UNDERSTANDING THE RESILIENCE PROCESS OF CHINESE INTERNATIONAL HIGHER DEGREE BY RESEARCH STUDENTS IN AUSTRALIA: A BOURDIEUSIAN SOCIOLOGICAL MIXED-METHODS STUDY

Congcong Xing

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Faculty of Creative Industries, Education, and Social Justice
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Keywords

Australia, Bourdieu, Capital, Confirmative factor analysis, Chinese international research students, Field, Habitus, Higher degree by research, Higher degree by research students (HDR) students, Higher education, Interview, Mixed-methods research, Multiple correspondence analysis, Neoliberalism, Participant objectivation, Reflexivity, Relational sociology, Resilience, Sociology of resilience, Structural constraints, Symbolic violence

Abstract

This study investigated the resilience process of Chinese international Higher Degree by Research (HDR) students in Australian universities. Whilst psychological literature has examined international students' adjustment to and acculturation in their new and challenging environment, there is a dearth of sociological investigation and discussion around the power structures behind such adjustment. Informed by Bourdieu's relational sociology, this study reconceptualised the psychological process of resilience to adverse conditions into a sociological process of resilience to structural constraints. Guided by Ungar's three pillars of resilience theory—adversities, empowering factors, and desirable outcomes, the study investigated the ways in which Chinese international research students negotiate power and manoeuvre strategies, whether consciously or unconsciously, to engage in the resilience process throughout their research candidature. The study employed a sequential exploratory mixed-methods design by first, qualitatively exploring the resilience process of Chinese international HDR students in Australia, and then second, quantitatively modelling the sociological resilience process. The qualitative data were collected from online semi-structured individual interviews with 18 Chinese international HDR students from four Australian universities. The subsequent quantitative phase, with the self-designed survey questionnaire informed by the qualitative findings, was conducted through an online survey with 220 Chinese international HDR students across Australian universities.

The major findings from the qualitative phase are as follows: first, with respect to the challenges, participants had to grapple with multiple and concurrent challenges including habitus-field mismatch, capital deficiencies, and symbolic violence. The empowering factors most commonly reported by the participants encompass participants' previous study and research experience, family support, and support from or within Australian universities; whereas the desirable outcomes defined and achieved by the participants include achieving higher research degree, improving academic English language proficiency, and developing abilities of handing research frustrations. Second, and notably, the study revealed the traces of sociological resilience to symbolic violence. Unlike those who succumbed to the structural constraints and fell prey to symbolic violence, some participants in this study

resiliently navigated through the structural problems and attempted to resist symbolic violence. With supervisor and peer empowerment as well as student agency and reflexivity, their sociological resilience to symbolic violence contributed to power shift in the supervision relationship, questioned English dominance, and prompted reflexive thinking towards neoliberal constraints regarding milestones and publications.

With reference to the quantitative findings, three patterns of sociological resilience were identified by Multiple Correspondence Analysis (MCA) analysis; that is, strong sociological resilience, moderate sociological resilience, and weak sociological resilience unfolded in the Australian higher education (HE) field. There existed a dialectical relationship between symbolic violence and resilience to symbolic violence as the strongest symbolic violence associated with the weakest sociological resilience to symbolic violence, and vice versa. Furthermore, the level of sociological resilience was related to the overall quality and quantity of capitals accrued by Chinese international HDR students. Of note is that respondents' prior overseas learning experience, research experience, and research publications, as well as their parents' educational qualifications, all constituted to their cultural capital. The respondents also obtained social capital from supervisors in the Australian HE field and their parents in the family field. Such capital acquisition defined their socio-educational advantage as agents within the Australian higher education field and further contributed to their sociological resilience to symbolic violence in the forms of pedagogic authority, English hegemony, and neoliberal constraints.

This study has effectively extended the theoretical framing of the psychology of resilience and echoed the call for moving towards to a critical sociology of resilience for the sake of system-level change. Some insights and practical strategies for building resilience were provided for relevant stakeholders, including Chinese international HDR students, other international HDR students and HDR students in general, supervisors, and education practitioners as well as the Australian government, university administrators, and policy makers.

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List of Abbreviations

ARS	Adolescent Resilience Scale
APA	Australian Postgraduate Awards
CA	Correspondence Analysis
COVID-19	Coronavirus Disease of 2019
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CSC	China Scholarship Council
DESE	Department of Education, Skills, and Employment
DET	Department of Education and Training
EFA	Exploratory Factor Analysis
EAL	English as an Additional Language
EASLL	English as a Second Language Learner
FOS	Field of Science and Technology
GAD	Generalised Anxiety Disorder
GFI	Goodness of Fit Index
HDR	Higher Degree Research
HE	Higher Education
HESA	Higher Education Support Act
MCA	Multiple Correspondence Analysis
NFI	Normed Fit Index
NSW	North South Wales
PhD	Doctor of Philosophy

PPFP	Protective and Promotive Factors and Processes
PR	Permanent Residency
QILT	Quality Indicators for Learning and Teaching
QS	Quacquarelli Symonds
QUT	Queensland University of Technology
RMSEA	Root Mean Square Error of Approximation
RSP	Research Support Program
RTP	Research Training Program
RTS	Research Training Scheme
SAR	Special Administrative Region
SPSS	Statistic Package for Social Science
SRE	Sustainable Research Excellence
TEQSA	Tertiary Education Quality and Standards Agency
TLI	Tucker-Lewis Index
UK	United Kingdom
UHREC	University Human Research Ethics Committee
USA	United States of America
WHO	World Health Organisation

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This is my journey to PhD. This is also my journey to resilience.

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Statement of Contribution of Co-authors

The authors listed below have certified that:

1. they meet the criteria for authorship and that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;
2. they take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;
3. there are no other authors of the publication according to these criteria;
4. potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit, and
5. they agree to the use of the publication in the student's thesis and its publication on the QUT's ePrints site consistent with any limitations set by publisher requirements.

