dependent variable		
5.International student's satisfaction	All aspects of management provided to international students can be regarded as a kind of service, and this kind of service can be measured through perception, that is, we can analyze the feasibility of management services in universities through the method of evaluating the satisfaction of international students.	**19 questions in all**

Variable	Description	Question No.
1) Education quality	It includes the quality of the course content, teachers teaching skill and competence (including English level and professional guidance ability), teachers' academic consultation, teacher's professional level and research level, teaching methods, course evaluation, and cultural experience activities, etc.	1-6 questions
2) Campus international service	It includes teaching equipment, network resources, libraries, laboratories, enthusiasm and work efficiency of school staff, canteen, accommodation, sports and entertainment facilities, solutions to life problems, admission guidance, and campus safety.	7-11 questions
3) Scholarship	It includes the application and evaluation system of scholarship and also whether it performs incentives and exemplary leading role of scholarships;	12-14 questions
4) Career guidance	It includes guidance and services for international students in employment and entrepreneurship.	15-19 questions
6.International Student's Career Path	Career path refers to the choices of jobs and occupational positions an individual may choose to hold.	**12 questions in all**
1) Intention to choose one's profession as career	Individuals will be more interested in a career choice, and this interest will lead to the establishment intended career goal if they expect positive outcomes.	1-3 questions
2) Entrepreneurial work intention	Higher educated individuals can choose different careers, varying from being an employee to running a family business to running their own independent business.	4-9 question
3) Expatriate work intention	Expatriate career intentions have been operationalized as the wanting and the motivation to have a career in another country.	10-12 question

(1) Internationalization Strategy

Canadian scholar Jane Knight's classification of internationalization strategies of universities—project strategies and organizational strategies are shown in the table 2.7 and 2.8 (Jane Knight, 2007), which provides a conceptual framework for scholars to study internationalization strategies. Because the determination of the specific research dimensions should also be combined with the specific purpose and specific conditions of the researcher, and sometimes even some adjustments or modifications are required to make the conceptual framework more operable. As to the practical provincial public universities' development of internationalization, through comparison of these two systems of index, "Index of Internationalization Level of Higher Education in Shandong Province"(stipulated by Shandong Education Administration in 2018) and "The Index System of Higher Education Quality Certification for Foreign Students Study in China"(stipulated by China Education Association for International Exchange in 2018), this dissertation summarized the internationalization strategy indicator to form its questionnaire, operating as a diagnostic tool to evaluate the internationalization strategy of the representative provincial public universities.

(2) International Student's engagement

The Utrecht Work Engagement Scale, or UWES is well-established as the most widely-used academic measure of engagement around the world, and is adopted in many studies of engagement. However, the UWES is built around a particular understanding of what engagement means, i.e. that it comprises three states: vigor, dedication and absorption (Schaufeli et al., 2003; Truss, 2014).

This research had the survey of the level of students' engagement in the HEIs' learning environment. In the sector of international students' engagement, with reference to the article of Schaufeli et al, 2002, it discussed and compared both the engagement scales used for students and for employee and find corresponding questions between them. The engagement items are supposed to reflect three underlying

dimensions: Vigor (VI) (6 items; e.g., 'When I get up in the morning, I feel like going to class/work'); Dedication (DE) (5 items; e.g., 'I'm enthusiastic about my study/job'), and Absorption (AB) (6 items; e.g., 'When I'm studying/working, I forget everything around me')(Schaufeli et al., 2002).

(3) International Student's Equity

Nancy Fraser's three criteria of justice, namely redistribution, recognition and representation are useful in evaluating equitable educational opportunities (Luke, Woods, & Weir, 2013; Gewirtz, 1998; Lingard, Hayes, Mills, & Christie, 2003). The theory focused on an institutional level, which includes the allocation of resources, recognition across social and cultural differences and participation on equal terms in community. Fraser's conceptualization of equity in terms of redistribution, recognition and participation explores the institutional dimensions and their implications at different levels of a school system, the capability approach examines the consequences of educational policy for individuals at each level from a bottom-up perspective. Considering that the focus of this study is on higher education institutions, Fraser's framework for analyzing equity in education is more specific and practical for the purpose of this research.

(4) International Student's Well-being

Social sustainability means meeting the needs for human well-being (Rogers et al., 2012). In the paper of measuring social sustainability (a community-centered approach), the research conclude with an outline of a revised sustainability assessment instrument that has application for research looking to bridge the gap between psychological orientations towards well-being, on the one hand, and sociological or organizational studies on sustainability (Zhu, Du, Shahzad, & Wattoo, 2022).

In the questionnaire, the survey shares common features with the psychometric perspectives of the Australian Unity Well-being Index (Cummins et al., 2003).World Values Survey (Inglehart et al., 2000) and World Database of Happiness (Veenhoven, 2009), and indeed certain constructs of the Well-being Index and World Values Survey are incorporated into the indicator set. Individual's responses concerning their own well-being are relevant, and it also measures attitudinal assessment of the communities they belong to, reflecting Sirgy' s observation (Sirgy et al., 2010) that community is both equal to and more than the sum of its parts.

(5) International Student's Satisfaction

With reference to two most famous international education ranking system and based on international student satisfaction indicators in Chinese researches, this dissertation formed its key questions. As the most recognized academic and educational quality ranking system, the key indicators of the QS World University Rankings, Academic Rankings of World Universities, Times Higher Education Rankings and US News University Rankings are summarized. From the more comprehensive campus service perspective, the key indicators of the International Student Barometer (ISB), which is the existing widely accepted and frequently consulted authoritative evaluation system for international students of colleges and universities world-wide, are also summarized. On the other hand, Chinese researchers' survey illustrated the main categories and indicators additionally. They provide the specific research domain in China and showed the eminent indicators that international students concerned with most in educational quality of Chinese higher education institutions.

In reference and summary of the above-mentioned literature, the main variables appertaining students' educational satisfaction investigation in this research are 1) educational quality (including quality of teaching and research); 2) campus international service; 3) scholarship; 4) career guidance.

(6) International Student's Career Path

In the research of Hatane et al. 2021, learning environment are defined as which covers all facilities and activities related to learning. The facilities can be non-physical, for instance, curriculum, learning methods, teaching methods, and can be physical, such as classroom, laboratory, and library (Lancaster & Milia, 2015). In addition, the learning environment also covers social relation of people involved in the learning such as teachers and friends (Hopland & Nyhus, 2016). Students career choice are greatly influenced by the learning environment which is a cohesion of physical learning facilities and social support the students received in the learning process. The survey of "Students' intention to choose profession as career" basically represents the impact of the school education on the students. This dissertation's questionnaire of "Students' intention to choose profession as career" will be in reference to the research model of Hatane et al (2021).

In Cieślik & Van Stel (2017) research, measurement of students' future career expectations related with entrepreneurship is based on the respondent's assessment of his or her occupational status in ten years' time based on his personal and educational entrepreneurship experience. The study is based on a comprehensive survey held in May 2013 among 1,490 business and law students of Kozminski University in Warsaw, Poland to predict future career expectations in ten years' time. This dissertation's questionnaire of "Career choice of entrepreneurial" will be in reference to the research model of Cieślik & Van Stel (2017).

In the research of Cieślik & Van Stel (2017), the third category of questionnaire deals with the respondent's prediction regarding the probability of working abroad in ten years' time. This study discussed how career adaptability and cultural intelligence facilitate individual's intention to build an expatriate career. It also offered practical insights to assist career counsellor in universities to prepare students' capacity in

successful overseas careers. The "Career choice of expatriate working intention" would follow the questionnaire model in this research.

Part 3 Recommendation

This open-ended question invites respondents to offer further recommendations that could improve the effectiveness of the questionnaire.

3.5 Data Collection Strategy and Procedure

3.5.1 Questionnaire

In the pursuit of quantitative data, the researcher developed specific tools to facilitate data collection. The construction of the questionnaire was meticulously refined to align with the research goals and conform to the operational definitions and theoretical concepts of the variables under study. This process was conducted with the guidance and approval of the dissertation advisor. Additionally, the questionnaire was presented to experts for an assessment of its content validity and the clarity of its language, ensuring that the research instruments were both comprehensive and pertinent to the study's objectives.

1.Validity testing

1) Content Validity; Content validity refers to the appropriateness of the test item to sample the relevant content or range of behaviors. Because this method of measuring validity must aim at the objectives and contents of the course, and analyze the performance of the topic in a systematic and logical way, it is also called course validity or logical validity. The researcher examined the items or indicators at the practical level, which have the right and complete contents as indicated in operational definitions and conceptual definitions of the sub-concepts and concepts. And the

researcher adjusted all the items after the pretest by deleting some words in the things with no content validity.

2) Construct Validity: Structural validity refers to the degree to which a test actually measures the theoretical structure and characteristics to be measured, or it refers to the degree to which the test score can explain a certain structure or characteristic of a psychological theory; it refers to the consistency between the experiment and the theory reliability, that is, whether the experiment actually measures the hypothesized (constructed) theory.

3) Logical validity

The purpose congruence (IOC index) is used to evaluate the quality of items. Practitioners are challenged to determine the content validity grade of each item.

Score:1, If the expert is certain that this item measures the attribute.

Score: -1, If the expert believes that the item does not measure the attribute.

Score: 0. If the expert is doubtful whether or not the item measures the desired attribute of the measure.

A qualified item's IOC value should equal or exceed 0.70. Five experts were invited according to the actual situation (namely, Professor. Dr. Yingjie Song (finance), Professor. Dr. Yongqing Yang (management), Professor Dr. Yu Ma (finance), Professor Dr. Yanliang Chen (management), Professor Dr. Na Liu (management) evaluated the logical Validity of each item and the researcher adjusted all the items by deleting inappropriate words and adding suitable words in the things as suggested by these experts with Item Objective Congruence Index (IOC) or Content Validity Ratio (CVR).

The question items were critically scored, and finally, after the experts' judgment, the IOC values of the question items calculated as IOC Test report in Appendix.

According to experts' suggestion, the Q81 and Q82 should be questioned and surveyed more fully. The Q81 was extended to 6 questions and Q82 was extended to 4 questions. And 1 question was added to the Career guidance section. Based on the original questionnaire, 9 questions were deleted and 11 additional questions were added. After the IOC test, the revised questionnaire consisted of 84 questions. Based on this revised questionnaire, reliability testing was conducted.

2.Reliability testing

Reliability analysis was done for all scales using SPSS, using Cronbach's alpha and Cronbach's alpha of the item being deleted as the measures. The overall reliability status of the questionnaire was described. The 40 pretesting samples of the questionnaires was from school of international education of 3 provincial public universities in Yantai city of Shandong, China and these schools will not be chosen as the sample source in the context of formal questionnaire testing data collection. In conclusion, the reliability and validity of the questionnaire can be known after the reliability test, and the questionnaire can be conducted only when the measurement instrument meets the measurement criteria. Cronbach's alpha needs to be above 0.8 and Corrected Item-Total Correlation (CITC) needs to be 0.5 or higher to meet the requirements of internal consistency and reliability. When there are items or dimensions that do not meet the requirements, the items or dimensions need to be adjusted or deleted.

The reliability assessment aims to evaluate the consistency of the questionnaires. The closer the Cronbach's alpha toward 1, the higher the reliability. The judgment criteria are: Cronbach's alpha is greater than or equal to 0.7, the reliability is

considered high; Cronbach's alpha is 0.35-0.7, the reliability is considered normal; less than 0.35, the reliability is considered low. From the calculation results, the Cronbach's alpha coefficients as of a whole and at each level are greater than 0.7, indicating high reliability, in reference to Bai R.R. (2010).

The reliability analysis of the university's international concept and management used Cronbach's alpha, Corrected Item-Total Correlation (CITC), Cronbach's alpha (of items being deleted) as measures. The overall reliability status of the questionnaire was described. In conclusion, the reliability and validity of the questionnaire can be known after the reliability test, and the questionnaire can only be administered if the instrument meets the measurement criteria. Cronbach's alpha needs to be above 0.8, Corrected Item-Total Correlation (CITC) needs to be above 0.5, and the Cronbach's Alpha of Item being deleted must be less than the Cronbach's alpha in order to meet the requirements of internal consistency and reliability. When there are items or dimensions that do not meet the requirements, they need to be adjusted or deleted. Table 2 shows whether the question items meet the requirements.

Table 3.3 The Cronbach's Alpha of Variables

Variables	Dimension	Cronbach's Alpha
HEI's Internationalization Strategy	International Concept and Management	0.827
	International Teaching Staff and Curriculum	0.905
	International research and cooperation	0.906

	Support service	0.874
International Students' Engagement	Vigor	0.866
	Dedication	0.877
	Absorption	0.873
Social sustainability	Equity	0.895
	Well-being	0.950
International Students' Satisfaction	Educational Quality	0.926
	Campus International Service	0.911
	Scholarship	0.923
	Career Guidance	0.958
Career path	Profession as career intention	0.897
	Entrepreneurial work intention	0.908
	Expatriate work intention	0.924

(Source: Researcher, 2024)

It was found that the reliability of Q16 Q23 Q34 Q44 Q45 Q58 Q71 Q83 did not satisfy the requirements. Therefore, the pre-tested questionnaire needs to be adjusted by deleting 8 questions of Q16 Q23 Q34 Q44 Q45 Q58 Q71 Q83 in the questionnaire before officially distributing the questionnaire. As previous IOC test, the

revised questionnaire consisted of 84 questions. Based on the reliability test, additional 8 questions will be deleted. Thus, on this revised questionnaire, total 76 questions will form the questionnaire for the survey of this research.

In the pretest, 40 respondents were asked to provide suggestions for the questionnaire. Based on the feedback from the respondents, the initial questionnaire was moderately adjusted, and sentences that were prone to difficulty in understanding and bias were adjusted.

Following these adjustments, the updated questionnaire was prepared for distribution in the actual study. In addition to content changes, the layout of the questionnaire was also restructured. This comprehensive process of feedback incorporation and redesign culminated in the finalization of the questionnaire.

3.5.2 Data Collection

In collecting data, the researcher will carry out in collecting data as follows:

The number of 500 questionnaires determined by the researchers was forwarded only to a purposeful sample of international students studying in the 5 representative universities, which have the most international students in the 42 provincial public universities in Shandong, China. The researcher will visit or call the 5 universities' international students' administration office to clarify the purpose of study and ask for the permission to collect data among the international students, providing project summary and questionnaire documents as reference. On the premise of being completely voluntary, volunteers in data collection will be recruited by posters without undue influence. The researcher will explain the purpose of the study, content, data collection methods to the volunteers clearly and get the consent of the volunteers. Before requesting data from the informants, emails will be sent to clarify the purpose of the data collection and obtain consent from the informants. After that, the researcher

can distribute the questionnaire by email, online questionnaire platform or sending hard-copy of questionnaire to informants.

The study uses probability sampling (simple random sampling) and non-probability sampling (purposive sampling) as sampling strategy. The simple random sampling use for scope down the provincial public universities by choosing only 5 campuses. Then, the size of the sampling for interpreting data must be 500 with purposive sampling.

The statistic used in data analysis is frequency. Mean Percentage (Mean) and Standard Deviation (SD) to examine the assumptions, relationships, structure, and causal relationships of the model through Structural Equation Modeling (SEM), and estimate the path coefficient by using the Path Analysis Maximum Likelihood (ML). By using these principles, to study the direct and indirect effects of a variable, and how it affects the dependent variable. It is an analysis of the causal pathways that affect the effectiveness of an organization.

3.5.3 Data Methods

In this study, SPSS and AMOS software were used for reliability analysis, validity analysis, confirmatory factor analysis, correlation analysis, structural equation model, multiple regression analysis and path analysis. After collecting all the data from the questionnaire. The researcher has prepared the data for analysis as follows.:

1) Check the completeness of the answers in each questionnaire.

2) For each question, a specific coding scheme was established, and corresponding scores were allocated to the answers, facilitating a structured approach to data interpretation.

Level	Score
Strongly agree	5
Agree	4
Undecided	3
Disagree	2
Strongly Disagree	1

3) Proceed with coding and scoring each answer until all questionnaires are complete.

4) The fully coded and scored questionnaires were digitally transferred and securely stored on a computer system, setting the stage for the next phase of detailed data analysis.

3.6 Data Analysis

The Techniques used for data analysis for this research, it is divided into 3 parts. As follows：

Data analysis involves processing the collected data. In order to bring about answers to hypotheses and answer research questions. The process at this stage involves selecting appropriate statistics and analyzing the results from the received data. With statistical programs SPSS Version 26.0 and statistical programs Amos Version 23.0, the researcher has laid out the data analysis guidelines as follows:

1) Analysis of general characteristics of respondents using frequency and percentage statistics.

2) Analysis of opinions on various factors using statistics, the arithmetic mean (Mean) and standard deviation (Standard Deviation: SD)

3) To examine the model's assumptions, relationships, structure, and causality, this research applied structural equation modeling (Structural Equation Modeling: SEM) by analyzing paths (Path analysis) with techniques using the principle of Maximum Likelihood (ML) to estimate path coefficients. To study the direct and indirect influence of a variable, how does it affects the dependent variable. It is an analysis of the causal relationship path that influences different variables with statistical programs Amos Version.

Guidelines for testing hypotheses

Data were analyzed using Structural Equation Modeling (Structural Equation Modeling: SEM) by path analysis (Path analysis) using the technique of using the principle of Maximum Likelihood (ML) to estimate path coefficients. To study the direct and indirect influence of variables to see how much they affect the dependent variable. with the program Amos (Kanlaya Wanitbancha, 2013, p. 183) which has a path pattern of variables. As shown in the following picture figure 3.1:
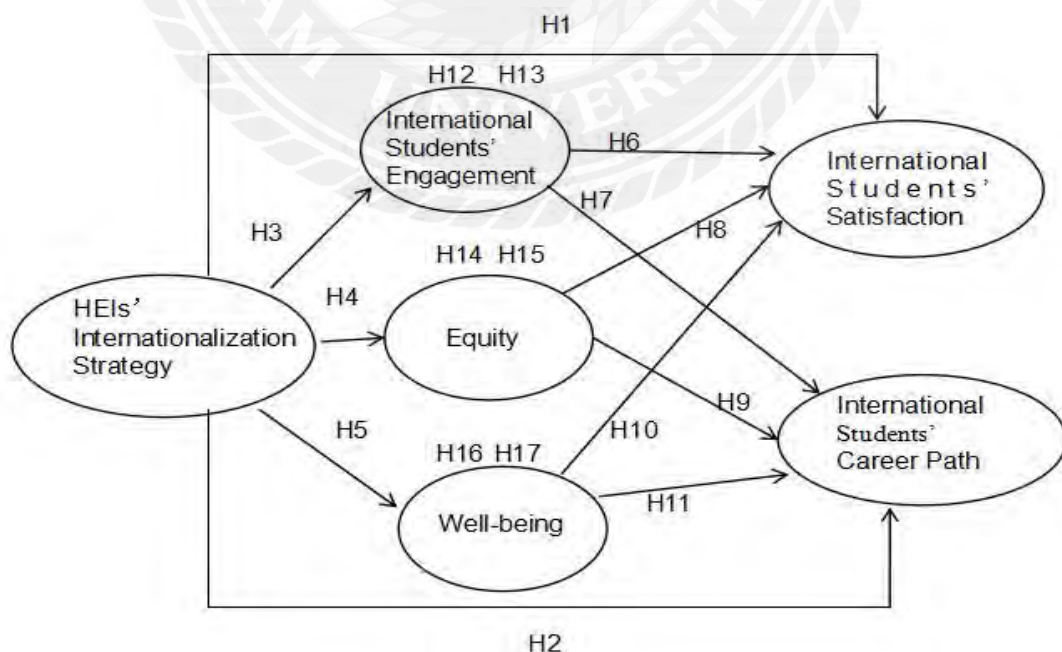
Figure 3.1 Model of Relationship Path Analysis of the Studied Variables.

This dissertation takes Provincial Public Universities as the research object, takes the internationalization strategy as the independent variable, its direct effect on dependent variables of international students' satisfaction and career path would be analyzed. International student's engagement, equity and well-being are intermediate variables, their mediating effect on international students' satisfaction and career path will be analyzed. It is expected to put forward practical strategic model for the internationalization development of the provincial public universities in China.

Structural Equation Modeling (SEM) is a complex statistical analysis method designed to explore and verify relationships between variables while taking into account observational errors. SEM is often used to test complex theoretical models that contain multiple latent and observed variables. This model is able to capture direct and indirect relationships between variables, while taking into account measurement errors and covariance between observed variables.

Structural Equation Modeling, also known as latent variable causality model, mainly represents the relationship between latent variables. It combines measurement model and structural model to study the correlation between latent variables and measurable variables, and also reflects the relationship between latent variables.

$$\eta = \mathrm{B}\eta + \Gamma\xi + \zeta$$

1) Internal latent variables (Exogenous; $\eta = et$) The variable serves as the dependent term within a solitary equation.

2) External latent variables (Endogenous; ξ=ksi) Act as the independent variable in each equation.

3) B: Direct influence of variables η on variables η other

4) Γ: Direct influence of variables ξ on variables η

5) ζ = zeta: structural tolerances

In general, the structural equation model has the following advantages: Firstly, it can deal with multiple dependent variables simultaneously through the analysis of structural equation, rather than the calculation of dependent variables one by one through regression analysis; Second, the structural equation model allows the measurement error of the independent variable, while the traditional method has to measure the independent variable completely. Third, the structural equation model allows the error term of the observed variables to be correlated, and the structural equation model can estimate the factor structure and factor relationship at the same time and can estimate the fitting degree of the whole model.

In this paper, statistical programs Amos Version 23.0 will be used to construct structural equation models to carry out confirmatory factor analysis, verify research hypotheses through the steps of model fitting, revision and testing, and realize structural testing of the evaluation index system and the objective empowerment of each dimension level indicator and each indicator level indicator. If the fit index of the initially constructed model does not meet the standard, the built model will be corrected until the value of the fit index reaches the standard. When the value of fitting index reaches a certain standard, it is considered that a good model fitting effect is obtained, indicating that the constructed hypothetical model is in line with the actual model to the greatest extent. A key criterion here is that the P-value should not be significant (greater than 0.05), which indicates a satisfactory alignment between the two models. Consistency evaluation includes a variety of statistical indicators, including Chi-square probability level (Cmin-P), relative Chi-square (CMIN/df), goodness of fit index (GFI), and approximate root-mean-square error (RMSEA). These indicators are mainly used to evaluate the overall fitting effect of the model, that is, whether the model can explain

the data well. For example, in general, Goodness of Fit index GFI is above 0.9 as the standard for pattern adaptation, and the closer the value of (GFI) is to 1, the stronger the explanatory ability of this model and the more appropriate the configuration; on the contrary, if the GFI pointer is closer to 0, the lower the explanatory ability of this model and the more inappropriate the configuration. Root Mean Square Error of Approximation (RMSEA) calculates the difference between the observed value and the estimated value, a value less than 0.08 is a very good fit, the smaller the better, etc.

Reliability is the degree to which a research tool can provide consistent and stable measurement results under the same conditions. If the results of reliability analysis fail to reach the ideal standard, it is not reliable to use the index system to build the structural equation model. In order to solve the problem of low reliability of the overall index and the reliability of each potential variable, it is necessary to evaluate the structural equation model (SEM), which means to form a new index system by removing some measurement indicators, modifying and adjusting the parameters of the model. There is a certain credibility between the index system and the potential variables, and then the new index system is used to build the structural equation model.

In order to improve the stability and accurate and reliable statistical results of the model, we need to do the following:

1) Simplify the model as much as possible, use the statistical software AMOS (Analysis of Moment Structures) to reduce the number of variables, and consider using the modification index (MI) of the model (Kris Raeng Sung Noen 2011) to improve the fit. Check the error value associated with the dependent variable.

2) The strategy also includes merging some potential variables to form new potential influencing factors, thus refining the structure of the model. The use of multiple observation dimensions can capture multiple aspects of potential variables,

which can improve the stability and reliability of measurements and reduce the impact of measurement errors.

3) Another key step is to consider establishing a bidirectional relationship between the dependent variables (represented by a double-headed arrow). This condition is often referred to as a "regression relationship" or "interaction effect." This means that a change in one dependent variable can affect another, and vice versa. In the construction of structural equation model using SEM software AMOS, each dependent variable should have corresponding measurement model and structural model. If necessary, some additional analysis, such as model comparison, revised indicators, etc. will be required to more fully assess the quality of the model.

3.7 Research Ethics

When conducting research on how HEIs' Internationalization strategies, including International concept and management, International teaching staff and curriculum, International research and cooperation, Support service, will influence the HEIs' social sustainability in equity, health & safety, culture diversity and career plan; with the international students' engagement and their educational satisfaction as the intermediate factor, the degree of engagement and satisfaction will be evaluated and its impact on the HEIs' social sustainability will be analyzed, it is necessary to seriously consider ethical issues to ensure the legitimacy, impartiality and respect of the research. First, informed consent is required to ensure that participants give informed consent to participate in the study before conducting the study, and clearly state the purpose, process, risks and benefits of the study. Second, it is necessary to protect the privacy and confidentiality of the participants, ensure that the personal data collected in the study is properly handled, and adopt anonymization to prevent the disclosure of personal identity. Third, it is necessary to be fair and impartial, avoid discriminatory questions to cause trouble to others, and pay particular attention to excluding any

factors that may lead to bias in statistical analysis. Fourth, before conducting research, it needs to be reviewed and approved by an ethics review committee to ensure that the research complies with ethical standards and regulations and follows best practices in research ethics. In order to ensure that the research is ethically reliable and legitimate, following these principles helps to protect the rights and interests of participants, while enhancing the scientific and social responsibility of the research.

CHAPTER 4

RESEARCH RESULT

This chapter mainly analyzes the collected data, including five parts:

4.1 Description of demographic characteristics

4.2 Normal distribution test

4.3 Reliability and validity analysis and confirmatory factor analysis

4.4 Structural equation modeling and hypothesis verification

4.5 Discussion of data analysis and recommendation on strategic model

4.6 Conclusion

According to the relevant research and analysis in the first three chapters, the relationship between each variable is clarified. This chapter collects data and analyzes the data to verify the hypothesis. SPSS and AMOS were used in the process of data analysis. The statistical analysis in this chapter mainly includes the statistics and description of control variables and the analysis of the normal distribution of data. At the same time, the reliability and validity of the survey data were analyzed. Cronbach's Alpha and Corrected Item-Total Correlation (CICT) were used for reliability analysis. Confirmatory Factors Analysis was used for validation, including path coefficient, composite reliability (CR) and average variance extracted (AVE) values. Ensure the reliability and differentiation of the survey data according to the analysis results. After the data passed the reliability test and validity test, correlation analysis and structural equation model construction were carried out. Structural equation model construction needs to verify the fit degree of the model, and the fit degree of the model needs to refer to GFI, CFI, AGFI, RMSEA and other indicators of data analysis. Through data analysis, model fit (model fit) must meet the requirements. The model is modified

according to the index. Finally, the path analysis of each variable is carried out to verify the hypothesis and draw a conclusion.

A total of 500 questionnaires were distributed in this study, and 358 valid questionnaires were collected. In the process of sorting out the questionnaire data, the questionnaires with missing values were deleted. At the same time, the questionnaire with a survey time of 30 seconds was deleted. Finally, 358 effective questionnaires were collected, and the effective rate was 72%. It is to ensure the rationality of the data by organizing the data. When the sample size is greater than 300, because the T distribution is close to a normal distribution and the sample standard deviation is a good estimate of the population standard deviation, no Z test is needed. When the sample size is greater than 300, because the T distribution is close to a normal distribution and the sample standard deviation is a good estimate of the population standard deviation, no Z test is needed.

4.1 Description of Demographic Characteristics

Demographic characterization refers to the detailed description and analysis of demographic characteristics in a sample in order to better understand the data, select appropriate models, and make predictions and analyses. The description of sample characteristics in this study mainly includes sample gender, country, major, school year, student type, etc. 358 valid questionnaires were collected in this study.

Statistics show that 173 men accounted for 48.3 percent, 185 women accounted for 51.7 percent, the survey respondents slightly more women than men. In the nationality survey, students from South Korea, Thailand, Pakistan, India, Russia, Indonesia, Laos, Vietnam, Malaysia, Japan, Kazakhstan, Bangladesh, Mongolia and other countries were mainly investigated, and the distribution was relatively balanced. Among them, the maximum number of Russian and Mongolian students is 30 and 31,

accounting for 8.5% and 8.6%. In the survey of majors, there are 59 students majoring in Chinese, accounting for 16.5%; 54 students majoring in computer, accounting for 15.1%; 45 students majoring in management, accounting for 12.6%; 48 students majoring in economics, accounting for 13.4%; 47 students majoring in medicine, accounting for 13.1%; 61 students majoring in engineering, accounting for 17%; 44 students majoring in other majors, accounting for 12.3%. In the distribution of student enrollment years, 87 students are enrolled in 2020, accounting for 24.3%, 94 students are enrolled in 2021, accounting for 26.25%, 94 students are enrolled in 2022, accounting for 26.25%, and 83 students are enrolled in 2023, accounting for 23.2%. In the survey of student types, there are 263 undergraduates, accounting for 73.5%, 95 postgraduates, accounting for 26.5%, as shown in Table 4.1.

Table 4.1 Sample Feature Description

Variable	Options	Frequency	Percent%
Gender	Male	173	48.3
	Female	185	51.7
Nationality	Korea	12	3.4
	Thailand	23	6.4
	Pakistan	24	6.8
	India	17	4.7
	Russia	30	8.5
	Indonesia	28	7.8
	Lao	20	5.5
	Vietnam	24	7.0
	Cambodian	22	6.2
	Malaysia	19	5.2
	Japan	27	7.5
	Kazakhstan	20	5.5
	Bangladesh	19	5.2
	Mongolia	31	8.6
	Africa	26	7.3
	others	16	4.4
Major	Chinese	59	16.5
	Computer	54	15.1

Variable	Options	Frequency	Percent%
	Management	45	12.6
	Economics	48	13.4
	Medical	47	13.1
	Engineering	61	17
	others	44	12.3
Year	2020	87	24.3
	2021	94	26.25
	2022	94	26.25
	2023	83	23.2
Study Type	undergraduate	263	73.5
	postgraduate	95	26.5
Total		358	100.0

4.2 Normal Distribution Test

4.2.1 Internationalization Strategy of HEI

In the Analysis of normal distribution of internationalization strategy data of provincial public universities, the internationalization strategy consists of four dimensions: the internationalization concept and management of the university, the international faculty and curriculum of the university, the international research and cooperation of the university, and the support services of the university. According to the data analysis results in Table 4.2, it can be seen that the overall mean score of each item ranges from 3.408 to 3.751, and the scale uses a Likert-5 measurement table. Therefore, it can be seen from the data analysis results that the understanding level of the survey subjects about the research is above the average, which is above the medium level. At the same time, the skewness and kurtosis analysis are carried out for each measurement item. According to the requirements of normal distribution, when the absolute value of the skewness coefficient of the data is less than 3 and the absolute value of the kurtosis coefficient is less than 8, the data is considered to be in line with normal distribution. Through the research results, we can know that the absolute values of skewness and kurtosis of each dimension are in line with the standard.

