

**RELATIONSHIPS BETWEEN STUDENT
LEADERSHIP PRACTICES, CORE SELF-
EVALUATION AND MOTIVATION TO
LEAD IN PUBLIC UNIVERSITIES
IN CHINA**

ZHANG MIAOLING

UNIVERSITI SAINS MALAYSIA

2025

**RELATIONSHIPS BETWEEN STUDENT
LEADERSHIP PRACTICES, CORE SELF-
EVALUATION AND MOTIVATION TO
LEAD IN PUBLIC UNIVERSITIES
IN CHINA**

by

ZHANG MIAOLING

**Thesis submitted in fulfilment of the requirements
for the degree of
Doctor of Philosophy**

August 2025

ACKNOWLEDGEMENT

Before my PhD journey nears its end, it is with gratitude that I write this acknowledgment to express my in-depth appreciation to those who have supported and supported me throughout this long and challenging PhD journey.

Firstly, Firstly, Associate Professor Thien Lei Mee. You have not only guided me with your rigorous academic attitude and profound professional knowledge but also encouraged and supported me when I faced difficulties in my research and life. I would also like to thank my panels, Associate Professor Dr. Aziah Ismail and Associate Professor Dr. Melissa Ng Lee Yen Abdullah, for their detailed feedback and professional guidance, which have greatly improved the quality of my research.

I sincerely thank the leaders and teachers of Fuyang Normal University for allowing me to study abroad. I am grateful to the Chinese and foreign experts and scholars for their support in revising the measures, validating their content validity, and teaching me the methods. I would also like to thank the leaders, teachers, and student representatives of the seven Chinese universities for their assistance in completing the survey and interviews. Without your participation, this study could not have been completed.

Finally, I'd like to thank my parents and family for their unconditional love and support. I'd also like to thank my friends at Universiti Sains Malaysia for their friendship and encouragement, which made my academic journey warm and fulfilling. I'll keep working hard and strive to achieve outstanding research results to repay everyone who cares about and supports me.

TABLE OF CONTENTS

ACKNOWLEDGEMENT.....	ii
TABLE OF CONTENTS.....	iii
LIST OF TABLES.....	xi
LIST OF FIGURES	xiii
LIST OF ABBREVIATIONS	xiv
LIST OF APPENDICES.....	xv
ABSTRAK	xvii
ABSTRACT.....	xix
CHAPTER 1 INTRODUCTION	1
1.1 Introduction.....	1
1.2 Background of study	6
1.3 Problem statement.....	16
1.4 Research objectives.....	21
1.5 Research questions.....	22
1.6 Research hypotheses	22
1.7 Significance of the study.....	23
1.7.1 Theoretical significance.....	23
1.7.2 Practical significance	25
1.8 Operational definitions.....	26
1.8.1 Student Leadership Practices.....	26
1.8.2 Core Self-Evaluation	27
1.8.3 Motivation to Lead	27
1.8.4 University student leaders	28
1.9 Limitation of the study.....	28
1.10 Summary	30

CHAPTER 2	LITERATURE REVIEW	32
2.1	Introduction.....	32
2.2	Leadership.....	32
2.2.1	Leadership as process, behavior	33
2.2.2	Leadership is ability.....	33
2.2.3	Leadership is influence.....	34
2.2.4	Leadership is a relationship	34
2.3	Student Leadership	35
2.4	Student Leadership Practices	35
2.4.1	Concept of Student Leadership Practices	35
2.4.2	Importance of Student Leadership Practices	38
2.4.3	Student leadership challenge model	40
2.4.3(a)	Model the way	41
2.4.3(b)	Inspire a shared vision.....	43
2.4.3(c)	Challenge the process.....	43
2.4.3(d)	Enable others to act	45
2.4.3(e)	Encourage the heart.....	46
2.5	Core Self-Evaluation.....	49
2.5.1	Concept of Core Self-Evaluation.....	49
2.5.2	Importance of Core Self-Evaluation.....	51
2.6	Motivation to Lead.....	53
2.6.1	Concept of Motivation to Lead.....	53
2.6.2	Importance of Motivation to Lead.....	56
2.7	Relationship between variables.....	59
2.7.1	Relationship between Core Self-Evaluation and Student Leadership Practices	59
2.7.2	Relationship between Motivation to Lead and Student Leadership Practices	62

2.7.3	Relationship between Core Self-Evaluation and Motivation to Lead	64
2.7.4	The mediating effect of Motivation to Lead on the relationship between Core Self-Evaluation and Student Leadership Practices	66
2.7.5	The mediating effect of affective identity Motivation to Lead on the relationship between Core Self-Evaluation and Student Leadership Practices	69
2.7.6	The mediating effect of non-calculative Motivation to Lead on the relationship between Core Self-Evaluation and Student Leadership Practices	72
2.7.7	The mediating effect of social-normative Motivation to Lead on the relationship between Core Self-Evaluation and Student Leadership Practices	75
2.8	Theoretical framework	78
2.9	Conceptual framework	84
2.10	Summary	86
CHAPTER 3 METHODOLOGY		89
3.1	Introduction	89
3.2	Pragmatic worldview of this study	89
3.3	Research design	90
3.4	Sampling procedure	94
3.4.1	Quantitative sampling procedure	94
3.4.2	Qualitative sampling procedure	101
3.5	Instruments	105
3.5.1	Student Leadership Practices scale	105
3.5.2	Core Self-Evaluation scale	111
3.5.3	Motivation to Lead scale	112
3.6	Marker variable	115
3.7	Interview protocol	116
3.8	Cross-cultural adaptation procedures	119

3.9	Content validity.....	121
3.10	Data collection procedure	123
3.10.1	Quantitative data collection procedure.....	123
3.10.2	Qualitative data collection procedure.....	125
3.11	Pilot study	126
3.12	Confirmatory factor analysis of the scales.....	127
3.12.1	Confirmatory factor analysis of Student Leadership Practices scale	129
3.12.2	Confirmatory factor analysis of Core Self-Evaluation scale.....	134
3.12.3	Confirmatory factor analysis of Motivation to Lead scale.....	135
3.13	Preliminary analysis procedures	139
3.14	Phase One:Quantitative data analysis procedures.....	140
3.14.1	Measurement model evaluation.....	140
3.14.2	Structural model	141
3.15	Phase Two:Qualitative data analysis procedures	143
3.16	Trustworthiness.....	146
3.17	Ethical consideration.....	148
3.18	Summary	150
CHAPTER 4 DATA ANALYSIS		152
4.1	Introduction.....	152
4.2	Response rate	152
4.3	Demographic background of participants	154
4.4	Preliminary analysis.....	155
4.4.1	Outliers	156
4.4.2	Normality.....	157
4.4.3	Common method bias.....	157
4.4.4	Descriptive statistics and correlation.....	158
4.5	Phase one: quantitative research analysis	158