In the case of this chapter: Chapter 1 (Section 1.1.2)

Submission or subversion: Survival and resilience of Chinese international research students in neoliberalised Australian universities. [Published online: 26th Oct 2021]

Contributor	Statement of contribution*
Congcong Xing	Research design, conducted research, data analysis, write and proofread the manuscript
A/Prof Michael Mu	Aided research design, data analysis, revised and proofread the manuscript
A/ Prof Deborah Henderson	Aided research design, data analysis, revised and proofread the manuscript

Chapter 1: Introduction

Currently, international students from a range of countries pursue a higher education research degree in Australia (DET, 2019a). Despite the interruptions and disruptions brought by the global pandemic, the internationalisation of Australian higher education continues, and Chinese international HDR [1] (Higher Degree by Research) students remain prominent in research programs in Australian universities (DESE, 2022). Such increasing enrolments are also accompanied by serious concerns about the wellbeing of international HDR students, who may experience higher levels of stress and mental-health problems than their Australian counterparts given their location far from their homelands (Han, 2012). While such problems are persistent, this PhD research explores the possibilities of transforming potential problems into opportunities. To this end, the research investigates the resilience process of Chinese international HDR students from Australian universities.

Resilience has been defined in various terms over the past five decades, however the notion commonly denotes "the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (Masten et al., 1990, p. 426). Previous research on international students' mental health has found that resilience reduces the risk of psychological distress, aids in the management of academic demands, enhances academic outcomes, while also facilitating effective coping strategies to manage academic pressures (Abbott et al., 2009; Bovier et al., 2004). Resilience is a key factor for international research students to cope with various problems during their transition to a new research environment (Cameron et al., 2019; Pidgeon et al., 2014; Zhou & Todman, 2009). The resilience process investigated in this PhD study is not merely an important research problem specifically for Chinese international HDR students in Australia. Rather, its gravity is pertinent to domestic and other international HDR students generally. The outcomes of this study can proffer lessons for resilience-building in a wider context although the thesis has a

[1] HDR refers to any Master's or doctoral degree with a minimum of two-thirds of the total assessable content being research, such as Master by Research, Doctor of Philosophy, or Professional Doctorate by research course. This term is popular in an Australian higher education context. In this thesis, the acronym "HDR" is used to refer to research students generally in any higher education context.

particular concern for the resilience process of Chinese international HDR students in Australia.

The first chapter of the thesis is structured as follows to provide a brief introduction to the current project. Section 1.1 provides an overview of the research background and context for the research. Section 1.2 addresses the purpose of the research in terms of the research objectives and research questions. Section 1.3 establishes the significance of the research from theoretical, methodological, and practical perspectives. The structure of the whole thesis is outlined in Section 1.4.

1.1 BACKGROUND AND CONTEXT

Recently, *Nature*'s fifth survey of over 6,000 PhD students exposed the numerous challenges encountered by doctoral students (Woolston, 2019). Almost 40% of respondents were attending universities outside of their homeland at the time of the survey. It was found that a majority of respondents deliberated on their pervasive dissatisfactions with research training, work-life balance, incidents of discrimination and harassment, and precarious career prospects. Over one-third of respondents (36%) confessed that they had sought help against anxiety or depression caused by their PhD studies, a significant increase from 12% in 2017. These findings are consistent with previous research regarding the mental-health status of international students. For example, an international survey held by the World Health Organisation (WHO) discovered that 31% had demonstrated symptoms of mental disorder, such as major depression, general anxiety disorder, or a panic disorder for at least 12 months (Auerbach et al., 2018). Such findings raise concerns about the mental health and wellbeing of HDR students as well as some worrying consequences of higher education.

Existing literature indicates that in the face of the dual pressure of academic demands and the challenges of everyday life, some international HDR students struggle with serious mental problems such as anxiety and depression, which in chronic cases, result in suicide (Drum et al., 2009; Furr et al., 2001). One recent research of 1,017 PhD researchers from a research-intensive Australian university found that nearly one-third (26.7%) had seriously considered discontinuing or withdrawing from their candidature, with mental health difficulties ranked as the strongest risk factor (Larcombe et al., 2021). Such empirical evidence suggests that

the research journey of international students is fraught with challenges and distractions, and that some HDR candidates find this process difficult to navigate. Chinese international HDR students also experience similar difficulties and dilemmas when they pursue their research degrees in Australian universities (Han, 2012; Yu & Wright, 2016). It is thus important to investigate the resilience process of international HDR students in Australia. The following sections provide the relevant background information with respect to the status quo of Australian higher education together with an overview of the wellbeing of international HDR students in Australian universities.

1.1.1 The Internationalisation of Australian HDR Education and China's Prominent Participation

The internationalisation of Australian universities has been one of the most successful initiatives in the global landscape of higher education (Tran & Rahimi, 2018). As the world's third largest provider of international education prior to the COVID-19 pandemic, Australian higher education embarked on a new path, aiming at the development of world-class research and a highly educated workforce for Australia (Edwards et al., 2011). In 2003, the Higher Education Support Act 2003 (HESA) was launched to provide "grants to support research by, and the research capability of, higher education providers" and "grants to support the training of research students". In January 2017, with the Commonwealth Scholarships Guidelines (Research) 2017 and Other Grants Guidelines (Research) 2017, the Research Training Program (RTP) and the Research Support Program (RSP) programs commenced. The Research Training Program (RTP) funds higher education providers to support the training of domestic and international students pursuing Research Doctorate (three to four years) and Research Masters (up to two years) programmes, known as HDR programmes. In 2019, the RTP received approximate $1.03 billion from the government.

With government encouragement, many Australian universities are now strategically focusing on increasing the number of international candidates enrolled in their HDR programs. In response to funding allocations granted by the Australian government, Australian universities offer scholarships to attract and support international HDR students. These scholarships are provided to fund tuition fees, a stipend for general living costs, and/or ancillary costs such as thesis publication costs. With reference to Chinese international HDR students, one of their major sources of financial support relies on Australian scholarships. Under successive scholarship

programmes, the number of international HDR students in 2019 increased by 4.8 % from 2018 with 62% of these students funded by a government research training program (DET, 2019a). Such was the demand for these scholarship programmes that by 2019, Australia hosted more than 23,968 international HDR candidates[2], which constituted approximately 36 percent of the total HDR cohort[3] (DET, 2019a). Among the prevalence of international HDR students, a large proportion are Chinese, with statistics estimating that Chinese students account for 45.8% of total international HDR students enrolled in Australian HDR programs in 2015 (DESE, 2015).