Table 4.2 Percentage Distribution of Internationalization Strategies of HEI

Dimension	Item	Mean Statistic	Std.Deviation Statistic	Skewness	Kurtosis
The university's international concept and management	IS1	3.429	1.199	-0.700	-0.399
	IS2	3.686	1.140	-0.602	-0.333
	IS3	3.603	1.190	-0.608	-0.515
	IS4	3.517	1.203	-0.499	-0.699
	IS5	3.634	1.152	-0.587	-0.458
The university's international teaching staff and curriculum	IS6	3.652	1.122	-0.517	-0.559
	IS7	3.590	1.213	-0.571	-0.595
	IS8	3.751	1.016	-0.324	-0.762
	IS9	3.748	1.158	-0.672	-0.566
	IS10	3.655	1.191	-0.449	-0.915
The university's international research and cooperation	IS11	3.616	1.180	-0.527	-0.610
	IS12	3.740	1.157	-0.535	-0.754
	IS13	3.577	1.267	-0.540	-0.857
	IS14	3.712	1.257	-0.683	-0.649
	IS15	3.408	1.115	-0.413	-0.241
The university's support service	IS16	3.504	1.073	-0.461	-0.143
	IS17	3.577	1.023	-0.414	-0.147
	IS18	3.673	1.112	-0.743	0.187
	IS19	3.582	1.013	-0.361	-0.393
	IS20	3.613	1.096	-0.773	0.293

4.2.2 International Students' Engagement

According to relevant literature review, the variables of international student's engagement include three dimensions: vigor, dedication and absorption, with a total of 15 questions. According to Table 4.3, the average value of each item ranges from 3.384 to 3.907, indicating that the research subjects have a higher than average understanding of the study. At the same time, the collected data were analyzed for kurtosis and skewness. The absolute value of skewness coefficient was less than 3, and the absolute value of kurtosis coefficient was less than 8, and the data were in line with normal

distribution.

Table 4.3 Percentage Distribution of International Students' Engagement

Dimension	Item	Mean Statistic	Std. Deviation Statistic	Skewness	Kurtosis
Vigor	ISE1	3.694	1.113	-0.705	-0.314
	ISE2	3.725	1.009	-0.467	0.016
	ISE3	3.564	1.049	-0.509	0.074
	ISE4	3.681	1.023	-0.532	0.073
	ISE5	3.592	1.074	-0.336	-0.354
Dedication	ISE6	3.717	1.173	-0.749	-0.093
	ISE7	3.553	1.253	-0.576	-0.570
	ISE8	3.907	1.119	-1.004	0.451
	ISE9	3.722	1.105	-0.677	-0.050
	ISE10	3.595	1.171	-0.675	-0.340
Absorption	ISE11	3.564	1.198	-0.572	-0.526
	ISE12	3.520	1.250	-0.551	-0.612
	ISE13	3.384	1.086	-0.454	-0.155
	ISE14	3.403	1.123	-0.442	-0.281
	ISE15	3.546	1.096	-0.337	-0.466

4.2.3 International Students' Equity and Well-being

International student's equity and well-being include a total of 10 questions. According to the analysis results in Table 4.4, the average value of each question is between 3.514 and 3.818, indicating that the survey sample's cognition of organizational equity and well-being is above the average level. The absolute value of kurtosis is less than 1 and the absolute value of skewness is less than 2, both of which meet the requirements that the absolute value of skewness coefficient is less than 3 and the absolute value of kurtosis coefficient is less than 8. Therefore, the data of international student's equity and well-being conforms to the normal distribution.

Table 4.4 Percentage Distribution of International Students' Equity and Well-being

Dimension	Item	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Kurtosis Statistic
Equity	OEW1	3.597	1.049	-0.647	0.227
	OEW2	3.584	1.131	-0.650	-0.054
	OEW3	3.720	1.122	-0.719	0.043
	OEW4	3.636	1.135	-0.807	0.117
	OEW5	3.818	1.284	-0.821	-0.408
Well-being	OEW6	3.758	1.121	-1.029	0.500
	OEW7	3.514	1.049	-0.631	0.159
	OEW8	3.626	1.033	-0.668	0.405
	OEW9	3.743	1.035	-0.729	0.104
	OEW10	3.727	1.118	-0.659	-0.177

4.2.4 International Students' Satisfaction

The satisfaction of international students includes four dimensions, namely educational quality, campus international service, scholarship and career guidance, with a total of 19 questions. According to Table 4.5, the average value of each question is between 3.120 and 3.842, indicating that the survey sample's cognition of overseas student satisfaction is above the average level. The absolute value of the peak value of the measurement items is less than 0.7, and the absolute value of the partial value is less than 2, which all meet the requirements that the absolute value of the skewness coefficient is less than 3, and the absolute value of the kurtosis coefficient is less than 8. Therefore, the collected data of international student satisfaction conforms to the normal distribution.

Table 4.5 Percentage Distribution of International Students' Satisfaction

Dimension	Item	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Kurtosis Statistic
Educational quality	ISS1	3.623	1.071	-0.547	-0.221
	ISS2	3.818	1.209	-0.696	-0.556
	ISS3	3.520	1.125	-0.606	-0.264
	ISS4	3.455	1.154	-0.532	-0.350
	ISS5	3.501	1.128	-0.376	-0.829
	ISS6	3.561	0.977	-0.155	-0.411
Campus international service	ISS7	3.603	1.044	-0.199	-1.079
	ISS8	3.842	1.330	-0.722	-0.766
	ISS9	3.733	0.912	-0.046	-0.861
	ISS10	3.966	1.171	-0.766	-0.503
	ISS11	3.618	1.052	-0.497	-0.500
Scholarship	ISS12	3.120	1.248	-0.349	-0.967
	ISS13	3.527	1.225	-0.576	-0.520
	ISS14	3.520	1.231	-0.394	-0.938
Career guidance	ISS15	3.436	1.204	-0.430	-0.712
	ISS16	3.509	1.219	-0.486	-0.695
	ISS17	3.647	1.015	-0.404	-0.343
	ISS18	3.636	1.211	-0.680	-0.389
	ISS19	3.631	1.080	-0.398	-0.428

4.2.5 International Students' Career paths

Career paths contains three dimensions, namely, profession as career intention, entrepreneurial work intention, and expatriate work intention, with a total of 12 items. According to the data analysis results in Table 4.6, it can be seen that the overall mean score of each item ranges from 3.405 to 3.733, and the scale uses a Likert-5 measurement table. Therefore, it can be seen from the data analysis results that the understanding level of the survey subjects about the research is above the average, which is above the medium level. At the same time, the skewness and kurtosis analysis are carried out for each measurement item. According to the requirements of normal distribution, when the absolute value of the skewness coefficient of the data is less than

3 and the absolute value of the kurtosis coefficient is less than 8, the data is considered to be in line with normal distribution. Through the research results, we can know that the absolute values of skewness and kurtosis of each dimension are in line with the standard.

Table 4.6 Percentage Distribution of International Students' Career Paths

Dimension	Item	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Kurtosis Statistic
Profession as career intention	CP1	3.733	1.048	-0.663	-0.199
	CP2	3.600	1.153	-0.456	-0.806
	CP3	3.626	1.219	-0.608	-0.588
Entrepreneurial work intention	CP4	3.660	1.244	-0.662	-0.610
	CP5	3.681	1.018	-0.684	0.393
	CP6	3.405	1.213	-0.376	-0.563
	CP7	3.473	1.075	-0.346	-0.344
	CP8	3.527	1.123	-0.623	-0.191
	CP9	3.408	1.160	-0.509	-0.383
Expatriate work intention	CP10	3.704	0.913	-0.328	-0.021
	CP11	3.530	1.186	-0.674	-0.253
	CP12	3.608	0.938	-0.210	-0.576

According to the analysis results of the data normal distribution index of each variable, it can be seen that the collected data meets the requirements of normal distribution.

4.3 Reliability and Validity Analysis and Confirmatory Factor Analysis

A total of 358 valid questionnaires were collected. The reliability and validity of the questionnaire data were tested. When the reliability test and validity test pass the requirements, the structural equation model is analyzed.

4.3.1 Reliability Analysis

1. Reliability analysis of internationalization strategy of HEI

In this study, Cronbach's Alpha and Corrected item-total Correlation (CITC) test was performed on the collected data, and Cronbach's Alpha if Item Deleted test was performed on each Item. Cronbach's Alpha is above 0.7 and correction item-total correlation (CITC) is above 0.5 to meet internal consistency and reliability requirements. According to the analysis results, as shown in Table 4.7, the Corrected item-total Correlation (CITC) value of each Item in the internationalization strategy of colleges and universities is higher than 0.5. Meanwhile, Cronbach's Alpha is 0.931, both of which are greater than 0.7. Through analysis, the value of Cronbach's Alpha if Item Deleted for each item was less than Cronbach's Alpha, indicating that each item met the requirements and could improve the reliability of the scale. Therefore, the internationalization strategy of HEI has a good credibility.

Table 4.7 Reliability Analysis of Internationalization Strategy of HEI

Dimension	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
The university's international concept and management	IS1	0.648	0.927	
	IS2	0.601	0.928	
	IS3	0.630	0.927	
	IS4	0.649	0.927	
	IS5	0.642	0.927	
The university's international teaching staff and curriculum	IS6	0.494	0.930	
	IS7	0.595	0.928	
	IS8	0.539	0.929	0.931
	IS9	0.513	0.929	
	IS10	0.762	0.924	
The university's international research and cooperation	IS11	0.617	0.927	
	IS12	0.635	0.927	
	IS13	0.626	0.927	
	IS14	0.631	0.927	
	IS15	0.596	0.928	

Dimension	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
The university's support service	IS16	0.617	0.927	
	IS17	0.587	0.928	
	IS18	0.602	0.928	
	IS19	0.612	0.928	
	IS20	0.632	0.927	

2. International student's engagement

Data are analyzed on the international student's engagement and according to the analysis results, the Corrected item-total Correlation (CITC) value of each Item in the International student's engagement is higher than 0.5, as shown in Table 4.8. Meanwhile, Cronbach's Alpha if Item Deleted for each item was less than Cronbach's Alpha 0.915, and Cronbach's Alpha value was greater than 0.7. This shows that each item meets the requirements and can improve the reliability of the scale.

Table 4.8 Reliability Analysis of International Students' Engagement

Dimension	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
Vigor	ISE1	0.655	0.908	
	ISE2	0.657	0.908	
	ISE3	0.610	0.909	
	ISE4	0.623	0.909	
	ISE5	0.631	0.909	
Dedication	ISE6	0.657	0.908	
	ISE7	0.643	0.908	
	ISE8	0.609	0.909	0.915
	ISE9	0.626	0.909	
	ISE10	0.630	0.909	
Absorption	ISE11	0.560	0.911	
	ISE12	0.616	0.909	
	ISE13	0.612	0.909	
	ISE14	0.564	0.911	
	ISE15	0.569	0.911	

3. International students' equity and well-being

Data are analyzed for international student's equity and well-being, and according to the analysis results, the Corrected item-total Correlation (CITC) value of each Item in equity and well-being is higher than 0.5, as shown in Table 4.9 and Table 4.10. Meanwhile, Cronbach's Alpha if Item Deleted was less than Cronbach's Alpha 0.893 and 0.885 for each item, and Cronbach's Alpha value was greater than 0.7. This shows that each item meets the requirements and can improve the reliability of the scale. The data reliability is good.

Table 4.9 Reliability Analysis of International Students' Equity

Dimension	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
Equity	OEW1	0.701	0.878	
	OEW2	0.741	0.869	
	OEW3	0.809	0.854	
	OEW4	0.699	0.879	
	OEW5	0.754	0.868	0.893

Table 4.10 Reliability Analysis of International Students' Well-being

Dimension	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
Well-being	OEW6	0.649	0.877	
	OEW7	0.707	0.863	
	OEW8	0.796	0.843	
	OEW9	0.731	0.858	
	OEW10	0.733	0.857	0.885

4. International students' satisfaction

The data of international student satisfaction are analyzed, and according to the analysis results, the Corrected item-total Correlation (CITC) value of each Item in the

international students' satisfaction is higher than 0.5, as shown in Table 4.11. Meanwhile, Cronbach's Alpha if Item Deleted for each item was less than Cronbach's Alpha 0.928, and Cronbach's Alpha value was greater than 0.7. This shows that each item meets the requirements and can improve the reliability of the scale. The data reliability is good.

Table 4.11 Reliability Analysis of International Students' Satisfaction

Dimension	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
Educational quality	ISS1	0.579	0.925	0.928
	ISS2	0.663	0.923	
	ISS3	0.611	0.924	
	ISS4	0.610	0.924	
	ISS5	0.641	0.924	
	ISS6	0.615	0.925	
Campus international service	ISS7	0.563	0.925	
	ISS8	0.581	0.925	
	ISS9	0.601	0.925	
	ISS10	0.568	0.925	
	ISS11	0.603	0.925	
Scholarship	ISS12	0.631	0.924	
	ISS13	0.583	0.925	
	ISS14	0.624	0.924	
Career guidance	ISS15	0.632	0.924	
	ISS16	0.680	0.923	
	ISS17	0.619	0.924	
	ISS18	0.638	0.924	
	ISS19	0.623	0.924	

5. International students' career paths

Data analysis is made on the career paths, and according to the analysis results, the Corrected item-total Correlation (CITC) value of each Item in the career paths is higher than 0.5, as shown in Table 4.12. Meanwhile, the Cronbach's Alpha if Item

Deleted score of each item was less than Cronbach's Alpha 0.907, and the Cronbach's Alpha value was greater than 0.7. This shows that each item meets the requirements and can improve the reliability of the scale. The data reliability is good.

Table 4.12 Reliability Analysis of International Students' Career Paths

Dimension	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
Profession as career intention	CP1	0.546	0.903	
	CP2	0.575	0.902	
	CP3	0.512	0.905	
Entrepreneurial work intention	CP4	0.690	0.896	
	CP5	0.672	0.897	
	CP6	0.731	0.894	0.907
	CP7	0.728	0.895	
	CP8	0.655	0.898	
	CP9	0.713	0.895	
Expatriate work intention	CP10	0.602	0.901	
	CP11	0.610	0.900	
	CP12	0.609	0.900	

Through the analysis of the above data, it can be found that the Corrected Item-Total Correlation (CITC) of the survey data is higher than 0.5, and the Cronbach's Alpha is higher than 0.7. Moreover, Cronbach's Alpha if Item Deleted for each topic is less than Cronbach's Alpha, indicating that the reliability of the data is good and meets the requirements.

4.3.2 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is used to verify that the constructed measurement model fits the data well. Ensure that the measurement tools used accurately reflect the concepts or variables involved in the study. The Confirmatory Factor Analysis mainly has the following measurement indexes in the verification process, including average variance extracted (AVE), composite reliability (CR) and paths coefficient, which are used to test convergence validity and polymerization

validity. At the same time, each item needs to be different, so it needs to conduct a confirmatory validity test. The function of confirmatory validity is to determine the relationship between the square root of AVE value and the standardized coefficient. According to relevant studies and standards, AVE values should be at least 0.5 to demonstrate good convergence validity and composite reliability. In this study, SEM method is used to study and construct structural equation model. AMOS software and SPSS software were used for the overall study. Firstly, the fit test of the model was carried out, and the relevant indexes met the requirements. Secondly, parameter estimation is carried out to obtain related research results.

1. Internationalization strategy of HEI

According to FIG. 4.1, the test results of the model's compatibility index show that Chi-square/df is 1.493, less than 3 meets the requirements; GFI, AGFI and CFI test results are all above 0.9, meeting the requirements; meanwhile, RMSEA is 0.036 and less than 0.08. Therefore, the results of this analysis show that the confirmatory factor analysis model of internationalization strategy scale of universities has a good fit. At the same time, it also shows that the scale used in this study has good structural validity. According to the above analysis of the internationalization strategy scale of universities, it is determined that the factor analysis is appropriate, and the collected data is calculated and analyzed according to the AVE and CR calculation formulas. According to the analysis results in Table 4.13, it can be seen that in the internationalization strategy scale test of universities, the paths coefficients are all greater than 0.7. Items in this dimension must have a factor load value greater than or equal to 0.5 (standard estimated regression weight). The average variance extracted (AVE) values of international concept and management, international faculty and curriculum, international research and cooperation, and support services of the university are 0.649, 0.644, 0.592 and 0.588, respectively, all exceeding 0.5. The composite reliability (CR) was greater than 0.7, which were 0.902, 0.900, 0.879 and 0.877, respectively. Through the analysis results, it can be seen that the indicators of internationalization strategy research of HEI meet the requirements, and the data of internationalization strategy survey of HEI can be applied to structural equation research.

Table 4.13 AVE and CR of HEI Internationalization Strategies

Path relationship			Estimate	AVE	CR
IS1	<---		0.825		
IS2	<---		0.773		
IS3	<---	The university's international concept and management	0.794	0.649	0.902
IS4	<---		0.817		
IS5	<---		0.818		
IS6	<---		0.761		
IS7	<---		0.838		
IS8	<---	The university's international teaching staff and curriculum	0.787	0.644	0.900
IS9	<---		0.748		
IS10	<---		0.872		
IS11	<---		0.781		
IS12	<---		0.767		
IS13	<---	The university's international research and cooperation	0.782	0.592	0.879
IS14	<---		0.783		
IS15	<---		0.733		
IS16	<---		0.766		
IS17	<---		0.742		
IS18	<---	The university's support service	0.790	0.588	0.877
IS19	<---		0.761		
IS20	<---		0.775		
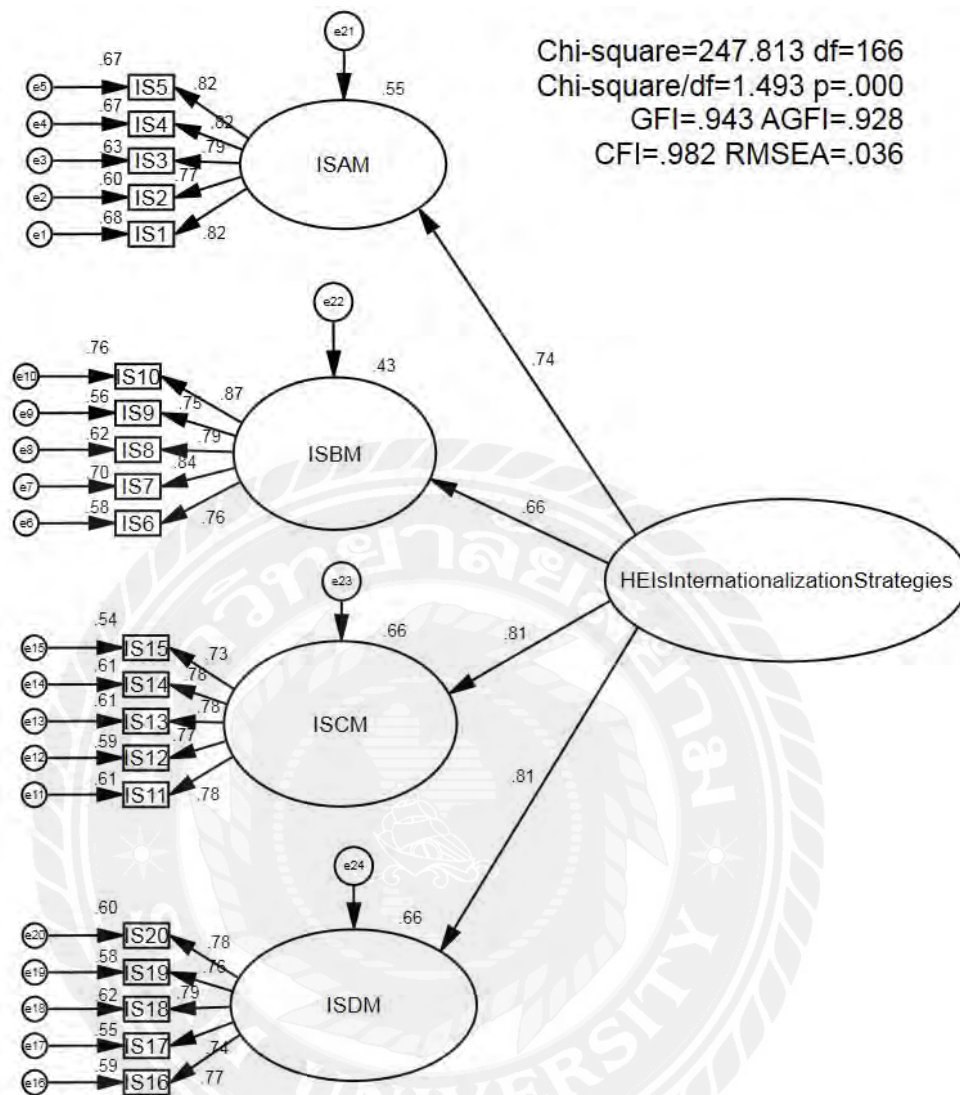
Figure 4.1 Confirmatory Factor Analysis of Internationalization Strategy of HEI

Note: ISAM IS university's international concept and management. ISBM is university's international teaching staff and curriculum. ISCM is university's international research and cooperation, and ISDM is university's support service.

2. International student's engagement

According to FIG. 4.2, the test results of the model's compatibility index show that Chi-square/df is 2.430, less than 3 meets the requirements; GFI, AGFI and CFI test results are all above 0.9, meeting the requirements; meanwhile, RMSEA is 0.061 and less than 0.08. Therefore, the results of this analysis show that the confirmatory factor

analysis model of international students' engagement scale has a good fit. At the same time, it also shows that the scale used in this study has good structural validity. According to the above analysis, the confirmatory factor analysis of the engagement scale of international students is well matched, and the collected data is calculated and analyzed according to the calculation formulas of AVE and CR. According to the analysis results in Table 4.14, it can be seen that in the engagement scale test of international students, the path coefficients are all greater than 0.7. Items in this dimension must have a factor load value greater than or equal to 0.5 (standard estimated regression weight). The average variance extracted values (AVE) of vigor, dedication and absorption were 0.600, 0.601 and 0.579, respectively, all exceeding 0.5. The composite reliability (CR) was greater than 0.7, which were 0.883, 0.882 and 0.873, respectively. Through the analysis of the results, it can be seen that the indicators of international student's engagement meet the requirements, and the international student's engagement survey data can be applied to structural equation research.

Table 4.14 AVE and CR for International Students' Engagement

Path relationship			Estimate	AVE	CR
ISE1	<---		0.769		
ISE2	<---		0.775		
ISE3	<---	Vigor	0.761	0.600	0.883
ISE4	<---		0.752		
ISE5	<---		0.816		
ISE6	<---		0.785		
ISE7	<---		0.790		
ISE8	<---	Dedication	0.757	0.601	0.882
ISE9	<---		0.768		
ISE10	<---		0.774		
ISE11	<---		0.731		
ISE12	<---		0.781		
ISE13	<---	Absorption	0.771	0.579	0.873
ISE14	<---		0.768		
ISE15	<---		0.754		

Figure 4.2 Confirmatory Factor Analysis of International Students' Engagement

3. International student's equity

According to FIG. 4.3, the test results of the model compatibility index show that Chi-square/df is 2.300, less than 3 meets the requirements; GFI, AGFI and CFI test results are all above 0.9, meeting the requirements; meanwhile, RMSEA is 0.058 and less than 0.08. Therefore, the results of this analysis show that the confirmatory factor analysis model of equity scale has a good fit. At the same time, it also shows that the scale used in this study has good structural validity. According to the above analysis, the confirmatory factor analysis of the equity scale was well matched, and the collected data were calculated and analyzed according to the AVE and CR calculation formulas. According to the analysis results in Table 4.15, it can be seen that in the international

student's equity scale test, the path coefficients are all greater than 0.7. The average variance extracted (AVE) value for equity is 0.631, which is more than 0.5. The composite reliability (CR) is greater than 0.7 with a value of 0.89. Through the analysis results, we can see that the indexes of international student's equity research meet the requirements, and the data of international student's equity survey can be applied to structural equation research.

Table 4.15 International Students' Equity AVE and CR

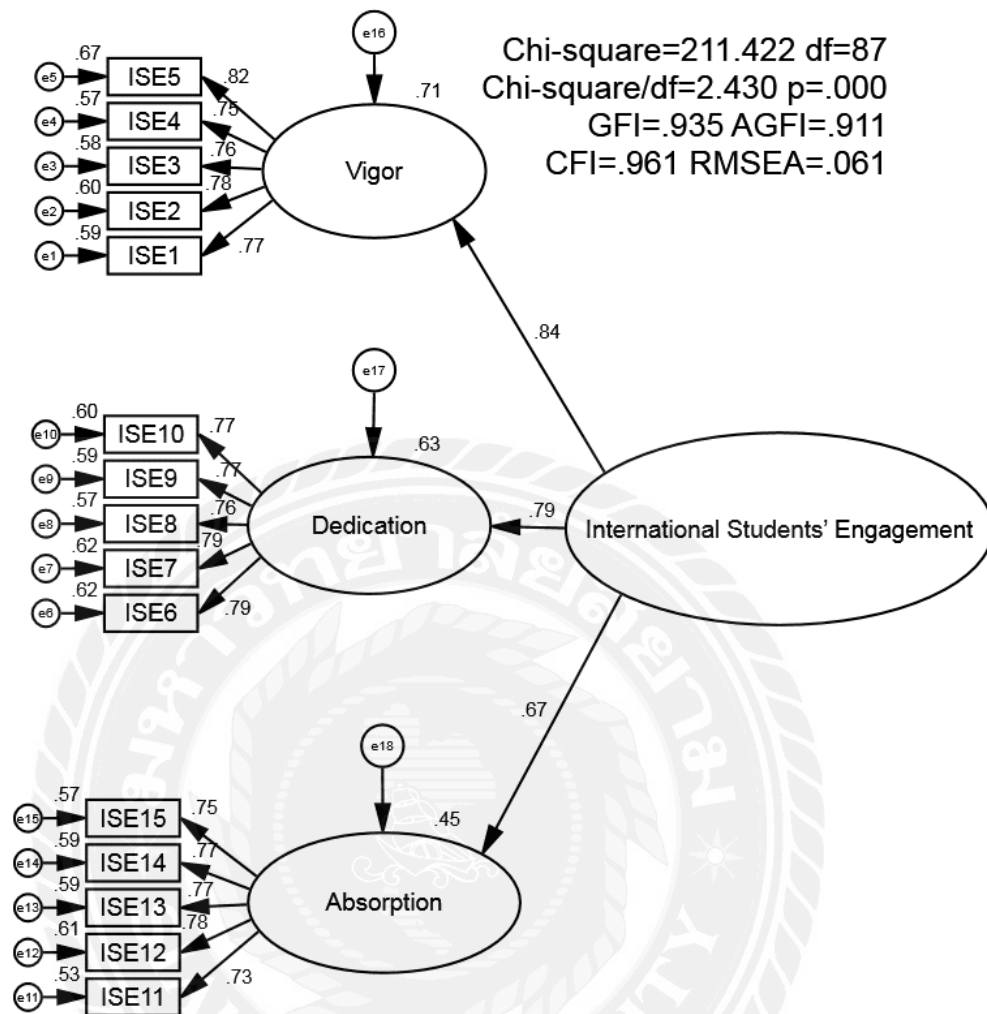| Path relationship			Estimate	AVE	CR
OEW1	<---		0.747		
OEW2	<---		0.795		
OEW3	<---	Equity	0.877		
OEW4	<---		0.734		
OEW5	<---		0.810	0.631	0.895
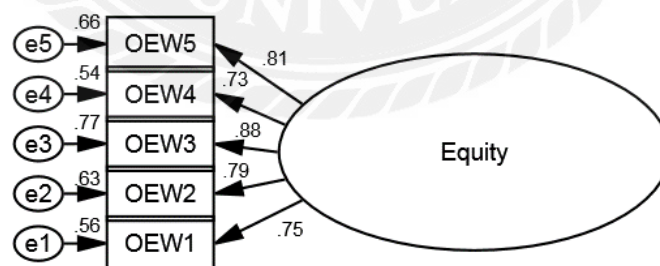
Figure 4.3 Confirmatory Factor Analysis of International Students' Equity

4. International Students' well-being

According to Figure 4.4, the test results of the model's compatibility index show that Chi-square/df is 2.428, less than 3 meets the requirements; GFI, AGFI and CFI test results are all above 0.9, meeting the requirements; meanwhile, RMSEA is 0.061 and

less than 0.08. Therefore, the results of this analysis indicate that the confirmatory factor analysis model of international student's well-being scale has a good fit. At the same time, it also shows that the scale used in this study has good structural validity. According to the above analysis, the confirmatory factor analysis of the international student's well-being scale was well matched, and the collected data were calculated and analyzed according to the AVE and CR calculation formulas. According to the analysis results in Table 4.16, it can be seen that in the international student's well-being scale test, the path coefficients are all greater than 0.7. The average variance extracted (AVE) value for international student's well-being is 0.612, which is over 0.5. The composite reliability (CR) is greater than 0.7, with a value of 0.887. It can be seen from the analysis results that the indicators of international student's well-being research meet the requirements, and the data of international student's well-being survey can be applied to structural equation research.

