

**RELATIONSHIPS BETWEEN SELF-EFFICACY,
PERCEIVED SOCIAL SUPPORT, AND CAREER
ADAPTABILITY OF CHINESE UNIVERSITY
GRADUATES IN THE EARLY CAREER STAGE**

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by

SONG CHUNZE

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TABLE OF CONTENTS

ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS.....	iii
LIST OF TABLES	ix
LIST OF FIGURES	xi
LIST OF SYMBOLS	xii
LIST OF ABBREVIATIONS	xiii
LIST OF APPENDICES	xiv
ABSTRAK	xv
ABSTRACT	xvii
CHAPTER 1 INTRODUCTION.....	1
1.1 Introduction	1
1.2 Research Background.....	1
1.2.1 Severe Employment Situation of Chinese University Graduates.....	1
1.2.2 The Importance of Career Adaptability to Career.....	4
1.3 Research Problem.....	6
1.4 Research Objective.....	11
1.5 Research Question.....	12
1.6 Research Significance	13
1.6.1 Theoretical Significance.....	13
1.6.2 Practical Significance	14
1.7 Definition of Terms	15
1.7.1 Career Adaptability	15
1.7.2 Self-efficacy	16
1.7.3 Perceived Social Support	17

1.7.4	Chinese University Graduates	19
1.7.5	Early Career Stage.....	19
1.8	Limitation of the Study	20
1.9	Summary	22
CHAPTER 2 LITERATURE REVIEW		23
2.1	Introduction	23
2.2	Overview of the Background about Chinese University Graduates in Early Career Stage	23
2.2.1	Career Development Stage.....	24
2.2.2	Background about Chinese University Graduates in Early Career Stage	26
2.2.3	Chinese University Graduates in Early Career Stage.....	29
2.2.4	Deficiency and Prospects about Chinese University Graduates in Early Career Stage.....	31
2.3	Career Adaptability	33
2.3.1	Concept of Career Adaptability.....	33
2.3.2	Measurement of Career Adaptability	36
2.3.3	Theoretical Perspectives and Mechanisms of Career Adaptability	38
2.3.4	Career Adaptability of University Graduates.....	42
2.3.5	Deficiency and Prospects for Career Adaptability	45
2.4	Self-efficacy	48
2.4.1	Concept of Self-efficacy.....	48
2.4.2	Measurement of Self-efficacy	52
2.4.3	Theoretical Perspectives and Mechanisms of Self-efficacy.....	55
2.4.4	Self-efficacy of University Graduates.....	62
2.4.5	Deficiency and Prospects for Self-efficacy	65
2.5	Perceived Social Support	67
2.5.1	Concept of Perceived Social Support.....	67

2.5.2	Measurement of Perceived Social Support	70
2.5.3	Theoretical Perspectives and Mechanisms of Perceived Social Support	72
2.5.4	Perceived Social Support of University Graduates	76
2.5.5	Deficiency and Prospects for Perceived Social Support	79
2.6	Current Status of Core Variables among Chinese University Graduates in Early Career Stage	82
2.7	The Influence of Demographic Factors on Self-efficacy, Perceived Social Support, and Career Adaptability	85
2.8	Relationship between Self-efficacy, Perceived Social Support and Career Adaptability	88
2.8.1	Relationship between Self-efficacy and Career Adaptability	88
2.8.2	Relationship between Perceived Social Support and Career Adaptability	91
2.9	Mediating Role of Perceived Social support between Self-efficacy and Career Adaptability	95
2.10	Underlying Theories	100
2.10.1	Reciprocal Determinism Theory	100
2.10.2	Self-efficacy Theory	103
2.10.3	Career Development Theory	106
2.11	Theoretical Framework	109
2.12	Conceptual Framework	112
2.13	Theoretical and Empirical Gaps in Applying This Model to the Chinese Context	115
2.14	Summary	117
CHAPTER 3 METHODOLOGY		118
3.1	Introduction	118
3.2	Research Design	118
3.3	Research Variable	119
3.4	Population and Sampling	120

3.4.1	The Population	121
3.4.2	The Sample Size.....	122
3.4.3	The Sampling	124
3.5	Research Instrument	125
3.5.1	12-Item Career Adapt-Ability Scale Short Form	126
3.5.2	General Self-Efficacy Scale	127
3.5.3	Perceived Social Support Scale.....	128
3.6	Pilot Study	130
3.6.1	Pilot Test Process	131
3.6.2	Test Criteria for Reliability and Validity Analysis	131
3.6.3	Validity and Reliability Analysis of Pilot Test	134
	3.6.3(a) Validity and Reliability of CAAS-SF.....	134
	3.6.3(b) Validity and Reliability of GSES	137
	3.6.3(c) Validity and Reliability of PSSS	140
3.7	Data Collection Procedure.....	145
3.8	Data Analysis	146
3.8.1	Data Analysis Using SPSS.....	146
3.8.2	Data Analysis Using Smart-PLS	149
	3.8.2(a) Justification for the Use of PLS-SEM and Smart-PLS	149
	3.8.2(b) Analysis Method for Direct Effects	150
	3.8.2(c) Analysis Method for Mediation Effects	151
	3.8.2(d) Evaluation Indicators of Measurement Models and Structural Models.....	152
3.9	Ethical Considerations.....	158
3.10	Summary	159
CHAPTER 4 RESULTS AND FINDINGS		160
4.1	Introduction	160

4.2	Data Preparation	161
4.3	Verifying Data Characteristics	163
4.3.1	Missing Data	163
4.3.2	Data Normality	163
4.3.3	Common Method Bias	164
4.4	Descriptive Statistics of Respondents	165
4.5	The Level of Self-efficacy, Perceived Social Support, and Career Adaptability	168
4.6	The Influence of Demographic Factors in Self-efficacy, Perceived Social Support, and Career Adaptability	175
4.7	The Correlations between Self-efficacy, Perceived Social Support, and Career Adaptability	179
4.7.1	Relationship between Self-efficacy and Career Adaptability	180
4.7.2	Relationship between Perceived Social Support and Career Adaptability	181
4.8	The Mediating role of Perceived Social Support between Self-efficacy and Career Adaptability	186
4.9	The Validity of the Predictive Model	189
4.9.1	Measurement Model Evaluation Results	190
4.9.1(a)	Indicator Reliability	190
4.9.1(b)	Internal Consistency Reliability	193
4.9.1(c)	Convergent Validity	193
4.9.1(d)	Discriminant Validity	194
4.9.2	Structural Model Evaluation Results	200
4.9.2(a)	Model Fit	200
4.9.2(b)	Collinearity Evaluation	201
4.9.2(c)	Path Coefficient	201
4.9.2(d)	Coefficient of Determination - R^2	202
4.9.2(e)	Effect Size - f^2	203