The revenue spent on international HDR candidates can provide them with opportunities to generate original knowledge and enrich research, and also promote mutual cultural understandings and transnational networks at their host institutions (Tran et al., 2017). In sum, the Australian HDR training system operates effectively in advancing research development and academic outputs, and facilitating those scholarship holders as emerging agents to strengthen relations between Australia and other regions (Tran & Rahimi, 2018). However, despite the great achievements made by these programs, many problems remain unrecognised or unsolved, to which the next section turns.

1.1.2 The Neoliberalisation of Australian Higher Education

Since the 1980s, Australian higher education systems have been transformed by neoliberalism (Bottrell & Manathunga, 2019). Following the withdrawal of government funding and the attendant fee deregulation for higher education, neoliberal practices within the sector have increasingly focused on securing efficiency, encouraging competition, and intensifying accountability (Rea, 2016). Concomitantly, Australian higher education continues to shift its core functions of teaching, research, and service to revenue generating operations (Bottrell & Manathunga, 2019). This focus on revenue raising foregrounds the proliferation of international education in Australia, and prior to the outbreak of COVID-19, deregulated international course fees had become a critical and reliable source of university income (Xing et al., 2021).

[2] International HDR candidates refer to those who undertake HDR study in a country other than their own. The term is inclusive of international candidates from English and non-English speaking countries.
[3] According to the Research Block Grants and their data on 2019 Higher Degree by Research Student Population, a total of 66,578 students participated in HDR programs in Australia in 2019.

For example, 693,750 full-fee paying international students in Australia on a student visa contributed $37.6 billion to the Australian economy in 2018-19 (DET, 2019b).

While supporters of the neoliberal university argue that massification and marketisation facilitate greater access to higher education and generate economic benefits to universities and their graduates, many scholars have noted the detrimental nature of those changes prompted by the neoliberalisation of higher education (Rousseau, 2020). As neoliberal logic renders knowledge into a commodity, it prompts an emphasis on competition, measurement, assessment, and economic-driven outcomes (Saunders, 2007). This emphasis has transformed higher education institutions into sites that serve the needs of governments and industries as they are required to actively pursue new revenue streams and new customers (Dougherty & Natow, 2020). As a form of 'all-invasive governmentality' (Cannella & Koro-Ljungberg, 2017, p. 155), neoliberalism can be understood as a means of disempowering academics by eroding their autonomy through financial cuts, increased workloads, and performance management practices (Kenny, 2018). For instance, almost all HDR students are required to complete an independent research project following the standardised milestones including Confirmation, the Mid-candidature Review/Progress Review, and the Pre-submission Seminar/Final Review (TEQSA, 2021). While milestones may differ across universities, they have key features of standardisation, accountability, and performativity. In this vein, all research students, regardless of their nationality, disciplines, or other research-related issues, are expected to complete their thesis and yield knowledge that is consistent with standardised milestones.

The neoliberal agendas of efficiency, profitability, and managerialism have afflicted HDR candidates by urging them to produce wide-ranging outcomes in short timeframes (Manathunga, 2019). Recent research indicates that the pressure of tight timelines has intensified the anxiety of some doctoral students as they struggled to progress their research (Bosanquet et al., 2020; Shahjahan, 2020). As the perverted logic of neoliberalism is evident in Australian universities "in a dehumanizing ethos of free market supremacy, social surveillance, and community shattering individualism" (Bottrell & Manathunga, 2019, p. V), international HDR students' learning and wellbeing is threatened. The next section presents an overview of the challenges and wellbeing of international HDR students.

1.1.3 The High Stakes and Wellbeing of International HDR Students

In recent years, many empirical studies have revealed that anxiety and depression prevail among graduate students from diverse backgrounds (Barry et al., 2018; Li et al., 2014; Stubb et al., 2011). When compared to the general population, graduate students are six times more likely to suffer from depression and anxiety (Evans et al., 2018). One study using a clinically validated scales for anxiety (GAD07), found that 41% percent of graduate students scored as having moderate to severe anxiety, compared to 6% of the general population (Evans et al., 2018). The strikingly high rates of anxiety and depression call for more action to improve graduate students' wellbeing, such as the establishment and expansion of mental health and career development resources for graduate students, and a shift in the academic culture (Evans et al., 2018).

Research on the psychological wellbeing of east Asian international students has placed dramatic weight on researching the nature of the challenges they face (Li et al., 2014). This cohort is experiencing a range of additional stressors. These factors include, but not limited to, culture shock, adjustment to education system differences, lack of appropriate accommodation, communication/language difficulties, discrimination and isolation, homesickness and loneliness, loss of established support and social networks, financial hardships (Bradley, 2000; Khawaja & Stallman, 2011; Lee & Rice, 2007).

Surveys and other research findings provide evidence about some of the dilemmas that HDR students face. For example, *Nature*'s survey results show that out-of-balance, overburdened and stressed-out working environments have taken a toll on HDR students' wellbeing and mental health (Woolston, 2019). Nearly half of those polled reported they worked more than 50 hours every week, a figure that has not changed significantly since 2017. Overall, nearly 40% of respondents were dissatisfied with their work-life balance. Another survey shows that full-time international HDR students commonly work longer than their Australian counterparts (Li et al., 2014). For Chinese international HDR students, they reported different levels of stress when milestones loomed, leading to the "self-exploitation" of some students who worked over time in order to meet the deadline (Xing et al., 2021, p. 17).

Lack of funding presents another challenge. While a large proportion of international HDR students received scholarships with stipends, nearly 58% chose, or

are forced to, undertake some part-time work for pay while almost a quarter reported their incomes reached less than $15,000 for the previous fiscal year (Li et al., 2014). Despite of the grant and income they received, some international HDR students found it difficult to fulfil their obligations to financially support their families. As the *Nature*'s survey shows, over 10% of respondents reported they were caring for a child under the age of 12, and the same proportion were responsible for an elder adult (Woolston, 2019). As a result, international HDR students are facing an aggregated financial burden when they had to pay the high living expenses.