Table 4.16 AVE and CR of International Students' Well-being

Path relationship			Estimate	AVE	CR
OEW6	<---		0.698		
OEW7	<---		0.767		
OEW8	<---	Well-being	0.863		
OEW9	<---		0.779		
OEW10	<---		0.794	0.612	0.887

Chi-square=12.140 df=5
Chi-square/df=2.428 p=.033
GFI=.988 AGFI=.964
CFI=.993 RMSEA=.061
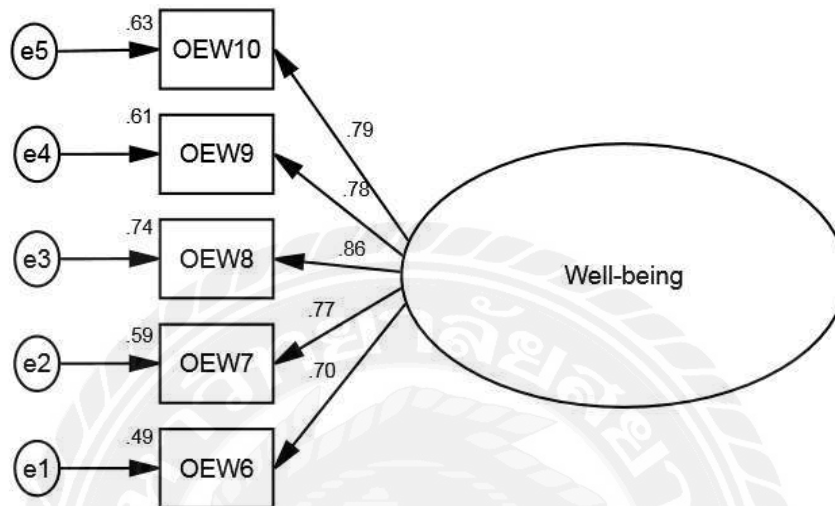
Figure 4.4 Confirmatory Factor Analysis of International Students' Well-being

5.International student satisfaction
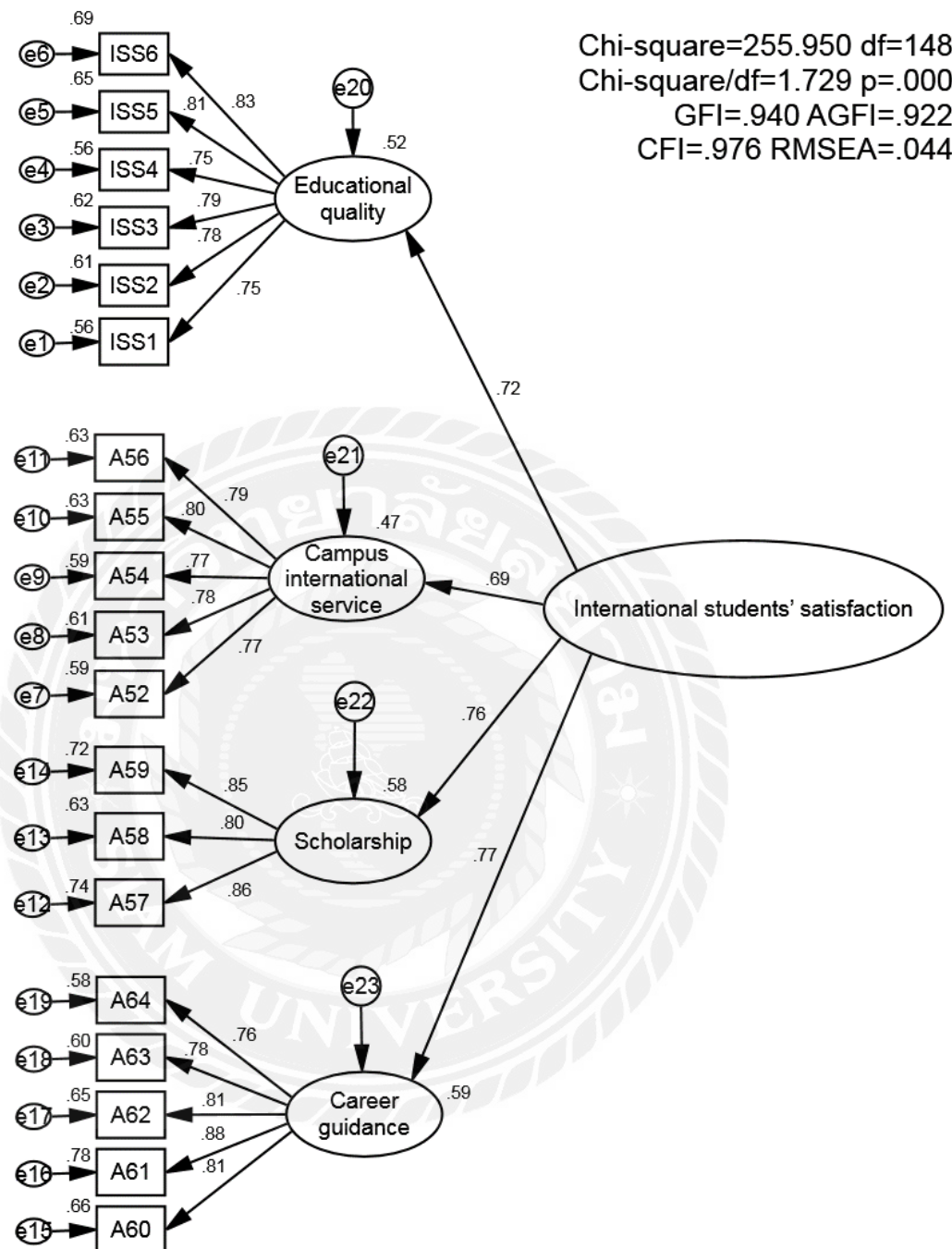
Figure 4.5 Confirmatory Factor Analysis of International Students' Satisfaction

According to Figure 4.5, the test results of the model's compatibility index show that Chi-square/df is 1.729, less than 3 meets the requirements; GFI, AGFI, and CFI test results are all above 0.9 and meet the requirements; meanwhile, RMSEA is 0.044 and less than 0.08. Therefore, the results of this analysis show that the confirmatory factor analysis model of the international student satisfaction scale has a good fit. At

the same time, it also shows that the scale used in this study has good structural validity. According to the above analysis, the scale of international student satisfaction is well matched, and the collected data are calculated and analyzed according to the calculation formulas of AVE and CR. According to the analysis results in Table 4.17, it can be seen that in the scale test of international student satisfaction, the path coefficients are all greater than 0.7. Items in this dimension must have a factor load value greater than or equal to 0.5 (standard estimated regression weight). The average variance extracted values (AVE) of educational quality, campus international service, scholarship and career guidance were 0.614, 0.612, 0.699 and 0.655, respectively, all exceeding 0.5. The combined validity (CR) was greater than 0.7, which were 0.905, 0.888, 0.874 and 0.904, respectively. Through the analysis results, it can be seen that the indicators of international student satisfaction meet the requirements and can be applied to structural equation research.

Table 4.17 AVE and CR of International Students' Satisfaction

Path relationship			Estimate	AVE	CR
ISS1	<---	Educational quality	0.747		
ISS2	<---		0.781		
ISS3	<---		0.785		
ISS4	<---		0.750		
ISS5	<---		0.806		
ISS6	<---		0.829	0.614	0.905
ISS7	<---	Campus international service	0.769		
ISS8	<---		0.783		
ISS9	<---		0.768		
ISS10	<---		0.797		
ISS11	<---		0.795	0.612	0.888
ISS12	<---	Scholarship	0.863		
ISS13	<---		0.795		
ISS14	<---		0.849	0.699	0.874
ISS15	<---	Career guidance	0.812		
ISS16	<---		0.885		
ISS17	<---		0.806		
ISS18	<---		0.777		
ISS19	<---		0.760	0.655	0.904

6.International Students' Career paths

According to FIG. 4.6, the test results of the model's compatibility index show that Chi-square/df is 2.582, less than 3 meets the requirements; GFI, AGFI and CFI test results are all above 0.9, meeting the requirements; meanwhile, RMSEA is 0.064 and less than 0.08. Therefore, the results of this analysis show that the confirmatory factor analysis model of career development path scale has a good fit. At the same time, it also shows that the scale used in this study has good structural validity. According to the above analysis, the career development path scale is well matched, and the collected data are calculated and analyzed according to the AVE and CR calculation formulas. According to the analysis results in Table 4.18, it can be seen that in the career paths scale test, the path coefficients are all greater than 0.7. Items in this dimension must have a factor load value greater than or equal to 0.5 (standard estimated regression weight). The average variance extracted values (AVE) of career as profession intention, entrepreneurial intention and expatriate intention were 0.617, 0.628 and 0.683, respectively, all exceeding 0.5. Composite reliability (CR) was greater than 0.7, which were 0.828, 0.910 and 0.866, respectively. Through the analysis results, it can be seen that the indicators of career paths meet the requirements and can be applied to structural equation research.

Table 4.18 AVE and CR of International Students' Career Paths

Path relationship			Estimate	AVE	CR
CP1	<---	Profession as career intention	0.749		
CP2	<---		0.823		
CP3	<---		0.783	0.617	0.828
CP4	<---	Entrepreneurial work intention	0.797		
CP5	<---		0.747		
CP6	<---		0.813		
CP7	<---		0.834		
CP8	<---		0.747		
CP9	<---		0.813	0.628	0.910
CP10	<---	Expatriate work intention	0.851		
CP11	<---		0.746		
CP12	<---		0.877	0.683	0.866
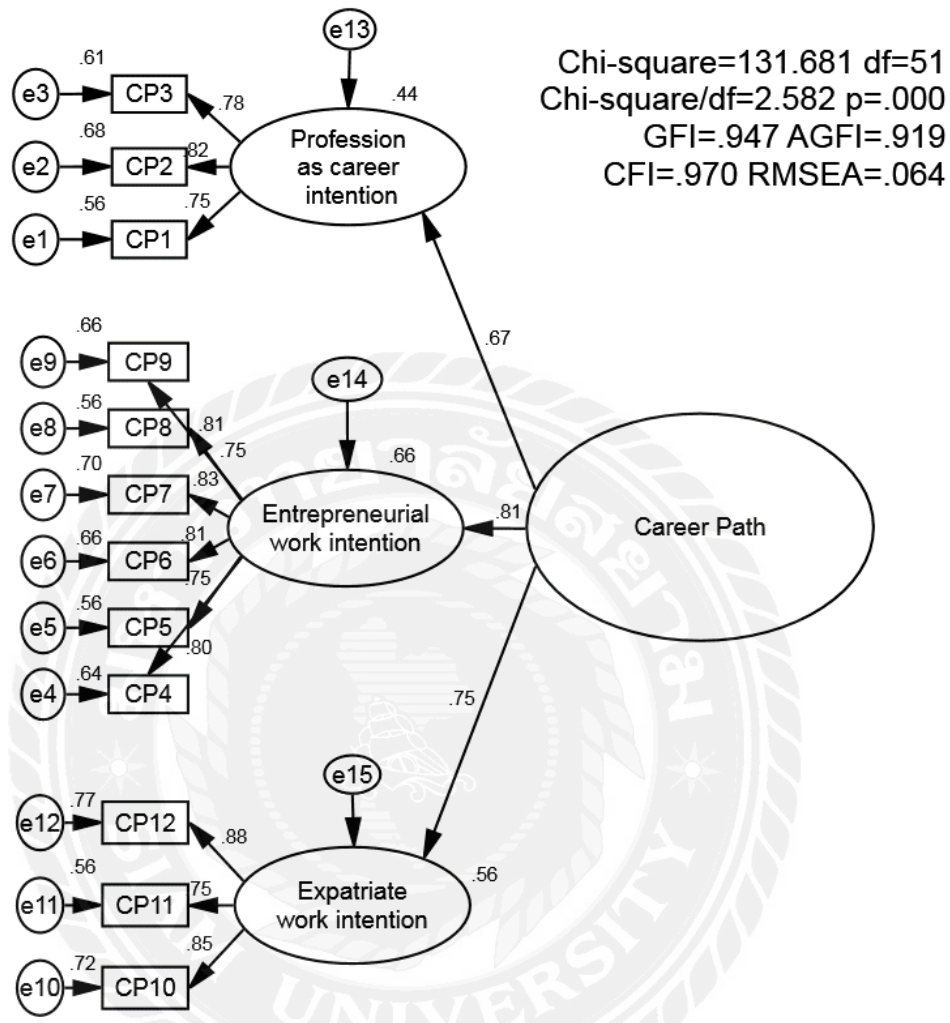
Figure 4.6 Confirmatory Factor Analysis of International Students' Career Paths

Through the analysis results, it can be seen that the indicators of each variable study meet the requirements, and the survey data can be applied to structural equation research.

4.3.3 Correlation Analysis

In this study, the dimension of each variable is analyzed by correlation analysis method. The differential validity of the survey data was determined by comparing the correlation coefficient with the square root of AVE. When the absolute value of the

square root of AVE is always greater than the correlation coefficient, it indicates that the item has good confirmatory validity. Through data analysis, it can be clearly concluded that the correlation coefficient of each variable is less than the absolute value of the square root of AVE. Meanwhile, according to the results in Table 4.19, the correlation coefficient does not exceed 0.9, and there is no co-linearity problem, which meets the requirements. Structural equation models can be analyzed and studied.

Table 4.19 Results of Pearson's Correlation Analysis for Each Dimension

	√AVE	ISAM	ISBM	ISCM	ISDM	VI	DE	AB	EQ	WE	EQ	CIS	SCH	CG	PAI	ENWI	EXWI
ISAM	0.806	0.806															
ISBM	0.802	.473**	0.802														
ISCM	0.769	.502**	.459**	0.769													
ISDM	0.767	.539**	.413**	.609**	0.767												
VIG	0.775	.311**	.335**	.362**	.418**	0.775											
DE	0.775	.336**	.274**	.362**	.404**	.594**	0.775										
AB	0.761	.247**	.223**	.260**	.368**	.497**	.466**	0.761									
EQ	0.794	.418**	.368**	.400**	.466**	.224**	.240**	.219**	0.794								
WE	0.782	.416**	.356**	.484**	.463**	.264**	.183**	.127*	.377**	0.782							
EQ	0.784	.366**	.321**	.388**	.419**	.310**	.291**	.215**	.395**	.393**	0.784						
CIS	0.782	.360**	.309**	.328**	.350**	.322**	.257**	.285**	.387**	.392**	.445**	0.782					
SCH	0.836	.346**	.330**	.386**	.411**	.285**	.267**	.197**	.458**	.386**	.496**	.463**	0.836				
CG	0.809	.350**	.276**	.335**	.451**	.310**	.254**	.245**	.387**	.379**	.506**	.482**	.516**	0.809			
PAI	0.785	.294**	.222**	.361**	.353**	.238**	.251**	.170**	.276**	.340**	.271**	.190**	.259**	.264**	0.785		
ENWI	0.792	.385**	.339**	.474**	.461**	.396**	.382**	.327**	.428**	.462**	.360**	.355**	.339**	.305**	.468**	0.792	
EXWI	0.826	.334**	.336**	.432**	.430**	.343**	.324**	.302**	.453**	.435**	.326**	.359**	.407**	.363**	.445**	.556**	0.826

NOTE: * p<0.05 ** p<0.01 *** p<0.001，ISAM is the university's international concept and management. ISBM is the university's international teaching staff and curriculum. ISCM is the university's international research and cooperation. ISDM is the university's support service. VIG is Vigor. DE is Dedication. AB is Absorption. EQ is Equity. WE is Well-being. EQ is Educational quality. CIS is Campus international service. SCH is Scholarship. CG is Career guidance. PAI is Profession as career intention. ENWI is Entrepreneurial work intention. EXWI is Expatriate work intention.

4.4 Structural Equation Model and Hypotheses Verification

4.4.1 Direct Effect Verification

According to the above data and index analysis, the research data meets the requirements of structural equation model construction. AMOS software was used to construct the structural equation model of the data, and the relationship between the variables was explained to verify whether the hypothesis was valid. Structural equation models need to be tested for model fit. Chi-square/df needs to be less than 3 to meet the study criteria. At the same time, GFI, AGIF and CFI should be greater than 0.9 to be excellent, greater than 0.8 to be less than or equal to 0.9 to be acceptable, and RMSEA should be less than 0.08 to meet the requirements of model fitting indicators, as shown in Table 4.20. According to the results, the Chi-square in the study was 285.018, the df was 241, and the Chi-square/df was 1.183, which was less than 3, meeting the standard. GFI, IFI, CFI and TLI are all greater than 0.9, and RMSEA is 0.022 and less than 0.08. Therefore, the model fitting index meets the requirements. The model has good adaptability and can be used for calculation and analysis of structural equation models.

Table 4.20 Model Fit Intercept（N=358）

Model fit indicators	Threshold Range	Observed Values
Chi-square	-	285.018
df	-	241
Chi-square/df	Below 5, best below 3	1.183
GFI	Above 0.9，0.8-0.9Acceptable	0.943
AGFI	Above 0.9，0.8-0.9Acceptable	0.929
CFI	Above 0.9，0.8-0.9Acceptable	0.990
RMSEA	Below 0.08	0.022

According to the output results of AMOS (see Table 4.21 and Figure 4.7), it can be concluded that the path coefficient of influence of internationalization strategies of

HEI on international student's engagement is 0.612. The regression weight estimates had 8.958 (C.R.) standard errors greater than zero, P<0.001. The internationalization strategy of HEI has a significant positive impact on the engagement of international students. Therefore, hypothesis 3 is accepted.

The results show that the path coefficient of influence of internationalization strategy on international student's equity is 0.686. The regression weight estimate has a 9.097 (C.R.) standard error greater than zero, P<0.001. The internationalization strategy of HEI has a significant positive impact on organizational equity. Therefore, hypothesis 4 is accepted.

The path coefficient of the influence of internationalization strategy on international student's well-being is 0.714. The regression weight estimate has a 9.069 (C.R.) standard error greater than zero, P<0.001. The internationalization strategy of HEI has a significant positive impact on international student's well-being. Therefore, hypothesis 5 is accepted.

The path coefficient of influence of internationalization strategy on international student satisfaction is 0.265. The regression weight estimate has a 2.773 (C.R.) standard error greater than zero, P=0.006<0.05. The internationalization strategy of HEI has a positive impact on the satisfaction of international student. Therefore, hypothesis H1 is accepted.

The path coefficient of influence of international student's engagement on international student satisfaction is 0.183. Regression weight estimates have 2.790 (C.R.) standard error greater than zero, P=0.005<0.05. It shows that there is a certain degree of positive correlation between international student's engagement and international student satisfaction, but this relationship is not very strong. Therefore, hypothesis 6 is accepted.

The path coefficient of the influence of international student's equity on the satisfaction of international student is 0.229. The regression weight estimate has a 4.483 (C.R.) standard error greater than zero, P<0.001. International student's equity has a

positive impact on the satisfaction of international student. Therefore, hypothesis 8 is accepted.

The path coefficient of influence of international student's well-being on international students' satisfaction was 0.180. The regression weight estimate has a 3.342 (C.R.) standard error greater than zero, P<0.001. It shows that there is a certain degree of positive correlation between international student's well-being and international student satisfaction, but this relationship is not very strong. Therefore, hypothesis 10 is accepted.

The path coefficient of influence of internationalization strategy on career paths is 0.212. Regression weight estimates have a 2.439 (C.R.) standard error greater than zero, P=0.015<0.05. It shows that the internationalization strategy of HEI has a positive impact on career paths. Therefore, hypothesis 2 is accepted.

The path coefficient of influence of international students' engagement on career paths is 0.251. Regression weight estimates have 4.051C.R.) standard error greater than zero, P<0.001. It shows that international student's engagement has a positive impact on career paths. Therefore, hypothesis 7 is accepted.

The path coefficient of influence of international student's equity on career paths is 0.156. The regression weight estimate has a 3.435 (C.R.) standard error greater than zero, P<0.001. It shows that there is a certain degree of positive correlation between international student's equity and international student career paths, but this relationship is not very strong. Therefore, hypothesis 9 is accepted.

The path coefficient of influence of international student's well-being on career paths is 0.199. The regression weight estimate has a 4.005 (C.R.) standard error greater than zero, P<0.001. 199. It shows that there is a certain degree of positive correlation between international student's well-being and international student's career paths, but this relationship is not very strong Therefore, hypothesis 11 is accepted.

Table 4.21 Results of Structural Equation Modeling

Path relationship			Estimate	S.E.	C.R.	P	Estimates of standardized regression weights
International Students' engagement	<---	HEIs Internationalization Strategies	0.612	0.068	8.958	***	0.615
Equity	<---	HEIs Internationalization Strategies	0.686	0.075	9.097	***	0.598
Well-being	<---	HEIs Internationalization Strategies	0.714	0.079	9.069	***	0.626
International Students' satisfaction	<---	HEIs Internationalization Strategies	0.265	0.096	2.773	0.006	0.287
International students' satisfaction	<---	International Students' engagement	0.183	0.066	2.790	0.005	0.197
International students' satisfaction	<---	Equity	0.229	0.051	4.483	***	0.284
International students' satisfaction	<---	Well-being	0.180	0.054	3.342	***	0.222
Career paths	<---	HEIs Internationalization Strategies	0.212	0.087	2.439	0.015	0.255
Career paths	<---	International Students' engagement	0.251	0.062	4.051	***	0.301
Career paths	<---	Equity	0.156	0.045	3.435	***	0.215
Career paths	<---	Well-being	0.199	0.050	4.005	***	0.273

NOTE: * $p<0.05$ ** $p<0.01$ *** $p<0.001$
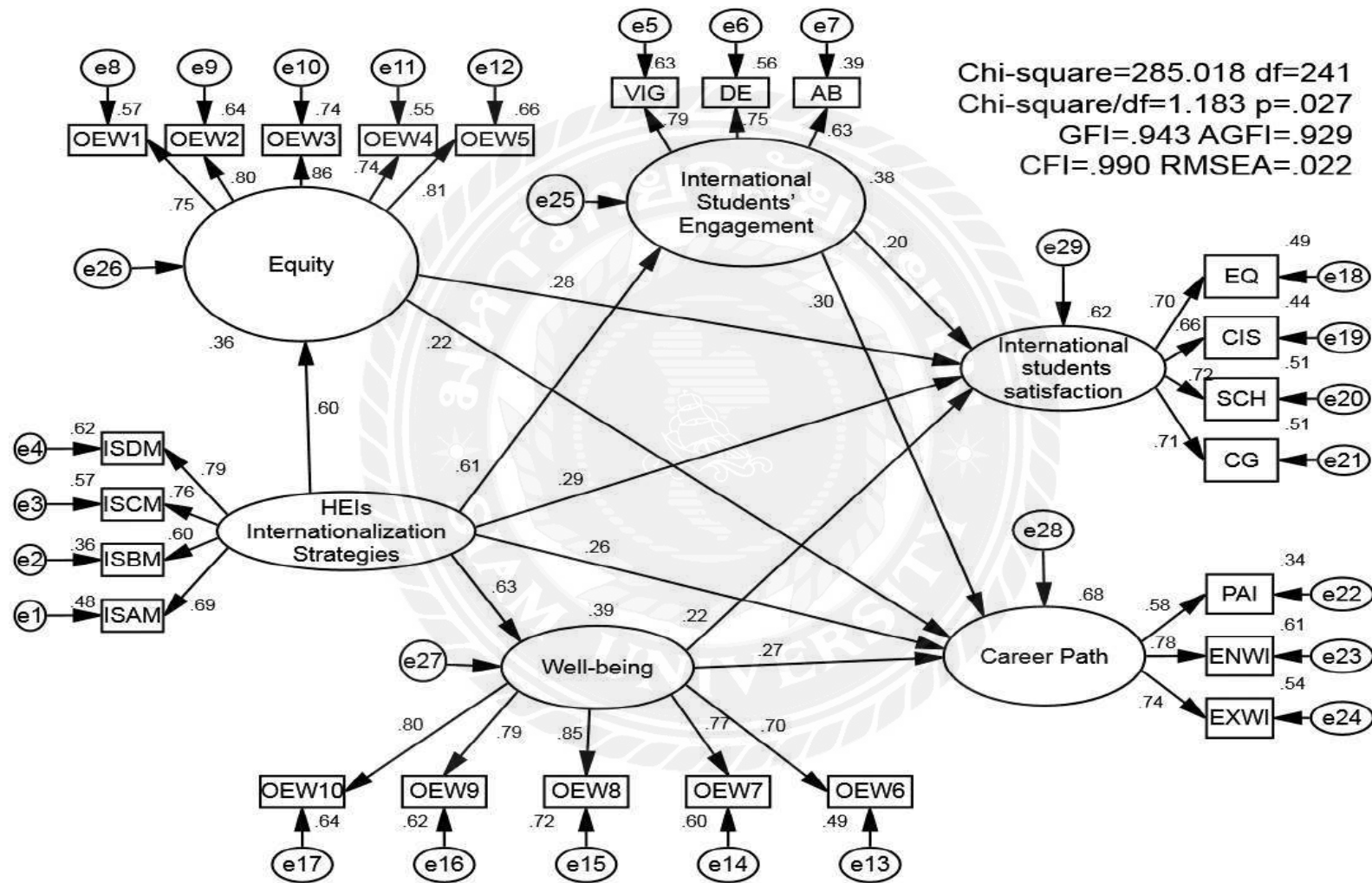
Figure 4.7 Confirmatory Factor Analysis of Variables

4.4.2 Indirect Effect Verification

In order to verify the mediation effect in the structural equation model, the Process plug-in in SPSS was used for analysis, and the Bootstrap mediation effect test method was used to test whether the mediation effect was significant. The method was Bootstrap ML, repeated sampling 5000 times, and the results of the mediation effect were tested. See Tables 4.22 and 4.23.

When studying mediating effects, the lower limit of confidence interval (LLCI) and upper limit of confidence interval (ULCI) refer to the lower and upper limits of confidence intervals. These measures were used to assess the statistical significance of the mediating effect.

LLCI: This is the Lower limit of the confidence interval for estimating mediating effects.

ULCI: This is the Upper limit of the confidence interval for estimating the mediation effect.

To determine whether the mediating effect is significant, the following criteria are usually used:

(1) Confidence intervals do not cross zero: If the interval between LLCI and ULCI does not include zero, the mediating effect is considered significant.

(2) P-value: The P-value of the mediating effect. If the P-value is less than the significance level, the mediating effect is considered significant.

Through these two criteria, we can judge the significance of the mediating effect and conclude whether there is substantial mediating effect. In statistical analysis, confidence intervals and P-values are important indicators, which help researchers to verify whether the role of mediating variables between independent variables and dependent variables is accepted.

The reason to testify the 3 variables' mediating effect:

The HEI internationalization strategies collectively contribute to the overall educational environment and services offered by HEI, ultimately influencing students' satisfaction. International student's engagement is influenced by the educational setting, including the complex interplay of relationships, learning activities and the learning environment, all of which are closely related to the internationalization strategy of HEI. Individuals who measure engagement using Schaufeli, Salanova, et al.'s (2002) approach and are engaged in their work are likely to feel more satisfied (Wefald & Downey, 2009). In Howson et al. (2021) research, the paper highlights how combining student's engagement and satisfaction two approaches in student experience surveys can support policy decisions and institutional enhancement (Kandiko Howson & Matos, 2021). This dissertation posits International student's engagement has mediating effect on the relationship between the internationalization strategy of HEI and the satisfaction of international student (H12).

In terms of strategies related with teaching quality, professional training and career guidance courses, the impact of them significantly affects students' career choice. In the research of Grier-Reed et al., the research found that higher levels of student's engagement corresponded to higher levels of career decision self-efficacy (Grier-Reed, Appleton, Rodriguez, Ganuza, & Reschly, 2012). On the other hand, academic engagement scale is positively related to early career earnings for students in non-STEM fields (Hu & Wolniak, 2010). This dissertation posits that international students' engagement has a mediating impact on the relationship between the internationalization strategy of HEI and the career paths of international student (H13).

Understanding customers' expectations regarding organizational social responsibility is fundamental to creating and implementing successful strategies and program (Santos et al., 2020), and the outcome will impact students' satisfaction. In the paper of Pitman et al. (2019), the research aimed to provide theoretical framework for ranking Australian higher education institutions on their 'equity performance'. On the

equity condition, the accessibility of teaching facilities, availability of textbooks in libraries in the universities, administrative service quality, reliability of university examinations, perceived learning gains and quality of students' welfare services were significantly and directly related to students' satisfaction (Kara, Tanui, & Kalai, 2016). International student's equity has mediating effect on the relationship between the internationalization strategy of HEI and the satisfaction of international student (H14).

The equity can be equal terms in a school's daily activities, the regulations that govern a school's education, the resources distribution and the efficiency of education, all of which are closely related to the internationalization strategy of HEI. To ensure an adequate level of career development, schools are expected to take the initiative by particularly aiming at equal treatment for all students (Lee et al., 2021). Previous studies have argued that school resources can effectively support under-served or dispositional characteristics students, closing the gap in educational outcomes. This dissertation posits international student's equity has mediating effect on the relationship between the internationalization strategy of HEI and the career paths of international student (H15).

For international students in universities, all of the well-being constituents are related with educational quality and environment as a whole and thus closely related with management strategy of internationalization. Students satisfaction can be measured with the score of life-as-a-whole. Feelings of well-being are composed of a cognitive-evaluative factor(satisfaction) and an affective factor (happiness) (Vermunt, Spaans, & Zorge, 1989). This dissertation posits that international students' well-being has a direct impact on international students' satisfaction (H16).

Students' well-being resources embodying the consequences of career well-being, affect career decision-making difficulty directly (Mohammed et al., 2021). The pre-existing levels of well-being and confidence influence occupational choice (Creed,

Muller, & Patton, 2003). This dissertation posits that international student's well-being has mediating effect on the relationship between the internationalization strategy of HEI and the career paths of international student. (H17).

The total effect of HEI internationalization strategy on international student satisfaction is 0.575, and 95% confidence interval does not include 0, indicating that the total effect is significant. The direct effect of the internationalization strategy of HEI on the satisfaction of international students is 0.224, accounting for 38.929% of the total effect. The 95% confidence interval does not include 0, indicating that the direct effect is significant. As to HEI internationalization strategies--->International students' engagement--->International students' satisfaction, the indirect effect of satisfaction is 0.090, and the 95% confidence interval does not contain 0, indicating that the indirect effect is significant, accounting for 15.707%. As to HEI internationalization strategies-- >International student's equity-- >International students' satisfaction, the indirect effect is 0.134, and the 95% confidence interval does not include 0, indicating that the indirect effect is significant, accounting for 23.308%. HEI internationalization strategies-- >International student's well-being-- >International students' satisfaction, the indirect effect is 0.127, and the 95% confidence interval does not include 0, indicating that the indirect effect is significant, accounting for 22.056%.

Therefore, through the analysis of variables such as the engagement of international students, the equity of international students, and the well-being of international students, there is an indirect effect on the total effect of the internationalization strategy of HEI and the satisfaction of international students, and the effect is significant. The engagement of international students has a mediating effect on the relationship between the internationalization strategy of HEI and the satisfaction of international students. Therefore, H12 is accepted. The equity of international students has a mediating effect on the relationship between the internationalization strategy of HEI and the satisfaction of international students. Therefore, H14 is

accepted. The well-being of international students has a mediating effect on the relationship between the internationalization strategy of HEI and the satisfaction of international students. Therefore, H16 is accepted.

The total effect of internationalization strategy on international student career paths is 0.573, and 95% confidence interval does not include 0, indicating that the total effect is significant. The direct effect of the internationalization strategy of HEI on the career paths of international students is 0.157, accounting for 27.352% of the total effect. The 95% confidence interval does not include 0, indicating that the direct effect is significant. As to HEI Internationalization Strategies-- >International Students' engagement-- >Career Paths, the indirect effect is 0.122, and the 95% confidence interval does not include 0; the indirect effect is significant, accounting for 21.295%. As to HEI Internationalization Strategies-- >Equity-- >Career Paths, indirect effect is 0.151, and the 95% confidence interval does not include 0, indicating that the indirect effect is significant, accounting for 26.270%. As to HEI Internationalization Strategies-- >Well-being-- >Career Paths, the indirect effect was 0.144, and the 95% confidence interval did not include 0, indicating that the indirect effect was significant, accounting for 25.153%.

Through the analysis of variables such as the engagement of international students, the equity of international students, and the well-being of international students, there is an indirect effect on the total effect of internationalization strategy of HEI on the career paths of international students, and the effect is significant. The engagement of international students has a mediating effect on the relationship between the internationalization strategy of HEI and the career paths of international students. Therefore, H13 is accepted. The equity of international students has a mediating effect on the relationship between the internationalization strategy of HEI and the career paths of international students. Therefore, H15 is accepted. The well-being of international students has a mediating effect on the relationship between the internationalization strategy of HEI and the career paths of international students. Therefore, H17 is

accepted.