4.9.2(f)	Predictive Relevance- Q^2	203
4.9.2(g)	PLS-Predict.....	204
4.10	Summary	206
CHAPTER 5 DISCUSSION AND CONCLUSION.....		207
5.1	Introduction	207
5.2	Summary of the Study	208
5.3	The Level of Self-efficacy, Perceived Social Support, and Career Adaptability	209
5.4	The Influence of Demographic Factors in Self-efficacy, Perceived Social Support, and Career Adaptability	214
5.5	Correlations between Self-efficacy, Perceived Social Support, and Career Adaptability	219
5.5.1	Relationship between Self-efficacy and Career Adaptability	220
5.5.2	Relationship between Perceived Social Support and Career Adaptability	222
5.6	The Mediating role of Perceived Social Support between Self-efficacy and Career Adaptability	224
5.7	The Validity of the Predictive Model.....	231
5.8	Implications of this Study	234
5.8.1	Theoretical Implications.....	234
5.8.2	Educational Implications.....	235
5.9	Contribution to New Knowledge	238
5.10	Recommendations for Future Research	240
5.11	Conclusion.....	243
REFERENCES.....		247
APPENDICES		
LIST OF PUBLICATIONS		

LIST OF TABLES

	Page
Table 3.1	Variables Classification and Their Correspondence in PLS-SEM .. 120
Table 3.2	Reliability Analysis Results of CAAS-SF Pilot Test..... 134
Table 3.3	The EFA Results of CAAS-SF Pilot Test..... 135
Table 3.4	The CFA Results of CAAS-SF Pilot Test..... 137
Table 3.5	Reliability Analysis Results of GSES Pilot Test 138
Table 3.6	The EFA Results of GSES Pilot Test..... 139
Table 3.7	The CFA Results of GSES Pilot Test 140
Table 3.8	Reliability Analysis Results of PSSS Pilot Test 141
Table 3.9	The EFA Results of PSSS Pilot Test 142
Table 3.10	The CFA Results of PSSS Pilot Test 144
Table 3.11	Validity Indicators for Assessing Reflective Measurement Model . 155
Table 3.12	Validity Indicators for Assessing Reflective Structural Model 157
Table 4.1	Testing Normality Distribution of Formal Test Variables..... 164
Table 4.2	Summary of Basic Characteristics 167
Table 4.3	Outlines the Descriptive Statistics for Self-Efficacy (N=207)..... 169
Table 4.4	Outlines the Descriptive Statistics for Perceived Social Support (N=207) 171
Table 4.5	Outlines the Descriptive Statistics for Career Adaptability (N=207) 172
Table 4.6	Direct Effect Analysis Results 185
Table 4.7	Mediation Effect Analysis Results of Perceived Social Support as a Second-Order Construct..... 187
Table 4.8	Mediation Analysis Results of Each Dimension of Perceived Social Support 188

Table 4.9	Factor Loading for Each Construct.....	192
Table 4.10	Construct Reliability	193
Table 4.11	AVE Value	194
Table 4.12	The Cross Loading Output Using Smart-PLS.....	196
Table 4.13	Fornell-Larker Criterion.....	198
Table 4.14	HTMT Value	199
Table 4.15	Coefficient of Determination - R^2	202
Table 4.16	Effect Size - F^2	203
Table 4.17	Predictive Relevance of the Model Q^2	204
Table 4.18	PLS-Predict	205

LIST OF FIGURES

	Page
Figure 1.1 China's Cumulative Enrolment Rate in Higher Education and The Number of University Graduates in Recent Years.....	3
Figure 2.1 Reciprocal Determinism Theory Model.....	101
Figure 2.2 Theoretical Framework	110
Figure 2.3 Conceptual Framework	113
Figure 4.1 Direct Effect Model of Self-Efficacy on Career Adaptability	181
Figure 4.2 Direct Effect Model of Perceived Social Support on Career Adaptability.....	182
Figure 4.3 Direct Effect Model of Perceived Social Support Dimensions on Career Adaptability	183
Figure 4.4 Mediated Path Model of Perceived Social Support	189
Figure 4.5 The Measurement Model	190
Figure 4.6 The Structural Model	200

LIST OF SYMBOLS

f^2	The effect size in PLS
Q^2	The cross-validated redundancy in PLS
R^2	Coefficient of determination in PLS

LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
BCI	Bias-corrected Confidence Intervals
CAAS	Career Adapt-Ability Scale
CAAS-SF	Career Adapt-Ability Scale – Short Form
CFA	Confirmatory Factor Analysis
CITC	Corrected-Item Total Correlation
CR	Composite Reliability
CV	Coefficient of Variation
EFA	Exploratory Factor Analysis
GSES	General Self-Efficacy Scale
HTMT	Hetero Trait-Mono Trait
KMO	Kaiser-Meyer-Olkin
LV	Latent Variable
PCA	Principal Component Analysis
PLS	Partial Least Square
PSSS	Perceived Social Support Scale
SD	Standard Deviation
SEM	Structural Equation Modelling
SRMR	Standardized Root Mean-square Residual
VIF	Variance Inflation Factor

LIST OF APPENDICES

Appendix A	Survey on the Relationship between Self-efficacy, Perceived Social Support, and Career Adaptability of Chinese University Graduates in Their Early-Career
Appendix B	Permission to use General Self-efficacy Scale (GSES)
Appendix C	Permission to use Perceived Social Support Scale (PSSS)
Appendix D	Permission to use Career Adapt-Ability Scale - Short Form (CAAS-SF)
Appendix E	Inter Rater Agreement and Comments 01
Appendix F	Inter Rater Agreement and Comments 02
Appendix G	Inter Rater Agreement and Comments 03
Appendix H	The JEPeM of USM
Appendix I	Ethics Review from China
Appendix J	Demographic Variable Information and Assignment Code Table
Appendix J	Non-parametric Test Results of Self-efficacy, Perceived Social Support and Career Adaptability under Different Demographic Factors (N = 207)