Unmet expectations and uncertain futures constitute another key source of disappointment and anxiety. Almost 40% of respondents perceived their programmes failed to meet their original expectations, while only 10% commented that their programmes exceeded their expectations—a significant decrease from a rate of 23% in 2017 and only 26% of respondents thought their programme was preparing them 'very well' for a rewarding career (Woolston, 2019). This is primarily due to a significant gap between HDR students' goals regarding academic work and whether their perceptions of such goals are realistic. According to Woolston (2019), a vast majority (83%) have seriously considered an academic career and more than half (54.1%) of all students intended to pursue academic work upon graduation. In reality, there are numerous barriers to pursuing academic work in Australia. Among research students who aspired to settle into an academic career after graduation, nearly 30% indicated that seeking for an academic position was unrealistic due to the shortage of academic positions and lower pay in comparison to other employment sectors.

Another major factor that contributes to anxiety is the relationship with supervisors. A social survey of international PhD students from two key Australian universities found approximately 12% of respondents were dissatisfied or very dissatisfied with the quality and effectiveness of their supervision (Harman, 2003). Furthermore, a proportion of international HDR students struggled with communicating in English, adjusting to different supervision styles or culture, such as less deferential working arrangement and less structured research direction (Harman, 2003). While meanwhile, many supervisors also encountered greater challenges in supervising international HDR students. For example, their supervision is often hampered by increased academic workloads which could be a neoliberal consequence

of significant reductions in Commonwealth Government funding allocated to universities (Harman, 2003).

Surveys also uncovered widespread instances of hurtful behaviours such as harassment and discrimination that can demoralise HDR students and derail their career paths. According to *Nature*'s survey (Woolston, 2019), 21% of respondents reported the experience of harassment, discrimination, or bullying. The rates of harassment or discrimination reported in Australia were 18%. In the survey, 57% of respondents who had experienced bullying were unwilling to discuss their situation due to the fear of personal repercussions. As a result, international HDR students are often identified in peril and are potentially less engaged in their studies when compared to their native peers (Mori, 2000).

However, despite the fact that international HDR students are often labelled as vulnerable, some of them cope well with the arduous research journey. This echoes another survey conducted by *Nature* with PhD students (Woolston, 2017), which reveals that, despite various problems with doctoral programmes, many of these students remained committed to pursuing research careers. The 2018 Graduate Outcomes Survey National Report (QILT, 2018) by the Australian government also confirms HDR students' achievements which resulted from their persistent effort. This report surveyed a total of 6,114 HDR students who just received their degree less than four months previously. Different from the *Nature* survey that revealed student dissatisfaction, the Australian survey found that up to 85% of students were satisfied with their degree and 85.2% of employed students were in professional occupations with 82.3% of students employed full-time. With regard to their overall satisfaction by various aspects of a degree, 92.6% of respondents were satisfied with skills development, 91.7% with goals and expectation, 82% with supervision, 81.3% with thesis examination, 74.6% with infrastructure, and 61.1% with intellectual climate. Furthermore, a recent study on Chinese returnee students shows that they had better academic and innovation performance than domestic scholars (Lu & Zhang, 2015). This has been accompanied by an increase in publications in international journals and collaborations in international projects. Those students who completed their graduate education abroad performed much better in dealing with transitional stresses and were more resilient both mentally and physically in spite of the transitional stress factors (Wang, 2012).

As previously stated, international HDR students are often considered as at risk due to the challenges associated with life-work balance, supervisory roles and relationships, career prospects, and harassment and discrimination. It is worth noting, however, that some international HDR students have responded positively to these challenges, demonstrating a tendency to engage in a resilience process. The focus of this thesis is on the resilience process of Chinese international HDR students, a group of particular demographic significance in the Australian higher education context. Accordingly, the overarching inquiry is: In what ways and for what reasons do Chinese international HDR students in Australia engage in the resilience process despite the challenges they face? The nature and dynamics of the resilience process merit scholarly investigation, which is the focus and purpose of the current study.

1.2 PURPOSES OF THE RESEARCH

This sociological, mixed-methods study examined the resilience process of Chinese international HDR students in Australia[4]. The reasons for researching Chinese international HDR students are twofold: one is that Chinese international research students not only constitute one-third of Australian international students, but also exist as a major global source of mobile students. The tendency of Chinese prominence remains true for the international HDR cohort (Yu & Wright, 2016). The other reason is that international HDR students in general, and Chinese in particular, are faced with tensions and politics around language usage, academic power relations, and legitimate knowledge production (see discussion in Mu et al., 2019b). The demographic prominence and sociopolitical complexity associated with Chinese international HDR students indicate that this population is a research-worthy group in a study of resilience. While it should be noted, despite the fact that Chinese international HDR students were chosen as the research subjects, this research is beyond an intercultural perspective on the 'Chineseness' of the resilience process of these young people. When

[4] This PhD research has conceptual and theoretical connections to the ARC-DECRA project of the principal supervisor Associate Professor Michael Mu, who has agreed to supervise one PhD in resilience research during his DECRA years. It should be acknowledged, however, the PhD and the ARC-DECRA are qualitatively different in context, with the former working with Chinese adult students and the latter with Australian school students from different heritage backgrounds. While the ARC project largely revolves around the sociological resilience strategies of Australian school students, this PhD project, through a sociological reframing of the three pillars of psychology of resilience, takes a deep dive into the resilience process of Chinese international HDR students in Australia. In this vein, each project has unique contribution to knowledge about resilience.

Chinese culture did emerge from the data, it was interpreted through Bourdieusian sociological tools, habitus and field in particular. As such, the significance of the research is of relevance to domestic and international HDR students in Australia and beyond.