4.5.1	Assessment of measurement model (first-order construct)	159
4.5.1(a)	Convergent validity	159
4.5.1(b)	Discriminant validity	161
4.5.2	Assessment of measurement model (second-order constructs).....	164
4.5.2(a)	Convergent validity	164
4.5.2(b)	Discriminant validity	165
4.5.3	Structural model assessment.....	165
4.5.3(a)	The coefficient of determination (R^2).....	167
4.5.3(b)	Path coefficient.....	167
4.5.3(c)	Mediator testing.....	169
4.5.3(d)	Effect size (f^2).....	170
4.5.4	PLS predict assessment	172
4.5.5	Summary of hypotheses testing.....	174
4.6	Phase two: qualitative results.....	176
4.6.1	Profile of the respondents	178
4.6.2	Qualitative data analysis.....	179
4.6.3	Thematic coding analysis	180
4.6.3(a)	Theme: Core Self-Evaluation and Student Leadership Practices.....	180
4.6.3(a)(i)	Core Self-Evaluation impacts Student Leadership Practices.....	182
4.6.3(a)(ii)	Evaluation of own abilities and leadership practices	183
4.6.3(a)(iii)	Evaluation of work abilities and Student Leadership Practices.....	185
4.6.3(b)	Theme: Motivation to Lead and leadership practices.....	187
4.6.3(b)(i)	Student Leaders' Motivations to Lead and leadership practices.....	189

4.6.3(b)(ii)	Motivation to Lead and leadership behavior	191
4.6.3(c)	Theme: Core Self-Evaluation and Motivation to Lead	193
4.6.3(c)(i)	Self-evaluation and Motivation to Lead	194
4.6.3(c)(ii)	Self-confidence and Motivation to Lead	196
4.6.3(d)	Theme: Motivation to Lead, Core Self-Evaluation and leadership practices.....	197
4.6.3(d)(i)	The role of Core Self-Evaluation and Motivation to Lead	198
4.6.3(d)(ii)	Motivation to Lead and leadership practices	200
4.6.3(e)	Theme: Affective identity Motivation to Lead, Core Self-Evaluation and leadership practices.....	201
4.6.3(e)(i)	The role of Core Self-Evaluation and affective identity Motivation to Lead	202
4.6.3(e)(ii)	The role of affective identity Motivation to Lead in leadership practices	204
4.6.3(f)	Theme: The expression and role of non-calculative Motivation to Lead	207
4.6.3(f)(i)	Core Self-Evaluation and non-calculative Motivation to Lead	209
4.6.3(f)(ii)	Selfless and leadership practices	210
4.6.3(f)(iii)	The presence of non-calculative Motivation to Lead in student organizations.....	213
4.6.3(g)	Theme: The expression and role of social-normative Motivation to Lead	214
4.6.3(g)(i)	Core Self-Evaluation and social-normative Motivation to Lead	216
4.6.3(g)(ii)	Responsibility and obligations	218

4.6.3(g)(iii)	Reflection of social-normative Motivation to Lead in student organisations.....	220
4.6.4	Summary of qualitative analysis.....	221
4.7	Summary of chapter	224
CHAPTER 5 DISCUSSION AND CONCLUSION		225
5.1	Introduction.....	225
5.2	Summary of this study	225
5.3	Discussion of the findings.....	229
5.3.1	Relationship between Core Self-Evaluation and Student Leadership Practices	229
5.3.2	Relationship between Motivation to Lead and Student Leadership Practices	230
5.3.3	Relationship between Core Self-Evaluation and Motivation to Lead	232
5.3.4	Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices.....	233
5.3.5	Affective identity Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices	236
5.3.6	Non-calculative Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices.....	238
5.3.7	Social-normative Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices	240
5.3.8	How do Core Self-Evaluation and Motivation to Lead (affective identity Motivation to Lead, non-calculative Motivation to Lead, and social-normative Motivation to Lead) influence Student Leadership Practices?	242
5.3.8(a)	How does Core Self-Evaluation influence Student Leadership Practices?	243
5.3.8(b)	How does Motivation to Lead influence Student Leadership Practices?	245

5.3.8(c)	How does Core Self-Evaluation influence Motivation to Lead?	247
5.3.8(d)	How Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices	250
5.3.8(e)	How affective identity Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices	252
5.3.8(f)	How non-calculative Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices	254
5.3.8(g)	How social-normative Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices	257
5.4	Implications of the study	260
5.4.1	Theoretical implications	261
5.4.2	Practical implications	264
5.5	Limitations and recommendations for future research	267
5.6	Conclusion	270
REFERENCES.....		275
APPENDICES		

LIST OF TABLES

	Page
Table 2.1 Student Leadership Challenge Model Basic Contents	41
Table 3.1 Quantitative sampling procedure.....	96
Table 3.2 Items for Student Leadership Practices inventory-self instrument (SLPI-Self)	109
Table 3.3 Items for Core Self-Evaluation.....	112
Table 3.4 Items for Motivation to Lead.....	113
Table 3.5 Items for attitude toward the color blue.....	116
Table 3.6 Validity comments from an expert.....	117
Table 3.7 Translation phase	120
Table 3.8 Scale content validity expert information.....	122
Table 3.9 Convergent validity of Student Leadership Practices.....	130
Table 3.10 Discriminant validity of Student Leadership Practices	132
Table 3.11 Convergent validity of Core Self-Evaluation	134
Table 3.12 Convergent validity of Motivation to Lead	136
Table 3.13 Discriminant validity of Motivation to Lead.....	137
Table 4.1 Participating university and response rate	153
Table 4.2 Demographic information of university student leaders	154
Table 4.3 Descriptive statistics and correlation.....	158
Table 4.4 Assessment of measurement model (first-order construct)	159
Table 4.5 Heterotrait-Monotrait ratio (first-order constructs)	163
Table 4.6 Assessment of measurement model (second-order constructs).....	164
Table 4.7 Heterotrait-Monotrait ratio (second-order constructs)	165
Table 4.8 Path coefficients, specific direct effects and confidence interval	168
Table 4.9 Path coefficients for indirect relationship.....	170

Table 4.10	Effect size (f^2)	171
Table 4.11	PLS predict for structural model 1	173
Table 4.12	PLS predict for structural model 2	173
Table 4.13	Summary of hypothesis	175
Table 4.14	Profile of qualitative university	177
Table 4.15	Demographic information on the respondents.....	178
Table 4.16	Themes coding of Core Self-Evaluation and Student Leadership Practices	181
Table 4.17	Themes coding of Motivation to Lead and Leadership Practices.....	188
Table 4.18	Themes coding of Core Self-Evaluation and Motivation to Lead	193
Table 4.19	Themes coding of Motivation to Lead, Core Self-Evaluation and leadership practices.....	198
Table 4.20	Themes coding of affective identity Motivation to Lead, Core Self-Evaluation and leadership practices.....	202
Table 4.21	Themes coding of the expression and role of non-calculative Motivation to Lead	208
Table 4.22	Themes coding of the expression and role of social-normative Motivation to Lead	215
Table 4.23	Qualitative theme coding summary	223