Table 4.22 Results of Indirect Effects Tests (1)

Path	Effect	SE	t	p	LLCI	ULCI	Percentage%
HEIs Internationalization Strategies--->International students' satisfaction Total Effect	0.575	0.418	13.744	0.000	0.493	0.657	-
HEIs Internationalization Strategies--->International students' satisfaction Direct Effect	0.224	0.054	4.117	0.000	0.117	0.331	38.929
HEIs Internationalization Strategies--->International Students' engagement--->International students' satisfaction Indirect Effect	0.090	0.025	-	-	0.046	0.141	15.707
HEIs Internationalization Strategies--->Equity-->International students' satisfaction Indirect Effect	0.134	0.027	-	-	0.084	0.191	23.308
HEIs Internationalization Strategies--->Well-being-->International students' satisfaction Indirect Effect	0.127	0.027	-	-	0.074	0.181	22.056

Table 4.23 Results of Indirect Effects Tests (2)

Path	Effect	SE	t	p	LLCI	ULCI	Percentage%
HEIs Internationalization Strategies--->Career Paths Total Effect	0.573	0.053	10.791	0.000	0.469	0.677	-
HEIs Internationalization Strategies--->Career Paths Direct Effect	0.157	0.070	2.237	0.000	0.259	0.019	27.352
HEIs Internationalization Strategies--->International Students' engagement--->Career Paths Indirect Effect	0.122	0.032	-	-	0.062	0.191	21.295
HEIs Internationalization Strategies--->Equity--->Career Paths Indirect Effect	0.151	0.035	-	-	0.085	0.219	26.270
HEIs Internationalization Strategies--->Well-being-->Career Paths Indirect Effect	0.144	0.033	-	-	0.079	0.212	25.153

The results show a clear causal relationship between each variable. According to Figure 4.7, the coefficient path directly reflects the relationship between the variables. The results show that hypothesis H1 to hypothesis H11 are valid.

Table 4.24 Hypotheses Testing

NO.	Hypotheses	Result
H1	Internationalization strategy of HEI has a direct impact on international students' satisfaction.	Accepted
H2	Internationalization strategy of HEI has a direct impact on international students' career paths.	Accepted
H3	Internationalization strategy of HEI has a direct impact on international student's engagement.	Accepted
H4	Internationalization strategy of HEI has a direct impact on international student's equity.	Accepted
H5	Internationalization strategy of HEI has a direct impact on international student's well-being.	Accepted
H6	International student's engagement has a direct impact on international students' satisfaction.	Accepted
H7	International student's engagement has a direct impact on international students' career paths.	Accepted
H8	International student's equity has a direct impact on international students' satisfaction	Accepted
H9	International student's equity has a direct impact on international students' career paths.	Accepted
H10	International student's well-being has a direct impact on international students' satisfaction.	Accepted
H11	International student's well-being has a direct impact on international students' career paths.	Accepted
H12	International student's engagement has mediating effect on the relationship between the internationalization strategy of HEI and the satisfaction of international student.	Accepted
H13	International student's engagement has mediating effect on the relationship between the internationalization strategy of HEI and the career paths of international student.	Accepted
H14	International student's equity has mediating effect on the relationship between the internationalization strategy of HEI and the satisfaction of international student.	Accepted
H15	International student's equity has mediating effect on the relationship between the internationalization strategy of HEI and the career paths of international student.	Accepted
H16	International student's well-being has mediating effect on the relationship between the internationalization strategy of HEI and the satisfaction of international student.	Accepted

NO.	Hypotheses	Result
H17	International student's well-being has mediating effect on the relationship between the internationalization strategy of HEI and the career paths of international student.	Accepted

4.5 Discussion of Data Analysis and Recommendation on Strategic Model

4.5.1 Discussion of Data Analysis

(1) Data analysis of the level degree of provincial public universities' internationalization strategies implementation, international students' engagement, well-being and equity, satisfaction and career paths.

In the survey, in the HEI internationalization strategy dimension of the university's international concept and management, for the question of IS1 (The internationalization of education is a crucial principle in your school), the mean score is lower, which means students were less agreeable with this statement; in the dimension of the university's international research and cooperation, for the question of IS15 (The school provides more opportunities for students to participate in international programs and activities each year.), the mean score is lower, which means students were less agreeable with this statement.

In the international student's engagement dimension of absorption questions, for ISE13 (It is difficult to detach myself from my studies.) and ISE14 (I am immersed in my studies.), the mean score is lower, which means the absorption is lower in these aspects.

In the dimension of international student's equity, for QEW2 (I have access to good service on campus), the mean score is lower, which means that students were not in accordance with the statement in equitable distribution of service resource.

In the dimension of emotional and social well-being, for QEW7 (I am satisfied with my personal relationships.), the mean score is lower, which means the students were less in good cognition of the personal relationships.

In the dimension of International students' satisfaction, for ISS12 (Convenient access to the information of scholarships.), the mean score is lower, which means the students were not very satisfied with the information accessibility in scholarship. In the

dimension of career guidance, for ISS15 (Seminars or courses on career planning.), the mean score is lower, which means the students were not very satisfied with the career guidance courses.

(2) Data analysis of direct impact.

The results of the structural equation modeling indicate that university internationalization strategies have a positive and direct impact on international students' engagement, sense of well-being and equity, satisfaction, and career paths.

The path coefficient of the university internationalization strategy's influence on international students' engagement is 0.612, with S.E. = 0.068, C.R. = 8.958, a standard error greater than zero, and $p < 0.001$. This signifies a significant positive effect of university internationalization strategies on international students' engagement.

The path coefficient for the impact of internationalization strategies on international students' equity is 0.686, with S.E. = 0.075, C.R. = 9.097, a standard error greater than zero, and $p < 0.001$. This demonstrates a significant positive influence of university internationalization strategies on organizational equity.

The path coefficient for the influence of internationalization strategies on international students' well-being is 0.714, with S.E. = 0.079, C.R. = 9.069, a standard error greater than zero, and $p < 0.001$. This signifies a significant positive impact of university internationalization strategies on students' well-being.

The path coefficient for the influence of internationalization strategies on international students' satisfaction is 0.265, with S.E. = 0.096, C.R. = 2.773, a standard error greater than zero, and $p < 0.001$. This indicates a positive impact of university internationalization strategies on student satisfaction, albeit to a lesser extent, equity, and well-being.

The path coefficient for the influence of internationalization strategies on career paths is 0.212, with S.E. = 0.087, C.R. = 2.439, a standard error greater than zero, and $p < 0.01$. This suggests a positive influence of university internationalization strategies on international students' career paths, albeit to a lesser extent, equity, and well-being. .

(3) Data analysis of intermediate impact.

Regarding the research path of university internationalization strategy → international student's engagement → international students' satisfaction, the indirect effect of international student's engagement as a mediating factor is 0.090, accounting

for 15.707% of the total effect. This result provides an in-depth understanding of how university internationalization strategies influence international students' satisfaction by enhancing their engagement. The internationalization strategy affects international students' satisfaction through both direct and indirect pathways.

In the research path of university internationalization strategy → international students' engagement → career paths, the indirect effect of engagement as a mediating factor is 0.122, accounting for 21.295% of the total effect. Engagement plays a vital mediating role in the career development path. This proportion, higher than 15.707% in the satisfaction path, indicates that engagement has a more direct and significant impact on career development.

In the research path of university internationalization strategy → equity → international students' satisfaction, the indirect effect of equity as a mediating factor is 0.134, accounting for 23.308% of the total effect. This result highlights the pivotal role of "equity" in international students' satisfaction.

In the research path of university internationalization strategy → equity → career paths, the indirect effect is 0.151, accounting for 26.270% of the total effect. Equity plays a significant mediating role in the impact of university internationalization strategies on international students' career paths, and this effect is statistically significant.

In the path of university internationalization strategy → well-being → international students' satisfaction, the indirect effect is 0.127, accounting for 22.056% of the total effect. Well-being is a psychological factor that impacts international students' satisfaction. It encompasses various aspects of their campus life, social relationships, cultural adaptation, and self-development.

In the research path of university internationalization strategy → well-being → career path, the indirect effect is 0.144, accounting for 25.153% of the total effect. This result indicates that well-being plays a significant mediating role in the process of university internationalization strategies influencing international students' career paths.

4.5.2 Recommendation on Strategic Model

As to the data analysis, it can be found that university internationalization

strategies have significant positive effects on enhancing engagement, equity, and well-being of international students. However, the relatively weaker impacts on international students' satisfaction and career path indicate that universities should further address the inadequacies of current policies. It is essential to enhance the positive effects of internationalization policies on students' satisfaction and career paths. Furthermore, the significant mediating effect of intermediate variables should not be overlooked. In enhancing internationalization policies, universities must prioritize improving students' engagement, well-being, and equity. They should fully leverage the mediating effects of these intermediate variables to ensure that students' satisfaction and career paths are positively influenced by policy adjustments and comprehensive factors. Based on the preceding discussion, an innovative strategic model for practical policy in internationalization management within provincial public universities is proposed as illustrated in Figure 4.8.
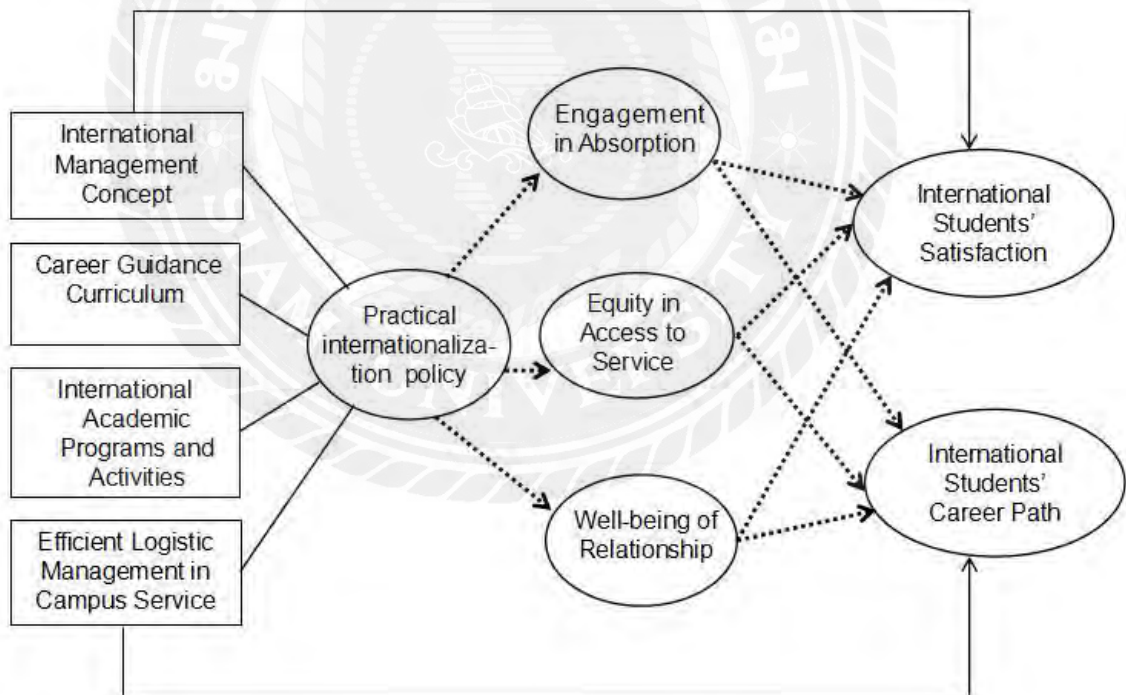
Figure 4.8 Proposed Strategic Model according to the Data Analysis

In addition, developing from the Proposed Strategic Model, the Dynamic Management Process of Internationalization Strategy was created. As defined in this dissertation, the strategic management theory is a dynamic management process that determines strategic goals, plans and implements strategies to achieve the goals,

continuously manages and controls during the strategy implementation process, and finally evaluates the implementation results. The proposed strategic model in this dissertation can be summarized in the following dynamic management process as showed in Figure 4.9.
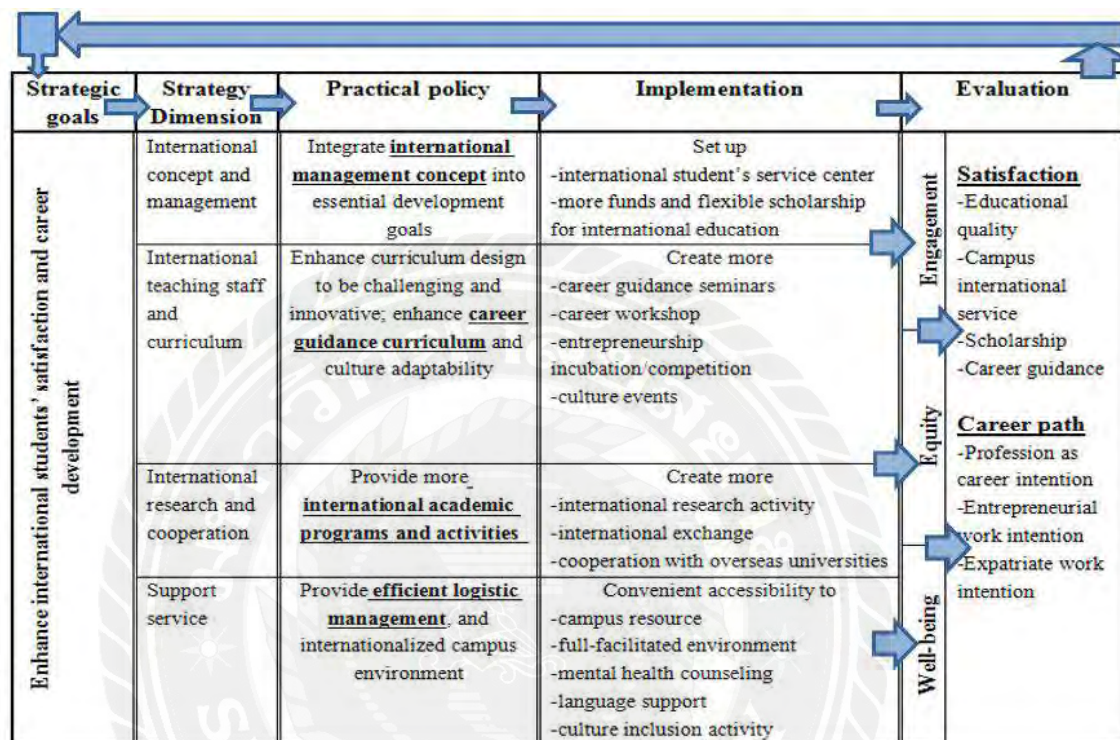
Figure 4.9 Dynamic Management Process of Internationalization Strategy

The main benefits of dynamic management processes include increased flexibility, adaptability and innovation. The dynamic management process enables HEIs to better adapt to the changing needs of international students by constantly adjusting and optimizing strategies. This flexibility allows higher education institutions to quickly adjust their policies in response to the latest developments and needs of international education. In addition, dynamic management processes can help HEIs better allocate resources and ensure the smooth progress of policy implementation, thereby improving overall operational efficiency. By collecting and analyzing international students' feedback, it helps higher education institutions to continuously optimize their strategies, reduce the blindness of the decision-making process, and improve the effectiveness and success rate of the internationalization strategies .

In conclusion, if any researcher wants to apply this dynamic model, the researcher

should demonstrate the survey according to the practical policy implementation situation. The practical policy of the strategy can be adjusted to match the HEI's weakness, strength, and the external environment you want to improve. This model aims at developing the practical internationalization strategy through the implementation and evaluation of the policy's effect on different variables. The model of survey targets to get the improved policy via implementation of the dynamic circle of management.

4.6 Conclusion

This chapter analyzes the collected data. Descriptive statistical analysis, reliability and validity analysis, confirmatory factor analysis, correlation analysis and construction of structural equation of relevant data were mainly carried out by SPSS and AMOS. Each hypothesis is verified according to the analysis index of relevant data. The verification results show that each variable has a positive effect.

According to the data analysis results, the internationalization strategy of HEI has positive impact on international student's satisfaction, international students' career paths, and has significant impact on international student's engagement, international student's equity and international student's well-being. The effective internationalization strategy of HEI not only increases the satisfaction of international students, but also boosts their career development and engagement, while improving their perception of equity and well-being in the organization. The engagement of international students has a positive impact on their satisfaction and career paths, and equity and well-being of international students also positively improve their satisfaction and have a positive effect on career paths. The engagement, perceived equity and well-being of international students play an intermediary role between the internationalization strategy of HEI and the satisfaction and career paths of international students. Universities' internationalization strategies indirectly contribute to international students' satisfaction and career development by increasing their engagement, cognition of equity, and well-being. This indicates that the full implementation of the internationalization strategy of HEI not only directly improves the educational experience of international students in all aspects, but also further enhances this positive impact through a variety of intermediary factors.

CHAPTER 5
RESEARCH CONCLUSION, DISCUSSION AND RECOMMENDATION

This chapter summarizes the research's data and conclusions and recommends strategies. The findings explain the relationships between the studied variables. Finally, it addresses the execution of the investigation results, gives recommendations to the internationalization strategy of Shandong Province's provincial public universities, and proposes future study areas based on the research findings. This chapter is further divided into four sections, as follows:

5.1 Research Conclusion

5.2 Discussion

5.3 Recommendations

5.4 Future Research

5.5 Research Limitation

5.1 Research Conclusion

According to the analysis and research from Chapter One to Chapter Four, the questionnaire was finalized to investigate the provincial public universities in Shandong province, the total survey samples were collected 358, and the hypotheses were verified through calculations. This research mainly answers three questions respectively:

1. What is the level degree of China' s provincial public universities' internationalization strategies' implementation, international students' engagement, international students' well-being and equity, international students' satisfaction and career paths?

According to the survey, the average score for the internationalization strategy is 3.613, indicating that international students' recognition of the HEI internationalization strategies is above average. The average score for international students' engagement is 3.611, suggesting a moderately high level of engagement. The average score for student's equity is 3.671, which signifies higher-than-average

recognition of the school's equity. The average score for international students' well-being is 3.674, reflecting a higher-than-average perception of well-being among students. The average score for international students' satisfaction is 3.593, indicating satisfaction above average. The questionnaire on international students' career development focuses on personal career choice preferences. In this section, a higher average score suggests that international students are more inclined to choose a particular career path. In the "career intention" dimension, international students agree with the "I have a career plan for my current occupation." In the "expatriate work intention" dimension, they also demonstrate a high level of agreement with the "I will work abroad in 10 years."

2. What is the direct impact of HEI internationalization strategy on international students' engagement, well-being and equity, and international students' satisfaction and career paths?

The results of the structural equation modeling indicate that the internationalization strategy of universities has a positive and direct impact on international students' engagement, well-being, equity, satisfaction, and career paths. The direct impact of the internationalization strategy on international students' engagement, equity, and well-being is significant, with impact coefficients of 0.612, 0.686, and 0.714, respectively. While the direct impact of the internationalization strategy on international students' satisfaction and career paths is not statistically significant, it still exerts a relatively positive influence, with impact coefficients of 0.201 and 0.265, respectively. The impact coefficient data demonstrates that the internationalization strategy of universities has a positive influence on international students' engagement, well-being, equity, satisfaction, and career paths.

3. What is the mediating effect of international student's engagement, equity and well-being on the relationship between the internationalization strategy of HEI and the satisfaction of international students, and on the relationship between the internationalization strategy of HEI and the career paths of international students?

In this study, regarding the path of "university internationalization strategy → international student's engagement → international students' satisfaction," the indirect effect of international student's engagement as a mediating factor is 0.090, accounting for 15.707% of the total effect. This indicates that while the mediating

variable plays a relatively small role in the independent variable influencing the dependent variable, its contribution cannot be overlooked. As for the path of "university internationalization strategy → international student's engagement → international students' career paths," the indirect effect is 0.122, accounting for 21.295% of the total effect. The indirect effect of international student's engagement is significant, as it constitutes a substantial proportion of the total effect and is crucial for understanding the relationships between variables. Therefore, although the indirect effect of international student's engagement as an intermediate variable may be small or inconspicuous, its impact on the dependent variable cannot be neglected. The significance of its indirect effect in the model provides researchers with vital information about the relationships between variables.

As for "university internationalization strategy → equity → international students' satisfaction," the indirect effect is 0.134, accounting for 23.308% of the total effect. This suggests that the indirect effect of international student's equity plays a crucial role in the model and has a significant impact on the dependent variable. For the path of "university internationalization strategy → equity → international students' career paths," the indirect effect is 0.151, with a 95% confidence interval that does not include 0, indicating a significant indirect effect, accounting for 26.270% of the total effect. This demonstrates that the indirect effect of international student's equity contributes significantly to the total effect, with a relatively large degree of influence. Consequently, the mediating effect of international student's equity is substantial. The significance of international student's equity as an intermediate variable and its indirect effect in the model provides researchers with important information about the relationships between variables.

Regarding the path of "university internationalization strategy → well-being → international students' satisfaction," the indirect effect is 0.127, accounting for 22.056% of the total effect. This indicates that the indirect effect of international student's well-being is indeed a significant influence path, and its contribution to the total effect cannot be overlooked. As for the path of "university internationalization strategy → well-being → career paths," the indirect effect is 0.144, accounting for 25.153% of the total effect. This suggests that the indirect effect of international student's well-being contributes

significantly to the total effect, and its degree of influence is noteworthy. Therefore, the mediating effect of international student's well-being is substantial. The significance of international student's well-being as an intermediate variable and its indirect effect in the model provides researchers with valuable information about the relationships between variables.

5.2 Discussion

Based on the research findings in Chapter 4, an analysis of the survey data on the internationalization strategies of provincial public universities in Shandong Province indicates that such strategies positively influence international students' engagement, sense of well-being and equity, satisfaction, and career paths. Furthermore, the engagement, equity, and well-being of international students' exhibit mediating effects in the relationships between university internationalization strategies and both international students' satisfaction and career paths. Consequently, the following questions need to be addressed:

Research Question 1: what is the level degree of provincial public universities' internationalization strategies' implementation, international students' engagement, international students' well-being, international students' equity, international students' satisfaction and career paths?

In the survey, the internationalization strategy mean score is 3.613, which means international students' agreement with the school's internationalization policy is above the average level. In the dimension of the university's international concept and management, for IS1 (The internationalization of education is a crucial principle in your school), the mean score is lower, which means students were less agreeable with this statement. In the dimension of the university's international research and cooperation, for IS15 (The school provides more opportunities for students to participate in international programs and activities each year.), the mean score is lower, which means students were less agreeable with this statement. In the university's international teaching staff and curriculum, for IS8 (The courses provided by your school are aligned with globalized curricula.) and IS9 (Your school provided practical training courses for study and introduces internship enterprise.), the mean score is higher, which means the level of agreement is high.

The internationalization students' engagement mean score is 3.611, which means the engagement level belongs to the upper medium level. In the dimension of absorption, for ISE13 (It is difficult to detach myself from my studies.) and ISE14 (I am immersed in my studies.), the mean score is lower, which means the absorption is lower in these aspects. IS8 of dedication (I am enthusiastic about my studies.) and IS2 of vigor (Regarding my academic pursuits, I always persevere, even when things do not go well.), which means the engagement level is higher in these aspects.

International students' equity mean score is 3.671, which means the degree of recognition of institutional equity is above the medium level. For QEW2 (I have access to good service on campus), the mean score is lower, which means that in the equitable distribution of service resource students were less agreeable with the statement. For QEW5 (I would like to take part in school activities.), the mean score is higher, which means the students agreed with participation on equal terms in the community.

International students' well-being mean score is 3.674, which means the students' cognition of well-being is above the average level. For the emotional and social well-being, for QEW7 (Satisfaction with my relationships), the mean score is lower, indicating that students had a weaker positive cognition of personal relationships. For QEW6 (I am satisfied with the environment where I live), the mean is higher. This suggests that students had a positive understanding of the physical well-being in their living environment.

International students' satisfaction mean score is 3.593, and the degree of satisfaction is above the average level. For ISS12 (Convenient access to the information of scholarships.), the mean score is lower, which means the students were not very satisfied with the information accessibility in scholarship. In the dimension of career guidance, for ISS15 (Seminars or courses on career planning.), the mean score is lower, which means the students were not very satisfied with the career guidance courses. In campus international service, for ISS10 (Efficiency of school work procedure) and ISS8 (Campus environment and facilities), the mean score is higher, which means students were satisfied with these factors.

The International Students' Career Paths Questionnaire aims to explore personal preferences and inclinations when choosing a career. In this section, a higher mean

score indicates a greater inclination of international students toward a specific career choice. For CP6 (I plan to continue my master's degree after getting my bachelor's degree or continue my Ph.D. study after getting my master's degree.) and CP9 (I shall be an employee of a small or medium-sized company without family connections), the mean score is lower, which means the students were not very inclined to these career directions. For CP1 (I have a career plan for my present profession.) and CP10 (I shall pursue my career in 10 years abroad.), the mean score is higher, which means students were very inclined to these career directions.

Research Question 2: What is the direct impact of HEI internationalization strategy on international students' engagement, international students' well-being and equity, international students' satisfaction and career paths?

The results of the structural equation modeling indicate that university internationalization strategies have a positive and direct impact on international students' engagement, sense of well-being and equity, satisfaction, and career paths.

The path coefficient of the university internationalization strategy's influence on international students' engagement is 0.612, with S.E. = 0.068, C.R. = 8.958, a standard error greater than zero, and P < 0.001. This signifies a significant positive effect of university internationalization strategies on international students' engagement. Universities can effectively enhance student's engagement through HEI internationalization strategies, cross-cultural activities, and curriculum design. This translates into more active engagement in academic and extracurricular activities, fostering a deeper integration into campus culture, increased interaction with peers and faculty, and an enhanced overall study abroad experience. These factors play roles in enhancing students' academic performance and personal development.

The path coefficient for the impact of internationalization strategies on international students' equity is 0.686, with S.E. = 0.075, C.R. = 9.097, a standard error greater than zero, and P < 0.001. This demonstrates a significant positive influence of university internationalization strategies on organizational equity. Equity is vital for international students to access equal resources, treatment, and opportunities within the university environment. The implementation of internationalization strategies enhances organizational equity, particularly in terms of student admission, academic support, and resource allocation. Equity boosted international students' health and academic

motivation.

The path coefficient for the influence of internationalization strategies on international students' well-being is 0.714, with S.E. = 0.079, C.R. = 9.069, a standard error greater than zero, and P < 0.001. This signifies a significant positive impact of university internationalization strategies on students' well-being. Well-being encompasses satisfaction with university life and mental well-being. Internationalization strategies can significantly improve international students' psychological well-being by providing additional support services, promoting cross-cultural exchanges, and enhancing social integration. This is crucial for fostering a sense of belonging, mitigating the negative effects of cultural shock, and enhancing the overall study-abroad experience.

The path coefficient for the influence of internationalization strategies on international students' satisfaction is 0.265, with S.E. = 0.096, C.R. = 2.773, a standard error greater than zero, and P < 0.001. This indicates a positive impact of university internationalization strategies on student satisfaction, albeit to a lesser extent, equity, and well-being. Satisfaction may be influenced by various factors, including academic performance, living conditions, and career prospects. While internationalization strategies are an important contributor to satisfaction, they are not the sole determinant.

The path coefficient for the influence of internationalization strategies on career paths is 0.212, with S.E. = 0.087, C.R. = 2.439, a standard error greater than zero, and P < 0.01. This suggests a positive influence of university internationalization strategies on international students' career paths. The internationalization strategies may encompass international internship opportunities, collaborations with multinational corporations, and career guidance, all of which contribute to broadening students' career options and development paths. However, the construction of career paths involves complex factors such as demand in specific fields, language proficiency, and the job market. Although internationalization strategies offer some assistance, their impact on career development is relatively modest.

In conclusion, this study highlights that university internationalization strategies have significant positive effects on various aspects of international students' experiences, particularly in enhancing engagement, equity, and well-being. This underscores the importance of internationalization strategies not only in elevating

universities' international reputation but also in substantially improving international students' campus experience and personal development. However, the weaker impacts on satisfaction and career paths suggest that universities should further integrate resources, such as strengthening career guidance and extracurricular practical opportunities, to boost international students' confidence in their future careers. Additionally, given the multifaceted nature of satisfaction, universities can optimize the overall learning and living environment to maximize the potential of internationalization strategies.

Research Question 3: What is the mediating effect of international student's engagement, equity and well-being on the relationship between the internationalization strategy of HEI and the satisfaction of international students, and on the relationship between the internationalization strategy of HEI and the career path of international students?

(1) Regarding the research path of university internationalization strategy → international student's engagement → international student satisfaction, the indirect effect of international student's engagement as a mediating factor is 0.090, accounting for 15.707% of the total effect. This result provides an in-depth understanding of how university internationalization strategies influence international student satisfaction by enhancing their engagement. The internationalization strategy affects international student satisfaction through both direct and indirect pathways.

Although the indirect effect accounts for a relatively small proportion, it still demonstrates the non-negligible significance of engagement. Universities' internationalization strategies may indirectly impact student satisfaction by enhancing their sense of engagement, integration, and social interaction on campus (Grant, 2021). Thus, engagement, as a crucial factor in enhancing international students' campus experience, merits attention from universities. Universities need to balance direct and indirect influences in their internationalization strategies. While direct measures significantly impact student satisfaction, enhancing engagement remains an effective approach. Universities can further improve student satisfaction by encouraging active engagement in academic, cultural, and social activities (Foss, 2011). They should develop more diverse and inclusive strategies to offer more opportunities for international student's engagement (Schilling, 2017). This will help strengthen their

sense of campus engagement, thereby enhancing satisfaction.

(2) In the research path of university internationalization strategy → international student's engagement → career development, the indirect effect of engagement as a mediating factor is 0.122, accounting for 21.295% of the total effect. Engagement plays a vital mediating role in the career development path. This proportion, higher than 15.707% in the satisfaction path, indicates that engagement has a more direct and significant impact on career development.

The influence of university internationalization strategies on international students' career development is partially achieved by enhancing their engagement. Career development encompasses not only academic proficiency but also social skills, cultural adaptability, and professional network building (Palmié et al., 2023). Engagement directly affects improvements in these areas, thereby influencing career development. Therefore, engagement is a crucial channel for transforming internationalization strategies into career success. Universities should prioritize not only direct career support measures but also enhance engagement through various activities and programs to help international students better achieve their career goals (Liu, 2019). This research provides important theoretical and practical insights into how universities can promote international students' career development through internationalization strategies (Grant, 2021).

(3) In the research path of university internationalization strategy → equity → international student satisfaction, the indirect effect of equity as a mediating factor is 0.134, accounting for 23.308% of the total effect. This result highlights the pivotal role of "equity" in international student satisfaction.

The influence of university internationalization strategies on international student satisfaction is largely achieved by enhancing their perception of equity (Cristina,2021). Perceived equity encompasses not just academic resource allocation but also various aspects of campus life, such as administrative support, cultural integration, social opportunities, scholarships, and financial aid. Thus, enhancing equity not only improves their campus experience but also strengthens their satisfaction with the university (Cristina,2021). Universities should ensure equitable resource allocation, academic support, and cross-cultural exchange opportunities for international students

in their internationalization strategies and enhance their overall campus experience and satisfaction (Zhang, 2015).

(4) In the research path of university internationalization strategy → equity → career path, the indirect effect is 0.151, accounting for 26.270% of the total effect. Equity plays a significant mediating role in the impact of university internationalization strategies on international students' career paths, and this effect is statistically significant.

Equitable assessment and support can make international students feel recognized and respected for their efforts, enhancing their career confidence and competitiveness (Charles, 2019). Equitable cultural support enables international students to perform more effectively in multicultural workplaces, increasing their career opportunities. Equity significantly impacts international students' campus experience and influences their career opportunities and paths. Universities should strengthen equitable design in their internationalization strategies to ensure that international students receive the same treatment as local students in career development resources, opportunities, and support, thereby promoting their career success (Qu,2019).