The research outcomes included an in-depth understanding of the resilience process of Chinese international HDR students in response to the challenges associated with, and evolving from their research work. Such knowledge provided some insights and practical strategies for building resilience of Chinese international HDR students. Research outcomes extended the theoretical framing of the psychology of resilience and support the call for moving towards to a critical sociology of resilience (Mu, 2018, 2019a, 2021c, 2022; Mu & Pang, 2019). Furthermore, Australian universities could apply the study's findings to assist in the educational services they provide and to develop HDR pedagogies to support the learning and wellbeing of international HDR students. Lessons learnt and knowledge built from the PhD project may also have relevance to building resilience of international HDR students in other parts of the world.

In this study, the overarching research question is:

In what ways and for what reasons do Chinese international HDR students in Australia engage in the resilience process?

To address this research question, three sub-questions are proposed. These are:

RQ1: What challenges do Chinese international HDR students in Australia face?

RQ2: How do Chinese international HDR students in Australia deal with challenges along their research journey?

RQ3: What are the positive outcomes Chinese international HDR students in Australia desire or achieve despite the challenges they face?

1.3 SIGNIFICANCE OF THE RESEARCH

The significance of this research lies in its theoretical, methodological, and practical contributions and implications. Theoretically, the current study makes a theoretical contribution by adopting a sociological approach to resilience research through recourse to Bourdieu's reflexive and relational tools (Bourdieu, 1977, 1990b; Bourdieu & Wacquant, 1992). This provides a new lens for discussing hidden

adversities such as symbolic violence that have been neglected by both classical social psychological and social ecological paradigms, which will be discussed in detail in Chapter 2 and Chapter 3. Most resilience research on international students is concerned with undergraduate students while HDR students have been largely overlooked in the literature. This study targets international HDR students by taking Chinese students as an example.

Methodologically, previous studies on the resilience of international students (undergraduate level) mainly apply quantitative research design by utilising existing resilience scales. As for international HDR students, extant research is rare. A handful of studies adopt qualitative methods such as analytical autoethnography with an interactive interview (Wu & Hu, 2019), self-study methodology (Hu et al., 2016), focus-group interviews and field notes (Zhang, 2016), memory-work (Ingleton & Cadman, 2002), in-depth interviews and solicited diary (Yu & Wright, 2016), and reflective autobiographical narratives (Soong et al., 2015). This study differs in its two-phase mixed methods design with qualitative data to be collected from in-depth semi-structured individual interviews followed by an online survey to further explore the results from qualitative findings. This echoes Bourdieu's methodological pluralism. Although a longitudinal study would offer a diachronic account of the resilience process, the limited timeframe of this PhD does not support a longitudinal study. However, the qualitative research phase in the study attempts to involve some "longitudinal" features to examine the resilience process at different stages of the HDR journey by interviewing different participants at different stages. At the ontological and epistemological level, the study draws on Bourdieu's reflexive instrument of "participant objectivation" (Bourdieu, 2003a, 2013) to sociologise scholastic bias that may be introduced into the study due to my own identity—a Chinese international HDR student at Queensland University of Technology. In this respect, the study followed the path of Mu (2018) and Mu and Pang (2019, 2021) to engage with "participant objectivation" using Bourdieu's field analysis (Bourdieu & Wacquant, 1992, p. 253). Participant objectivation will be elucidated and unpacked in Chapter 4.

Practically, the current study attempts to understand for what reasons, and in what ways, Chinese international HDR students engage with the resilience process in Australian universities. The findings provide implications for university administrators, policymakers, practitioners, scholars, and, of course, international

HDR students themselves or HDR students in general. For the Australian government and universities, the study offers insight into international HDR students' learning and wellbeing by developing a sociological model of resilience building. For Chinese international HDR students, the study's findings provide new insights into understanding the challenges they might encounter, the empowering factors they can rely on, and the possible pathways to desirable outcomes from their lived HDR research experiences in Australia. The study's research outcomes could assist Chinese international HDR students in understanding how they exercise agency to build resilience within their social lives and for them to be better understood by the Australian academia and society. Moreover, to its credit, despite the fact that this study set its scene in Australia and targeted at Chinese international HDR students, its implications may extend beyond Chinese international HDR students in Australia to a broader global higher education context.

1.4 THESIS OUTLINE

The thesis consists of eight chapters. Chapter 1 has introduced the context and background information related to the resilience process of Chinese international HDR students in Australian universities. It defines the research objectives and the research questions. It also delineates the significance of this study. Chapter 2 provides an analysis of extant literature and establishes the conceptual and empirical basis of this research. It begins with an overview of the debates on the definitions of resilience and the paradigm shifts of resilience research. It is then followed by a review of empirical evidence on international students' resilience and pertinent resilience-related studies including adaptation, acculturation, coping, and transition of international HDR students, with a sharp focus on Chinese international HDR students. The chapter concludes with a summary of the literature review and the research gaps. Chapter 3 proposes a Bourdieusian theoretical framework for understanding resilience as a form of practice. Bourdieu's reflexive and relational thinking tools, namely field, habitus, and capital are applied to reconceptualise the traditional psychological construct of resilience. The chapter reframes the engagement of Chinese international HDR students in Australian universities in the resilience process through a Bourdieusian sociological lens. Chapter 4 illustrates the methodology for this research project. The chapter addresses the choice of Bourdieu's relationalism as the philosophical premise of the study and details the sequential exploratory mixed-methods research design. The

chapter also takes into account the ethical considerations of the whole research process.

The data analysis and findings are laid out in Chapters 5-7. Chapter 5 and Chapter 6 present the analysis of semi-structured interviews with 18 Chinese international HDR students from four Australian universities. Specifically, Chapter 5 presents an in-depth analysis of the challenges encountered by the participants from four Australian universities, while Chapter 6 focuses on factors facilitating participants' resilience process, desired outcomes, and sociological resilience to symbolic violence. Chapter 7 introduces the development and validation of the survey questionnaire as well as outlines the quantitative findings of sociological resilience process. Chapter 8 concludes this thesis with an overview of the research findings and in-depth theoretical discussions of these qualitative and quantitative findings drawing on Bourdieu's sociological thinking tools of capital, habitus, and field. This chapter also addresses the contributions and limitations of the study as well as suggestions for stakeholders and future studies.