**HUBUNGAN ANTARA EFIKASI KENDIRI, PENERIMAAN
SOKONGAN SOSIAL DAN KEBOLEHSUAIAN KERJAYA GRADUAN
UNIVERSITI CHINA PADA PERINGKAT AWAL KERJAYA**

ABSTRAK

Dengan perkembangan pendidikan tinggi di China, jumlah graduan universiti yang terus meningkat telah menyebabkan cabaran kerjaya yang semakin serius apabila graduan memasuki pasaran kerja. Dalam persekitaran pekerjaan yang kompleks dan sentiasa berubah, keupayaan graduan untuk menyesuaikan diri pada peringkat awal kerjaya telah menjadi faktor penting yang mempengaruhi perkembangan kerjaya dan kualiti pekerjaan mereka. Walaupun kajian-kajian terdahulu telah meneroka hubungan antara efikasi sendiri, penerimaan sokongan sosial, dan kebolehsuaian kerjaya, pembinaan model yang sistematik serta analisis empirikal yang menyeluruh masih agak terhad. Berpandukan teori Determinisme Timbal Balik, teori efikasi sendiri, dan teori pembangunan kerjaya, kajian ini telah membina satu model struktur yang melibatkan efikasi sendiri, penerimaan sokongan sosial, dan pembolehubah kebolehsuaian kerjaya, serta menggunakan pendekatan kuantitatif untuk mengesahkan model yang dibina tersebut. Berdasarkan 207 soal selidik yang sah telah diterima daripada graduan universiti dari empat jurusan institusi pendidikan tinggi di China, analisis statistik deskriptif dan ujian perbezaan statistik telah dijalankan dengan menggunakan SPSS 26, manakala analisis model pengukuran berstruktur dilaksanakan melalui Smart-PLS 3.3.7 untuk mengenal pasti laluan penting dan mekanisme yang mempengaruhi keupayaan kebolehsuaian kerjaya. Dapatan kajian menunjukkan bahawa efikasi sendiri dan penerimaan sokongan sosial merupakan peramal positif yang signifikan terhadap kebolehsuaian kerjaya, dengan penerimaan sokongan sosial

memainkan peranan sebahagian daripada pembolehubah pengantara. Selain itu, faktor demografi seperti masa tamat pengajian, pengalaman kerja, jenis industri, dan kekerapan pertukaran kerja turut memberi kesan yang berbeza ke atas pembolehubah utama. Model yang dibina menunjukkan tahap kesesuaian, kebolehjelasan, dan keupayaan untuk membuat ramalan yang baik, sekali gus memaparkan mekanisme pembentukan keupayaan untuk menyesuaikan diri dengan kerjaya serta mengemukakan implikasi teori dan praktikal dalam meningkatkan kualiti pekerjaan graduan universiti. Kajian ini menggariskan kepentingan untuk meningkatkan efikasi sendiri dan membina sistem penerimaan sokongan sosial yang efektif bagi memperkukuh keupayaan menyesuaikan kerjaya graduan. Kajian ini juga mengemukakan saranan yang bersasar kepada institusi pengajian tinggi, majikan, dan pembuat dasar dalam menyokong peralihan kerjaya graduan secara lebih berkesan.

**RELATIONSHIPS BETWEEN SELF-EFFICACY, PERCEIVED
SOCIAL SUPPORT, AND CAREER ADAPTABILITY OF CHINESE
UNIVERSITY GRADUATES IN THE EARLY CAREER STAGE**

ABSTRACT

With the expansion of higher education in China, the number of university graduates has continued to rise, resulting in increasingly severe career challenges as they enter the labour market. In a complex and rapidly changing employment environment, graduates' ability to adapt in the early stages of their careers has become a key factor influencing both their career development and employment quality. Although previous studies have explored the relationships among self-efficacy, perceived social support, and career adaptability, there remains a lack of systematic modelling and empirical analysis of these variables. Guided by the theories of reciprocal determinism, self-efficacy, and career development, this study constructed a structural model involving self-efficacy, perceived social support, and career adaptability, and employed a quantitative research approach to test the model. Based on 207 valid responses from graduates of four types of Chinese universities, SPSS 26 was used for descriptive and comparative statistical analysis, while Smart-PLS 3.3.7 was applied to examine the measurement and structural models and explore key pathways and mechanisms influencing career adaptability. The findings demonstrate that both self-efficacy and perceived social support are significant positive predictors of career adaptability, with perceived social support partially mediating this relationship. Additionally, demographic variables such as graduation time, work experience, industry type, and turnover frequency were found to have differential effects on the core variables. The model showed good fit, explanatory power, and

predictive validity, offering insights into the formation mechanism of career adaptability and providing theoretical and practical implications for improving the employment quality of college graduates. This study highlights the importance of enhancing self-efficacy and building effective social support systems to strengthen graduates' career adaptability, offering targeted recommendations for higher education institutions, employers, and policy makers.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter introduces the background of this study, outlines the research problems, objectives and questions, highlights the significance of the study, defines core concepts and variables, and addresses the preliminary limitations. These foundational elements provide the groundwork for the literature review, theoretical development, and empirical analysis that follow in subsequent chapters.

1.2 Research Background

Under the background of globalization, technological advancement, and economic restructuring, the employment situation has become increasingly challenging for university graduates in China. This section aims to analyse the changes in employment trends at the macro level and the development of career adaptability at the micro level, thereby enhancing the understanding of the career development challenges encountered by modern university graduates and establishing a realistic basis for future research.

1.2.1 Severe Employment Situation of Chinese University Graduates

The job circumstances of Chinese university graduates are increasingly shaped by a complex interplay of macro- and micro-level factors. From a macro perspective, global economic development and transformation have exerted profound impacts on graduate employment. In particular, trade wars and tariff disputes among developed countries have directly affected international trade and investment flows, causing fluctuations in export markets for many countries, including China (Klein & Pettis, 2020). Moreover, rapid technological advancements have accelerated automation and

digitalization, intensifying competition in the job market for graduates (Benanav, 2020). China is still one of the biggest economies in the world, but its pace of economic growth has slowed to about 6% over time (G. Tian & Chen, 2022). There is a decrease in conventional manufacturing occupations and an increase in demand for technology-based positions as a result of China's economic transition from a manufacturing-driven to a service- and technology-oriented structure (Z. Liu & Ling, 2022). This shift has faced additional pressure due to the U.S.–China trade war, which has affected China's export industries and further challenged the employment landscape (Klein & Pettis, 2020).