LIST OF FIGURES

		Page
Figure 2.1	Conceptual framework	85
Figure 3.1	Explanatory sequential design procedures	93
Figure 3.2	Quantitative sampling design	97
Figure 3.3	Sample size guideline source.....	99
Figure 3.4	Calculation of minimum required sample size	100
Figure 3.5	First-order confirmatory Student Leadership Practices analysis model	133
Figure 3.6	First-order confirmatory Core Self-Evaluation factor analysis model	135
Figure 3.7	First-order confirmatory Motivation to Lead factor analysis model	138
Figure 3.8	Qualitative data analysis procedure.....	144
Figure 4.1	Structural model 1	166
Figure 4.2	Structural model 2	166

LIST OF ABBREVIATIONS

AIMTL	Affective identity Motivation to Lead
CSE	Core Self-Evaluation
MTL	Motivation to Lead
NCMTL	Non-calculative Motivation to Lead
SLP	Student Leadership Practices
SNMTL	Social-normative Motivation to Lead

LIST OF APPENDICES

Appendix A1	Ask permission for Student Leadership Practices Inventory
Appendix A2	Ask permission for Core Self-Evaluation Scale
Appendix A3	Ask permission for Motivation to Lead Scale
Appendix B1	Scale content validity Expert information 1
Appendix B2	Scale content validity Expert information 2
Appendix B3	Scale content validity Expert information 3
Appendix B4	Scale content validity Expert information 4
Appendix B5	Scale content validity Expert information 5
Appendix C	Item Suitability Assessment Form for Expert Panels
Appendix D1	Original Student Leadership Practices Inventory
Appendix D2	Original Core Self-Evaluation Scale
Appendix D3	Original Motivation to Lead Original Scale
Appendix E	Scoring of the expert panel's item suitability assessment form
Appendix F1	Subject Information and Consent Form (Signature Page)
Appendix F2	Participant's Material Publication Consent Form (Signature Page)
Appendix F3	Subject Information and Consent Form (Signature Page) Chinese
Appendix F4	Participant's Material Publication Consent Form (Signature Page) Chinese
Appendix G1	Permission letter to conduct the study at the school (English)
Appendix G2	Permission letter to conduct the study at the school (Chinese)
Appendix H	Interview protocol
Appendix I	JEPeM
Appendix J	Final scale of this study
Appendix K	Flowchart of this research methodology
Appendix L1	Cook's Distance: Independent Variable was CSE and Dependent Variable was SLP

Appendix L2	Cook's Distance: Independent Variable was MTL and Dependent Variable was SLP
Appendix L3	Cook's Distance: Independent Variable was CSE and Dependent Variable was MTL
Appendix M	Output of skewness and kurtosis calculation
Appendix N	Respondents' statements in thematic coding

**HUBUNGAN ANTARA AMALAN KEPIMPINAN PELAJAR, PENILAIAN
TERAS KENDIRI DAN MOTIVASI UNTUK MEMIMPIN DI
UNIVERSITI AWAM DI CHINA**

ABSTRAK

Universiti memainkan peranan kritikal dalam pembangunan kepimpinan pelajar dan bertanggungjawab memupuk pemimpin masa depan. Kajian ini bertujuan meneroka hubungan antara Amalan Kepimpinan Pelajar, Penilaian Teras Kendiri, dan Motivasi untuk Memimpin, termasuk tiga dimensi Motivasi untuk Memimpin di universiti awam China. Kajian ini menggunakan reka bentuk penyelidikan kaedah campuran berurutan penjelasan. Dalam fasa kuantitatif, kajian ini menggunakan kaedah persampelan pelbagai peringkat untuk mengumpul data daripada pemimpin pelajar di tujuh buah universiti di Wilayah Anhui, dan sejumlah 687 data diperolehi daripada kaji selidik. Data analisis dilakukan dengan perisian Smart PLS 4.0. Ujian hipotesis dilakukan dengan menggunakan Pemodelan Persamaan Struktur Separa Kuasa Dua Terkecil. Kajian ini menggunakan persampelan bertujuan bagi fasa kualitatif untuk menjalankan temu bual bersama dengan 12 pemimpin pelajar yang terlibat dalam fasa kuantitatif. Selepas itu, kajian ini menjalankan analisis tematik menggunakan Nvivo 14.0 untuk memanjangkan dapatan dapatan kuantitatif. Dapatan kuantitatif mendedahkan bahawa Penilaian Teras Kendiri pelajar universiti mempunyai hubungan positif dengan amalan kepimpinan dan Motivasi Memimpin. Selain itu, terdapat hubungan yang positif antara Motivasi Memimpin dan Amalan Kepimpinan Pelajar. Penilaian Teras Kendiri bukan sahaja mempengaruhi Amalan Kepimpinan Pelajar secara langsung tetapi juga secara tidak langsung mempengaruhi Amalan Kepimpinan Pelajar melalui Motivasi untuk Memimpin. Dimensi identiti

afektif Motivasi untuk Memimpin, Motivasi normatif sosial untuk Memimpin, dan Motivasi bukan pengiraan untuk Memimpin) turut muncul sebagai pengantara yang signifikan. Dapatan ini konsisten dengan dapatan daripada konteks budaya dan demografi yang lain, menunjukkan bahawa Penilaian Teras Kendiri mempunyai kesan positif ke atas Amalan Kepimpinan Pelajar dalam pelbagai konteks. Dalam analisis kualitatif, kajian mengenal pasti tujuh tema dan 19 sub-tema yang menjelaskan secara terperinci cara-cara Penilaian Teras Kendiri dan Motivasi untuk Memimpin (identiti afektif Motivasi untuk Memimpin, Motivasi normatif sosial untuk Memimpin dan Motivasi bukan pengiraan untuk Memimpin) mempengaruhi Amalan Kepimpinan Pelajar. Dapatan ini memberikan gambaran tentang kesan motivasi pemimpin pelajar untuk memimpin dan Penilaian Teras Kendiri terhadap amalan kepimpinan mereka. Dapatan kualitatif ini menerangkan peranan pengantara bagi tiga dimensi Motivasi untuk Memimpin. Kajian ini mempunyai sumbangan teori dalam memberikan sokongan empirikal kepada kajian kepimpinan pelajar universiti dalam konteks Cina dan memperluaskan aplikasi teori efikasi sendiri dan teori efikasi sendiri kepimpinan. Kajian ini menawarkan rangka kerja teori kepada pentadbir universiti dan pendidik untuk meningkatkan prestasi pelajar dalam amalan kepimpinan dengan meningkatkan Penilaian Teras Kendiri dan memupuk Motivasi mereka untuk Memimpin. Dapatan kajian ini menyumbang asas teori kepada universiti untuk membangunkan strategi yang disasarkan untuk memupuk kepimpinan pelajar universiti. Batasan kajian ini memberikan cadangan untuk kajian masa depan.