Chapter 2: Literature Review

As articulated in Chapter 1, the overarching research question for this research is: In what ways and for what reasons do Chinese international HDR students in Australia engage in the resilience process? To address this research question, three sub-questions were proposed. These are:

RQ1: What challenges do Chinese international HDR students in Australia face?

RQ2: How do Chinese international HDR students in Australia deal with challenges along their research journey?

RQ3: What are the positive outcomes Chinese international HDR students in Australia desire or achieve despite the challenges they face?

In relation to these research questions, the literature review provided in the present chapter concentrates on the scholastic development of resilience research as well as relevant empirical studies on international students' resilience process. This chapter is structured in four sections. Section 2.1 reviews the evolution of the definitions of resilience; Section 2.2 focuses on the paradigmatic shifts of resilience research over the past five decades. These two sections lay the conceptual basis for this study. Section 2.3 establishes the empirical basis of this research by reviewing the empirical evidence on international students' resilience generally (see Section 2.3.1); discussing pertinent resilience-related studies including adaptation, acculturation, coping, and transition on international research students, with a focus on Chinese international research students (see Section 2.3.2). It also reanalyses empirical studies with reference to the major paradigm shifts in resilience research (see Section 2.3.3). Section 2.4 concludes this chapter by summarising the literature review, identifying the research gaps, and posing the research questions investigated in this research. The discussion that follows seeks to not only map the existing schools of resilience research, but also generate some scholarly conversations between these areas of inquiry as well as laying the empirical groundwork for this project within the existing research landscape. This serves to contextualise the research questions at the heart of this thesis.

2.1 DEFINITIONS OF RESILIENCE

Resilience has been recognised as an important research concept in psychological studies over the past five decades. The term originates from the Latin *salire* meaning to spring up and from *resilire* meaning to leap or spring back. Both terms can be used to describe something with the property of bouncing back (Frydenberg, 2017). Since the 1970s, there has been an interest in an individual's capacity to 'bounce back' despite significant adversity or trauma. This human phenomenon is coined as 'resilience'. The concept of resilience has been explored from different perspectives, including developmental psychology, trauma recovery, formative psychology, and the study of competence under stress (Sabouripour & Roslan, 2015). In the early 1970s, psychopathological research has attempted to investigate how human wellbeing can be achieved in times of adversity, such as war and poverty, that often leads to significant undesirable outcomes (Zolkoski & Bullock, 2012). Early seminal work has provided solid foundations for resilience research concerning child and youth wellbeing (Luthar, 2003) and emerging adulthood development followed by adulthood wellness (Lam & McBride-Chang, 2007; Masten et al., 2004).

Preliminary studies of child and youth resilience (Anthony, 1974; Garmezy & Rutter, 1983; Rutter, 1979) are considered to be the vanguard of resilience research. Broadly speaking, child and youth resilience refers to young people's positive or successful adaptation following adversity (Brooks, 2006; Masten, 2001; Masten & Powell, 2003). More specifically, child and youth resilience was once equated to a personal trait (Luecken & Gress, 2010). For example, Felsman (1989) defines the concept as "a function of the individual's unique strengths, capacities, vulnerabilities, and 'goodness of fit' with the demands and opportunities of the environment" (p. 79). However, as the definition evolved over time, instead of treating resilience as a personal trait, Masten et al. (1990) propose a view of resilience as "the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (p. 426). In other words, resilience is not exclusively about individual traits; it is also an outcome arising from a dynamic process that involves the exposure to stress or adversity, followed by successful adaptation.

Five decades of child and youth resilience research has yielded a broad consensus that resilience involves a process of negotiation and interaction between the

individual and the environment (Luthar et al., 2000; Seccombe, 2002; Ungar, 2008). Such conceptualisation of resilience as a process differs from the concept of resiliency that relies on individualistic, ontogenic frameworks to define personal traits and psychological qualities (Mu & Hu, 2016). It leads, instead, to an ecological approach to resilience-building (Ungar, 2011a). Yet ecological resources are never equally distributed across child populations, and Mu (2018, 2021c) reconceptualises resilience from a sociological perspective to grapple with structural inequalities. He contends that:

> Resilience is a process of socialisation that reshapes a particular social arena (field) where young people are enculturated into a system of dispositions (habitus) and endowed with a set of resources (capital) required for rebounding from adversities and performing well across multiple domains. (Mu, 2018, p. 61)

Similar to early child and youth resilience research, early work on adult resilience tends to adopt an individualistic perspective. For example, resilience is "the ability to maintain a stable equilibrium" (Bonanno, 2004, p. 20). This definition soon shifted to one that resilience, at or beyond adulthood stage, is not merely an individualistic issue but a social process. From this perspective, resilience can occur when the trajectory from risk to pathology is interrupted by the combination of environmental, social, and individual factors (Fergus & Zimmerman, 2005). Some resilience researchers have recognised that attention to both social and contextual factors may provide greater insights into differences in resilience processes. This has given rise to social and ecological perspectives that define resilience as "the capacity of individuals to access resources that enhance their wellbeing, and the capacity of their physical and social ecologies to make those resources available in meaningful ways" (Ungar, 2010, p. 6).

Given the abovementioned definitions, scholars now commonly emphasise the interactions between an individual and their social environment in the resilience process. Neither the individualistic framework nor the ecological approach to resilience-building by itself can spark transformational change (Mu, 2021c). It is unlikely that individuals respond with the same degree of capacity to adverse factors and, similarly, that the environmental forces which strengthen or weaken resilience to stress and hardship are distributed equally amongst human populations. Thus, when

considering adult resilience, a sociological approach provides a useful perspective to think through the individual and environmental dynamics and to inquire into structural inequalities when building human resilience. Accordingly, this study draws from a sociological perspective to investigate Chinese international HDR students' engagement in the resilience process in Australia. The next part of the chapter examines the literature in order to further discuss the paradigmatic shifts that have occurred in resilience research.