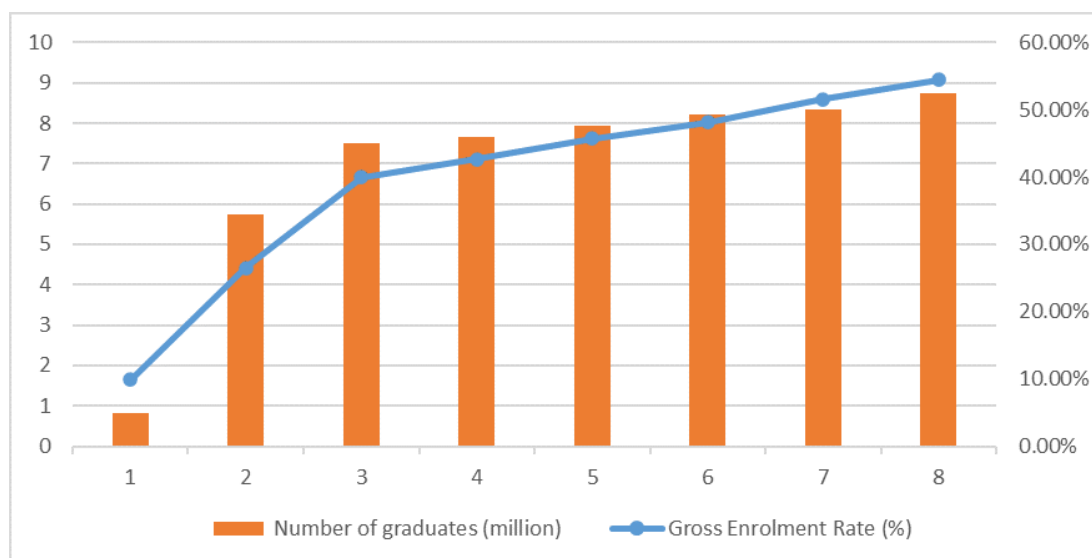
In China, higher education has grown very quickly, which has caused a lot of people to enter the job market at the same time (Chan & Zhang, 2021). China had an average enrollment rate of only 9.86% in higher education in 1998, according to the 2019 National Education Development Statistical Bulletin. The data shows that the rate has gone up quickly since 1999, when more people started going to university. It reached 15% in 2002, 23% in 2007, 26.5% in 2010, 30% in 2012, and 51.6% in 2019 (Ministry of Education of the People's Republic of China, 2020). The 2020 statistical report showed that this rate further increased to 54.4%, with 9.67 million students enrolled in undergraduate and junior college programs, 32.85 million students currently enrolled, and over 1.1 million new graduate students admitted, bringing the total number of graduates to 3.14 million (Ministry of Education of the People's Republic of China, 2021). This tendency is expected to continue growing.

With a start of less than 900,000 in 1999, the number of Chinese university graduates surpassed 5 million in 2009, and 8.34 million (2019), 8.74 million (2020), and 9.09 million (2021)—all reflecting this increase (Chinanews, 2020). As shown in

Figure 1-1, it illustrates the gross enrollment rate and graduate numbers over the past decade, both of which continue to rise in recent years.

Figure 1.1

China's Cumulative Enrolment Rate in Higher Education and The Number of University Graduates in Recent Years



On the micro level, individual graduates frequently face unstable employment and unclear career prospects. Although higher education has become more accessible, many recent grads still face a severe shortage of job opportunities that are a good fit for their degree (Orona et al., 2023). This not only contributes to employment difficulties for many graduates but also places those who are employed in unstable positions (Yin, 2023), further increasing the unemployment rate among recent graduates (Xing et al., 2018). Studies have shown that higher education expansion has caused a supply-demand imbalance, increasing job pressure (Ou & Zhao, 2022) and giving rise to structural mismatches and heightened competition (Ge & Jiang, 2021). Furthermore, the outbreak of Covid-19 brought unprecedented shocks to global job markets. Chinese university graduates, as a vulnerable group just entering the

workforce, have been disproportionately affected (Akkermans et al., 2020; International Labor Organization, 2020).

In summary, Chinese university graduates are facing an exceptionally severe employment landscape, influenced by structural changes in the economy and external uncertainties. At the same time, it highlights the structural contradictions between education and employment. These contextual factors make it especially urgent and important to study how graduates can achieve a successful career transition and improve their career adaptability. A thorough analysis of these issues will help provide targeted support and guidance for their career development.

1.2.2 The Importance of Career Adaptability to Career

Career development is no longer a linear and predictable process in the swiftly changing social and occupational landscape of today; rather, it is a dynamic journey characterized by uncertainty and transitions (Savickas, 2013; Savickas & Porfeli, 2011). In light of this, career adaptability has garnered the attention of both researchers and career counseling practitioners as a critical psychological resource. An individual's psychological preparedness and resource capacity to manage current and anticipated vocational duties, transitions, and traumas are referred to as career adaptability. Concern, confidence, control, and curiosity are the four dimensions through which it is frequently conceptualized (Savickas, 2005, 2013; Savickas & Porfeli, 2012).

In the Chinese context, the diversification of career choices and the complexity of the employment environment for university graduates underscore the importance of career adaptability. Studies have shown that individuals possessing greater career adaptability demonstrate stronger initiative and resilience when facing career uncertainty. They are more effective in exploring career opportunities and transitioning between roles, leading to better performance and

development in the workplace (Gregor et al., 2021; He & Yu, 2022). Furthermore, career adaptability has been found to be significantly correlated with various positive outcomes, such as work engagement, career satisfaction, and employability (Al-Jubari et al., 2021; Karimi et al., 2025; C. Song et al., 2024). Specifically, individuals exhibiting high adaptability are more inclined to cultivate robust career interests, subsequently impacting their career intentions (Walden et al., 2022). Therefore, career adaptability positively predicts job performance, subjective career success, and life satisfaction (Cabras & Mondo, 2018; Ohme & Zacher, 2015; Zacher, 2014).

For university graduates transitioning into the workforce, the level of career adaptability directly impacts their ability to successfully shift from the role of a “student” to that of a “professional.” Career adaptability predicts job success throughout the school-to-work transition and improves environmental uncertainty coping, according to Koen et al. (2012) and Monteiro & Almeida (2015). Additionally, highly adaptable individuals are more inclined to recognize social support, cultivate a positive career identity, and improve their confidence and perseverance (X. Liu, Ji, et al., 2023). Human resource departments have also recognized that the employability and career adaptability of new employees constitute vital human capital for maintaining competitive advantage (Coetzee et al., 2015). As such, career adaptability is a crucial element in facilitating individuals' ongoing development and success in their professional trajectories.