**RELATIONSHIPS BETWEEN STUDENT LEADERSHIP PRACTICES,
CORE SELF-EVALUATION AND MOTIVATION TO LEAD IN
PUBLIC UNIVERSITIES IN CHINA**

ABSTRACT

The university plays a critical role for student leadership development and responsible to cultivate future leaders. This study aims to explore the relationships between Student Leadership Practices, Core Self-Evaluation, and Motivation to Lead, as well as its three dimensions in Chinese public universities. This study used an explanatory sequential mixed-method research design. In the quantitative phase, multi-stage sampling procedure was used to collect data from student leaders at seven universities in Anhui Province, and a total of 687 valid responses were obtained for analysis. Data were analyzed through Smart PLS 4.0, and hypothesis testing was conducted using the Partial Least Squares Structural Equation Modeling. Meanwhile, purposive sampling for the qualitative phase to conduct interviews with 12 student leaders who involved in the quantitative phase. Following this, a thematic analysis was performed using Nvivo 14.0 based on the interview transcription. The quantitative results revealed that university students' Core Self-Evaluation was positively related to their leadership practices and Motivation to Lead. Moreover, there was a positive relationship between Motivation to Lead and Student Leadership Practices. Core Self-Evaluation not only directly affected Student Leadership Practices but also indirectly affected Student Leadership Practices through Motivation to Lead. The dimensions of Motivation to Lead, namely affective identity Motivation to Lead, social-normative Motivation to Lead, and non-calculative Motivation to Lead were appeared as the significant mediators. These findings are consistent with previous findings from other

cultural and demographic contexts, suggesting that Core Self-Evaluation has a positive effect on Student Leadership Practices in multiple contexts. In the qualitative analysis, the study identified seven themes and 19 sub-themes that explained in detail the ways in which Core Self-Evaluation and Motivation to Lead (affective identity Motivation to Lead, non-calculative Motivation to Lead, and social-normative Motivation to Lead) influence Student Leadership Practices. The findings provides insight into the impact of student leaders' Motivation to Lead and Core Self-Evaluation on their leadership practices. The qualitative findings have further explained the mediating role of the three dimensions of Motivation to Lead. This study has its theoretical contribution by providing empirical support for literature of university student leadership, and expanding the application of self-efficacy theory and leadership self-efficacy theory in the Chinese context. It offered a theoretical framework for university administrators and educators to enhance students' performance in leadership practices by improving their Core Self-Evaluation and stimulating their Motivation to Lead. These findings provide a theoretical basis for universities to develop targeted strategies for cultivating university student leadership. Limitations informed recommendations for future research.

CHAPTER 1

INTRODUCTION

1.1 Introduction

One of the primary goals of higher education was student leadership development (Harper, 2024). University student leaders are a highly educated group of potential future leaders. Research has shown that the university level is the golden period for student leadership development (Ge et al., 2020). Since the 1980s, leadership education for university students has rapidly emerged globally and has become one of the most active and valued areas of education in Western higher education institutions (Ma et al., 2012).

In the United States, university Student Leadership Practices can be traced back to before the 1970s, when the National Student Association (NSA) promoted campus change initiatives related to the university student experience as an early exploration of leadership education for university students (Xu, 2019). As times have evolved, leadership has become a widely discussed topic in American higher education and has garnered widespread attention on all campuses (Ferry & Guthey, 2021). At the level of education for all students, America has also developed one of the most advanced leadership education systems for university students in the world (Ge et al., 2020). Similarly, many of the world's most famous universities are becoming aware of the importance of leadership education for students and actively engage in the practice of leadership education for students (Kong et al., 2012). For example, Skalicky et al. (2020) investigated student leadership development programs in higher education. They found that numerous universities worldwide, including Australia, regard student leadership development as a priority or part of their mission.

Moreover, research on student leadership in China has also achieved positive results (Li, 2024). The overall development trend of student leadership research in China is divided into three stages: The first stage was in the early 20th century, during which China was learning, knowing and adopting the experience of Western countries, especially the United States (Zhang et al., 2020). The second stage was from 2005-2015, when Chinese leadership research developed rapidly, mainly focusing on leadership enhancement, targeting student leaders' groups, and exploring leadership development. The third stage is from 2016 to the present, primarily focusing on research on specific leadership theories, such as self-leadership (Zhang et al., 2020). During this period, many publications were also made, such as the first publication on Chinese university student leadership research, which was published in 2004 (CNKI, 2022).

Chinese higher education institutions have always paid high attention to the cultivation and practice of university student leadership. With the deepening of higher education reform and the continuous promotion of the goal of enhancing the comprehensive ability of university students, universities and colleges in Beijing, Shanghai, Zhejiang, and Jilin have responded positively by exploring and implementing a series of effective student leadership education programs (Tang et al., 2023). Based on practices, these colleges and universities have also continued to promote students' self-leadership awareness and self-orientation through diversified paths such as curricular education, communication forums, academic research, and competition practices (Chao et al., 2024). As a representative program, the 'Young Marxists Cultivation Project,' launched in 2007, aims to cultivate outstanding young people such as university student leaders, Communist Youth League leaders, and young intellectuals (Liang, 2023). The program addresses the ideological and value

issues students face in their growth process and aims to improve their leadership, communication, and coordination skills (Gao, 2022). Through systematic training, the program attempts to comprehensively improve the overall quality and professional ability of university students (Wan & Sun, 2023). At present, the 'Young Horse Project' has been widely implemented in China and has become an essential training tool for student leaders in higher education (League, 2023).

Nevertheless, the study suggested that student leadership in contemporary higher education was critical (Hartfield et al., 2024). It is important to strengthen training for youth league organizations, student unions, student associations, and student leaders and to actively apply leadership theories to practices (Han, 2021). It improves some leadership skills of students. For example, a group from the Chinese Academy of Sciences has constructed a five-force model of leadership, which considers inspiration, influence, foresight, control, and determination as leaders' leadership skills that leaders must possess (Ye, 2021). It includes the skills demonstrated by university students in the whole student work process, which can directly correspond to the work link, including professional and technical skills, planning and execution skills, communication and coordination skills, analytical and judgemental skills, and stress adjustment skills' summarized by decisiveness and control, and 'innovation and change-making skills, and education and training skills,' summarized by foresight and influence. 'Innovation and change-seeking ability, education and training ability, and goal management ability,' outlined in terms of decisiveness and control (Ye, 2021).

Student leadership is an essential formative experience in students' lives that is critical to their future professional success (Komives et al., 2020). Leadership, one of the essential core competency indicators for graduates, can help students enter the

industry better and achieve more successful development (Liu & Zhang, 2022). University education may become the context of the final period of systematic education before most student leaders enter the workplace. With the increasing complexity of the global environment, university students, especially undergraduates who serve as student leaders, face greater leadership pressures and challenges (Barker et al., 2018; Karaman et al., 2019). Leadership has been widely recognized as one of the core competencies expected of university graduates (Liu & Zhang, 2022). Schools, colleges, technical schools, and universities are committed to producing job-competitive professionals to meet the actual needs of the labor market (Yulia et al., 2020). Although data show that the overall employment rate of university graduates in China in 2020 is over 90 % (Cao, 2021), university graduates (including student leaders) face an increasingly challenging employment situation due to the impact of the epidemic and the continued increase in graduate numbers. However, empirical research on Student Leadership Practices remained limited, especially from student leaders' perspectives (Kimmins, 2021). The literature review also suggests that the depth and breadth of research on student leadership and its practices still need to be expanded.