(5) In the path of university internationalization strategy → well-being → international student satisfaction, the indirect effect is 0.127, accounting for 22.056% of the total effect. Well-being is a psychological factor that impacts international students' satisfaction. It encompasses various aspects of their campus life, social relationships, cultural adaptation, and self-development.

Universities can enhance international students' social well-being through internationalization strategies that promote cross-cultural exchanges and establish diverse communities, thereby improving their satisfaction with the university. Universities should integrate more mental health and emotional support measures into their internationalization strategies (Qian & Meng, 2017). Well-being influences international students' emotional and psychological states, improving their satisfaction with the university by enhancing their quality of life, social relationships, and career development confidence (Gbollie & Gong, 2020). This research provides crucial insights for universities in formulating internationalization strategies: by enhancing international students' well-being, universities can effectively increase their satisfaction, thereby driving the internationalization development of universities.

(6) In the research path of university internationalization strategy → well-being → career path, the indirect effect is 0.144, accounting for 25.153% of the total effect. This result indicates that well-being plays a significant mediating role in the process of university internationalization strategies influencing international students' career paths.

Well-being promotes international students' career development by enhancing their emotional states and mental health, strengthening their self-confidence and optimistic attitudes towards the future, and thereby fostering proactive actions in their careers. International students with higher well-being are more likely to actively engage in career planning, skill upgrading, and internship opportunities, and expand their career path (Mishra & Aithal, 2023). Universities should foster an inclusive and supportive campus environment through internationalization strategies, ensuring students feel respected and treated equally in their academic and career development. Enhancing well-being not only strengthens their career confidence but also boosts their competitiveness in the job market (Cao, 2018). By improving international students' mental health, emotional states, and social skills, universities can facilitate their career development through internationalization strategies, enhancing their campus experience and fostering better career outcomes.

5.2.1 Discussion on Variable: Internationalization Strategies of HEIs

The internationalization strategy of institutions of higher learning encompasses four aspects: the university's international mindset and management, internationalized faculty and curricula, international research and collaboration, and institutional support services. Enhancements in these areas, particularly the management philosophy, faculty strength, research collaboration, and support services, can provide international students with a more equitable, comprehensive, and attractive learning and living experience. This aligns with the findings of numerous scholars. Such a comprehensive internationalization strategy elevates international students' engagement and satisfaction, paves the way for their career development, and consequently strengthens the university's global competitiveness.

(1) International Mindset and Management of Universities

The international mindset and management of universities determine the overall strategic direction of the institution amidst globalization. The international educational

philosophy, coupled with comprehensive strategic planning ensures that the university can adapt to changing global educational demands (Grant, 2021). This attracts more international students and ensures the effective implementation of HEI internationalization strategies through robust management systems and institutions (Palmié et al., 2023). Furthermore, financial support enables the university to invest in international projects and resources, further enhancing the experience of international students. A rational management and support system also guarantees that international students enjoy equal access to resources and opportunities as local students, fostering equity and inclusivity (Cristina,2021).

(2) Internationalized Faculty and Curricula

Internationalized faculty and curricula directly impact students' academic experience and career preparedness. High-level English instruction provides an excellent language learning environment for international students, while a globalized curriculum equips them with an international perspective and mastery of professional skills in a globalized context (Charles, 2019). Additionally, practical teaching components offer students hands-on work experience, coupled with career development and career planning guidance, helping them clarify their future career paths (Cao, 2018). Courses with an international perspective can increase student's engagement and satisfaction, laying a solid foundation for their future careers.

(3) International Research and Collaboration

Through extensive cooperation and exchange with the international academic community, institutions of higher learning enhance their research capabilities while offering international students opportunities to participate in high-quality research projects (Gbollie & Gong, 2020). By attending international conferences or engaging with overseas research institutions, students gain invaluable experience and resources within the global academic sphere (Mishra & Aithal, 2023). The university's diverse international programs and activities for international students can bolster their cross-cultural communication skills, enhancing their sense of belonging and well-being.

(4) Institutional Support Services

For international students, institutional support services are paramount. Comprehensive housing conditions, abundant English language resources, and diverse information dissemination channels significantly improve international students'

quality of life and learning efficiency (Mishra & Aithal, 2023). These services not only strengthen international students' sense of well-being and belonging but also promote social interaction, enriching their overseas study experience.

5.2.2 Discussion on Variable: Engagement of International Students

International student's engagement can be measured through the three dimensions of Vigor, Dedication, and Absorption. The involvement of international students is of great significance in the context of the internationalization of higher education. By enhancing students' Vigor, Dedication, and Absorption, the school can help students better integrate into the learning environment and improve their academic performance and career development potential. This research result is consistent with the conclusions of many scholars (Ouweneel et al. 2014; Ouweneel et al., 2013; Salmela Aro & Upadyaya, 2014; Teuber et al. 2021; Upadyaya & Salmela-Aro, 2013). The school's internationalization strategy provides external support and opportunities for student's engagement, and student's engagement plays a key intermediary role in this process, translating the potential advantages of the internationalization strategy into actual academic achievement and career success.

Vigor emphasizes the motivation, energy, and persistence of international students in their studies. It shows the motivation and mental toughness of students in the face of learning challenges. Adapting to a new cultural environment and education system is often challenging for international students, students with a high Vigor level can maintain a positive attitude, overcome difficulties, and seek new learning opportunities (Teuber et al., 2021). Vigor not only helps enhance the continuity of learning but also motivates students to strive for academic excellence, demonstrating greater academic presence and leadership. This dynamism has a direct impact on career development because it shows students' adaptability and long-term willingness, it often wins the recognition of employers (Mishra & Aithal, 2023).

Dedication reflects international students' passion, dedication, and commitment to learning. It is not just an interest in the content of the course, but also a deep identification with what is being learned and the satisfaction derived from learning. High levels of Dedication are often associated with greater academic motivation and personal fulfillment. International students who can develop a deep identification with the content of the course and feel the meaning of their learning generally (Teuber et al.,

2021). They can show higher engagement. They are actively engaged in academic activities and show higher satisfaction. At the same time, this Dedication also provides a powerful source of motivation for career development. Students with strong dedication are usually more focused on their career choices and continue to accumulate experience for their career development.

Absorption describes international students' deep involvement and immersion in learning. Students with high Absorption levels can usually devote themselves to learning tasks, achieving a state of self-absorption, ignoring surrounding disturbances, and experiencing the enjoyment and satisfaction of learning (Lopez-Zafra et al., 2022).. This focus not only improves academic performance but also enhances students' ability to cope with complex tasks. Absorption means that they can deeply understand curriculum content in a cross-cultural educational environment and apply it effectively in practice. This deep academic commitment helps students develop more competitive vocational skills and demonstrate strong problem-solving and innovation in their future careers.

5.2.3 Discussion on Variable: Well-being of International Students

International student's well-being has a significant positive impact on student satisfaction and career development. In this context, well-being encompasses multiple aspects, including the living environment, personal relationships, the balance between study and social life, the sense of security on campus, and the overall state of life. A good living environment can significantly improve the quality of life of international students, allowing them to reduce stress and anxiety as they adjust to a new environment, thus increasing satisfaction. This research result is consistent with the conclusions of many scholars (Cortés-Denia et al., 2023). A comfortable and supportive living environment allows students to focus on academic and social activities, enhancing their well-being. Building and maintaining positive personal relationships is essential for international students. Friendly social networks and good relationships between classmates and teachers can enhance their sense of belonging and social support, which improves their overall satisfaction. The social support not only contributes to students' academic success but also their professional development, as social networks are often an important source of career opportunities (Ahmad et al., 2021).

Balance between studies and social life is also an important part of well-being.

International students need to effectively manage academic stress and social activities to avoid mental health problems caused by excessive stress. Various support measures on campus, such as psychological counseling services and time management guidance, can help students achieve this balance and improve their academic performance and life satisfaction (Ahmad et al., 2021). A sense of safety on campus is another key factor. A safe learning and living environment can make international students more confident in facing life's challenges and reduce anxiety and restlessness. This sense of security not only increases their satisfaction but also allows them to better focus on preparing for career development. Institutions' strategies not only directly affect international students' satisfaction and career development, but also have an indirect impact on these factors by enhancing their well-being (Schönborn et al., 2019). Therefore, focusing on and improving the well-being of international students is key to enhancing their overall experience and chances of success.

5.2.4 Discussion on Variable: Equity of International Students

Equity for international students includes living conditions in dormitories, campus services, gender equity, equal communication with lecturers, and academic equity dialogue. Quality dormitory conditions and fair campus services can effectively reduce the anxiety and dissatisfaction of international students and improve their overall satisfaction (Wahlström, 2022).. At the same time, gender equality and an open academic exchange environment also help to enhance students' sense of belonging and engagement, which further increases their satisfaction. This research result is consistent with the conclusions of many scholars (Eizenberg & Jabareen, 2017; Jurado et al., 2020; Keddie, 2020; Block, 2020).

Equality also plays an important role in career development. Equitable career development opportunities and resources, such as internships and career guidance, can help international students better adapt to the workplace and enhance their career skills and competitiveness (Jurado et al., 2020). An impartial assessment system ensures fair evaluation of international students in their academic and professional development, while acculturation support helps them make a smooth transition to a new cultural environment and enhances their adaptability to the workplace. The internationalization strategy of an institution not only affects the satisfaction of international students but

also has an important impact on their career development. By developing and implementing effective internationalization strategies, institutions of higher learning can create a more inclusive and equitable environment that enhances the overall experience and likelihood of career success for international students (Ling & Nasri, 2019).

5.2.5 Discussion on Variable: Satisfaction of International Students

International student satisfaction is divided into four dimensions: education quality, global service on campus, scholarship, and career planning. By providing quality education, comprehensive campus services, a fair scholarship system, and comprehensive career planning support, the university can effectively increase international student satisfaction, thereby enhancing their learning and life experience. This research result is consistent with the conclusions of many scholars.

The quality of education is an important component of international student satisfaction. The modernization and adequacy of teaching facilities directly affect students' learning experience. The teaching level and academic research ability of teachers are also crucial, and good teachers can not only provide high-quality courses but also help students solve academic problems through personal learning consultation. In addition, the rational arrangement of curriculum plans and curricula, as well as the transparency of curriculum evaluation, can affect students' overall satisfaction with the quality of education. The effective course feedback mechanism and the academic support of teachers further improve the learning effectiveness and satisfaction of students (Block, 2020). Campus international services are rich in content. Dormitory conditions and the quality of their management, campus environment, and facilities directly affect students' life experiences. The service attitude of school staff and the efficiency of work procedures are also important considerations, which affect the convenience and comfort of students in their daily lives. The compatibility of the campus culture and the rich cultural activities can help international students better integrate into the campus environment and improve their overall satisfaction (Ling & Nasri, 2019).

Scholarship is another important dimension affecting international student satisfaction (Keddie, 2020). The ease of obtaining scholarship information and the

simplicity of the application process directly affect students' satisfaction. A transparent and fair scholarship evaluation system can increase students' trust and satisfaction with the school, especially in the case of greater financial pressure, the convenience and support of the scholarship are essential (Tetteh et al., 2021). The abundance and quality of career planning courses or seminars, entrepreneurship courses, internship company presentations, information on advancement, and career development directly affect students' confidence and readiness for future growth (Keddie, 2020). High-quality career development support helps students succeed in their job search and career development process and increases their overall satisfaction with the school.

5.2.6 Discussion on Variable: Career Path of International Students

The career development of international students is a complex and multi-dimensional variable, positively influenced by the internationalization strategies of institutions of higher learning, student's engagement, equity measures, and well-being. Career development is divided into four dimensions: career planning intention, entrepreneurial intention, employment intention, and overseas work intention. By providing systematic career planning support, entrepreneurial resources, career services, and overseas career opportunities, the school can effectively promote the career development of students and help them succeed in the global job market. This research result is consistent with the conclusions of many scholars (Wang & Chen, 2023; Tetteh et al., 2021; Bálint et al., 2024; Ali & Abou, 2020; Mei & Symaco, 2022).

Students career planning includes the vision of their future careers, decisions about current career choices, and how to prepare for future careers both academically and practically (Wang & Chen, 2023). The internationalization strategy of institutions of higher learning can support students' career planning by providing relevant career guidance and resources, such as career counseling services and lectures by industry experts. These support measures help students define their career goals and develop a practical career path (Tetteh et al., 2021).

In terms of entrepreneurial intentions, international students' entrepreneurial intentions include involvement in the family business, interest in self-employment, and the intention to continue learning (Hatane et al.,2021). The internationalization strategy of higher education institutions encourages students to explore entrepreneurial

opportunities and independent careers by providing entrepreneurship courses, innovation support, and incubator resources. In particular, providing relevant training and resources can enhance students' entrepreneurial confidence and ability. In addition, supportive strategies and entrepreneurship networks help students translate their entrepreneurial intentions into action (Ali & Abou, 2020).

Employment intentions include consideration of job choice, company choice, and business type choice. International students face many choices when making career decisions, and colleges and universities can help students better understand the job market and make informed career choices through services such as career planning courses, internship opportunities, and corporate referrals (Ali & Abou, 2020). The internationalization strategy of the school helps students to have access to more employment opportunities and resources, and improve their employment competitiveness (Mei & Symaco, 2022).

Overseas work intentions relate to international students' pursuit of working abroad and future career planning. The internationalization strategies and well-being measures of institutions of higher learning can influence students' intentions to work abroad (Guerrero et al., 2020). For example, by offering international internships, recruitment campaigns by multinational companies, and the establishment of a global career network, the school can help students expand international career development channels. In addition, good well-being support and an international environment can boost students' interest and confidence in working overseas, encouraging them to explore more global career opportunities.

5.3 Recommendation

5.3.1 Recommendation for Internationalization Strategies of HEIs

1. Findings

(1) The internationalization strategies of institutions of higher learning have significantly increased international student's engagement, satisfaction, and well-being by promoting international ideas, faculty programs, research collaborations, and support services.

(2) A sound internationalization strategy promotes equity and career development for international students, providing them with a wider range of resources

and opportunities.

2. Recommendations

（1）International concept and management

To effectively promote the internationalization strategy of colleges and universities, it is necessary to start with the internationalization concept and management. Colleges and universities should formulate a comprehensive and clear international strategic plan, and deeply integrate the concept of global education into the development goals of schools. The concept of internationalization should not only be reflected in the content of education but also be realized through all-round strategic deployment. For example, schools should invest more funds to support the development of international projects and the construction of management institutions for international affairs. The sound management system and organizational structure of the school can effectively promote the smooth operation of international affairs and ensure the implementation of the internationalization strategy at all levels (Grant, 2021). At the same time, the university should strengthen cooperation with high-level universities overseas and establish a long-term and in-depth cooperation mechanism so that international concepts can play a greater role in management and daily operations.

（2）To enhance the internationalization of teachers and courses

Colleges and universities should actively introduce teachers with international backgrounds and improve the international teaching ability of existing teachers through training, to ensure high-quality teaching content and teaching methods (Liu, 2019). At the same time, teaching in English should be part of the internationalization strategy, and more courses should be taught in English to attract students from all over the world. In addition, schools need to build a global curriculum system, so that the curriculum content is closer to the international frontier knowledge and skills needs. Practice teaching is also an important part of training international students' professional competitiveness. By providing more hands-on opportunities, combined with career development and career planning guidance, the school can help international students better integrate into the global workplace and enhance their competitiveness for employment (Cao, 2018).

（3）Strengthen international research and cooperation

In terms of international research and cooperation, the University should actively expand cooperation with international scientific research institutions and high-level universities. By participating in and hosting international academic conferences, promoting academic exchanges, and enhancing the international influence of scientific research results, the university can not only improve its scientific research level but also provide international students with more opportunities for academic exchanges and engagement in international scientific research projects. This international collaboration helps students to keep abreast of the latest research developments and to participate in international research projects to expand their academic horizons. In addition, the university should set up teaching and research institutes around the world to provide students with more channels to participate in international academic activities and deepen cooperation with overseas universities (Charles, 2019).

(4) Optimize international student support services

The improvement of support services is also key to increasing international students' satisfaction and well-being. Schools should further improve accommodation conditions, provide a more comfortable and safe living environment, and enrich English learning resources to help international students better adapt to academic life. International channels of information dissemination are also important, and schools should ensure that all types of information are timely and accurate to international students, so that they can smoothly access the resources and support they need (Gbollie & Gong, 2020). In addition, schools should provide equal access to resources to ensure that international students have equitable access to school facilities and services, reducing the inconvenience caused by language or cultural differences. By hosting international cultural events, the university can help international students integrate into campus life, enhance cultural exchange, and promote their sense of belonging and well-being.

5.3.2 Recommendation for Engagement of International Students

1. Findings

(1) International students' engagement (including Vigor, Dedication, and Absorption) significantly improves their satisfaction and career development prospects.

(2) Internationalization strategies of institutions of higher learning play a mediating role in international student satisfaction and career development by

enhancing international student's engagement.

(3) Engaged international students are more energetic, dedicated, and focused, which helps them achieve more in their academic and professional paths.

2. Recommendations

The implementation of the internationalization strategy of institutions of higher learning should create a learning environment that can stimulate the Vigor of international students. By designing a more challenging and interesting curriculum, students are encouraged to demonstrate mental resilience and enduring motivation to learn in the face of academic challenges. Schools should also provide more extracurricular activities and on-campus resources to help students maintain a high level of energy and motivation. To enhance the Dedication of students, colleges, and universities can strengthen the emphasis on the meaning and value of learning tasks. Through a curriculum that is integrated with practical career development, international students can gain a deeper understanding of the meaning of the content they are studying, thereby enhancing their sense of engagement with their studies. Schools should provide more guidance and feedback to help students discover an inner sense of achievement and pride in learning and to stimulate their love of academics (Mishra & Aithal, 2023). As for Absorption, schools should create an environment more suitable for students to concentrate on learning, such as providing quiet learning Spaces and reducing external interference. In addition, schools can help international students better immerse themselves in learning tasks and enhance their sense of learning experience by setting flexible learning plans and diversified teaching methods.

To further enhance the engagement of international students, schools should strengthen career development and career planning guidance, provide more internship and employment opportunities, and cooperate with global enterprises and institutions to pave the way for international students' career development. Through these measures, schools can better connect international students to their learning engagement and career development needs, ultimately increasing their satisfaction.

5.3.3 Recommendation for Well-being of International Students

1. Findings

The well-being of international students (such as living environment, personal relationships, learning and social balance, campus security, and overall life situation)

has a positive impact on their satisfaction and career development and acts as a bridge between the internationalization strategy of institutions of higher learning and international student satisfaction and career development.

2. Recommendations

To enhance the well-being of international students and enhance their satisfaction and career development, institutions of higher learning need to improve the living environment. The school should provide international students with comfortable, safe, and diverse accommodation options to ensure that they have good living conditions. At the same time, increase the healthy eating and recreational facilities on campus to create a more balanced and comfortable living atmosphere for students. Institutions of higher learning promote the establishment and development of personal relationships among international students. Schools can help international students build strong friendships and social networks with local students and other international students through cultural exchange activities and social inclusion programs (Wahlström, 2022). Providing language support and cross-cultural communication training can help students overcome language and cultural barriers and enhance their sense of belonging.

Schools should provide flexible learning programs and support services. Through the establishment of mental health counseling, academic guidance, and social support platforms, students can effectively manage academic pressure, rationally arrange social and study time, and avoid excessive academic burdens. A sense of security on campus is an important part of the well-being of international students (Block, 2020). Schools should strengthen campus security measures, ensure 24-hour security services, and hold safety lectures specifically for international students to enhance their safety awareness on and off campus (Keddie, 2020). In addition, a safety system should be established on campus to facilitate students to seek help, so that students can get help in time. Schools should focus on improving the living conditions of international students and enhance their well-being and quality of life through colorful campus activities and life services. Schools can provide more extracurricular activities, sports facilities, and interest groups to encourage students' engagement and help them maintain a healthy lifestyle and positive attitude toward life.

5.3.4 Recommendation for Equity of International Students

1. Findings

Equity for international students, including accommodation conditions, campus services, gender equality, communication opportunities with lecturers, and equity in academic dialogue, has a positive impact on their satisfaction and career development and plays a role in linking the internationalization strategy of institutions of higher learning with international student satisfaction and career development.

2. Recommendations

According to the research findings, the level of international students' equity comes from many aspects. To improve international students' sense of equity, colleges and universities need to take various measures. Institutions of higher learning need to improve accommodation for international students. To ensure that all international students can enjoy a comfortable and safe living environment. Schools should regularly evaluate dormitory facilities, carry out necessary maintenance and upgrades, ensure fair distribution of facilities, and avoid the perception of unequal treatment due to differences in conditions (Keler & Martynova, 2020). Universities need to optimize campus services. Institutions of higher learning need to provide comprehensive support for international students, including academic counseling and life services. Schools should establish a dedicated International Student Service Center to ensure that all students have equal access to the resources and assistance they need. Schools should develop and implement strict gender equality measures to ensure students enjoy equal opportunities and treatment in academic and campus life. Schools should encourage and support students to suggest improvements and provide effective channels for feedback. Regular teacher-student exchanges are organized to ensure that international students have the opportunity to express their ideas and needs and receive a positive response (Ali & Abou, 2020). Schools should provide fair opportunities for academic discussion and engagement. Through the establishment of intercultural exchange platforms and academic seminars, international students are encouraged to engage in in-depth academic dialogue with local students and faculty to ensure that all students can express their views and participate in discussions on an equal basis in an academic environment.

5.3.5 Recommendation for Satisfaction of International Students

1. Findings

(1) The internationalization strategy, student's engagement, equity, and well-being of institutions of higher education significantly increase international student satisfaction, with the quality of education and international services on campus being the key influencing factors.

(2) International students' satisfaction is manifested mainly in the four dimensions of education quality, international service on campus, scholarship, and career paths, and the improvement of each dimension has a positive impact on satisfaction.

2. Recommendations

To improve international student satisfaction, institutions of higher education can optimize the overall experience by improving the overall quality of education and international services on campus. Institutions should optimize curriculum design, ensure that curriculum content meets international standards, increase cross-cultural curriculum and practical links, and enhance the interaction of learning. At the same time, the teaching level of teachers should be strengthened through regular training to help teachers master more international teaching skills to ensure that they can effectively respond to the needs of students from different cultural backgrounds. Schools can strengthen language support services and offer specialized language tutoring courses to help international students adapt to the academic environment more quickly (Arifa et al., 2021). In addition, institutions should provide diversified acculturation programs to enhance interaction and understanding between international students and local students through intercultural exchange activities, thereby promoting a sense of belonging. At the same time, a sound administrative service system has been established to ensure that international students receive timely and efficient support in visa, accommodation, and other aspects.

In terms of scholarships, institutions can increase the number of scholarships for international students and design more flexible funding programs to attract and retain outstanding international students. It is important to provide targeted career planning and employment support, and schools should regularly organize career planning lectures, internship opportunities, and exchange activities with enterprises to

help international students understand the job market and boost their confidence in career development (Kandiko Howson & Matos, 2021). Equal treatment and student's well-being are important factors influencing satisfaction. Schools should ensure that international students enjoy equal treatment in academic, life, and social activities, carry out regular mental health services, pay attention to their psychological needs and life pressures, and provide relevant counseling and support services. The comprehensive implementation of these measures can effectively improve the overall satisfaction and sense of belonging of international students.

5.3.6 Recommendation for Career Paths of International Students

1. Findings

(1) The internationalization strategy of colleges and universities, the engagement of international students, equity, and well-being have a significant positive impact on the career development of international students, covering multiple dimensions such as career planning, entrepreneurship, employment, and overseas work intention.

(2) The career development of international students is affected by multi-dimensional factors, including career planning intention, entrepreneurial intention, employment intention, and overseas work intention, which are specifically reflected in career choice, entrepreneurial path, and overseas career pursuit.

2. Recommendations

In terms of career planning, schools should offer career planning courses specifically for international students, covering career path design, industry analysis, and vocational skills upgrading. Tailored career advice services are necessary for international students from different countries and cultures to help them plan the right career direction in their home country and target job market. At the same time, regular career planning workshops are organized to invite industry experts or successful alumni to share their experiences and help international students understand the requirements and challenges of different career options (Guerrero et al., 2020).

In terms of entrepreneurship support, schools should set up entrepreneurship incubation centers to provide specialized tutors to help international students develop entrepreneurial ideas. Students with entrepreneurial intentions are encouraged to submit business plans through regular entrepreneurship competitions, with the winners

receiving start-up capital and ongoing mentorship. In addition, schools should streamline the process for international students to apply for entrepreneurial visas or relevant legal documents to help students who intend to start a local business quickly enter the market.

For employment, the school can establish long-term partnerships with local and international enterprises, regularly hold job fairs, and provide a university-enterprise docking platform for international students. According to the needs of international students, the school can provide personalized career development services such as resume optimization and interview skills training. In addition, schools should assist international students in understanding and responding to the visa and legal requirements of the local job market, providing visa advice and job search support.

In terms of overseas work, schools should strengthen cooperation with global enterprises, especially in industries with a high degree of internationalization, and set up overseas internship and exchange programs to help international students accumulate international work experience (Mei & Symaco, 2022). By establishing a global alumni network, the school can provide career recommendation opportunities at home and abroad and increase the chances of international students getting positions overseas.

5.4 Future Research

Future research could deepen the understanding of international students' educational satisfaction and career development from multiple dimensions. Research can be extended to institutions of higher education of different types and regions, such as private universities, technical colleges, and institutions in different countries. This diverse sample helps to assess the effects of internationalization strategies in a variety of educational settings, identifying best practices and strategies in different contexts to provide more generalizable conclusions.

At the same time, future research should focus on how different cultural backgrounds and personal characteristics affect international students' satisfaction and career development. For example, research could explore how cultural differences, language ability, family background, and other factors affect international students' educational experiences and career choices to help institutions of higher education

develop more personalized and targeted support measures. It is also key to explore how to optimize the internationalization strategy of higher education institutions in different contexts. This includes assessing the effectiveness of existing internationalization measures and testing new strategies and interventions, especially those that are innovative and improve student's engagement, equitable treatment, and well-being. Through these studies, suggestions for improvement in practice can be provided to institutions of higher education to enhance the overall educational experience and career development potential of international students.

5.5 Research Limitation

Although the hypothesis is effectively verified by the quantitative method and structural equation model, there are still some shortcomings in this study. Firstly, the limitations of data sources. Because the study focused on regional universities, the geographical scope and type of sample were relatively limited. Therefore, the generalization of the findings is limited. Second, the satisfaction and career development of international students are affected by many factors, such as cultural differences, personal background, language ability, etc., but these variables cannot be fully reflected in structural equation models. The study may have overlooked some important subjective factors or situational variables, leading to a bias in the interpretation of the influence mechanism. Third, questionnaire surveys usually collect data at a single point in time, which means that it is difficult to capture the dynamic relationship of variables over time. International students' satisfaction and career paths can be influenced by long-term factors, and cross-sectional data fail to reveal these changing trends, so deeper causal mechanisms need to be further revealed. The measurement of subjective variables such as international students' satisfaction, well-being, and engagement in the questionnaire will be affected by students' personal subjective feelings and social expectations, resulting in results that are not objective enough. Future studies can further improve the research on international students' satisfaction and career development by expanding the sample range, adopting a hybrid method combining longitudinal study design with quantitative and qualitative methods, and more accurate variable measurement methods.

REFERENCES

Adler, N. J., & Gundersen, A. (2001). *International dimensions of organizational behavior*. South-Western.

Agasisti, T., & Dal Bianco, A. (2007). Determinants of college student migration in Italy: Empirical evidence from a gravity approach. *SSRN Electronic Journal, 2007*, 1063481. https://doi.org/10.2139/ssrn.1063481

Ahmad, N., Ullah, Z., Mahmood, A., Ariza-Montes, A., Vega-Muñoz, A., Han, H., & Scholz, M. (2021). Corporate social responsibility at the micro-level as a "new organizational value" for sustainability: Are females more aligned towards it?. *International Journal of Environmental Research and Public Health, 18*(4), 2165. https://doi.org/10.3390/ijerph18042165

Ajmal, M. M., Khan, M., Hussain, M., & Helo, P. (2018). Conceptualizing and incorporating social sustainability in the business world. *International Journal of Sustainable Development & World Ecology, 25*(4), 327-339. https://doi.org/10.1080/13504509.2017.1408714

Al Ariss, A., & Crowley-Henry, M. (2013). Self-initiated expatriation and migration in the management literature: Present theorizations and future research directions. *Career Development International, 18*(1), 78-96. https://doi.org/10.1108/13620431311305962

Ali, F., Zhou, Y., Hussain, K., Nair, P. K., & Ragavan, N. A. (2016). Does higher education service quality effect student satisfaction, image and loyalty? A study of international students in Malaysian public universities. *Quality Assurance in Education, 24*(1), 70-94. https://doi.org/10.1108/qae-02-2014-0008

Ali, M., & Abou, E. (2020). Determinants of entrepreneurial intention among Sudanese University students. *Management Science Letters, 10*(12), 2849-2860. https://doi.org/10.5267/j.msl.2020.4.023

Alpenidze, O. (2015). Conceptualizing internationalization strategies for higher education institutions. *Central and Eastern European Journal of Management and Economics, 3*(3), 229-242. http://www.ceejme.eu/volumes/2015/03/ceejme_3_5_art_04.pdf

Altbach, P. G. (1998). *Comparative higher education: Knowledge, the university and development*. Greenwood Publishing Group.

Altonji, J. G., Blom, E., & Meghir, C. (2012). Heterogeneity in human capital investments: High school curriculum, college major, and careers. *Annual Review of Economics, 4*(1), 185-223. https://doi.org/10.1146/annurev-economics-080511-110908

Ammigan, R. (2019). Institutional satisfaction and recommendation: What really matters to international students. *Journal of International Students, 9*(1), 262-281. https://doi.org/10.32674/jis.v9i1.260

Anderson, P. H., Hubbard, A., & Lawton, L. (2015). Student motivation to study abroad and their intercultural development. *Frontiers: The Interdisciplinary Journal of Study Abroad, 26*(1), 39-52. https://doi.org/10.36366/frontiers.v26i1.354

Andrews, K. R., & David, D. K. (1987). *The concept of corporate strategy* (3rd ed.). Irwin.

Angwaomaodoko, E. A. (2023). A critical evaluation of parental and peer influence on students' career path. *SSRN Electronic Journal, 2023*, 4853979. https://doi.org/10.2139/ssrn.4853979

Anjum, T., Farrukh, M., Heidler, P., & Díaz Tautiva, J. A. (2020). Entrepreneurial intention: Creativity, entrepreneurship, and university support. *Journal of Open Innovation: Technology, Market, and Complexity, 7*(1), 7010011. https://doi.org/10.3390/joitmc7010011

Ansoff, H. I., Declerck, R. P., & Hayes, R. L. (1976). *From strategic planning to strategic management*. John Willey.

Antoniu, E. (2010). Career planning process and its role in human resource development. *Annals of the University of Petrolane, Economics, 10*(2), 13-22.