It is worth noting that career adaptability is influenced by factors including family background, educational environment, and social support (L. Chen & Tian, 2021; Sulistiani & Handoyo, 2018; T. Wang et al., 2023; N. Zhou et al., 2019). In the face of global job contraction, educational institutions and universities must prioritize the cultivation and intervention of career adaptability through curriculum design,

career guidance, and psychological counseling. Meanwhile, enterprises need to embrace a talent-oriented philosophy, value employee development, uncover employee potential, boost their confidence, and help them transition smoothly into new roles. On the individual level, graduates must acknowledge their current capabilities, enhance their learning skills, and proactively adjust to employment needs (X. Wang, 2021).

Consequently, career adaptability is crucial for both individual career success and the efficient use of society's resources in today's complicated and constantly changing work environment. It is a psychological mechanism that helps recent college grads deal with workplace challenges and make career transitions. This perspective offers vital theoretical support for a deeper understanding of the psychological mechanisms underpinning graduates' career development.

1.3 Research Problem

Employment is not only the cornerstone of national livelihood but also directly linked to social stability and individual well-being. As a highly scrutinized social issue, the university graduates employment affects millions of families and places increasing demands on government policy-making, higher education talent cultivation, and enterprise human resource systems (F. Gao, 2013; Y. Gao et al., 2018; L. Liu, 2023). Recent government policies aimed at enhancing university graduate employment (Ou & Zhao, 2022; D. Zhu & Cao, 2023), both macro- and micro-level data reveal that graduates commonly face significant adaptive challenges during the early stage of their career development.

For example, the 2019 MyCOS report on the employment status of Chinese university graduates shows that the early-stage turnover rate (within six months post-

graduation) for the class of 2018 was 33%, consistent with previous years (2017: 33%, 2016: 34%) (B. Wang & Chen, 2019), indicating a normalization of high turnover rates among early-career graduates. And, according to the "Report on College Graduates' Career Development" jointly conducted by the Beijing Municipal Education Commission, Peking University, Tsinghua University, and several well-known enterprises, nearly one-third of new employees who are recent graduates report low levels of career development, over 60% lack interest in their current jobs, and more than half change jobs frequently within a short period (Song C. et al., 2021).

These phenomena highlight the deeper issues that graduates face during the early career stage—issues that extend far beyond the outcome indicator of whether they are employed. Instead, they are intricately connected with the adaptation process to professional roles, confidence in future development, and perceived social support. However, current research is still insufficient in clarifying the specific causes and developmental mechanisms of these problems. On the one hand, most existing studies have focused on students' "employment intentions," "turnover behaviours," or "career planning" (W. Zhou & Xie, 2022), with relatively limited attention given to the psychosocial challenges specific to the early career stage. In fact, this stage is not merely the endpoint of employment but a critical period of identity transformation from student to professional, during which individuals experience intense reconstruction of role cognition and social function (W. Zhou & Xie, 2022). They face not only job-related tasks but also challenges such as organizational adaptation, rebuilding social relationships, and reshaping vocational self-concepts. Research has shown that maladaptation during this period can easily trigger job anxiety, psychological stress, and career confusion (Dong et al., 2023; Hou et al., 2019; Nota

& Rossier, 2015; Y. Zeng, 2023), thereby affecting long-term career trajectories and psychological well-being (L. Gao et al., 2025; B. Gu & Li, 2000).

On the other hand, in terms of theoretical development, research on career adaptability mechanisms during the first phases of career growth within the Chinese setting remains insufficiently systematized. Particularly, studies exploring the interactive mechanisms among internal individual resources (self-efficacy), external support factors (perceived social support), and outcome variables (career adaptability) are still relatively lacking. Existing research suggests that vocational development studies in China largely adopt theoretical models from Western contexts, such as Savickas's career adaptability theory. However, these theories are often rooted in individualistic cultural backgrounds, and their core assumptions and inter-variable relationships may not fully align with the collectivist orientation and structurally embedded support systems of Chinese society (Y. Li et al., 2017; X. Yang et al., 2019; W. Zhou & Xie, 2022).

At the higher education level, research on career adaptability has primarily focused on exploring basic relational pathways between variables, lacking multidimensional integration of individual developmental trajectories across different cultural and social contexts (W. Zhou & Xie, 2022). For instance, Chinese young adults often face greater familial expectations and prioritize employment "stability," which influences their career development process differently from their Western counterparts (L. Liu, 2023; Yang K., 2024). Consequently, further research rooted in the Chinese context is essential to elucidate the roles and processes through which self-efficacy and social support affect the career development of local university graduates.

Furthermore, existing studies about career adaptability predominantly examine current university students or specific professional groups, such as nurses, teachers,

and IT engineers, while attention to college graduates truly entered the workforce in their early careers already remains significantly insufficient (Xue, 2023; Zhong & Xu, 2023). However, this group is at a critical transitional stage from school education to the labour market, facing more complex and diverse challenges in role transformation, environmental adaptation, and career stability, thus possessing considerable practical research value (Y. Yang, 2020; Yin, 2023).

Moreover, although previous studies have explored the connections among self-efficacy, social support, and career adaptability in relation to career development from different perspectives (C. Xu et al., 2024; B. Ye et al., 2021; Yu et al., 2020), there is a scarcity of studies that construct multivariable interactive theoretical models to reveal their underlying mechanisms from an integrated perspective (S. Yang & Pu, 2022; Zhuang et al., 2021). Specifically in the context of China, further exploration is needed on how to incorporate individual psychological resources and external support factors within a unified analytical framework.

What is more noteworthy is that simplifying the high turnover rates or job dissatisfaction among college graduates as merely a “lack of adaptability” presents a theoretically one-sided view. The turnover behaviours of graduates may involve deeper structural factors such as mismatches between job supply and demand, insufficient career development opportunities, lack of organizational support, and disparities in urban-rural and regional development (Ou & Zhao, 2022; Yang K., 2024; Yin, 2023; Y. Zeng, 2023; D. Zhu & Cao, 2023). Therefore, when examining the impact of career adaptability on graduates’ employment outcomes, it is essential to situate these factors within a broader social structural context, avoiding simplistic attributions to individual traits or deficiencies in ability.