Leadership must be put into practice, and it is only in practice that leadership can be cultivated and demonstrated (Tao & Xi, 2022). On campus, student organisation leaders are typical representatives of Student Leadership Practices and behaviours (Phillips et al., 2023). Research on student leadership in higher education has been relatively lacking from the perspective of student leaders and existing literature has yet to explore the critical issues in this field thoroughly (Kimmins, 2021). Research on Student Leadership Practices across cultures and contexts adds depth to the field (Cho et al., 2015). Despite several kinds of research on various aspects of leadership

(Vilkinas et al., 2020), few studies have explored the relationship between personality traits and Student Leadership Practices. Core Self-Evaluation (Gardner & Pierce, 2010) and Motivation to Lead (Chan & Drasgow, 2001) are two personality traits widely researched in psychology and organisational behaviour. Moreover, Core Self-Evaluation (Crawford & Weber, 2012) and Motivation to Lead (Polatcan, 2021) are positive impact university Student Leadership Practices. While Core Self-Evaluation and Motivation to Lead have been widely studied, they have not been sufficiently applied to university Student Leadership Practices.

Individuals with high Motivation to Lead tend to exhibit more consistent leadership behaviors and strive to be good leaders (Liu et al., 2019). Understanding the antecedents of Motivation to Lead is particularly important as it contributes to improving Motivation to Lead, which leads to improved leadership abilities and performance (Bergner et al., 2019). Several studies have used Core Self-evaluation as a predictor of Motivation to Lead.

Measurement of Motivation to Lead identifies students who already have a clear Motivation to Lead and, more importantly, recognizes individuals who have leadership potential but are not yet willing to take on leadership roles (Wu & Jugovac, 2024). Some scholars have studied the impact of various dimensions of Motivation to Lead on Student Leadership Practices, providing insight into motivation's role in leadership development. A series of student leadership behaviours reflect Student Leadership Practices. For example, Hong et al. (2011) discovered that students with high affective identity Motivation to Lead scores became leaders in short-term leaderless situations. Non-calculative Motivation to Lead significantly affected leadership behaviour (Vilkinas et al., 2020). Social-normative Motivation to Lead had a significant impact on leadership behaviour (Vilkinas et al., 2020). Several studies

have investigated different types of Motivation to Lead individually (Hong et al., 2011) while some studies combine different types of Motivation to Lead as a whole (Luria & Berson, 2013). A few studies have explored the differences between the dimensions of Motivation to Lead. For future research, Badura et al. (2020) highlighted that studies of all three dimensions of Motivation to Lead, simultaneously and separately, are encouraged to illustrate the unique aspects of the different dimensions of Motivation to Lead.

Nevertheless, the relationship between Student Leadership Practices, Core Self-Evaluation, and Motivation to Lead is relatively underexplored in the leadership literature. To fill this research gap, the primary aim of this study is to examine the relationships between Student Leadership Practices, Core Self-Evaluation, and Motivation to Lead (affective identity Motivation to Lead, non-calculative Motivation to Lead, social-normative Motivation to Lead) among Chinese public university student leaders. This study contributes to the knowledge base of student leadership literature.

1.2 Background of study

With globalization and science-technical advancements, talent competition is becoming increasingly fierce. In recent years, society and organizations have faced fundamental leadership difficulties in fulfilling goals and creating sustainable and complete social evolution (Cáceres-Reche et al., 2021). An increasing number of Leadership Development Programs (LDPs) are being promoted to enhance individual skills and promote leadership development (Fang & Ong, 2019). Institutions of higher education (IHEs) have an essential responsibility to develop future leaders (Rosch et al., 2023). However, creating high-quality student leaders with excellent leadership

skills has become a serious challenge for universities. Student leaders' thoughts and behaviors not only reflect their personal qualities but also have a profound impact on other university students. It has long been recognized that university student leadership is critical (Li, 2024).

Currently, more than 2,000 institutions of higher education around the world have established programs to support student leadership development (Rosch et al., 2023). University student leadership education originated in Western countries, with the most typical and mature development in the United States (Li, 2015). Specifically, leadership education for university students in the United States has experienced three primary stages of development: the 'elite education' stage from the late 1970s to the mid-1990s, the 'universal education' stage from the late 1990s to the early 2000s, and the 'education for all' stage from the 21st century onwards (Tao, 2011). During this process, many representative educational achievements and theories have emerged. For example, in work *The Challenge of Student Leadership: Five Practices for Becoming an Exemplary Leader*, Kouzes and Posner (2018) summarized the five practices of exemplary leaders, describing how leaders can practice their personal values, commitments, and actions, and how they can inspire others to achieve extraordinary things together with themselves, which provides important theoretical guidance and practical frameworks for the development of Student Leadership Practices. In this study, Student Leadership Practices as specific behaviors and actions that students use when they are at "their personal best as leaders" (Tao, 2015). These behaviors and actions are categorized into five key leadership practices, which contain five dimensions: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart (Tao, 2015).

Furthermore, other countries have conducted leadership education for university students due to the influence of the United States. Similarly, 35 of Australia's 40 undergraduate institutions, or 87.5%, have provided undergraduate leadership education; Student leadership development has been significant in Malaysian higher education institutions and has become one of the country's top priorities (Rosch et al., 2015). Student leadership is essential in democratizing student education in Malaysian public universities (Safian et al., 2022). In contrast, the Turkish Higher Education Quality Council (THEC) identified that satisfaction with university expectations remains very low in cultivating student leadership (Polatcan, 2021). Compared to Western countries, China is almost 20 years later than the West in leadership research (Fu et al., 2018). Huang and Sun (2016) suggested that systematic research on student leadership began in China around 2007. Research on university student leadership in China began relatively late, has been enriched since the 21st century, with significant growth since 2010 (Zhou, 2023). However, there are relatively few references that explore the leadership development of Chinese university students from leadership concepts (Fu et al., 2018).

In addition, China emphasizes student leadership education and has introduced a number of policies. For example, the Chinese Ministry of Education issued “Opinions of the Ministry of Education on Accelerating the Construction of High-Level Undergraduate Education to Comprehensively Improve the Ability of Talent Cultivation” in October 2018 (Liu, 2018). The fundamental point of ability highlights the need for education departments, colleges, and universities to organize communication on the issue of comprehensively improving talent training ability in the 21st century and actively managing all forces to promote high-level university education. The Communist Youth League of China pays great attention to the

ideological and political leadership of young people, especially the cultivation of youth leadership and leaders, and the Medium- and Long-Term Youth Development Plan (2016-2025), issued in 2017, lists the 'Young Horse Project' as the first item of its key projects, fully reflecting its central position in the youth development strategy (Xinhuashe, 2017). To further promote the implementation of the 'Young Horse Project,' in 2020, To further promote the implementation of the 'Young Horse Project,' in 2020, the 'Opinions on the Further Implementation of the Project for Cultivating Young Marxists' was issued, which made detailed deployment and arrangements for the further implementation of the 'Young Horse Project' in the new era (Li, 2020). Subsequently, the 'Measures for the Management of the Young Marxist Training Project (for Trial Implementation)' was issued in 2023 to clarify the organization and management of the 'Young Horse Project' (Du, 2024). The Communist Youth League of China website shows that by the end of 2023, the project had been launched in 2,679 higher education institutions in 31 provinces (regions and cities) across China. This cultivates many young political leaders for the Party and strongly supports student leadership education and the development of young talent in higher education institutions.