2.2 PARADIGM SHIFTS OF RESILIENCE RESEARCH

Over the past five decades, resilience research has shown paradigmatic shifts from the classical psychological individualistic framework, through the social psychological and ecological framework, to the culturally sensitive approach, and furthermore, to the sociological approach. Different approaches towards resilience research reflect the historical developments of the concept, together with the expansion of interests across various disciplines. This phenomenon indicates both the vitality and complexity of resilience research. As such, resilience research encompasses both multi-level analysis and cross-disciplinary findings. This section illuminates the paradigm shifts of resilience research.

2.2.1 From Disease/Risk to Positivity: The Rise of the Term "Resilience"

During the 18th and 19th centuries, risk research has been a dominant paradigm for those researchers aiming to identify biological and psychosocial vulnerabilities to illness (Boholm, 1998; Renn, 1998). Over that period, scholars have specifically targeted those identified high risk individuals to investigate the so-called risk factors for problem behaviours (Glantz & Johnson, 2006). For instance, in a biological context in medical science and practice, drug treatments were applied to control the developmental system of physical illness. With reference to the psychological context, Freudian psychotherapy was applied to the intervention of mental illness; and at the broader societal level, public health interventions, social welfare programs, and government all attempt to minimise or eradicate disease (Reich et al., 2010). The pervasive acceptance of the medical intervention paradigm can be attributed to the assumption that the best approach to manage or prevent a problem was to focus on what causes it and on the group of people who appear to have the majority of those causal or risk characteristics (Leshner, 1999).

However, numerous existing observations suggest that focusing on risk alone could be problematic. First, the *disease model* seems contradicts the realities of the phenomenon under investigation (Reich et al., 2010). It is generally the case that although trapped in poor or hazardous conditions, some high-risk populations do not develop the anticipated problem behaviours. For example, some left-behind children[5] in rural communities without appropriate parenting seem immune to the negative outcomes arising from disadvantaged childhood more commonly associated with negative wellbeing outcomes (Mu, 2018); most high risk adolescents who have some exposure to illicit drugs do not develop a dependency on illicit drugs or become drug abusers (Glantz & Johnson, 2006). Moreover, some groups undergoing high levels of standard risk factors such as physical trauma nonetheless display no notable patterns of illness as might be predicted according to the disease/illness model (Gould et al., 2003). These reported anomalies bring the risk/disease paradigm under increasing doubt and scrutiny.

The situation is further complicated when, as Leshner (1999) reminds us, risk factors including poverty, familial dysfunctions, child abuse, and sub-clinical/pre-morbid conditions such as impairments in regulatory functioning are considered. These challenging risk factors are not always controllable or foreseeable. At the same time, Leshner (1999) notes that imposing classifications of risk factors may lead to identifying individuals as delinquents rather than as individuals who need help. This, in turn, leads to practices and discourses that tend to *other* and pathologise individuals in need of help.

It is also necessary to note that human development is a complicated lifelong process which is multi-dimensional including contexts and systems that are biological, social, emotional, and cognitive; multidirectional such as positive and negative; and multidetermined such as self, others (Baltes et al., 1999; Keyes, 2004). A deficit model ignores the complex multi-dimensionality to the development of problem behaviours and rarely considers the broad-spectrum nature of risk influences. As a consequence, although a risk-focused approach has been beneficial in some disciplines, such as in

[5] Left-behind children are those children who remain in rural regions of China while their parents leave to work in urban areas. These children are often categorised as 'left-behind' because the rural regions they reside in often lack social and economic infrastructures that are more readily available and accessible in urban areas.

the reduction of infectious diseases in public health research, more complex 'diseases' of lifestyle necessitate a more comprehensive approach (Rutter, 1993). It was in response to the paradigmatic problems of the medical deficit model that a focus on resilience research came to the fore.

During the last two decades, clinicians and policymakers have gradually shifted from investigating pathophysiology towards examining the mechanisms that can protect individuals against stress-related sickness (Kalisch et al., 2017; Mohaupt, 2009; Windle, 2011). Part of the motivation for this shift in focus resulted from a growing frustration with the pervasive emphasis on the identification of risk factors informed by concentrating on maladaptive outcomes or psychopathology (Rutter, 2012; Turner et al., 1995). In comparison with the risk/disease model, resilience theory places an emphasis on understanding healthy development and positive outcomes despite risk exposure (Masten, 2001). This outweighs the usual practice of listing deficits that predispose, enable, and reinforce some negative behaviours, and it further overturns the negative and misleading assumptions about this class of phenomena.

In sum, a resilience approach which enables a more holistic perspective is not only heuristically useful but also seeks to focus on a strength-based view of the ways in which individuals respond to and adapt to challenging circumstances. Accordingly, this research specifically focused on the positive responses some Chinese international HDR students exhibit as they attempt to maintain equilibrium in the face of stress and challenge.

2.2.2 From a Psychological to an Ecological Model: The Role of Environment and Culture

Within the field of psychology, early resilience research marked a "paradigm shift from looking at risk factors that led to psychosocial problems to the identification of strengths of an individual" (Richardson, 2002, p. 309). The latter approach intends to explicate why some individuals are able to withstand or even thrive throughout their lives despite a variety of difficulties and challenges, ranging from daily hassles to major life challenges or traumatic events (Luthar et al., 2006; Masten, 2001; Masten et al., 2004; Masten & Reed, 2002; Rutter, 1993).

Resilience research in the psychological field originated in two schools during the 1970s: traumatology that focused on adults and developmental psychology which addressed the need of children and youth (Anthony & Bonanno, 2010). Psychological

approaches to researching resilience have been successful in revealing a variety of interpersonal characteristics that resilient individuals may exhibit in various contexts. However, such individual approaches fail to capture resilience in its entirety (Liu et al., 2017). For example, empirical studies on resilience have indicated that the positive development of a child under stress is more typically the outcome of a supportive environment than individual capability or personal motivation (Panter-Brick & Eggerman, 2012; Ungar et al., 2017). As a result, more scholars have noted the significance of interactions between individuals and their environment in unveiling the nature of resilience (Luthar & Brown, 2007; Masten, 2016; Masten et al., 2004; Rutter, 2006a).