To sum up, Chinese university graduates' career adaptability study still exhibits several critical gaps and limitations: (1) a lack of systematic studies specifically targeting university graduates in their early career stages; (2) insufficient integrative modelling and empirical validation of self-efficacy, perceived social support, and career adaptability; (3) inadequate theoretical validation and exploration of application pathways within the local cultural context; and (4) a failure to fully integrate individual psychological resources with social structural factors to comprehensively explain the career development issues faced by college graduates. Addressing these deficiencies, this study intends to focus on Chinese university graduates at the early career stage, employing Reciprocal Determinism Theory, Self-efficacy Theory, and Career Development Theory as its theoretical framework. This study aims to construct a systematic structural model based on three key variables: self-efficacy, perceived social support, and career adaptability, to explore their interactive mechanisms and influence pathways on career development.

Through this integrative perspective, this study not only contributes to deepening the localization and explanatory power of relevant theories within the Chinese cultural context but also strives to uncover the critical mechanisms that promote the enhancement of career adaptability among university graduates. This will support the development of evidence-based strategies aimed at elevating their career adaptability. The research outcomes are expected to promote a shift in university career guidance, corporate talent management, and policy-making from single-factor interventions to systematic, multidimensional support, thereby more effectively fostering the career development of college graduates and achieving a seamless integration of theoretical research and practical application.

1.4 Research Objective

This study systematically investigates the relational mechanisms among self-efficacy, perceived social support, and career adaptability in Chinese university graduates during their early career stages through quantitative research. The research objectives are established through a blend of theoretical and problem-oriented methodologies, emphasizing the influence of individual career-related psychological resources on career adaptability and offering empirical evidence to enhance career development support systems for university graduates. The research objectives are delineated as follows:

Research Objective 1: Assess the levels of self-efficacy, perceived social support, and career adaptability among Chinese university graduates in their early career stages.

Research Objective 2: Investigate the influence of demographic factors on self-efficacy, perceived social support, and career adaptability among Chinese university graduates in their early career stages.

Research Objective 3: Examine the influence of self-efficacy, and perceived social support on career adaptability among Chinese university graduates in their early career stages.

Research Objective 4: Investigate the mediating role of perceived social support in the relationship between self-efficacy and career adaptability among Chinese university graduates in early career stages.

Research Objective 5: Evaluate the robustness and validity of the predictive model assessing the influence of self-efficacy and perceived social support on career adaptability among Chinese university graduates in their early career stages.

By achieving these objectives, this study seeks to establish a theoretical framework for comprehending essential psychological factors influencing the career adaptability of university graduates, as well as empirical data and strategic references for career guidance and educational practice.

1.5 Research Question

According to Duffy et al. (2016), research questions serve as a guiding framework to help researchers stay on track by exploring specific types of data to address current needs and issues relevant to the objectives of this study.

This study aims to thoroughly enhance the theoretical framework and empirical validation while investigating the career adaptability process of Chinese university graduates during their early career stages, structured around the following five fundamental questions.

Research Question 1: What are the current levels of self-efficacy, perceived social support, and career adaptability among Chinese university graduates during their early career stages?

Research Question 2: To what extent do demographic factors contribute to differences in self-efficacy, perceived social support, and career adaptability among Chinese university graduates in their early career stages?

Research Question 3: To what extent do self-efficacy and perceived social support predict career adaptability among Chinese university graduates in their early career stages?

Research Question 4: To what extent does the perceived social support mediate the relationship between self-efficacy and career adaptability for Chinese university graduates in their early career stages?

Research Question 5: To what extent is the predictive model, including the measurement and structural components, robust and valid in explaining the influences between self-efficacy, perceived social support, and career adaptability among Chinese university graduates in their early career stages?

By systematically addressing these research topics, this study seeks to uncover key psychological mechanisms that influence the career adaptability of university graduates, so offering theoretical foundations and empirical evidence for the enhancement of career guidance and educational practices.

1.6 Research Significance

This study seeks to investigate the correlations between self-efficacy, perceived social support, and career flexibility among Chinese university graduates in their early career stages. Employing a quantitative research approach, this study constructs and validates a structural model to elucidate these relationships. The findings are anticipated to enhance theoretical comprehension of the mechanisms underlying career adaptability and address several gaps in the existing literature, thereby offering significant theoretical and practical implications.

1.6.1 Theoretical Significance

First, while existing studies often link self-efficacy to academic performance and job performance and perceived social support to mental health, empirical research investigating the interrelations among self-efficacy, perceived social support, and career adaptability—especially in early-career Chinese university graduates—remains relatively scarce. This study expands the application of self-efficacy and career adaptability theories by constructing a structural model that explores the influence of

self-efficacy on career adaptability, using perceived social support as a mediating variable.

Second, although career adaptability is widely regarded as a key competence for coping with changes and challenges in career development, its formation mechanism still requires further exploration. Through empirical analysis, this study reveals the pathways through which self-efficacy and perceived social support contribute to the development of career adaptability, providing a novel perspective for understanding its internal mechanisms.

Furthermore, perceived social support, defined as individuals' subjective perception of support from family, friends, and others, has been shown to positively influence career satisfaction and adaptability. Nonetheless, the mediating role it plays in the relationship between self-efficacy and career adaptability remains inadequately validated. This study enriches the application of social support theory within the career development domain, by incorporating perceived social support as a mediating variable.

Finally, career adaptability theory emphasizes four essential psychological resources—concern, control, curiosity, and confidence—that are necessary for individuals in their career development. By empirically testing the importance of these competencies during the early career stage of university graduates, this study further supports the core tenets of career adaptability theory.

1.6.2 Practical Significance

The findings of this study have important practical implications for career guidance and education in higher education institutions. Clarifying the influence of self-efficacy and perceived social support on career adaptability enables educators to develop targeted interventions aimed at enhancing students' career adaptability.

In addition, the results offer significant insights for employers in the development of onboarding and support programs for new employees. Understanding the adaptation challenges faced by early-career employees can help organizations develop more effective support strategies, reduce employee turnover, and improve overall organizational performance.

1.7 Definition of Terms

Clearly defining the main variables and key concepts in research analysis is essential to ensure consistency between theoretical analysis and empirical measurement. This research examines Chinese university graduates at the onset of their careers, investigating the connections among self-efficacy, perceived social support, and career adaptability. This section offers systematic explanations and operational definitions of the core constructs of the study, acknowledging the definitional variations across studies in career development and the context-dependent nature of certain concepts. Specifically, the following subsections are defined the core concepts of “career adaptability,” “self-efficacy,” “perceived social support,” “Chinese university graduates,” and the “early career stage,” and describe how these variables were measured.