However, although higher education institutions have taken various actions to promote the development of student leadership education, there is a lack of systematic evaluation studies on the actual effectiveness of these initiatives, and the real impact of student leadership practice still needs to be further explored. Some studies have pointed out that the Youth Horse Project still suffers from insufficiently broad content, disconnection between theory and practice, and insufficient student participation during its practice (Hu, 2024); moreover, factors such as limited practical opportunities, limited schedule, and unsatisfactory training effects may also constrain

its effectiveness in nurturing students (Wang, 2017). Moreover, Tang et al. (2023) pointed out that leadership education was primarily focused on student leaders and was not highly widespread; the teaching content was still mainly based on theoretical teaching, and behavioral practices were relatively insufficient. This phenomenon of favoring theory and neglecting practices leads to some student leaders' loss of values and lack of motivation and creativity (Xu, 2015). Some student leaders passively accept tasks, lack teamwork and service consciousness, and feel good about themselves but lack the Motivation to Lead (Chen, 2020).

Leadership is a complex and critical topic that has long been the topic of academic interest. It has been suggested that leadership development is a lifelong process that begins as early as childhood and is particularly critical during the university youth years (Murphy & Johnson, 2011). Nonetheless, much of the current research has focused on adult leadership development in the workplace (Liu et al., 2019), relatively neglecting the value of the university years as an important period of leadership growth (Eva et al., 2021; Kouzes & Posner, 2024). Therefore, this study focuses on the leadership practices of student leaders in higher education and emphasizes the importance of developing leadership skills in higher education.

Student leadership has received extensive attention at different stages of education and has gradually developed a multi-level research system. Tang (2024) proposed a project-based cultivation pathway for leadership in middle school students and defined leadership in middle school students. Still, it has not yet been measured and verified through empirical research. Based on the practical exploration of some senior high schools in Hangzhou City, Zhejiang Province, Cai (2022) proposed specific thoughts and strategies to cultivate senior high school students' leadership, emphasizing the importance of school education practices. Zhou (2023) constructed

an innovation-driven leadership cultivation model from the perspectives of value leadership and innovation-driven and made corresponding suggestions on the optimization path of the leadership education model for engineering students. University students are a vital force for future social development, and the university stage is the golden period for student leadership development (Ge et al., 2020). Based on the theories of leaders, Wen.En and Qian (2022) constructed a model of leadership development from the perspectives of "Model the Way," "Inspire a Shared Vision," "Enable Others to Act," "Challenge the Process" and "Encourage the Heart." They systematically explored the influencing factors of young students' leadership in higher education and its functioning mechanism, which broadened the theoretical and practical basis of the research on leadership in higher education.

There are three special types of universities in China: "Project 211 universities" and "Project 985 universities". The other type is ordinary universities. "Project 211" was a Chinese government project aimed at creating about 100 higher education institutions and some key subjects for the 21st century (Geng, 2019). In 2011, 112 universities were included in the "211 Project". The term "Project 985 universities" refers to the universities China has focused on supporting to build world-class universities (Zhou, 2024). Launched in 1998, the program, with 39 universities selected, aims to enhance the international competitiveness of Chinese higher education (Zhou, 2024).

In China, Tao (2013) found that the mean scores of Chinese university Student Leadership Practices were generally average. There were significant differences in leadership practices between "Project 211 universities" and ordinary universities, with the former having higher mean scores than the latter. The students from "Project 211 universities" also scored significantly higher than those from ordinary universities on

the five dimensions of leadership practices. It suggested that students from "Project 211 universities" have higher leadership practices than students from ordinary universities. The possible explanations are as follows: the students from "Project 211 universities" have a relatively high level of leadership due to the high quality of their student population and general competencies (Tao, 2013). Significant differences exist between the educational beliefs, educational resources, and teaching quality of "Project 211 universities" and ordinary universities. "Project 211 universities" emphasize the leadership training of university students, and their student leaders demonstrate a higher level of leadership (Tao et al., 2013). Most of the "Project 211 universities", especially the "Project 985 universities", regard the development of student leadership qualities as an essential component of students' quality education or general education or even as a critical objective of leaders cultivation. In China, considering the significant differences in leadership practices between student leaders in "Project 211 universities" and ordinary universities, ordinary universities should play a leading role in student leadership education. They should pay more attention to and strengthen student leadership education.

In Chinese universities and colleges, the persons in responsible positions in student organizations should have more than two years of work experience at all levels of the school's student organizations (Fa, 2018). In contrast, the heads of the second-level department should have at least one year of relevant work experience (Fa, 2018). In principle, the term of office is one year, and re-election is allowed (Fa, 2018). However, the prominent student leaders of each student organization should not serve in the same position for more than two periods in total (Fa, 2018). It means that first-year students in higher education are usually limited to ordinary student leaders; in their second year, students with some experience can be promoted to head various

departments of student organizations in their schools; in their third year, they have the opportunity to serve as the prominent leaders of student organizations; and in their fourth year, students usually need to gradually leave the management of student organizations, and focus on their academic studies and employment preparations. Under this system, students' leadership abilities were typically developed and strengthened through practice. Therefore, how to effectively promote the improvement of Student Leadership Practices during the higher education process has become a significant concern for researchers.

In 1997, the concept of Core Self-Evaluation was first introduced, which describes individuals' fundamental assessment of their values, abilities, and capabilities (Judge, 1997). Since it was introduced, Core Self-Evaluation as an essential indicator of personality traits, has gradually gained attention in recent years (Smedema et al., 2021; Wang & Li, 2021). When Judge first introduced the concept of Core Self-Evaluation, it was measured through subscales and the subscale scores were summed to give a total Core Self-Evaluation score. To improve the measurement of Core Self-Evaluation, Judge et al. (2003) developed a direct measure of Core Self-Evaluation, referred to as the Core Self-Evaluation scale, which has shown further advantages in brevity and predictive validity. As Chinese scholars have conducted localized research on it, the field of study involving Core Self-Evaluation has been growing (Zhang, 2019).