Arcagni, A., Fattore, M., Maggino, F., & Vittadini, G. (2021). Some critical reflections on the measurement of social sustainability and well-being in complex societies. *Sustainability, 13*(22), 12679. https://doi.org/10.3390/su132212679

Arifa, Y., El Baroudi, S., & Khapova, S. (2021). How do individuals form their motivations to expatriate? A review and future research agenda. *Frontiers in Sociology, 6*, 631537. https://doi.org/10.3389/fsoc.2021.631537

Arthur, M. B., Khapova, S. N., & Wilderom, C. P. (2005). Career success in a boundary less career world. *The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 26*(2), 177-202. https://doi.org/10.1002/job.290

Arum, S., & Van de Water, J. (1992). The need for a definition of international education in US Universities. In C. B. Klasek (Ed.). *Bridges to the Future: Strategies for internationalizing higher education* (pp. 191-203). Association of International Education Administrators.

Asare-Nuamah, P. (2017). International students' satisfaction: Assessing the determinants of satisfaction. *Higher Education for the Future, 4*(1), 44-59. https://doi.org/10.1177/2347631116681213

Assembly, G. (2015). *Resolution adopted by the General Assembly on 11 September 2015*. United Nations.

Astin, A. W. (2012). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education*. Rowman & Littlefield Publishers.

Atef, T., & Al Balushi, M. (2017). Omani tourism and hospitality students' employment intentions and job preferences: Ramifications on Romanization plans. *Quality Assurance in Education, 25*(4), 440-461. https://doi.org/10.1108/QAE-04-2016-0022

Athanassopoulos, A. D. (1998). Decision support for target-based resource allocation of public services in multiunit and multilevel systems. *Management Science, 44*(2), 173-187. https://doi.org/10.1287/mnsc.44.2.173

Attom, L. E. (2024). Assessing the influential factors that guide students of the university of education, windbag, toward choosing teaching career path. *Asian Journal of Education and Social Studies, 50*(5), 304-322. https://doi.org/10.9734/ajess/2024/v50i51364

Audretsch, D. B., & Chowdhury, F. (2011). Knowledge spillover entrepreneurship and economic development. *International Review of Entrepreneurship, 9*(2), 67-82.

Audretsch, D. B., Coad, A., & Segarra, A. (2014). Firm growth and innovation. *Small Business Economics, 43*, 743-749. https://doi.org/10.1007/s11187-014-9560-x

Avery, D. R., McKay, P. F., & Wilson, D. C. (2007). Engaging the aging workforce: The relationship between perceived age similarity, satisfaction with coworkers, and employee engagement. *Journal of Applied Psychology, 92*(6), 1542-1556. https://doi.org/10.1037/0021-9010.92.6.1542

Ayoubi, R. M., & Massoud, H. K. (2007). The strategy of internationalization in universities: A quantitative evaluation of the intent and implementation in UK Universities. *International Journal of Educational Management, 21*(4), 329-349. https://doi.org/10.1108/09513540710749546

Ayoubi, R., & El-Habiabeh, A. (2006). An investigation into international business collaboration in higher education organizations: A case study of international partnerships in four UK leading universities. *International Journal of Educational Management, 20*(5), 380-396. https://doi.org/10.1108/09513540610676449

Azapagic, A. (2003). Systems approach to corporate sustainability: a general management framework. *Process Safety and Environmental Protection, 81*(5), 303-316. https://doi.org/10.1205/095758203770224342

Azmat, F., Osborne, A., Le Rossignol, K., Jogulu, U., Rentschler, R., Robottom, I., & Malathy, V. (2013). Understanding aspirations and expectations of international students in Australian higher education. *Asia Pacific Journal of Education, 33*(1), 97-111. https://doi.org/10.1080/02188791.2012.751897

Baines, J., & Morgan, B. (2004). Sustainability appraisal: A social perspective. In B. Dalal-Clayton & B. Sadler, (Eds.). In *First draft of work in progress* (pp. 95-112). International Institute for Environment and Development.

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309-328. https://doi.org/10.1108/02683940710733115.

Bakker, A. B., & Demerouti, E. (2014). Job demands-resources theory. In P. Y. Chen & C. L. Cooper (Eds.). In *Work and wellbeing* (pp. 37-64). Wiley Blackwell. https://doi.org/10.1002/9781118539415.wbwell019

Bakker, A. B., & Leiter, M. (2017). Strategic and proactive approaches to work engagement. *Organizational Dynamics, 46*(2), 67-75. https://doi.org/10.1016/j.orgdyn.2017.04.002

Bakker, A. B., & Leiter, M. P. (2010). *Work engagement: A handbook of essential theory and research*. Psychology Press.

Bálint, B., Telegdy, B., & Lázár, E. (2024). The importance of a coordinated career guidance system in addressing the rural NEETs issue. *Politics and Governance, 12*, 7439. https://doi.org/10.17645/pag.7439

Barak, M., & Yuan, S. (2021). A cultural perspective to project-based learning and the cultivation of innovative thinking. *Thinking Skills and Creativity, 39*(23), 100766. https://doi.org/10.1016/j.tsc.2020.100766

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99-120. https://doi.org/10.1177/014920639101700108

Barry, S. (1983). Implementation of strategic planning/strategic planning in emerging companies/the executive's illustrated primer of long range planning. *The Academy of Management Review (pre-1986), 8*(1), 169.

Baruch, Y. (2004). Transforming careers: from linear to multidirectional career paths: organizational and individual perspectives. *Career Development International, 9*(1), 58-73. https://doi.org/10.1108/13620430410518147

Baruch, Y., Dickmann, M., Altman, Y., & Bournis, F. (2013). Exploring international work: Types and dimensions of global careers. *The International Journal of Human Resource Management, 24*(12), 2369-2393. https://doi.org/10.1080/09585192.2013.781435

Bauer, E. L. (2022). Linking perceived corporate social responsibility and employee well-being a eudemonia perspective. *Sustainability, 14*(16), 10240. https://doi.org/10.3390/su141610240

Bedenlier, S., Bond, M., Buntins, K., Zawacki-Richter, O., & Kerres, M. (2020). Facilitating student's engagement through educational technology in higher education: A systematic review in the field of arts and humanities. *Australasian Journal of Educational Technology, 36*(4), 126-150. https://doi.org/10.14742/ajet.5477

Beijing Daily (2024, February 1). *Economic "report card" of 31 provinces in 2023: Guangdong, Jiangsu, Shandong and Zhejiang are the leaders, and the growth rate of 17 provinces outperforms that of the whole country*. https://baijiahao.baidu.com/s?id=1789657839047690724

Bessey, D. (2012). International student migration to Germany. *Empirical Economics, 42*(1), 345-361. https://doi.org/10.1007/s00181-010-0417-0

Bilgel, N., Bayram, N., Ozdemir, H., Dogan, F., & Ekin, D. (2012). Work engagement, burnout and vigor among a group of medical residents in Turkey. *British Journal of Education, Society & Behavioral Science, 2*(3), 220-238. https://doi.org/10.9734/bjesbs/2012/1496

Blizzard, R. (2004, March 9). *Engagement vs. satisfaction among hospital teams*. Gallup. http://www.gallup.com/poll/10903/engagement-vs-satisfaction-among-hospital-teams.aspx

Boardman, A. E., & Vining, A. R. (2020). Ownership and performance in competitive environments: A comparison of the performance of private, mixed, and state-owned enterprises. *The Journal of Law and Economics, 32*(1), 1-33. https://doi.org/10.1086/467167

Boström, M. (2012). A missing pillar? Challenges in theorizing and practicing social sustainability: Introduction to the special issue. *Sustainability: Science, Practice and Policy, 8*(1), 3-14. https://doi.org/10.1080/15487733.2012.11908080

Botezat, A., Incaltarau, C., Diac, S. A., & Grosu, A. C. (2024). Having your career path decided too early: The effects of high school track on education-occupation mismatch. *International Journal of Manpower, 45*(6), 1171-1190. https://doi.org/10.1108/IJM-03-2023-0123

Bovill, C., Bulley, C. J., & Morss, K. (2011). Engaging and empowering first-year students through curriculum design: Perspectives from the literature. *Teaching in Higher Education, 16*(2), 197-209. https://doi.org/10.1080/13562517.2010.515024

Brezis, E. S., & Soueri, A. (2011). *Students' international mobility*. www.almalaurea.it/info/convegni/bologna2011/abstract/Brezis_Soueri.pdf

Briscoe, J. P., & Hall, D. T. (2006). The interplay of boundary less and protean careers: Combinations and implications. *Journal of Vocational Behavior, 69*(1), 4-18. https://doi.org/10.1016/j.jvb.2005.09.002

Bromiley, P., Rau, D., & McShane, M. (2015). Can strategic risk management contribute to enterprise risk management: A strategic management perspective. In *The Routledge companion to strategic risk management* (pp. 140-156). Routledge. https://doi.org/10.4324/9781315780931-12

Brown, A., & Nurser, T. (2011). *Students as change agents-new ways of engaging with learning and teaching in higher education*. Higher Education Academy.

Cai, L., & Hall, C. (2016). Motivations, expectations, and experiences of expatriate academic staff on an international branch campus in China. *Journal of Studies in International Education, 20*(3), 207-222. https://doi.org/10.1177/1028315315623055

Caligiuri, P., & Bonache, J. (2016). Evolving and enduring challenges in global mobility. *Journal of World Business, 51*(1), 127-141. https://doi.org/10.1016/j.jwb.2015.10.001

Calvert, C. A. (2021). Transforming student career paths into a project to increase engagement in a project management course. *Journal of Education for Business, 34*(33), 1-11. https://doi.org/10.1080/08832323.2020.1860872

Canaj, K., Nimani, A., Canaj, B., & Spahija, D. (2022). Management and internationalization of research strategies in higher education institutions as a basis of economic well-being. *Corporate and Business Strategy Review, 3* (2, special issue), 221-229. https://doi.org/10.22495/cbsrv3i2siart3

Cao, C., Zhu, C., & Meng, Q. (2016). A survey of the influencing factors for international academic mobility of Chinese university students. *Higher Education Quarterly, 70*(2), 200-220. https://doi.org/10.1111/hequ.1208

Cao, S. (2018). Interaction and Integration: The New Thinking of Synergy Development between Stanford University and Silicon Valley Enterprise. *Journal of Yangzhou University (Higher Education Study Edition), 22*(1), 34-37. https://doi.org/10.19411/j.cnki.1007-8606.2018.01.006

Carver, C. S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. *Psychological Review, 97*(1), 19-35.

Cedefop, ETF, & European Commission. (2019). *Investing in career guidance*. https://www.cedefop.europa.eu/en/publications/2227

Cedefop, ETF, & European Commission. (2021). *Investing in career guidance: Revised edition 2021*. https://www.cedefop.europa.eu/en/publications/2230

CEIdata. (2021). *Number of resident population in Shandong*. https://wap.ceidata.cei.cn/detail?id=%2BKfFOagTqS4%3D

Chandler Jr, A. D. (1969). *Strategy and structure: Chapters in the history of the American industrial enterprise*. MIT Press.

Chaplin, G., & Wyton, P. (2014). Student's engagement with sustainability: Understanding the value-action gap. *International Journal of Sustainability in Higher Education, 15*(4), 404-417. https://doi.org/10.1108/IJSHE-04-2012-0029

Chen, X. F. (2002). *Internationalization of higher education: A megatrend across the centuries*. Fujian Education Publishing House.

Chien, C. (2016). *An introduction to the UIS and UOE Questionnaires*. UNESCO Institute for Statistics.

China Education Association for International Exchange. (2018). *Quality certification index system for higher education institutions to study in China (Framework)*. https://max.book118.com/html/2019/0224/6004131021002012.shtm

China Youth Online. (2024, January 26). *Prediction of the employment situation for 2024 college graduates: The employment potential in emerging fields is more intense than that in the general system*. https://baijiahao.baidu.com/s?id=1789132470100696020

Chun, C., Chang, Z., & Qian, M. (2016). Factors for international academic mobility of Chinese University Students. *Higher Education Quarterly, 70*(2), 200-220. https://doi.org/10.1111/hequ.1208

Cieślik, J., & van Stel, A. (2017). Explaining university students' career path intentions from their current entrepreneurial exposure. *Journal of Small Business and Enterprise Development, 24*(2), 313-332. https://doi.org/10.1108/jsbed-09-2016-0143

Clark, D. A. (2003). Concepts and perceptions of human well-being: Some evidence from South Africa. *Oxford Development Studies, 31*(2), 173-196. https://doi.org/10.1080/13600810307428

Cortés-Denia, D., Lopez-Zafra, E., & Pulido-Martos, M. (2023). Physical and psychological health relations to engagement and vigor at work: A Prisma-compliant systematic review. *Current Psychology, 42*(1), 765-780. https://doi.org/10.1007/s12144-021-01450-y

Council, C. L. (2004). *Driving performance and retention through employee engagement*. Corporate Executive Board.

Cummins, R. A., Eckersley, R., Pallant, J., van Vugt, J., & Misajon, R. (2003). Developing a national index of subjective wellbeing: The Australian unity wellbeing index. *Social Indicators Research, 64*(2), 159-190. https://doi.org/10.1023/a:1024704320683

Datnow, A., & Park, V. (2018). Opening or closing doors for students? Equity and data use in schools. *Journal of Educational Change, 19*, 131-152. https://doi.org/10.1007/s10833-018-9323-6

Dawe, G., Jucker, R., & Martin, S. (2005). *Sustainable development in higher education: Current practice and future developments*. https://www.sustainabilityexchange.ac.uk/files/sustdevinhefinalreport.pdf

De Los Santos, P. J., Moreno-Guerrero, A. J., Marín-Marín, J. A., & Soler Costa, R. (2020). The term equity in education: A literature review with scientific mapping in web of science. *International Journal of Environmental Research and Public Health, 17*(10), 3526. https://doi.org/10.3390/ijerph17103526

de Wit, H. (2019). Internationalization in higher education, a critical review. *SFU Educational Review, 12*(3), 9-17. https://doi.org/10.21810/sfuer.v12i3.1036

de Wit, H. (2024). Internationalization in and of higher education: critical reflections on its conceptual evolution. In *Internationalization in higher education and research: Perspectives, obstacles, alternatives* (pp. 17-31). Springer.

de Wit, H., & Deca, L. (2020). Internationalization of higher education, challenges and opportunities for the next decade. In *European higher education area: Challenges for a new decade* (pp. 3-11). Springer. https://doi.org/10.1007/978-3-030-56316-5_1

de Wit, H., Hunter, F., Howard, L., & Egron-Polak, E. (2015). Internationalization of higher education. *Brussels: European Parliament, 10*, 444393.

DeVoretz, D. J. (2006). *The education, immigration and emigration of Canada's highly skilled workers in the 21st century*. https://policycommons.net/artifacts/1189572/the-education-immigration-and-emigration-of-canadas-highly-skilled-workers-in-the-21st-century/1742696/

Dickmann, M., & Baruch, Y. (2011). *Global careers*. Routledge.

Ding, X. (2016). Exploring the experiences of international students in China. *Journal of Studies in International Education, 20*(4), 319-338. https://doi.org/10.1177/1028315316647164

District, G. V. R. (2004). *The social components of community sustainability: A framework*. TAC Social Issues Subcommittee.

Divinska, N. (2022). Diagnostics of the teacher's professional skills to use innovative forms and teaching methods. *Problems of Education, 56*(2), 134-146. https://doi.org/10.52256/2710-3986.2-97.2022.08

Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology, 29*(1), 94-122. https://doi.org/10.1016/j.joep.2007.09.001

Dong, S. (2019). The effects of first-generation status on student's engagement and outcomes at liberal arts colleges. *Journal of College Student Development, 60*(1), 17-34. https://doi.org/10.1353/csd.2019.0001

Dou, X., Li, H., & Jia, L. (2021). The linkage cultivation of creative thinking and innovative thinking in dance choreography. *Thinking Skills and Creativity, 41*(23), 100896. https://doi.org/10.1016/j.tsc.2021.100896

Douglas, J. (2015). *Student satisfaction and dissatisfaction: A study in the higher education context* (Master thesis). Liverpool John Moore's University. https://www.proquest.com/openview/24fe6aa2701c15ac1654e7a67d220578

Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment, 11*(2), 130-141. https://doi.org/10.1002/bse.323

Eckersley, R. (2006). Is modern Western culture a health hazard?. *International Journal of Epidemiology, 35*(2), 252-258. https://doi.org/10.1093/ije/dyi235

Eckersley, R. (2011). The science and politics of population health: Giving health a greater role in public policy. *Webmed Central Public Health, 2*(3), WMC001697. http://www.webmedcentral.com/article_view/1697

Economic Policy Committee, Directorate-General for Economic and Financial Affairs. (2010). *Efficiency and effectiveness of public expenditure on tertiary education in the EU*. https://economic-policy-committee.europa.eu/sites/default/files/docs/pages/country_fiches_-_ecofin_final_en.pdf

Eder, J., Smith, W. W., & Pitts, R. E. (2010). Exploring factors influencing student study abroad destination choice. *Journal of Teaching in Travel & Tourism, 10*(3), 232-250. https://doi.org/10.1080/15313220.2010.50353

Edwards, D. (2008). International engagements: The characteristics of international students' engagement with university. *Australasian Survey of Student Engagement, 2*, 1-9. https://research.acer.edu.au/cgi/viewcontent.cgi?article=1009&context=ausse

Eftimov, L., Trpeski, P., Gockov, G., & Vasileva, V. (2016). Designing a balanced scorecard as strategic management system for higher education institutions: A case study in Macedonia. *Ekonomika, 62*(2), 29-48. https://doi.org/10.5937/ekonomika1602029e

Eizenberg, E., & Jabareen, Y. (2017). Social sustainability: A new conceptual framework. *Sustainability, 9*(1), 9010068. https://doi.org/10.3390/su9010068

Elkington, J., & Rowlands, I. H. (1999). Cannibals with forks: The triple bottom line of 21st century business. *Alternatives Journal, 25*(4), 42-43. https://doi.org/10.5860/choice.36-3997

Engert, S., Rauter, R., & Baumgartner, R. J. (2016). Exploring the integration of corporate sustainability into strategic management: A literature review. *Journal of Cleaner Production, 112*, 2833-2850. https://doi.org/10.1016/j.jclepro.2015.08.031

Etzkowitz, H., Webster, A., Gebhardt, C., & Terra, B. R. C. (2000). The future of the university and the university of the future: Evolution of ivory tower to entrepreneurial paradigm. *Research Policy, 29*(2), 313-330. https://doi.org/10.1016/s0048-7333(99)00069-4

Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2009). *Student development in college: Theory, research, and practice*. John Wiley & Sons.

Fan, X. J. (2017). Research on strategic management of higher education--a review of "Research on strategic management of modern higher education development". *News and Writing, 10*, 126-134.

Felin, T., Foss, N. J., & Ployhart, R. E. (2015). The micro foundations movement in strategy and organization theory. *Academy of Management Annals, 9*(1), 575-632. https://doi.org/10.5465/19416520.2015.1007651

Fomicheva, T. V. (2020). To the operationalization of the concept of "sociocultural values" in the framework of the world values survey project. *Social' Naya Politika I Sociologiya, 19*(1), 123-131. https://doi.org/10.17922/2071-3665-2020-19-1-123-131

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. https://doi.org/10.1177/002224378101800104

Foskett, N. (2010). Global markets, national challenges, local strategies: The strategic challenge of internationalization. In F. Maringe & N. Foskett (Eds.). In *Globalization and internationalization in higher education: Theoretical, strategic and management perspectives* (pp. 35-50). A&C Black.

Foss, N. J. (2011). Invited editorial: Why micro-foundations for resource-based theory are needed and what they may look like. *Journal of Management, 37*(5), 1413-1428. https://doi.org/10.1177/0149206310390218

Fox, S., & Spector, P. E. (2002). Emotions in the workplace: The neglected side of organizational life introduction. *Human Resource Management Review, 12*(2), 167-171. https://doi.org/10.1016/S1053-4822(02)00044-X

Frändberg, L. (2015). Acceleration or avoidance? The role of temporary moves abroad in the transition to adulthood. *Population, Space and Place, 21*(6), 553-567. https://doi.org/10.1002/psp.1851

Fraser, N. (1996). *Social justice in the age of identity politics: Redistribution, recognition, and participation*. http://www.intelligenceispower.com/Important%20E-mails%20Sent%20attachments/Social%20Justice%20in%20the%20Age%20of%20Identity%20Politics.pdf

Fraser, N. (2007). Feminist politics in the age of recognition: A two-dimensional approach to gender justice. *Studies in Social Justice, 1*(1), 23-35. https://doi.org/10.26522/ssj.v1i1.979

Fraser, N. (2008). Social justice in the age of identity politics: Redistribution, recognition, and participation. In *Geographic thought* (pp. 72-89). Routledge.

Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science, 13*(2), 172-175. https://doi.org/10.1111/1467-9280.00431

Fritsch, M. (2008). How does new business formation affect regional development? Introduction to the special issue. *Small Business Economics, 30*, 1-14. https://doi.org/10.1007/s11187-007-9057-y

Fritsch, M., & Wyrwich, M. (2014). *The effect of regional entrepreneurship culture on economic development: Evidence for Germany*. https://www.econstor.eu/handle/10419/98454

Garrido, F. J. (2016). Strategists and strategies. *Strategy and Management Business Review, 6*(1), 1-13.

Gbollie, C. (2019). *Understanding study abroad motivation and its relationship with psychological adjustment, academic satisfaction and leadership potential of international students in China* (Doctoral Dissertation). Central China Normal University.

https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2022&file name=1019206190.nh

Gbollie, C., & David, M. (2014). Aligning expansion and quality in higher education: An imperative to Liberia's economic growth and development. *Journal of Education and Practice, 5*(12), 139-150.

Gbollie, C., & Gong, S. (2020). Emerging destination mobility: Exploring African and Asian international students' push-pull factors and motivations to study in China. *International Journal of Educational Management, 34*(1), 18-34. https://doi.org/10.1108/IJEM-02-2019-0041

Geller, E. S. (1995). Actively caring for the environment: An integration of behaviorism and humanism. *Environment and Behavior, 27*(2), 184-195. https://doi.org/10.1177/0013916595272004

Gewirtz, S. (1998). Conceptualizing social justice in education: Mapping the territory. *Journal of Education Policy, 13*(4), 469-484.

Gibb, A. A. (1996). Entrepreneurship and small business management: Can we afford to neglect them in the twenty-first century business school?. *British Journal of Management, 7*(4), 309-321. https://doi.org/10.1111/j.1467-8551.1996.tb00121.x

Gill, J. (2009, May 21). *Fine-tuned data show UK challenging US as top overseas draw.* Times Higher Education. https://www.timeshighereducation.com/cn/news/fine-tuned-data-show-uk-challenging-us-as-the-top-overseas-draw/406608.article

Godet, M. (2022). Effective strategic management the prospective approach. *Technology Analysis & Strategic Management, 1*(1), 45-56.

González-Bonilla, A., Blanco Carrasco, M., Castaño Collado, G., & Urquía Grande, E. (2021). Embedding internationalization in European higher education institution's strategies: Easier said than done?. *Papules de Europa, 33*(2), 57-68. https://doi.org/10.5209/pade.70172

Gopal, D., & Nagendra, H. (2014). Vegetation in Bangalore's slums: Boosting livelihoods, well-being and social capital. *Sustainability, 6*(5), 2459-2473. https://doi.org/10.3390/su6052459

Grant, J. H. (2007). Advances and challenges in strategic management. *International journal of Business, 12*(1), 11-31.

Grant, R. M. (2021). *Contemporary strategy analysis*. John Wiley & Sons.

Gray, E. K., Watson, D., Payne, R., & Cooper, C. (2001). Emotion, mood, and temperament: Similarities, differences, and a synthesis. In R. L. Payne & C. Cooper (Eds.). In *Emotions at work: Theory, research and applications for management* (pp. 21-43). John Wiley & Sons.

Green, M. F. (2016). Critical perspectives on internationalizing the curriculum in disciplines: Reflective narrative accounts from business, education, and health. *International Educator, 25*(5), 14-15.

Green, M. F. (2016). Impact of cognitive and social cognitive impairment on functional outcomes in patients with schizophrenia. *The Journal of Clinical Psychiatry, 77*(2), 8569. https://doi.org/10.4088/jcp.14074su1c.02

Green, W. (2019). Engaging students in international education: Rethinking student's engagement in a globalized world. *Journal of Studies in International Education, 23*(1), 3-9. https://doi.org/0.1177/1028315318814197

Gu, M. Y. (1990). *Dictionary of education*. Shanghai Education Press.

Guangdong Provincial People's Government. (1999, April 13). *Notice of the state council on the approval and transmission of the action plan for the revitalization of education in the 21st century by the ministry of education*. http://www.gd.gov.cn/zwgk/gongbao/1999/13/content/post_3359580.html

Gudz, M., Plynokos, D., & Tsavaliuk, K. (2019). Approaches to the formation of the strategy of internationalization of higher education institution. *State and Regions Series: Economics and Business, 4*(109), 38-42. https://doi.org/10.32840/1814-1161/2019-4-6

Guerrero, M., Urbano, D., & Gajón, E. (2020). Entrepreneurial university ecosystems and graduates' career patterns: Do entrepreneurship education programmers and university business incubators matter?. *Journal of Management Development, 39*(5), 753-775. https://doi.org/10.1108/JMD-10-2019-0439

Guo, X. X. (2016). *Research on international students admission policy and implement of university of California-Berkeley* (Master Thesis). Xi'an International Studies University.

https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201602&filename=1016760460.nh

Gustavsson, A., Wendelborg, C., & Tøssebro, J. (2021). Educated for welfare services the hidden curriculum of upper secondary school for students with intellectual disabilities. *British Journal of Learning Disabilities, 49*(4), 424-432. https://doi.org/10.1111/bld.12418

Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. Pearson.

Hale, J., Legun, K., Campbell, H., & Carolan, M. (2019). Social sustainability indicators as performance. *Geoforum, 103*, 47-55. https://doi.org/10.1016/j.geoforum.2019.03.008

Hall, M., Ramsay, A., & Raven, J. (2004). Changing the learning environment to promote deep learning approaches in first-year accounting students. *Accounting Education, 13*(4), 489-505. https://doi.org/10.1080/0963928042000306837

Hardjono, T. W., & van Marrewijk, M. (2001). The social dimensions of business excellence. *Corporate Environmental Strategy, 8*(3), 223-233. https://doi.org/10.1016/S1066-7938(01)00125-7

Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond relational demography: Time and the effects of surface-and deep-level diversity on work group cohesion. *Academy of Management Journal, 41*(1), 96-107. https://doi.org/10.5465/256901

Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*(2), 268-279. https://doi.org/10.1037//0021-9010.87.2.268

Harter, J. K., Schmidt, F. L., Killham, E. A., & Agrawal, S. (2009). *Q12 meta-analysis: The relationship between engagement at work and organizational outcomes*. Gallup.

Harvida, D. A., & Wijaya, C. (2020). Faktor yang mempengaruhi turnover karyawan dan strategi retensi sebagai pencegahan turnover karyawan: Sebuah tinjauan literatur. *JIANA (Jurnal Ilmu Administrasi Negara), 18*(2), 13-23.

Hatane, S. E., Setiono, F. J., Setiawan, F. F., Semuel, H., & Mangoting, Y. (2021). Learning environment, students' attitude and intention to enhance current knowledge in the context of choosing accounting career. *Journal of Applied Research in Higher Education, 13*(1), 79-97. https://doi.org/10.1108/JARHE-06-2019-0156

Hayrapetyan, G., & Hayrapetyan, V. (2009). *The determinants of the attractiveness of the national higher education system*. Economics Education and Research Consortium.

Hennessy, J. (2013). *Looking ahead, thinking strategically*. http://annualreport.stanford.edu/2013/

Hitt, M. A. (2011). Relevance of strategic management theory and research for supply chain management. *Journal of Supply Chain Management, 47*(1), 9-13. https://doi.org/10.1111/j.1745-493X.2010.03210.x

Holbeche, L. S. (2018). Organizational effectiveness and agility. *Journal of Organizational Effectiveness: People and Performance, 5*(4), 302-313. https://doi.org/10.1108/JOEPP-07-2018-0044

Holifield, R., Porter, M., & Walker, G. (2010). Introduction: Spaces of environmental justice. In *Spaces of Environmental Justice* (pp. 1-22). Wiley-Blackwell.

Hollander, R., Amekudzi-Kennedy, A., Bell, S., Benya, F., Davidson, C., Farkos, C., & Lizotte, M. (2016). Network priorities for social sustainability research and education: Memorandum of the integrated network on social sustainability research group. *Sustainability: Science, Practice and Policy, 12*(1), 16-21. https://doi.org/10.1080/15487733.2016.11908150

Hopland, A. O., & Nyhus, O. H. (2016). Learning environment and student effort. *International Journal of Educational Management, 30*(2), 271-286. https://doi.org/10.1108/IJEM-05-2014-0070

Howard, J. H. (2021). *Rethinking Australian higher education*. Howard Partners Canberra.

Hsu, T. C. (2012). Enhancing college students' global awareness through campus Toastmasters clubs. *International Journal of Research Studies in Education, 1*(1), 21-34. https://doi.org/10.5861/ijrse.2012.v1i1.1

Huang, S. (2016). *Handbook of American colleges*. Tsinghua University Publishing House.

i-graduate. (2015). *International student barometer*. http://www.igraduate.org/services/international-student-barometer/

Imperatives, S. (1987). *Report of the world commission on environment and development: Our common future*. https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf

Indicators, O. (2013). *Education at a Glance 2016 OECD indicators*. OECD Publishing.

Inglehart, R., Basanez, M., Diez-Medrano, J., Halman, L., & Luijkx, R. (2000). *World values surveys and european values surveys, 1981-1984, 1990-1993, and 1995-1997*. Inter-university Consortium for Political and Social Research.

Jackling, B., & Keneley, M. (2009). Influences on the supply of accounting graduates in Australia: A focus on international students. *Accounting & Finance, 49*(1), 141-159. https://doi.org/10.1111/j.1467-629X.2008.00273.x

Jamali, D. (2006). Insights into triple bottom line integration from a learning organization perspective. *Business Process Management Journal, 12*(6), 809-821. https://doi.org/10.1108/14637150610710945

Jamil, H., Wahab, A. Y. A., Razak, A. R. A., & Al-Shaari, N. (2020). Exploring the internationalization strategy of higher education institutions and halal food ecosystem in Malaysia. *Food Research, 4*(S1), 145-150. https://doi.org/10.26656/fr.2017.4(s1).s23

Jena, B., & Chang, J. (2007, 2008). *International student satisfaction survey*. International Programs for Student Administrative Office.

Jeon, H., & Min, J. (2021). Effect of university website composition on entrance, career path, satisfaction and PUBLIC VALUE-focused on college students who entered the department of beauty. *Public Value, 6*(4), 61-73. https://doi.org/10.22471/value.2021.6.4.61

Jha, B., & Kumar, A. (2016). Employee engagement: A strategic tool to enhance performance. *DAWN: Journal for Contemporary Research in Management, 3*(2), 21-29.