1.7.1 Career Adaptability

Career adaptability is the capacity to handle professional development responsibilities, transitions, and crises, which is a vital psychological resource that helps people focus and handle job obstacles (Savickas, 2002, 2005, 2013). This study adopts Savickas (2005)'s four-dimensional structure, which includes career concern, control, curiosity, and confidence. The four dimensions collectively form the

psychosocial resources that facilitate individuals' adaptability in career development (Savickas, 2005, 2013).

This study used the 12-item short form of the Career Adapt-Abilities Scale (CAAS-SF), developed by Maggiori, Rossier, and Savickas (2015) from original 24-item CAAS-SF, to measure the career adaptability levels of Chinese university graduates during the early career stage. The 12-item CAAS-SF (2015) has been validated across multiple countries and regions, including Australia, Turkey, Switzerland, and Germany, and has demonstrated strong psychometric properties (C. Song, Hashim, et al., 2023).

In the Chinese context, Song et al. (2023) translated and adapted the 12-item CAAS-SF, and validated its reliability and structural validity among a sample of university graduates. It had a Cronbach's α of 0.94, with α coefficients for all four dimensions exceeding 0.80. Confirmatory factor analysis supported its four-factor structure. Section 3.6.3(a) of Chapter 3 (pp. 134-137) provides reliability and validity assessments to ensure its relevance to the research sample. Overall, the Chinese 12-item CAAS-SF is a viable tool for evaluating career adaptability in study participants.

1.7.2 Self-efficacy

Self-efficacy denotes an individual's belief in their capacity to effectively accomplish specific tasks in various contexts (Bandura, 1977; Schwarzer et al., 1997). This study focuses on general self-efficacy, which emphasizes individuals' overall sense of competence and confidence across a wide range of life and occupational contexts. General self-efficacy serves as a stable psychological resource and is recognized as a reliable predictor of an individual's ability to manage challenges and adapt to changes (Scholz et al., 2002; Schwarzer, 2014). Compared to situation-specific self-efficacy beliefs, general self-efficacy has broader applicability and offers

a more comprehensive prediction of individuals' adaptive capacities, motivational levels, and stress-coping performance in complex and dynamic environments (Bandura, 2012; Jerusalem & Schwarzer, 1992).

This study utilized the General Self-Efficacy Scale (GSES), created by Schwarzer and Jerusalem in 1992, to assess self-efficacy. The GSES is a prominent tool for evaluating general self-efficacy, having been validated across 25 countries. Its internal consistency coefficients range from 0.75 to 0.91 (Scholz et al., 2002), demonstrating excellent cross-cultural reliability. The Chinese version of the scale, revised by Zhang and Schwarzer (1995), has been widely utilized among Chinese university student populations, with its reliability and validity substantiated through numerous empirical studies (Z. Du & Zhang, 2022; Qin et al., 2023; R.-P. Zhang, 2016).

This study aimed to improve the applicability of the measurement tool for the university graduate population by removing two items from the original scale (SE01 and SE02) that exhibited low communalities and factor loadings, as determined by exploratory and confirmatory factor analyses. The adopted final version consisted of the remaining 8 items designed to evaluate the self-efficacy of Chinese university graduates in the initial phase of their careers. The scale exhibited strong internal consistency, indicated by a Cronbach's α of 0.923, and demonstrated good structural validity. Chapter 3, Section 3.6.3(b) (pp. 137-140) provides a comprehensive analysis of reliability and validity.

1.7.3 Perceived Social Support

According to Zimet et al. (1988), perceived social support denotes the degree to which individuals subjectively recognize emotional or functional assistance from important others, including family, peers, coworkers, and so on. This study adopts a

broad perspective of social support, emphasizing college graduates' perceived support from their social networks during the early stage of career development. This includes emotional comfort, advisory feedback, and practical assistance, provided through social connections such as family, friends, colleagues, groups, and organizations (X. Wang et al., 1999).

The measurement instrument is derived from the Multidimensional Scale of Perceived Social Support, initially created by Zimet et al. (1988) and subsequently translated and modified by Jiang et al. in 1999 (Q. J. Jiang, 2001). The scale has undergone extensive validation within the Chinese cultural context, exhibiting strong reliability and validity (Q. J. Jiang, 2001; L.-Y. Wang & Huang, 2019; X. Wang et al., 1999; X. Zeng & Huang, 2021). In this study, to better align with the occupational context of recent graduates, the original scale was revised based on literature review: a new dimension of "university support" was added; the "friend" dimension was redefined as "peer," and the "significant other" dimension was revised to "colleague." Several item wordings were also localized for contextual appropriateness.

This study conducted reliability and validity tests on the revised Perceived Social Support Scale (PSSS), informed by exploratory and confirmatory factor analyses. The analysis of structural validity confirmed the four-factor structure, while the internal consistency analysis revealed a total scale Cronbach's α of 0.914, with α values for the four dimensions between 0.823 and 0.917, demonstrating good reliability. Based on factor loading results, one item from the family support dimension with a loading below 0.5 was removed, resulting in a final scale of 15 items used for the formal survey. Detailed reliability and validity analyses are presented in Chapter 3, Section 3.6.3(c) (pp. 140-144).

1.7.4 Chinese University Graduates

In this study, the term "Chinese university graduates" are those who have finished their education and received a diploma or degree from legally established higher education institutions in mainland China, including general undergraduate universities and higher vocational colleges. Specifically, this study focuses on university graduates at the associate and bachelor's levels, excluding those who have entered postgraduate education.

1.7.5 Early Career Stage

In this study, the term "early stage of career" refers to the period between the third and twelfth month after an individual enters the workforce upon completing higher education. This stage marks a critical transition from the student role to that of a professional, often accompanied by significant shifts in identity, contextual adaptation, and role reconstruction (Nota & Rossier, 2015; Savickas, 2005; W. Zhou & Xie, 2022).

Numerous studies indicate that university graduates typically experience a significant adaptation process in the early stages of employment. Particularly within the first three months, most individuals are in a state of high uncertainty and exploration, facing what is known as "reality shock" and have yet to establish a stable sense of occupational identity and role clarity (Bauer et al., 2007; F. Gao, 2013; Saks & Gruman, 2012). As employment progresses, from the third to the twelfth month, individuals gradually begin to internalize organizational culture, establish role identity, and engage in self-adjustment and positioning through continuous learning and feedback. This stage is considered a critical transition from initial exploration to relative stability in career development (Nota & Rossier, 2015; Yu et al., 2020; Zhuang et al., 2021).