The leadership traits theory holds that a leader's effectiveness is mainly explained by the traits the leader achieves (Verawati & Hartono, 2020). It suggested that actual leaders possess distinct innate characteristics (traits), which has prompted renewed interest in educational research (Northouse, 2021). Leadership trait theory distinguished between leaders and non-leaders, emphasizing specific personal traits

and qualities (Khodamorovati et al., 2025). These traits predict the emergence of new leaders (emergence), the performance of existing leaders (leadership effectiveness), and promotion to higher leadership positions (promotion), and are also related to leadership behaviour (Johansson & Van Dam, 2018). Numerous studies have focused on exploring the traits of leaders and have pointed out that the majority of key traits identified in various leadership studies can be categorised under one of the dimensions of the Big Five personality theory (Khodamorovati et al., 2025). Among these, emotional stability (neuroticism) is widely regarded as one of the essential traits of effective leadership (Rosile, 2011). Emotional stability (neuroticism) is also one of the dimensions of Core Self-Evaluation, suggesting that Core Self-Evaluation itself may also be a key personality variable in predicting leadership effectiveness. Based on this, Core Self-Evaluation holds promise for playing a significant role in Student Leadership Practices, offering a new theoretical perspective on understanding the development of student leadership.

Despite several kinds of research on various aspects of leadership (Vilkinas et al., 2020), few studies have been done to examine the theoretical concepts that impact personality traits and leadership practices. Core Self-Evaluation (Crawford & Weber, 2012) and Motivation to Lead (Polatcan, 2021) are personality traits that influence university Student Leadership Practices. Understanding the antecedents of Motivation to Lead is particularly important as it contributes to improving Motivation to Lead, which leads to improved leadership abilities and performance (Bergner et al., 2019). Several university student leadership studies have identified Motivation to Lead as a core construct for leadership development (Rosch et al., 2015), and some studies have used Core Self-evaluation as a predictor of Motivation to Lead.

While, there is a great deal of research on developing student leadership competencies, Core Self-Evaluation, and Motivation to Lead (Correia-Harker & Dugan, 2020). Understanding Motivation to Lead is critical to finding out who is attracted to leadership roles and whether those motivated to pursue leadership become more effective leaders (Badura et al., 2020). Understanding Motivation to Lead is critical to maximizing costly investments in leadership training and development, as it can help to assess whether student leaders are willing to invest efforts in leadership roles. Therefore, exploring and understanding the Motivation to Lead among university student leaders is critical to effective leadership development in higher education. However, while a considerable amount of research has focused on the motivation of adults to lead in actual leadership roles (Badura et al., 2020), systematic research on leaders' motivation among student populations, particularly among current student leaders, remains lacking.

Garcia-Cabrera et al. (2018) noted that students from different cultural and social backgrounds may demonstrate their Motivation to Lead in different ways in diverse educational contexts. Chan et al. (2000) classified it into affective identity Motivation to Lead, non-calculative Motivation to Lead, and social-normative Motivation to Lead. Some scholars focused on Motivation to Lead and behaviors of taking responsibility, considering these as an expression of followers' leadership potential (Lin et al., 2024). Tanaka et al. (2024) argued that exploring the individual factors of various dimensions of Motivation to Lead related to leadership behavior emergence could contribute to the development of the leadership studies field. However, existing research has examined only two dimensions of Motivation to Lead (Hong, 2005; Kessler et al., 2008) and related research (Barling et al., 2022; Faris et al., 2025; Toh et al., 2025), and three dimensions of Motivation to Lead need to be

examined (Farstad & Arnulf, 2024). Some researchers have pointed out that future research on the Motivation to Lead theory should expand the research content.

In short, Core Self-Evaluation and Motivation to Lead are essential. Thus, this study explored the process of Core Self-Evaluation and Motivation to Lead (affective identity Motivation to Lead, non-calculative Motivation to Lead, social-normative Motivation to Lead) in Student Leadership Practices, aiming to explain the relationships between these variables and provide a theoretical basis for future research.

1.3 Problem statement

In Chinese universities, leadership education is mainly conducted through leadership courses, extracurricular training, and student associations, in which theoretical knowledge is mainly explained (Ye, 2021). Despite attending the training, the student's leadership qualities are low, and leadership skills need improvement (Liu & Li, 2021; Zhang, 2022). In many universities, leadership education primarily targets student leaders, while Student Leadership Practices are relatively weak (Ye, 2021). The Leadership Practices Inventory serves as an assessment tool that enables students to examine themselves and assists students in comprehending and reflecting on the leadership behaviors of others critically (Posner, 2012). While an increase in research on the outcomes of leadership practices has occurred, research on Student Leadership Practices antecedents has been underexplored (Polatcan, 2021).

Values are the core of leadership (Zhou, 2023). However, In China, university student leadership education pays more attention to the ability training of university student leaders than to values education, and students' enthusiasm for participation is also very low (Zhou, 2023). Current research focuses more on the current situation and problems of leadership development of university student leaders and less on practices

aspect. Many Chinese universities leadership development programs focus on skills that are at the disadvantage of self-efficacy and motivation (Dugan et al., 2011). Some of the student leaders who have attended the training still consider that they have problems with leadership traits (Tang, 2018). Hernandez et al. (2011) highlight the need to understand the psychological mechanisms by which traits convert into leadership.

Individualism is ignored in Chinese universities' value cultivation mechanism, which may lead to a disconnect between students' perceptions of values and their actual behaviors (Weng & Yan, 2019). Furthermore, the curriculum in leadership education focuses on leadership abilities and practices, neglecting leadership values and how to combine leadership skills and practices to develop leadership values (Weng & Yan, 2019). Paschen and Dihmsmaier (2014) believed that leadership can be examined from the perspective of personality traits. Core Self-Evaluation is one of the primary factors of personality traits, and has been increasingly attracting attention in recent years (Smedema et al., 2021; Wang et al., 2021). However, it is not clear how student leaders' values affects their leadership practices. Core Self-Evaluation is the most basic assessment of an individual's abilities and values and significantly predicts Student Leadership Practice (Crawford & Weber, 2012). The low leadership abilities of Chinese university student leaders and the failure to play a good role in self-assessment also directly affect the improvement of student leadership (Han, 2021). By assessing Core Self-Evaluation, educators can identify students with strong leadership behaviors, conduct relevant education, and enhance Student Leadership Practices. But, there is relatively little research on Core Self-Evaluation and Student Leadership Practices.

Existing research has shown that Motivation to Lead is significantly and positively related to Student Leadership Practices (Polatcan, 2021), i.e., individuals who enjoy and consistently engage in leadership activities are more likely to demonstrate positive and effective leadership behaviors. However, in Chinese universities, student leaders are generally characterized by low motivation, eagerness to perform, lack of problematic reflection and improvement (Chen, 2020), and insufficient autonomy and initiative (Huang, 2024). These problems affect the quality of student leaders' leadership practices and reflect the inadequacy of their Motivation to Lead. At the same time, with the increased pressure on student leaders in universities, the motives of some student leaders are no longer pure, lack a sense of service, and regard student work as a burden (Xu, 2015), further weakening the effectiveness of leadership practices. Despite the amount of effort spent on campus leadership program research, as Krauss and Hamid (2015) point out, it is often difficult for these cultivation efforts to produce substantial results if students' Motivation to Lead is not developed.