Jin, L., & Schneider, J. (2019). Faculty views on international students: A survey study. *Journal of International Students, 9*(1), 84-96. https://doi.org/10.32674/jis.v9i1.268

Johnsen, Å. (2020). Strategic management thinking and practice in the public sector: A strategic planning for all seasons?. *Financial Accountability & Management, 31*(3), 243-268. https://doi.org/10.1111/faam.12056

Jones, E., & Brown, S. (2007). *Internationalizing higher education*. Routledge.

Jones, E., Leask, B., Brandenburg, U., & de Wit, H. (2021). Global social responsibility and the internationalization of higher education for society. *Journal of Studies in International Education, 25*(4), 330-347. https://doi.org/10.1177/10283153211031679

Joseph, D., Boh, W. F., Ang, S., & Slaughter, S. A. (2012). The career paths less (or more) traveled: A sequence analysis of IT career histories, mobility patterns, and career success. *Mis Quarterly, 36*(2), 427-452. https://doi.org/10.2307/41703462

Kahanec, M., & Králiková, R. (2011). Pulls of international student mobility. *SSRN Electronic Journal, 6233*. https://doi.org/10.2139/ssrn.1977819

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33*(4), 692-724. https://doi.org/10.5465/256287

Kahneman, D., Krueger, A. B., Schkade, D., Schwarz, N., & Stone, A. A. (2006). Would you be happier if you were richer?. *A focusing illusion. Science, 312*(5782), 1908-1910. https://doi.org/10.1126/science.1129688

Kamal, Y., & Ferdousi, M. (2009). Managing diversity at workplace: A case study of HP. *ASA University Review, 3*(2), 157-170. https://ssrn.com/abstract=1944511

Kanungo, R. N. (1982). Measurement of job and work involvement. *Journal of Applied psychology, 67*(3), 341-349. https://doi.org/10.1037//0021-9010.67.3.341

Karanika-Murray, M., Duncan, N., Pontes, H. M., & Griffiths, M. D. (2015). Organizational identification, work engagement, and job satisfaction. *Journal of Managerial Psychology, 30*(8), 1019-1033. https://doi.org/10.1108/JMP-11-2013-0359

Keler, V. V., & Martynova, O. V. (2020). Programs of career guidance work at the Krasnoyarsk State Agrarian University. In *the European Proceedings of Social & Behavioural Sciences* (pp. 717-725). European Publisher. https://doi.org/10.15405/epsbs.2020.10.03.84

Keller, G. (1983). *Academic strategy: The management revolution in American higher education*. JHU Press.

Kettlewell, J. S., & Henry, R. J. (2009). *Increasing the competitive edge in Math and science*. Rowman and Littlefield publishing Group.

Kilpatrick, S., Johns, S., Barnes, R., Fischer, S., McLennan, D., & Magnussen, K. (2016). Exploring the retention and success of students with disability in Australian higher education. *International Journal of Inclusive Education, 21*(7), 747-762. https://doi.org/10.1080/13603116.2016.1251980

Kirkeboen, L. J., Leuven, E., & Mogstad, M. (2016). Field of study, earnings, and self-selection. *The Quarterly Journal of Economics, 131*(3), 1057-1111. https://doi.org/10.1093/qje/qjw019

Kitamura, T. (1984). *Internationalization of the University*. Takanawa University Publishing Department.

Knight, J. (1993). Internationalization: management strategies and issues. *International Education Magazine, 9*(6), 21-22.

Knight, J. (1994). *Internationalization: Elements and checkpoints (Research Monograph, No.7)*. Canadian Bureau for International Education.

Knight, J. (2007). Internationalization: Concepts, complexities and challenges. In J. J. F. Forest & P. G. Altbach (Eds.). In *International Handbook of Higher Education* (pp. 207-227). Springer. https://doi.org/10.1007/978-1-4020-4012-2_11

Knight, J. (2011). *Change and development of internationalization in higher education in the currents* (D. F. Liu & Q. Y. Chen, Trans.). Beijing University Press.

Ko, S., & Lee, D. (2021). Effectiveness of green infrastructure location based on a social well-being index. *Sustainability, 13*(17), 9620. https://doi.org/10.3390/su13179620

Koning, J. (2001, August 22-23). *Social sustainability in a globalizing world: Context, theory and methodology explored*. UNESCO/MOST Meeting.

Kou, H. F. (2015). *A Research on Strategic Management to Further Education: A Study of S College* [Master Thesis]. Jilin University. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201502&filena me=1015596301.nh

Kramer, M. G. (2013). *Our built and natural environments: A technical review of the interactions among land use, transportation, and environmental quality*. http://www.epa.gov/smartgrowth/pdf/b-and-n/b-and-n-EPA-231K13001.pdf

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607-610. https://doi.org/10.1177/001316447003000308

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607-610. https://doi.org/10.1177/001316447003000308

Kuntsi, V. (2014). *Fostering work engagement through dedication: Case ram boll* (Master Thesis). University of Tampere. https://trepo.tuni.fi/bitstream/handle/10024/95870/GRADU-1404213426.pdf

Kusumawati, N. S., Nurhaeni, I., & Nugroho, R. (2020). The content of higher education internationalization policy: Stakeholders' insight of internationalization of higher education. *Journal of Education and Learning, 14*(2), 255-262. https://doi.org/10.11591/edulearn.v14i2.14581

Lancaster, S., & Di Milia, L. (2015). Developing a supportive learning environment in a newly formed organization. *Journal of Workplace Learning, 27*(6), 442-456. https://doi.org/10.1108/JWL-08-2014-0061

Lawler, E. E., & Hall, D. T. (1970). Relationship of job characteristics to job involvement, satisfaction, and intrinsic motivation. *Journal of Applied Psychology, 54*(4), 305-312. https://psycnet.apa.org/doi/10.1037/h0029692

Layard, P. R. G., Layard, R., & Dunn, J. (2009). *A good childhood: Searching for values in a competitive age*. Penguin UK.

Lazarus, R. S. (2006). *Stress and emotion: A new synthesis*. Springer publishing company.

Leask, B. (2015). A conceptual framework for internationalization of the curriculum. In *Internationalizing the Curriculum* (pp. 26-40). Routledge.

Lee, H. (2020). An analysis of the effect of the national scholarship policy on the reduction of the tuition fee burden. *The Korean Educational Administration Society, 38*(3), 229-252. https://doi.org/10.22553/keas.2020.38.3.229

Lee, S. W. (2017). Circulating east to east: Understanding the push-pull factors of Chinese students studying in Korea. *Journal of Studies in International Education, 21*(2), 170-190. https://doi.org/10.1177/1028315317697540

Lee, Y., Lee, G., Kim, J., & Lee, M. (2021). Equity in career development of high school students in south Korea: The role of school career education. *Education Sciences, 11*(1), 20. https://doi.org/10.3390/educsci11010020

Leiter, M. P., & Maslach, C. (2005). A mediation model of job burnout. In A. S. G. Antoniou & C. L. Cooper (Eds.). *Research Companion to Organizational Health Psychology* (pp. 544-564). Edward Elgar Publishing. https://doi.org/10.4337/9781845423308.00046

Leiter, M. P., & Maslach, C. (2010). Building engagement: The design and evaluation of interventions. In *Work Engagement: A Handbook of Essential Theory and Research* (pp. 164-180). Psychology Press.

Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology, 60*(4), 557-568. https://doi.org/10.1037/a0033446

Li, L. M., & Zhu, Q. B. (2007). Yale's goals and strategies for a global university. *Tsinghua Journal of Education, 4*, 64-69.

Li, Q. Q. (2004). *Globalization and neoliberalism*. Guangxi Normal University Press.

Li, R. (2016). *The research of internationalization development strategies in Shandong provincial universities* (Master Thesis). Shandong University of Finance and Economics. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201602&filename=1016138722.nh

Li, Y. (2014). *Post-graduation intentions of African students in China: The case of African students in Zhejiang Normal University* (Master Thesis). Zhejiang Normal University. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201501&filename=1014388402.nh

Li, Y. Y. (2019). Implications of private college financing in the United States for private colleges and universities in China. *Cultural and Educational Materials, 17*(4), 110-121.

Liang, T. Y., & Yoon, S. J. (2023). The effect of perceived corporate social responsibility (PCSR) on subjective well-being. *Sustainability, 15*(9), 7497. https://doi.org/10.3390/su15097497

Liang, W., Guan, W., Chen, R., Wang, W., Li, J., Xu, K., Li, C., Ai, Q., Lu, W., Liang, H., Li, S., & He, J. (2020). Cancer patients in sars-cov-2 infection: A nationwide analysis in china. *The Lancet Oncology, 21*(3), 335-337. https://doi.org/10.1016/S1470-2045(20)30096-6

Lindholm Dahlstrand, Å. (2007). Technology-based entrepreneurship and regional development: The case of Sweden. *European Business Review, 19*(5), 373-386. https://doi.org/10.1108/09555340710818969

Lindsay, L. B., & Pramod, K. (2001). *International student mobility in a competitive world: Determinants and US policy before and after post 9/11*. http://paa2008.princeton.edu/download.aspx?submissionId=81259

Ling, T., & Nasri, N. M. (2019). A systematic review: Issues on equity in education. *Creative Education, 10*(12), 3163-3174. https://doi.org/10.4236/ce.2019.1012240

Lingard, B., Hayes, D., Mills, M., & Christie, P. (2003). *Leading learning: Making hope practical in schools*. McGraw-Hill Education.

Littig, B., & Griessler, E. (2005). Social sustainability: A catchword between political pragmatism and social theory. *International Journal of Sustainable Development, 8*(1-2), 65-79. https://doi.org/10.1504/IJSD.2005.007375

Liu, D., & Wang, J. (2008). *The determinants of international student mobility: An empirical study on US data*. http://dalea.du.se/theses/?itemId=3759

Liu, Q. (2019). On strategic management and internal development of colleges and universities. *Heilongjiang Researches on Higher Education, 6*, 6-11.

Liu, X. L. (2015). *The study of the educational internationalization of local colleges and universities* (Master thesis). Northeast Normal University. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CDFDLAST2016&filename=1015407716.nh

Liu, X., Ping, S., & Gao, W. (2019). Changes in undergraduate students' psychological well-being as they experience university life. *International Journal of Environmental Research and Public Health, 16*(16), 2864. https://doi.org/10.3390/ijerph16162864

Lodi, E., Perrella, L., Zarbo, R., & Patrizi, P. (2022). Courage as mediator between positive resources and general/domain-specific well-being indices. *European Journal of Investigation in Health, Psychology and Education, 12*(8), 1067-1081. https://doi.org/10.3390/ejihpe12080076

Lodi, E., Zammitti, A., & Magnano, P. (2021). Risk intelligence as a resource in career transition: The role of college satisfaction on the visions about future jobs. *European Journal of Investigation in Health, Psychology and Education, 11*(3), 1030-1043. https://doi.org/10.3390/ejihpe11030077

López-Duarte, C., Maley, J. F., & Vidal-Suárez, M. M. (2021). Main challenges to international student mobility in the European arena. *Scientometrics, 126*(11), 8957-8980. https://doi.org/10.1007/s11192-021-04155-y

Lopez-Zafra, E., Pulido-Martos, M., & Cortés-Denia, D. (2022). Vigor at work mediates the effect of transformational and authentic leadership on engagement. *Scientific Reports, 12*(1), 17127. https://doi.org/10.1038/s41598-022-20742-2

Lozano, R. (2011). The state of sustainability reporting in universities. *International Journal of Sustainability in Higher Education, 12*(1), 67-78. https://doi.org/10.1108/14676371111098311

Lukács, A. (2021). Mental well-being of university students in social isolation. *European Journal of Health Psychology, 28*(1), 22-29. https://doi.org/10.1027/2512-8442/a000065

Luke, A., Woods, A., & Weir, K. (2013). *Curriculum, syllabus design and equity. Routledge*. https://doi.org/10.4324/9780203833452

Ma, J. (2014). *Institutional strategies for internationalization at different types of universities in the Netherlands: Take Leiden University and the Hague University of applied sciences as examples* (Master Thesis). Xiamen University. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201402&filename=1014222430.nh

Magee, L., Scerri, A., & James, P. (2012). Measuring social sustainability: A community-centered approach. *Applied Research in Quality of Life, 7*, 239-261. https://doi.org/10.1007/s11482-012-9166-x

Magnano, P., Lodi, E., Zammitti, A., & Patrizi, P. (2021). Courage, career adaptability, and readiness as resources to improve well-being during the university-to-work transition in Italy. *International Journal of Environmental Research and Public Health, 18*(6), 2919. https://doi.org/10.3390/ijerph18062919

Mahroum, S. (2000). Highly skilled globetrotters: Mapping the international migration of human capital. *R&D Management, 30*(1), 23-32. https://doi.org/10.1111/1467-9310.00154

Manokhina, N. N. (2024). Professional competence of college teachers: Her contribution to the formation of skills of social interaction skills among students of inclusive groups. *Innovative Science: Psychology, Pedagogy, Defect Ology, 7*(3), 101-110. https://doi.org/10.23947/2658-7165-2024-7-3-101-110

Marconi, G. (2013). Rankings, accreditations, and international exchange students. *IZA Journal of European Labor Studies, 2*(1), 1-22. https://doi.org/10.1186/2193-9012-2-5

Maringe, F., & Foskett, N. (2012). *Globalization and internationalization in higher education: Theoretical, strategic and management perspectives*. A&C Black.

Martin, G. C. (2014). The effects of cultural diversity in the workplace. *Journal of Diversity Management, 9*(2), 89-92. https://doi.org/10.19030/jdm.v9i2.8974

Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). *Maslach burnout inventory*. Scarecrow Education.

Matthews, N., Kilgour, L., Christian, P., Mori, K., & Hill, D. M. (2015). Understanding, evidencing, and promoting adolescent well-being: An emerging agenda for schools. *Youth & Society, 47*(5), 659-683. https://doi.org/10.1177/0044118X13513590

Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior, 70*(1), 149-171.

Mazzarol, T. W., & Soutar, G. N. (2001). *The global market for higher education: Sustainable competitive strategies for the new millennium*. Edward Elgar.

Mazzarol, T., & Soutar, G. N. (2002). Push-pull factors influencing international student destination choice. *International Journal of Educational Management, 16*(2), 82-90. https://doi.org/10.1108/09513540210418403

McDowall, T., & Jackling, B. (2010). Attitudes towards the accounting profession: An Australian perspective. *Asian Review of Accounting, 18*(1), 30-49. https://doi.org/10.1108/13217341011045999

McKenzie, S. (2004). *Social sustainability: Towards some definitions*. https://www2.econ.iastate.edu/classes/tsc220/hallam/Readings/SocialMcKenzie.pdf

McMahon, M. E. (1992). Higher education in a world market: An historical look at the global context of international study. *Higher Education, 24*(4), 465-482. https://doi.org/10.1007/BF00137243

Mei, W., & Symaco, L. (2022). University-wide entrepreneurship education in China's higher education institutions: Issues and challenges. *Studies in Higher Education, 47*(1), 177-193. https://doi.org/10.1080/03075079.2020.1735330

Ming, X. (1999). Abstract of the world declaration on higher education. *Exploring Education Development, 3*, 84-85.

Ministry of Education of the People's Republic of China. (2024). *Number of Higher Education Institutions*. http://www.moe.gov.cn/jyb_sjzl/moe_560/2022/quanguo/202401/t20240110_1099531.html

Ministry of Education of the People's Republic of China. (2024). *Number of students in higher education institutions*. http://www.moe.gov.cn/jyb_sjzl/moe_560/2022/quanguo/202401/t20240110_1099530.html

Mintzberg, H. (1978). Patterns in strategy formation. *Management Science, 24*(9), 934-948. https://doi.org/10.1287/mnsc.24.9.934

Mishra, N., & Aithal, P. (2023). A study of employee engagement in the higher education institutions. *International Journal of Applied Engineering and Management Letters, 7*(4), 115-129. https://doi.org/10.47992/ijaeml.2581.7000.0196

Mitlin, D., & Satterthwaite, D. (2014). Sustainable development and cities. In *Sustainability the Environment and Urbanization* (pp. 23-61). Routledge.

Mohammed, Z., Kumar, S., & Padakannaya, P. (2021). Well-being and career decision-making difficulties among master's students: A simultaneous multi-equation modeling. *Cogent Psychology, 8*(1), 1996700. https://doi.org/10.1080/23311908.2021.1996700

Mohd Rasdi, R., & Ahrari, S. (2020). The applicability of social cognitive career theory in predicting life satisfaction of university students: A meta-analytic path analysis. *Plos One, 15*(8), e0237838. https://doi.org/10.1371/journal.pone.0237838

Morden, T. (2016). *Principles of strategic management*. Routledge.

Munck, L., Munck, M. G. M., & Souza, R. B. d. (2011). Gestão de pessoas por competências: análise de repercussões dez anos pós-implantação. *RAM Revista de Administração Mackenzie, 12*, 4-52. https://doi.org/10.1590/s1678-69712011000100002

Neto, F. (2022). Brazilian international students' satisfaction with migration life in Portugal. *Journal of International Students, 13*(2), 133-154. https://doi.org/10.32674/jis.v13i2.4782

Ng, Y. H., Lai, S. P., Su, Z. P., Yap, J. Y., Teoh, H. Q., & Lee, H. (2017). Factors influencing accounting students' career paths. *Journal of Management Development, 36*(3), 319-329. https://doi.org/10.1108/JMD-11-2015-0169

Nguyen-Phung, H. T. (2023). The impact of maternal education on child mortality: Evidence from an increase tuition fee policy in Vietnam. *International Journal of Educational Development, 96*(8), 102704. https://doi.org/10.1016/j.ijedudev.2022.102704

Nickols, F. (2016). Strategy, strategic management, strategic planning and strategic thinking. *Management Journal, 1*(1), 4-7.

North Central Regional Educational Laboratory (NCREL). (2024). *Homepage*. http://www.ncrel.org

Nyamwange, J. (2016). Influence of student's interest on career choice among first year university students in public and private universities in Kisi County, Kenya. *Journal of Education and Practice, 7*(4), 96-102.

Oatley, K., & Johnson-Laird, P. N. (1987). Towards a cognitive theory of emotions. *Cognition and Emotion, 1*(1), 29-50. https://doi.org/10.1080/02699938708408362

Odia, J. O., & Ogiedu, K. O. (2013). Factors affecting the study of accounting in Nigerian Universities. *Journal of Educational and Social Research, 3*(3), 89-96. https://doi.org/10.5901/jesr.2013.v4n3p89

OECD. (2004). *Career guidance and public policy*. OECD Publishing.

OECD. (2008). *The global competition for talent: Mobility of the highly skilled*. OECD Publishing.

OECD. (2012). *Education at a Glance 2012: OECD indicators*. OECD Publishing.

OECD. (2018). *Equity in education: Breaking down barriers to social mobility*. OECD Publishing. https://doi.org/10.1787/9789264073234-en

OECD. (2019). *PISA 2018 results (Volume II): Where all students can succeed*. OECD Publishing. https://doi.org/10.1787/b5fd1b8f-en

Ou, Y. Y. (2019). *Study on the internationalization development strategy of higher education in Guangdong under the background of Guangdong-Hong Kong-Macao Greater Bay area* (Master Thesis). South China University of Technology Guangzhou. https://d.wanfangdata.com.cn/thesis/ChNNaW5lclRoZXNpc0IwMjMwNjMwEglEMDIwODU4ODIaCHJocGg3d2Ns

Palmié, M., Rüegger, S., & Parida, V. (2023). Micro foundations in the strategic management of technology and innovation: Definitions, systematic literature review, integrative framework, and research agenda. *Journal of Business Research, 154*, 113351. https://doi.org/10.1016/j.jbusres.2022.113351

Pan, S. Y. (2013). China's approach to the international market for higher education students: strategies and implications. *Journal of Higher Education Policy and Management, 35*(3), 249-263. https://doi.org/10.1080/1360080X.2013.786860

Pang, J. (2011, July 14-17). Perception of Singapore polytechnic students towards the hospitality and tourism industry. In *Conference 10th Asia Pacific Forum for Graduate Students in Hospitality and Tourism*. University of Nevada.

Partridge, E. (2005, September 28-30). Social sustainability': A useful theoretical framework. In *Australasian Political Science Association Annual Conference*. Dunedin.

Pascariati, P. S., & Ali, H. (2022). Literature review factors affecting decision making and career planning: Environment, experience and skill. *Dynastic International Journal of Digital Business Management, 3*(2), 219-231.

Pederson, J., Pytlikova, M., & Smith, N. (2004, April). *Selection or network effects? Migration flows into 27 OECD countries*. www.ftp.iza.org/dp1104.pdf

Penrose, E. T. (1959). *The theory of the growth of the firm*. Oxford University Press.

People's Information. (2021, May 11). *The total population of Shandong is 101527453 people! Ranked second in the country*. https://baijiahao.baidu.com/s?id=1699438009093133822

Perkins, R., & Neumayer, E. (2014). Geographies of educational mobility's : Exploring the uneven flows of international students. *The Geographical Journal, 180*(3), 246-259.

Phan, H. L. T., Tran, L. T., & Blackmore, J. (2019). Internationalization, student's engagement, and global graduates: A comparative study of Vietnamese and Australian students' experience. *Journal of Studies in International Education, 23*(1), 171-189. https://doi.org/10.1177/1028315318803717

Pirnea, I. C., Olaru, M., & Moisa, C. (2011). Relationship between corporate social responsibility and social sustainability. *Economy Transdisciplinary Cognition, 14*(1), 36-43.

Pitarch-Garrido, M. D. (2018). Social sustainability in metropolitan areas: Accessibility and equity in the case of the metropolitan area of Valencia (Spain). *Sustainability, 10*(2), 371. https://doi.org/10.3390/su10020371

Porter, M. E. (1980). Industry structure and competitive strategy: Keys to profitability. *Financial Analyst's Journal, 36*(4), 30-41. https://doi.org/10.2469/faj.v36.n4.30

Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review, 84*(12), 78-92.

Preedy, M., Glatter, R., & Wise, C. (2003). *Strategic leadership and educational improvement* (Vol. 2). Sage.

Presbitero, A. (2018). Extraversion, openness to experience, and global career intention: The mediating role of cultural intelligence. *Journal of Employment Counseling, 55*(3), 104-114. https://doi.org/10.1002/joec.12090

Presbitero, A., & Quita, C. (2017). Expatriate career intentions: Links to career adaptability and cultural intelligence. *Journal of Vocational Behavior, 98*, 118-126. https://doi.org/10.1016/j.jvb.2016.11.001

Pulido, L. (2014). Rethinking environmental racism: White privilege and urban development in southern California (2000). In *The People, Place, and Space Reader* (pp. 334-339). Routledge.

Qamhieh, M., Sammaneh, H., & Demaidi, M. N. (2020). PCRS: Personalized career-path recommender system for engineering students. *IEEE Access, 8*(3), 214039-214049. https://doi.org/10.1109/access.2020.3040338

Qian, X. L., & Meng, K. (2017). *An introduction to internationalization of higher education in the United States: Analysis of progress and lessons learned*. Nanjing University Press.

Qiang, Z. (2003). Internationalization of higher education: Towards a conceptual framework. *Policy futures in Education, 1*(2), 248-270. https://doi.org/10.2304/pfie.2003.1.2.5

QS Top Universities (2015). *QS stars university ratings*. www.topuniversities.com/qs-stars

QS World University Rankings. (2018). *Top universities*.
https://www.topuniversities.com/university-rankings/world-university-rankings/2018

Ramdhan, R. M., Kisahwan, D., Winarno, A., & Hermana, D. (2022). Internal corporate social responsibility as a micro foundation of employee well-being and job performance. *Sustainability, 14*(15), 9065. https://doi.org/10.3390/su14159065

Rezapkina, G. V. (2018). Dead-end "trends" in career guidance. In *Professional Self-Determination of Young People in the Innovation Region: Problems and Prospects* (pp. 19-22). Krasnoyarsk State Agrarian University.

Ridgway, M., & Robson, F. (2018). Exploring the motivation and willingness of self-initiated expatriates, in the civil engineering industry, when considering employment opportunities in Qatar. *Human Resource Development International, 21*(1), 24-45. https://doi.org/10.1080/13678868.2017.1340075

Riley, T. (2001). Equity with excellence: Confronting the dilemmas and celebrating the possibilities. *APEX The New Zealand Journal of Gifted Education, 13*(1), 51-61.

Roche, S. M., & McConkey, K. M. (1990). Absorption: Nature, assessment, and correlates. *Journal of Personality and Social Psychology, 59*(1), 91-101. https://doi.org/10.1037//0022-3514.59.1.91

Rogers, D. S., Duraiappah, A. K., Antons, D. C., Munoz, P., Bai, X., Fragkias, M., & Gutscher, H. (2012). A vision for human well-being: Transition to social sustainability. *Current Opinion in Environmental Sustainability, 4*(1), 61-73. https://doi.org/10.1016/j.cosust.2012.01.013

Rokhayati, A., Kambara, R., & Ibrahim, M. (2017). Pengaruh soft skill dan Perencanaan Karir Terhadap Kinerja Karyawan Dengan Kualitas Pelatihan Sebagai Variabel Modertor (Studi Empiris Pada Pt. Krakatau Tirta Industri Cilegon). *Jurnal Riset Bisnis dan Manajemen Tirtayasa, 1*(2), 107-124.

Rudzki, R. E. J. (1995). The application of a strategic management model to the internationalization of higher education institutions. *Higher Education, 29*, 436-438. https://doi.org/10.1007/BF01383961

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*(1), 54-67. https://doi.org/10.1006/ceps.1999.1020

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069. https://doi.org/10.1037//0022-3514.57.6.1069

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719-727.

Sá, M. J., & Serpa, S. (2020). The COVID-19 pandemic as an opportunity to foster the sustainable development of teaching in higher education. *Sustainability, 12*(20), 8525. https://doi.org/10.3390/su12208525

Saarenketo, S., Puumalainen, K., Kuivalainen, O., & Kyläheiko, K. (2009). A knowledge-based view of growth in new ventures. *European Business Review, 21*(6), 531-546. https://doi.org/10.1108/09555340910998823

Sachs, I. (1999). Social sustainability and whole development: Exploring the dimensions of sustainable development. In *Sustainability and the social sciences: A cross-disciplinary approach to integrating environmental considerations into theoretical reorientation* (pp. 25-36). Zed Books.

Sahin, I., & Kirdok, O. (2018). Investigation of relationship between high school students' career adaptability, subjective well-being and perceived social support. *International Education Studies, 11*(8), 127-135. https://doi.org/10.5539/ies.v11n8p127

Said, J., Ghani, E. K., Hashim, A., & Mohd Nasir, N. (2004). Perceptions towards accounting career among Malaysian undergraduates. *Journal of Financial Reporting and Accounting, 2*(1), 17-30. https://doi.org/10.1108/19852510480000658

Santos, G., Marques, C. S., Justino, E., & Mendes, L. (2020). Understanding social responsibility's influence on service quality and student satisfaction in higher education. *Journal of Cleaner Production, 256*(23), 120597. https://doi.org/10.1016/j.jclepro.2020.120597

Satterthwaite, D. (2008). Climate change and urbanization: Effects and implications for urban governance. In *United Nations Expert Group meeting on population distribution, urbanization, internal migration and development* (Vol. 24, pp. 309-343). UNDESA.

Saunders, F., Gilek, M., Ikauniece, A., Tafon, R. V., Gee, K., & Zaucha, J. (2020). Theorizing social sustainability and justice in marine spatial planning: Democracy, diversity, and equity. *Sustainability, 12*(6), 2560. https://doi.org/10.3390/su12062560

Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior, 80*, 661-673. https://doi.org/10.1016/j.jvb.2012.01.011

Sax, J., & Andersen, T. J. (2020). Making risk management strategic: Integrating enterprise risk management with strategic planning. *European Management Review, 16*(3), 719-740. https://doi.org/10.1111/emre.12185

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293-315. https://doi.org/10.1002/job.248

Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.). In *Work Engagement: A Handbook of Essential Theory and Research* (pp. 10-24). Psychology Press.

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701-716. https://doi.org/10.1177/0013164405282471

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). *Utrecht work engagement scale-9 (UWES-9)* [Database record]. APA PsycTests. https://doi.org/10.1037/t05561-000

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*, 71-92. https://doi.org/10.1023/A:1015630930326

Schilling, M. A. (2017). *Strategic management of technological innovation*. McGraw-Hill.

Schönborn, G., Berlin, C., Pinzone, M., Hanisch, C., Georgoulias, K., & Lanz, M. (2019). Why social sustainability counts: The impact of corporate social sustainability culture on financial success. *Sustainable Production and Consumption, 17*, 1-10. https://doi.org/10.1016/j.spc.2018.08.008

Setha, M. (2003). Social sustainability: People, history, and values. In *Managing change: Sustainable Approaches to the Conservation of the Built Environment* (pp. 392-404). Getty Conservation Institute.

Shani, N., & PS, N. (2011). The role of employee engagement and strategic tool in HRM. *IJM, 2*(2), 25-32.

Shek, D. T., & Wong, K. K. (2011). Do adolescent developmental issues disappear overnight? Reflections about holistic development in university students. *The Scientific World Journal, 11*(1), 353-361. https://doi.org/10.1100/tsw.2011.5

Shirom, A. (2003). Feeling vigorous at work? The construct of vigor and the study of positive affect in organizations. In *Emotional and Physiological Processes and Positive Intervention Strategies* (pp. 135-164). Emerald Group Publishing Limited.

Shuangzishu. (2022, December 23). *Peking university's international development strategy was officially released*. https://www.shuangzishu.com/news-id-904976.html

Shuck, B., & Wollard, K. (2010). Employee engagement and HRD: A seminal review of the foundations. *Human Resource Development Review, 9*(1), 89-110. https://doi.org/10.1177/1534484309353560

Shuck, B., Twyford, D., Reio Jr, T. G., & Shuck, A. (2014). Human resource development practices and employee engagement: Examining the connection with employee turnover intentions. *Human Resource Development Quarterly, 25*(2), 239-270. https://doi.org/10.1002/hrdq.21190

Sieger, P., Fueglistaller, U., & Zellweger, T. (2016). *Student entrepreneurship 2016: Insights from 50 countries*. KMU-HSG/IMU.

Sikorskaya, I. (2017). Higher education internationalization in Ukraine: Concerns and hope. *International Higher Education, 45*(91), 10-12. https://doi.org/10.6017/ihe.2017.91.10036

Simonton, D. K. (2000). Creativity: Cognitive, personal, developmental, and social aspects. *American Psychologist, 55*(1), 151-158. https://doi.org/10.1037//0003-066x.55.1.151

Singh, M., Rizvi, F., Shrestha, M. (2007). Student mobility and the production of cosmopolitan identities. In K. Gulson & C. Symes (Eds.). In *Spatial Theories of Education Policy and Geography Matters* (pp. 205-224). Routledge.

Sinner, J., Baines, J., Crengle, H., Salmon, G., Fenemor, A., & Tipa, G. (2005). Key concepts in sustainable development (Part 1: Economics and ecology). *Public Sector, 28*(3), 2-9.