Findings from local research in China further suggest that most college graduates formally enter the actual starting stage of their career development only after the probationary period (typically 1–3 months), during which they transition from probationary status to full-time employees (Y. Xie, 2017; Xue, 2023; Y. Zhou, 2018). Moreover, existing studies have found that graduates often encounter distinctive challenges between the 4th and 12th months of employment, including heavier adaptation burdens, deepening role identification, and fluctuating turnover intentions—indicating that career adjustment follows a staged process (Yang K., 2024; Yin, 2023; Y. Zeng, 2023).

In addition, according to career socialization theory and stage-based models of career development, newcomers typically complete their initial socialization process within the first 12 months of employment, forming relatively stable professional attitudes and behavioural patterns (Bauer et al., 2007). From an organizational perspective, many employers also set "one year of employment" as a key evaluation milestone for promotion, performance appraisal, and developmental planning, after which individuals begin to face issues related to long-term career path decisions and vertical development opportunities (Y. Xie, 2017; Y. Zhou, 2018). Therefore, defining the upper limit of the early career stage as 12 months after graduation not only aligns with the theoretical timeline of role consolidation and socialization completion but also reflects prevailing organizational practices in the Chinese context.

1.8 Limitation of the Study

Notwithstanding the endeavors in theoretical formulation, variable quantification, and data examination to uphold scientific rigor, this research possesses some limits that must be acknowledged when interpreting and utilizing its conclusions.

First, this study utilized a cross-sectional design and relied primarily on self-reported data collected via questionnaires. It may lead to common method bias and response bias, potentially compromising the validity of the relationships among variables. Moreover, cross-sectional data cannot reveal causal relationships. Although the study utilized Partial Least Squares Structural Equation Modelling (PLS-SEM) to investigate potential pathways among variables, this technique is more suitable for theory development and exploratory analysis rather than for validating causal findings. Future study might benefit from employing longitudinal or experimental designs to further examine the causal pathways and dynamic processes among the variables.

Second, in terms of sampling, this study mainly employed a combination of convenience sampling and snowball sampling through online surveys. While this allowed for broader reach, it lacked randomization and strict on-site control, thereby reducing the sample's representativeness and its potential for generalization. In particular, this study focused on Chinese university graduates who had been in the workforce for 3 to 12 months, which may limit the applicability of the findings to other cultural contexts, institutional systems, or non-college-graduate populations.

Finally, although research variables were measured using well-established scales and improved through literature combing and pilot testing, there may still be issues related to cultural adaptation or semantic interpretation. Future research could employ multi-method and multi-source data collection strategies to improve measurement validity and reliability.

This study offers preliminary empirical evidence regarding the relationships between self-efficacy, perceived social support, and career adaptability; however, the findings must be considered in light of the methodological limitations present. Further

research employing more sophisticated designs and broader samples is needed to strengthen and extend these findings.

1.9 Summary

This chapter introduces the study subject and provides a methodical outline. It starts with an examination of Chinese university graduates' dire job condition and a discussion of career adaptability's importance in career growth, establishing the study problem's practical. The chapter then discusses the study's main-focus, examining self-efficacy, perceived social support, and career adaptability in early-career Chinese university graduates and its research objectives and questions. This chapter contrasts theoretical and practical contributions by highlighting the study's relevance. It also systematically defines the key concepts and variables relevant to the research, clarifying their operational definitions and conceptual boundaries, thereby laying the groundwork for the forthcoming literature review, theoretical framework, and empirical investigation. The chapter also discusses the study's methodological limitations and the necessity to assess and implement research findings within a clear scientific framework.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter begins by exploring the early stage of career development through the lens of Career Development Theory. It first introduces the key characteristics of this initial phase. Then, the chapter reviews relevant academic literature on career adaptability, self-efficacy, and perceived social support. It explains the main features of each concept and examines how they may relate to one another. Building on these ideas and their underlying theories, the chapter then develops a theoretical and conceptual framework. This framework provides a clear structure to guide the direction of the study.

2.2 Overview of the Background about Chinese University Graduates in Early Career Stage

The early career stage plays a vital role in shaping long-term professional growth. As a key transitional period, the early career stage marks the shift from student life to working life. Individuals entering this phase must explore employment options, adapt to new workplace environments, and gain hands-on experience. These efforts are essential for establishing a stable path forward in their careers. It serves as a foundation for developing key outcomes such as career adaptability, job satisfaction, and future career success (W. Zhou & Xie, 2022). This stage also has a strong influence on the formation of career identity and self-efficacy (W. Zhou & Xie, 2022).

Particularly in the context of China's rapid socio-economic development and ever-changing employment environment, university graduates, as a key group entering the workforce, face especially complex career challenges and development opportunities. Therefore, systematically reviewing the developmental background and

related research status of Chinese university graduates in their early career stages is of significant theoretical value and practical importance.

This section consists of four main parts. First, it outlines the fundamental framework of career development stage theory, establishing a theoretical basis for comprehending the stage-specific attributes of university graduates' career progression. Second, it focuses on the specific background of Chinese university graduates' early career stage, analyzing the factors in the current social environment that impact their career development. Third, it reviews the foundational research findings regarding the early career stage of Chinese university graduates. Finally, it explores the existing gaps in current research and outline future prospects, providing guidance for subsequent empirical studies.

2.2.1 Career Development Stage

The theory of career development stages provides a significant framework for analyzing the evolving nature of an individual's career path. This theory posits that an individual's career is an ongoing process that develops throughout the life cycle, progressing through distinct stages and encountering various tasks and challenges (Patton & McMahon, 2014). Since the mid-20th century, numerous scholars have proposed distinctive models for dividing career stages. Although the standards vary, there is a general consensus that career development is characterized by distinct stages, and that there is a progressive relationship between these stages.

Early classical theories, such as those by Ginzberg (1951) and Super (1957), divided the career journey into stages based on age, including the fantasy, exploration, inception, maintaining, and declining stages (W. Zhou & Xie, 2022). These examples highlight the importance of the individual's self-concept in their professional growth (W. Zhou & Xie, 2022). Super (1990) proposed that career choices and development