Several early studies investigating the role of Motivation to Lead in leader emergence used individual Motivation to Lead as a predictor variable (Mohan & Carter, 2019). While many studies explore the relationship between Motivation to Lead and Student Leadership Practices, there is a gap in this study on Student Leadership Practices in the Chinese context. Although several studies have explored the relationship between Core Self-Evaluation and Motivation to Lead (Badura et al., 2020; Dobbs et al., 2019), there is a gap in studies focusing on university student leaders.

Several studies by scholars have found inconsistent results on the impact of different dimensions of Motivation to Lead on Student Leadership Practices. For example, Hong et al. (2011) found that students with high affective identity Motivation to Lead scores became leaders in short-term leaderless situations. However, Mutalib and Abdul Ghani (2013) reported that affective identity Motivation to Lead had no significant effect on leadership behavior. Non-calculative Motivation to Lead significantly affected leadership behavior (Vilkinas et al., 2020). However, the literature found no significant effect of non-calculative Motivation to Lead on leadership behavior (Ayrancı & Polat Dede, 2014; Mutalib & Abdul Ghani, 2013). Social-normative Motivation to Lead had a significant impact on leadership behavior (Vilkinas et al., 2020). Hong et al. (2011) also found that students with high social-normative Motivation to Lead became leaders in long-term project situations. However, the results did not support social-normative scores negatively predicted students occupying leadership positions (Rosch et al., 2015).

Several studies have investigated different types of Motivation to Lead individually (Hong et al., 2011), while some studies combine different dimensions of Motivation to Lead as a whole (Luria & Berson, 2013). A few studies have explored the differences between the dimensions of Motivation to Lead. For future research, Badura et al. (2020) highlighted that studies of all three dimensions of Motivation to Lead, simultaneously and separately, are encouraged to illustrate the unique aspects of the different dimensions of Motivation to Lead. More research is needed to examine the factors most likely to predict the combination of sources of motivation (Krauss & Hamid, 2015).

There is still no in-depth research on student leadership theory in the Chinese education field, and there is a lack of theories to guide research (Zhang & Wu, 2017). Most research methods on University Student Leadership are based on comparative and literature analysis, primarily qualitative analysis and less empirical research (Chen & Zhen, 2022). Quantitative research collection of the numerical data that needs to be analyzed to help conclude the study (Albers, 2017). Scholars have researched the relationship between Core Self-Evaluation and Motivation to Lead using a quantitative approach (Badura et al., 2020; Dobbs et al., 2019), as well as the relationship between Core Self-Evaluation and Student Leadership Practices (Crawford & Weber, 2012) and the relationship between Motivation to Lead and Student Leadership Practices (Polatcan, 2021). However, there is a gap in exploring the relationship between these variables using an explanatory sequential mixed methods approach.

While much of the current research focuses on leadership skills training or leadership behavioral performance, it is less likely to explore how intrinsic psychological traits (e.g., Core Self-Evaluation) can ultimately contribute to leadership practices by stimulating motivation to lead. Therefore, introducing Motivation to Lead as a mediating variable between Core Self-Evaluation and Student Leadership Practices could reveal the psychological mechanism of how students transform from positive self-perceptions to actual leadership behaviors and respond to the current reality of insufficient motivation and poor practices of student leaders in universities. Therefore, there is a need to explore Student Leadership Practices from the perspective of Core Self-Evaluation and Motivation to Lead ((affective identity Motivation to Lead, non-calculative Motivation to Lead, and social-normative Motivation to Lead).

1.4 Research objectives

This study has identified six research questions based on the above discussion of this study's background and problem statement.

- (1) To examine the relationship between Core Self-Evaluation and Student Leadership Practices.
- (2) To examine the relationship between Motivation to Lead and Student Leadership Practices.
- (3) To examine the relationship between Core Self-Evaluation and Motivation to Lead.
- (4) To examine if Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices.
- (5) To examine if the dimensions of Motivation to Lead—namely affective-identity, non-calculative, and social-normative—mediate the relationship between Core Self-Evaluation and Student Leadership Practices.
- (6) To explain the ways on how Core Self-Evaluation, Motivation to Lead (affective identity Motivation to Lead, non-calculative Motivation to Lead, social-normative Motivation to Lead) influence Student Leadership Practices.

1.5 Research questions

This study's research questions are based on the following research objectives:

- (1) Is there a positive relationship between Core Self-Evaluation and Student Leadership Practices?
- (2) Is there a positive relationship between Motivation to Lead and Student Leadership Practices?
- (3) Is there a positive relationship between Core Self-Evaluation and Motivation to Lead?
- (4) Does Motivation to Lead mediate the relationship between Core Self-Evaluation and Student Leadership Practices?
- (5) Does the dimensions of Motivation to Lead mediate the relationship between Core Self-Evaluation and Student Leadership Practices?
- (6) How do Core Self-Evaluation and Motivation to Lead (affective identity Motivation to Lead, non-calculative Motivation to Lead, and social-normative Motivation to Lead) influence Student Leadership Practices?

1.6 Research hypotheses

Based on the above analysis, the following research hypotheses are put forward:

- H1: Core Self-Evaluation has a positive relationship with Student Leadership Practices.

- H2: Motivation to Lead has a positive relationship with Student Leadership Practices.
- H3: Core Self-Evaluation has a positive relationship with Motivation to Lead.
- H4: Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices.
- H4a: Affective identity Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices.
- H4b: Non-calculative Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices.
- H4c: Social-normative Motivation to Lead mediates the relationship between Core Self-Evaluation and Student Leadership Practices.

1.7 Significance of the study

1.7.1 Theoretical significance

This study has important theoretical significance in exploring the relationship between Student Leadership Practices, Core Self-Evaluation, and Motivation to Lead in the context of Chinese public universities.

First, this study enriches the theoretical system of student leadership development in higher education. Leadership, as an essential core quality, has become increasingly important in higher education, and there is a lack of systematic empirical research on the relationship between Core Self-Evaluation and Motivation to Lead as key psychological factors in leadership development and students' actual leadership behaviors. By introducing and integrating the variables of "Core Self-Evaluation" and "Motivation to Lead," the study enriches the existing theoretical system of leadership, especially its applicability and explanatory power in the student population.

Second, this study has important theoretical significance in exploring the relationship between Student Leadership Practices, Core Self-Evaluation, and Motivation to Lead in the context of Chinese public universities. First, this study enriches the theoretical system of student leadership development in higher education. Leadership, as an essential core quality, has become increasingly important in higher education, and there is a lack of systematic empirical research on the relationship between Core Self-Evaluation and Motivation to Lead as key psychological factors in leadership development and students' actual leadership behaviors. By introducing and integrating the variables of "Core Self-Evaluation" and "Motivation to Lead," this study enriches the existing theoretical system of leadership, helping researchers understand the psychological mechanisms behind the leadership behavior of Chinese university student leaders.

Finally, based on the Student Leadership Challenge Model (Kouzes & Posner, 2002) and the measurement scale, this study modified the evaluation items suitable for Student Leadership Practices. It promoted the assessment of student leaders' leadership practices in higher education and informed further quantitative measurement of student leaders' leadership in higher education in the future. Investigating Student