Sirgy, M. J., Lee, D. J., Grzeskowiak, S., Yu, G. B., Webb, D., El-Hasan, K., Jesus, J., Ahmet Ekici, Johar, J. S., Anjala Krishen, Ayca Kangal, Swoboda, B., Claiborne, C. B., Maggino, F., Rahtz, D., Canton, A., & Ayse Kuruuzum. (2010). Quality of College Life (QCL) of Students: Further Validation of a Measure of Well-being. *Social Indicators Research, 99*(3), 375-390. https://doi.org/10.1007/s11205-010-9587-6

Smolentseva, A. (2020). Marketisation of higher education and dual-track tuition fee system in post-soviet countries. *International Journal of Educational Development, 78*(33), 102265. https://doi.org/10.1016/j.ijedudev.2020.102265

Song, C. F. (2003). WTO's rule and the development or protection of higher education in China. *Journal of Guizhou Normal University (Social Science), 2*, 99-103.

Soutar, G. N., & Turner, J. P. (2002). Students' preferences for university: A conjoint analysis. *The International Journal of Educational Management, 16*(1), 40-45.

Spangenberg, J. H., & Omann, I. (2006). Assessing social sustainability: Social sustainability and its multicriteria assessment in a sustainability scenario for Germany. *International Journal of Innovation and Sustainable Development, 1*(4), 318-348. https://doi.org/10.1504/IJISD.2006.013734

Spielberger, C. D. (1972). Review of profile of mood states [Review of the book profile of mood states, by D. M. McNair, M. Lorr & L. F. Droppleman]. *Professional Psychology, 3*(4), 387-388. https://doi.org/10.1037/h0020742

Spreitzer, G. M., Lam, C. F., & Fritz, C. (2010). Engagement and human thriving: Complementary perspectives on energy and connections to work. In A. B. Bakker & M. P. Leiter (Eds.). In *Work Engagement: A Handbook of Essential Theory and Research* (pp. 132-146). Psychology Press.

Stamp, E., Crust, L., Swann, C., Perry, J., Clough, P., & Marchant, D. (2015). Relationships between mental toughness and psychological wellbeing in undergraduate students. *Personality and Individual Differences, 75*, 170-174. https://doi.org/10.1016/j.paid.2014.11.038

Stanford University, Bechtel International Center. (2023). *Programs and events*. https://bechtel.stanford.edu/programs-and-events

Stanton, E. A. (2012). The tragedy of misdistribution: Climate, sustainability, and equity. *Sustainability, 4*(3), 394-411. https://doi.org/10.3390/su4030394

Steiner, G. A. (2010). *Strategic planning*. Simon and Schuster.

Sternberg, R. J. (1999). The theory of successful intelligence. *Review of General Psychology, 3*, 292-299. https://doi.org/10.1037/1089-2680.3.4.292

Sternberg, R. J., & Detterman, D. K. (1986). *What is intelligence? Contemporary viewpoints on its nature and definition*. Prager Pub Text.

Sullivan, S. E. (1999). The changing nature of careers: A review and research agenda. *Journal of Management, 25*(3), 457-484. https://doi.org/10.1177/014920639902500308

Sullivan, S. E., & Baruch, Y. (2009). Advances in career theory and research: A critical review and agenda for future exploration. *Journal of Management, 35*(6), 1542-1571. https://doi.org/10.1177/0149206309350082

Sun, Y. (2020). Innovative exploration of the cultivation model of professional English abilities of college students. *Advances in Higher Education, 4*(9), 1-12. https://doi.org/10.18686/ahe.v4i9.2651

Supriatna, M. (2009). *Layamon bambina karri di secular meninges*. Department Pendelikon Nasional Universities Pendelikon Indonesia.

Susanto, P. C., Sawitri, N. N., & Suroso, S. (2023). Determinant employee performance and job satisfaction: Analysis motivation, path career and employee engagement in transportation and logistics industry. *International*

Journal of Business and Applied Economics, 2(2), 257-268.
https://doi.org/10.55927/ijbae.v2i2.2711

Svara, J. H. (2011). The early stage of local government action to promote sustainability. In *The Municipal Year Book 2011* (pp. 43-60). ICMA Press.

Svara, J., Watt, T., & Takai, K. (2015). Advancing social equity as an integral dimension of sustainability in local communities. *Cityscape, 17*(2), 139-166.

Tamtik, M., & Guenter, M. (2019). Policy analysis of equity, diversity and inclusion strategies in Canadian universities-how far have we come?. *Canadian Journal of Higher Education, 49*(3), 41-56. https://doi.org/10.47678/cjhe.v49i3.188529

Taneja, S., Sewell, S. S., & Odom, R. Y. (2015). A culture of employee engagement: A strategic perspective for global managers. *Journal of Business Strategy, 36*(3), 46-56. https://doi.org/10.1108/JBS-06-2014-0062

Tang, J. J. (2014). Practice and thinking on the construction of teaching staff in provincial colleges and universities in non-central cities. *Reform and Opening, 15*, 85-87.

Te Wierik, M. L. J., Beishuizen, J., & Van Os, W. (2015). Career guidance and student success in Dutch higher vocational education. *Studies in Higher Education, 40*(10), 1947-1961. https://doi.org/10.1080/03075079.2014.914905

Tetteh, L. A., Agyenim-Boateng, C., Kwarteng, A., Muda, P., & Sunu, P. (2021). Utilizing the social cognitive career theory in understanding students' choice in selecting auditing as a career: Evidence from Ghana. *Journal of Applied Accounting Research, 23*(3), 715-737. https://doi.org/10.1108/JAAR-03-2021-0079

Thayer, R. E. (1996). *The origin of everyday moods: Managing energy, tension, and stress*. Oxford University Press.

Thorburn, M. (2020). Personal well-being and curriculum planning: A critical comparative review of theory, policy and practice coherence. *Educational Review, 72*(6), 785-799. https://doi.org/10.1080/00131911.2018.1552660

Throsby, D. (1999). Cultural capital. *Journal of Cultural Economics, 23*, 3-12. https://doi.org/10.1023/A:1007543313370

Tiro, M. A., Poerwanto, B., & Fahmuddin, M. (2021). Logistics regression modelling on student career path choices at the statistics department, FMIPA UNM

Makassar. *Journal of Physics: Conference Series, 2123*(1), 012002. https://doi.org/10.1088/1742-6596/2123/1/012002

Tremblay, K. (2005). Academic mobility and immigration. *Journal of Studies in International Education, 9*(3), 196-228. https://doi.org/10.1177/1028315305277618

Truss, C., Soane, E., Edwards, C., Wisdom, K., Croll, A., & Burnett, J. (2007). *Working life: Employee attitudes and engagement 2006*. Chartered Institute of Personnel and Development.

Truss, K. (2014). The future of research in employee engagement. In D. Robinson & J. Gifford (Eds.). *The Future of Engagement: Thought Piece Collection* (pp. 80-98). Institute for Employment Studies.

UC Berkeley. (2020). *Designing your course*. https://teaching.berkeley.edu/teaching-guides-resources/designing-your-course

UC Berkeley. (2020). *Find a program*. https://executive.berkeley.edu/programs

UC Berkeley. (2022). *Office of undergraduate admissions*. International Students. https://admissions.berkeley.edu/international-students

UC Berkeley. (2022). *Office of undergraduate admissions, study abroad*. https://admissions.berkeley.edu/study-abroad

UNESCO. (1974). *Recommendation concerning education for international understanding, co-operation and peace and education relating to human rights and fundamental freedoms*. The General Conference of UNESCO.

United Nations General Assembly. (2015). *United Nations summit on sustainable development 2015*. https://sustainabledevelopment.un.org/content/documents/8521Informal%20Summary%20-%20UN%20Summit%20on%20Sustainable%20Development%202015.pdf

Unterhalter, E. (2009). What is equity in education? Reflections from the capability approach. *Studies in Philosophy and Education, 28*(5), 415-424. https://doi.org/10.1007/s11217-009-9125-7

Van Bouwel, L., & Veugelers, R. (2013). The determinants of student mobility in Europe: The quality dimension. *European Journal of Higher Education, 3*(2), 172-190. https://doi.org/10.1080/21568235.2013.772345

van Maanen, J. (1977). Experiencing organization: Notes on the meaning of careers and socialization. In J. Van Maanen (Ed.). In *Organizational Careers: Some New Perspectives* (pp. 15-45). Wiley.

Vance, C. M., McNulty, Y., Paik, Y., & D'Mello, J. (2016). The expat-pruner: Conceptualizing a growing international career phenomenon. *Journal of Global Mobility, 4*(2), 202-224. https://doi.org/10.1108/JGM-11-2015-0055

Vatovec, C., & Ferrer, H. (2019). Sustainable well-being challenge: A student-centered pedagogical tool linking human well-being to ecological flourishing. *Sustainability, 11*(24), 7178. https://doi.org/10.3390/su11247178

Veenhoven, R. (2009). World database of happiness tool for dealing with the data-deluge. *Psihologijske Teme, 18*(2), 221-246.

Viljevac, A., Cooper-Thomas, H. D., & Saks, A. M. (2012). An investigation into the validity of two measures of work engagement. *The International Journal of Human Resource Management, 23*(17), 3692-3709. https://doi.org/10.1080/09585192.2011.639542

Wadhwa, R. (2012). International education market, potential clients and decision making. *International Journal of Higher Education for Future, 22*(1), 19-25.

Wahlström, N. (2022). *Equity, teaching practice and the curriculum: Exploring differences in access to knowledge*. Taylor & Francis.

Wan, Y. Y. (2016). *International student management research on the perspective of service satisfaction-case study of Shanghai Jiao Tong University* (Master Thesis). Shanghai Jiao Tong University. https://doi.org/10.27307/d.cnki.gsjtu.2016.005264

Wang, J. N., & Chen, R. (2023). Teaching innovation of career planning courses for university students: A case study of Harbin engineering university. *Theoretical Research and Practice of Innovation and Entrepreneurship, 6*(14), 40-42.

Waterman, A. S., Schwartz, S. J., Zamboanga, B. L., Ravert, R. D., Williams, M. K., Bede Agocha, V.,. Brent Donnellan, M. (2010). The questionnaire for eudemonic well-being: Psychometric properties, demographic comparisons, and evidence of validity. *The Journal of Positive Psychology, 5*(1), 41-61. https://doi.org/10.1080/17439760903435208

Watson, D. (2002). The disposition to experience pleasurable emotional states. In C. R. Snyder & S. J. Lopez (Eds.). In *Handbook of positive psychology* (pp. 106-119). Oxford University Press.

Wei, H. (2013). An empirical study on the determinants of international student mobility: A global perspective. *Higher Education, 66*, 105-122. https://doi.org/10.1007/s10734-012-9593-5

Wei, J. C. (2010). Characteristics of the internationalization of higher education of Stanford university and its enlightenment on China's higher education. *Higher Education of Sciences, 2*, 112-116.

Wen, X. Y. (2009). Problems and solutions of university students' career planning. *Education and Occupation, 9*, 86-88.

West, A. (2001). *High education admission and student mobility within the EU*. https://cordis.europa.eu/docs/projects/files/SOE/SOE2982040/70777131-6_en.pdf

White, M. A., & Bruton, G. D. (2011). *The management of technology and innovation: A strategic approach*. South-Western, CENGAGE Learning.

Wi11iam. (n.d.). *I-graduate review: New Zealand business schools shine*. http://www.amberedu.com/Article/Read/14667

Wild, T. C., Kuiken, D., & Schopflocher, D. (1995). The role of absorption in experiential involvement. *Journal of Personality and Social Psychology, 69*(3), 569-579. https://doi.org/10.1037//0022-3514.69.3.569

Wongpaiboon, K. (2008). *A study of international student satisfaction with the academic environment, social environment, and services of International Programs for students office at the University of South Carolina, Columbia campus* (Doctoral Dissertation). University of South Carolina.

Woodfield, S. (2010). Key trends and emerging issues in international student mobility (ISM). In F. Maringe & N. Foskett (Eds.). In *Globalization and internationalization in higher education* (pp. 109-123). Continuum International Publishing Group.

Wu, F. K., Shek, D. T., Chai, C. W., & Zhu, J. X. (2019). Well-being of university students in Hong Kong: A longitudinal case study. *International Journal of Child and Adolescent Health, 12*(1), 99-107.

Yang, B. G. (2024, January 26). *Forecast of employment situation for 2024 college graduates: The employment potential in emerging fields is more intense than that within the general system*. http://news.cyol.com/gb/articles/2024-01/26/content_AjeJqPuzLw.html

Yang, S. (2020). Promoting the cultivation of innovative practice ability of full-time professional degree graduate students by innovative practice competitions. *Creativity and Innovation, 4*(2), 5-13. https://doi.org/10.47297/wspciwsp2516-252701.20200404

Yang, Z. (2019). *International students' inflow: Motivation, economic effects and strategic choices of China* (Master Thesis). Nanjing Agricultural University. https://doi.org/10.27244/d.cnki.gnjnu.2019.001863

Yangzhix. (2023, September 18). *China population ranking 2023 population comparison among provinces*. http://hui.yangzhix.com/aricle.asp?id=47

Yijiangengyun. (2023, December 28). *These 12 universities in Northeast China have been selected for the Top 100 foreign students in China, let's see who they are all?*. https://baijiahao.baidu.com/s?id=1784956864274333645

Yu, L., Shek, D. T. L., & Zhu, X. (2017). The influence of personal well-being on learning achievement in university students over time: Mediating or moderating effects of internal and external university engagement. *Front Psyches, 8*, 2287. https://doi.org/10.3389/fpsyg.2017.02287

Yu, X. R. (2019). *Research on the improvement of education service quality of international students in higher vocational colleges-taking Liuzhou College as the example* (Master Thesis). Guangxi Normal University. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201902&filename=1019848717.nh

Yulianti Y, Syakila F, Dwi Kurnia S, & Asmawati A. (2023). Career guidance helps students choose the right career path. *Edumaspul: Journal Pendelikon, 7*(2), 3470-3474. https://doi.org/10.33487/edumaspul.v7i2.6837

Yusoff, Y., Omar, Z. A., Awang, Y., Yusoff, R., & Jusoff, K. (2011). Does knowledge on professional accounting influence career choice. *World Applied Sciences Journal, 12* (Bolstering Economic Sustainability), 57-60.

Zehner, A. (2012). *International students at Purdue: What recent survey data show*. http://www.purdue.edu/vpsa/assessment/archives/International%20Students%20at%20Purdue.pdf

Zhang, J. P. (2015). Exploration into strategy of the internationalization of higher education in Russia. *Seeking Truth, 42*(3), 9-13.

Zhang, L. L., & Li, X. G. (2016). Distribution characteristics and development strategies of the world's top 1% disciplines in ESI of provincial universities in China. *Modern Education Management, 6*, 37-42.

Zhang, Y. (2021). Internationalization higher education for what?. *Journal of Comparative & International Higher Education, 12*(6S1), 10-15. https://doi.org/10.32674/jcihe.v12i6s1.3077

Zhao, X. (2021). The latest development and policy analysis of education for international students in China. *Journal of World Education, 34*(9), 22-26.

Zhengguannews. (2023, April 10). *29 provinces with resident population data released: Guangdong, Shandong, and Henan firmly rank in the top three*. https://baijiahao.baidu.com/s?id=1762775302111057147

Zhou, F. (2012). *Study on strategy of Hunan College of Foreign Studies' Internationalization* (Master thesis). Changsha University of Science & Technology. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201501&filename=1014227676.nh

Zhu, C. C., Du, J. G., Shahzad, F., & Wattoo, M. U. (2022). Environment sustainability is a corporate social responsibility: Measuring the nexus between sustainable supply chain management, big data analytics capabilities, and organizational performance. *Sustainability, 14*(6), 3379. https://doi.org/10.3390/su14063379

Zucker, L. G., Darby, M. R., & Armstrong, J. S. (2022). Commercializing knowledge: University science, knowledge capture, and firm performance in biotechnology. *Management Science, 48*(1), 138-153. https://doi.org/10.1287/mnsc.48.1.138.14274

Zyberaj, J., Seibel, S., Schowalter, A. F., Pötz, L., Richter-Killenberg, S., & Volmer, J. (2022). Developing sustainable careers during a pandemic: The role of psychological capital and career adaptability. *Sustainability, 14*(5), 3105. https://doi.org/10.3390/su14053105

APPENDIX

IOC Test Report

ITEMS	EXPERT1	EXPERT2	EXPERT3	EXPERT4	EXPERT5	IOC
Q1	1	1	1	1	1	1
Q2	1	1	1	1	1	1
Q3	1	1	1	1	1	1
Q4	1	1	1	1	1	1
Q5	1	1	1	1	1	1
Q6	1	1	1	1	1	1
Q7	1	1	1	1	1	1
Q8	1	1	0	1	1	0.8
Q9	1	1	1	1	1	1
Q10	1	1	1	1	1	1
Q11	0	1	1	1	1	0.8
Q12	1	1	1	1	1	1
Q13	1	1	1	1	1	1
Q14	1	1	1	1	1	1
Q15	1	1	1	1	1	1
Q16	1	1	1	1	1	1
Q17	1	1	1	1	1	1
Q18	1	1	1	1	1	1
Q19	1	1	1	1	1	1
Q20	1	1	1	1	1	1
Q21	1	1	1	1	1	1
Q22	1	1	1	1	1	1
Q23	1	1	1	1	1	1
Q24	1	1	1	1	1	1
Q25	1	1	1	1	1	1
Q26	1	1	1	1	1	1
Q27	1	1	1	1	1	1
Q28	1	1	1	1	1	1
Q29	1	1	1	1	1	1
Q30	1	1	1	1	1	1
Q31	1	1	1	1	1	1
Q32	1	1	1	1	1	1
Q33	1	1	1	1	1	1
Q34	1	1	1	1	1	1
Q35	1	1	1	1	1	1
Q36	1	1	1	1	1	1
Q37	1	1	1	1	1	1
Q38	1	1	1	1	1	1
Q39	0	1	1	1	1	0.8

Q40	0	1	1	1	1	0.8
Q41	0	0	0	0	0	0
Q42	0	0	0	0	0	0
Q43	1	1	1	1	1	1
Q44	0	0	0	0	0	0
Q45	1	1	1	1	1	1
Q46	0	0	0	0	0	0
Q47	0	0	0	0	0	0
Q48	1	1	1	1	1	1
Q49	1	1	1	1	1	1
Q50	0	0	0	0	0	0
Q51	1	1	1	1	1	1
Q52	1	1	1	1	1	1
Q53	1	1	1	1	1	1
Q54	1	1	1	1	1	1
Q55	1	1	1	1	1	1
Q56	1	1	1	1	1	1
Q57	1	1	1	1	1	1
Q58	1	1	1	1	1	1
Q59	1	1	1	1	1	1
Q60	1	1	1	1	1	1
Q61	1	1	1	1	1	1
Q62	1	1	1	1	1	1
Q63	0	0	0	0	0	0
Q64	1	1	1	1	1	1
Q65	1	1	1	1	1	1
Q66	1	1	1	1	1	1
Q67	1	1	1	1	1	1
Q68	1	1	1	1	1	1
Q69	1	1	1	1	1	1
Q70	1	1	1	1	1	1
Q71	1	1	1	1	1	1
Q72	1	1	1	1	1	1
Q73	1	1	1	1	1	1
Q74	1	1	1	1	1	1
Q75	0	1	1	1	1	0.8
Q76	0	1	1	1	1	0.8
Q77	1	1	1	1	1	1
Q78	1	1	1	1	1	1
Q79	1	1	1	1	1	1
Q80	1	1	1	1	1	1
Q81	0	0	0	0	0	0
Q82	0	0	0	0	0	0

Questionnaire for Dissertation

A Strategic Model of International Students' Impact on Educational Satisfaction and

Career Paths: An Empirical Study of Provincial Public Universities in Shandong, China

Study conducted by Mrs. Wang Xiaolin

PhD student, Doctor of Philosophy Program in Management, Siam University

Notice: We would like to cooperate with you to complete the questionnaire. The information will be analyzed and done in an overall manner. The information will be kept confidential and will not be disclosed for business gain. It will only be used for educational purposes.

Part 1: Demographic Information

Dear students:

The following content is a research questionnaire on the topic of the internationalization of education in universities. In order to effectively improve the international development level of education in local colleges and universities, I sincerely invite you to take the time to fill out this questionnaire. Your opinion will serve as an important reference for this research. This study is conducted anonymously and your information will also be kept confidential. Sincerely thankful for your support of this research!

April, 2024

1-1 Sex:	☐ male; ☐ female;
1-2 Nationality Russia	☐ Korea ☐ Thailand ☐ Pakistan ☐ India ☐
Malaysia	☐ Indonesia ☐ Lao ☐ Vietnam ☐ Cambodia ☐
	☐ Japan ☐ Kazakhstan ☐ Bangladesh ☐ Mongolia ☐ Africa ☐ Others_____
1-3 Major Economics	☐ Chinese ☐ Computer ☐ Management ☐
	☐ Medical ☐ Engineering ☐ Others_____
1-4 Year of the university entrance:	☐ 2020 ☐ 2021 ☐ 2022 ☐ 2023
1-5 Study Type:	☐ undergraduate; ☐ postgraduate;

Part 2: Questions of Indicators

HEI Internationalization Strategies	1.Strongly agree	2.Agree	3.Neutral	4.Disagree	5.Strongly Disagree
The university's international concept and management					
1 The internationalization of education is a crucial principle in your school.					
2 Your school formulated a school-wide internationalization development strategy.					
3 Your school has complete rules and regulations of international education and international students' administration.					
4 Your college has an International Office (Foreign Affairs Office), or there is an International Education Institute in your school.					
5 Your school provides funding support (e.g., scholarship) for international student's study program and activities.					
The university's international teaching staff and curriculum					
6 The number of teachers in the school who have studied or worked abroad and are proficient in English teaching is enough.					
7 In your school, English taught courses are mainly taught by teachers with high English proficiency.					
8 The courses provided by your school are aligned with globalized curricula.					
9 Your school provides practical training course for major study and introduces internship enterprise.					
10 Your school provides career guidance courses or seminar for professional development and personal career plan.					
The university's international research and cooperation					
11 The number of published papers in important international journals is relatively high in your school.					
12 The school regularly sends teachers to participate in international academic conferences.					
13 The school regularly hosts or undertakes international academic conferences.					
14 The school established teaching or research institutions in overseas universities.					

15	The school provides more opportunities for students to participate in international programs and activities each year.					
The university's support service						
16	The school has foreign teachers and experts' apartments.					
17	The school library provides sufficient English books and academic resources in English.					
18	The school has an English version of the website.					
19	Both international students and Chinese students have equal access to the school's laboratories and study rooms.					
20	The school often holds international activities, such as lectures, cultural and festival activities.					

International Students' Engagement		1.Always/Every Day	2.Often	3.Sometimes	4.Occasionally	5.Rarely
Vigor						
1	When I get up in the morning, I feel like to attend class.					
2	Regarding my academic pursuits, I always persevere, even when things do not go well.					
3	I can continue studying for very long period at a time.					
4	I am very resilient, mentally, as far as my studies are concerned.					
5	I feel strong and vigorous when I'm studying or going to class.					
Dedication						
6	To me, my studies are challenging.					
7	My study inspires me.					
8	I am enthusiastic about my studies.					
9	I am proud of my studies.					
10	I find my studies full of meaning and purpose.					
Absorption						
11	When I am studying, I forget everything else around me.					
12	I get carried away when I am studying.					
13	It is difficult to detach myself from my studies.					
14	I am immersed in my studies.					
15	I feel happy when I am studying intensely.					

International Students' Equity & Well-being	1.Strongly agree	2.Agree	3.Neutral	4.Disagree	5.Strongly Disagree
Equity					
1 My dorm condition is satisfying.					
2 I have access to good service on campus.					
3 Each gender is treated equally at university.					
4 If I have a good idea about a better way to complete my work tasks, I can talk to my lecturer about it.					
5 I would like to take part in school activities.					
Well-being					
6 I am satisfied with the environment where I live.					
7 I am satisfied with my personal relationships.					
8 I am satisfied with the balance between my study work and social life.					
9 I feel safe.					
10 I am satisfied with my life as a whole these days.					

International Students' Satisfaction	Very satisfied				Not satisfied
	1	2	3	4	5
Educational quality					
1 Teaching facilities in classrooms, libraries and stadiums					
2 Teacher's teaching level					
3 Teacher's academic research level					
4 Curriculum plan and course schedule					
5 Course evaluation					
6 Teacher's consultancy for personal study					
Campus international service					
7 Dormitory condition and management					
8 Campus environment and facilities					
9 School staff's hospitality					
10 Efficiency of work procedure					
11 Campus culture compatibility and cultural activities					
Scholarship					
12 Convenient access to the information of scholarships					
13 Procedures of scholarship application					
14 Scholarship evaluation system					
Career guidance					
15 Seminars or courses on career planning					

16	Seminars or courses on entrepreneurship					
17	Introduction of enterprise for internship					
18	Information for pursuit of higher degree study					
19	Information for career development					

International Students' Career Paths	1.Strongly agree	2.Agree	3.Neutral.	4.Disagree	5.Strongly Disagree
Profession as career intention					
1 I have career plan for my present profession.					
2 I will choose my present profession as my future career.					
3 Choosing my present profession as my job is a good decision.					
Entrepreneurial work intention					
4 I shall be engaged in running a family business.					
5 I shall run my own business (eventually with a business partner).					
6 I plan to continue master's study after getting my bachelor degree, or continue PhD's study after getting my master degree.					
7 I shall be an employee of a large company.					
8 I shall be an employee of an institution of public administration.					
9 I shall be an employee of a small or medium sized company without family connections。					
Expatriate work intention					
10 I shall definitely pursue my career in 10 years' time abroad.					
11 I shall pursue my career in 10 years' time abroad.					
12 I shall pursue my career in 10 years' time in my home country.					

Part 3: Recommendation

Lastly, please point out some deficiencies of your university and provide some constructive

suggestions on international education:

Thanks for your participation!

No. SU 0210.7/42

Graduate School of Management,
Siam University
38 Petkasem Rd., Bang-wa,
Phasi-charoen, Bangkok, 10160

June 16, 2024

Subject: Request for Data Collection via Questionnaire Distribution
To Whom It May Concern:

Mrs. Wang Xiaolin Student ID#6419200012, a doctoral student of the Graduate School of Management, Siam University (Mobile Phone No. 0808107236/+86 13854506577 and email: 201511787@sdtbu.edu.cn) is currently working on the Ph.D. Dissertation entitle: "The Strategic Model of International Students Affecting Toward Educational Satisfaction and Career Path: Empirical Studies on Provincial Public Universities in China" under the supervision of Assistant Professor Dr. Maneekanya Nagamatsu and Dr. Sarun Widtayakornbundit.

In this regard, the Graduate School of Management would like to request for you cooperation by corresponding the attached questionnaire form. The completion of this questionnaire form will allow Mrs. Wang Xiaolin to further proceed on her research with data accuracy and overall quality. Your kind assistance is fully appreciated.

Best Regards,

Chaiyant P.

(Associate Professor Dr. Chaiyanant Panyasiri)
Dean of the Graduate School of Management

Graduate School of Management
Telephone +662-867-8000 ext 5311
E-mail: phd_m1@siam.edu

![PIM logo]

ใบรับรองจริยธรรมการวิจัยในมนุษย์
สถาบันการจัดการปัญญาภิวัฒน์

หมายเลขใบรับรอง: PIM-REC 039/2567

ข้อเสนอการวิจัยนี้ และเอกสารประกอบของข้อเสนอการวิจัยตามรายการแสดงด้านล่าง ได้รับการ
พิจารณาจากคณะกรรมการจริยธรรมการวิจัยในมนุษย์ สถาบันการจัดการปัญญาภิวัฒน์แล้ว คณะกรรมการฯ
มีความเห็นว่าข้อเสนอการวิจัยที่จะดำเนินการมีความสอดคล้องกับหลักจริยธรรมสากล ตลอดจนกฎหมาย
ข้อบังคับและข้อกำหนดภายในประเทศ จึงเห็นสมควรให้ดำเนินการตามข้อเสนอการวิจัยนี้ได้

ชื่อข้อเสนอโครงการ: The Strategic Model of International Students Affecting Toward Educational
Satisfaction and Career Path: Empirical Studies on Provincial Public Universities
in China

รหัสข้อเสนอการวิจัย (ถ้ามี): -

หน่วยงาน: Siam University

ผู้วิจัยหลัก: Wang Xiaolin

ลงนาม...

(อาจารย์ ดร.พิเชษฐ์ มุสิกะโปดก)
ประธานคณะกรรมการจริยธรรมการวิจัยในมนุษย์
สถาบันการจัดการปัญญาภิวัฒน์

วันที่รับรอง: 5 กรกฎาคม 2567   **วันหมดอายุ:** 5 กรกฎาคม 2568

เอกสารที่คณะกรรมการรับรอง
1. โครงร่างการวิจัย
2. ข้อมูลสำหรับชี้แจงกลุ่มประชากรหรือผู้มีส่วนร่วมในการวิจัย และ ใบแสดงความยินยอมจากกลุ่มประชากรหรือผู้มีส่วนร่วมในการวิจัย
3. เครื่องมือที่ใช้ในการวิจัย/เก็บรวบรวมข้อมูล เช่น แบบสอบถาม แบบสัมภาษณ์ ประเด็นในการสนทนากลุ่ม เป็นต้น

เงื่อนไขการรับรอง
1. นักวิจัยดำเนินการวิจัยตามที่ระบุไว้ในโครงร่างการวิจัยอย่างเคร่งครัด
2. นักวิจัยรายงานเหตุการณ์ไม่พึงประสงค์ร้ายแรงที่เกิดขึ้นหรือเปลี่ยนแปลงกิจกรรมวิจัยใดๆ ต่อคณะกรรมการพิจารณาจริยธรรมการวิจัยในมนุษย์ภายในกำหนด
3. นักวิจัยส่งรายงานความก้าวหน้าต่อคณะกรรมการพิจารณาจริยธรรมการวิจัยในมนุษย์ตามเวลาที่กำหนดหรือเมื่อได้รับการร้องขอจากคณะกรรมการฯ
4. หากการวิจัยไม่สามารถดำเนินการเสร็จสิ้นภายในกำหนด ผู้วิจัยต้องยื่นขออนุมัติใหม่ก่อนอย่างน้อย 1 เดือน
5. หากการวิจัยเสร็จสมบูรณ์ ผู้วิจัยต้องแจ้งปิดโครงการตามแบบฟอร์มที่กำหนด

AUTHOR'S BIOGRAPHY

Name and Surname	:	Wang Xiaolin
Date of Birth	:	October 3rd, 1979
Nationality	:	Chinese
Birth of Place	:	Heilongjiang
Address	:	191 Binhai Middle Road, Laishan District, Yantai City, Shandong Province, China
E-Mail		wangxiaolin963@outlook.com
Work Position	:	Section Director of International Students Admission & Teaching Affairs
Workplace	:	Shandong Technology and Business University
Education	:	Siam University

Bachelor's Degree

Degree	Bachelor of Arts
Major	English Linguistics
Institution	Qiqihar University
Country	China
Year	1998-2002

Master's Degree

Degree	Master of Management
Major	Business Administration
Institution	Shandong University of Science and Technology
Country	China
Year	2010-2012

Publishing Research :

Wang Xiaolin, Maneekanya Nagamatsu & Pattsornkun Submahachok (2025). The Strategic Model of International Students Affecting Toward Educational Satisfaction and Career Path: Empirical Study on Provincial Public Unversities in Shandong, China. *Rajapark Journal, 19*(62), (Jan-Feb 2025).