In recognition of such individual-environmental interactions, Ungar (2004, 2011a) advocates for reconceptualising resilience from a social ecological approach. The social ecological approach views resilience as developing through interactions within the environment, including families, schools, neighbourhoods, and the larger community (Ungar et al., 2007). The creation of favourable environmental contexts within families, schools, and communities can mitigate potential hazards and increase the protection or resources available to people (Brooks, 2006). A social ecological approach has progressively shifted the theory of resilience from an individual-focused emphasis to a dynamic multisystemic understanding of person-environment reciprocal processes (Ungar et al., 2013). Such shift is significant to avoid blaming the 'victim' or labelling those individuals vulnerable to adversities as non-resilient (Brooks, 2006).

While the social ecological approach potentially overlooks the sociocultural context in which an individual operates (Clauss-Ehlers, 2008; Mahoney & Bergman, 2002; Waller, 2001), Ungar and colleagues (2008; 2011) argue that resilience has been characterised primarily via a Western psychological discourse. This construct lacks sensitivity to community and cultural factors which contextualise how resilience is defined by different populations and manifested in different practices. As such, Ungar (2008) redefines resilience within a cultural frame. He contends that resilience is not only the capacity of individuals to navigate their way to psychological, social, and physical resources that sustain well-being, but also depends on their collective capacity to negotiate resources in culturally meaningful ways. A reconceptualisation of resilience from a culturally appropriate perspective emphasises the specific sociocultural conditions and avoids "a view of positive adaptation as a static

phenomenon with relevance to only a minority of persons in select circumstances" (Mahoney & Bergman, 2002, p. 212). Furthermore, in order to account for the complex process of resilience relevant to populations facing adversity, Ungar (2019) proposes a three-dimension framework in which risk exposure, promotive and protective factors and processes (PPFP), and developmental and behavioural outcomes must be examined in interaction with one another. As Ungar (2019) suggests, in order to study resilience, a risk assessment is a prerequisite to understanding whether the research population experienced or is experiencing any atypical levels of stress. Promotive and Protective Factors and Processes (PPFP) possibly mitigate the adverse impact due to exposure to specific risks and contribute to desirable outcomes. Positive outcomes, according to Ungar (2019), range from the biological level, such as better stress tolerance to the psychological level, such as improved self-esteem, social level such as increased engagement in productive activities, or environmental level such as upgraded physical environments and community safety. These three dimensions were interactive processes, collectively relating to the threats and shaping resilience.

In sum, in contrast to the psychological approach, the social ecological approach and the culturally appropriate approach advance resilience to a multidimensional and multifactorial level by emphasising the interdependency between individuals and the physical, social, and cultural environments. The approach de-emphasises an exclusive focus on the individual agency, incorporating a more complex perception of how the interaction between individual factors and social factors shapes personal agency and structural opportunity in response to diverse adversities (Evans, 2007). However, one issue with this approach lies in the unequal distribution of assets and resources available for individuals to cope with challenges. Such criticism gives rise to a sociological approach to resilience building.

2.2.3 Emerging Sociological Approach

In recent years, scholars have found that current approaches to resilience building have ignored fundamental factors that entail inclusion, access, social justice, and equality in relation to the social structures of class, race, and gender (Bottrell, 2009a, 2009b; Mu, 2018, 2021c, 2022). Informed by Bourdieu's sociology, Bottrell (2009a, 2009b) problematises the developmental and individual-level analyses in the resilience literature and appeals to the significance of social theory of resilience. She points out that "interventions for resilience building need to recognise the

embeddedness of resilience in social inequities, social processes and the differentiated societal and ideological expectations of young people" (Bottrell, 2009b, p. 321). She also proposes that the conceptualisation of resilience requires resistance to assumptions of mainstream knowledge and power. This signposts the need for a revolutionary change in positioned perspectives, structured inequalities, and the distribution of resources for resilience building (Bottrell, 2009b).

Uekusa and Matthewman (2018; 2017) attempt to rethink resilience from a sociological approach when performing disaster research. They point out that previous research may overemphasise the provision of resources and fail to recognise pre-existing structural inequalities which often create uneven disaster impacts. They draw on Bourdieu's (1986) work to explain enduring inequalities structured through capital including economic capital, cultural capital, social capital, and symbolic capital as well as habitus in field. Uekusa and Matthewman (2018; 2017) demonstrate the possible linkage between various forms of capital and resilience, and argue that some non-economic forms of capital, particularly social capital, can be valuable components of resilience to disaster.

Mu (2018) also proposes a sociological framework in the process of examining the resilience process of floating children[6] and left-behind children in China gaining insights from Bourdieu's theories. He notes that there is an unequal distribution of resilience resources in different child populations in terms of not only the quantities and qualities of resources they possess but also the capacities and ways of activating and using these resources. This echoes Bottrell's critiques on disordered social arrangements and the social logic of inequities that underpin individual odds in resilience calculations of young people especially the marginalised. Mu (2018) further argues:

> Resilience process consists of multifarious ecologies, contexts, and cultures in which reality is being constantly defined and redefined, negotiated and renegotiated, and constructed and reconstructed by

[6] Floating children are those of Chinese migrant parents from the rural, western provinces who seek employment in Mainland China's richer eastern provinces in the massive surge of the rural-to-urban migration in China.

individuals living within different segments of a given social structure. (p. 42)

In response to such complexity and multiplicity, Mu (2018) claims that a sociological framework is necessary "to debunk the tensions and negotiations between the individual and the social, construing resilience as a process of socialisation that internalises the external and externalises the internal" (p. 42). He incorporates Bourdieu's relational thinking into a sociology of resilience and asserts "resilience building needs to take into account the structural roots of social inequalities systemically created and reproduced" (Mu, 2021c, p. 18). In contrast to traditional psychological resilience model, sociology of resilience may not only deal with "visible and tangible forms of risks and adversities, but also invisible and symbolic forms of structural constraints" (Mu, 2021c, p. 16). A sociological approach to resilience can reveal, at least to a certain degree, the structural constraints and prompt in-depth reflective thinking on social systems, norms, and structures that are often taken for granted as legitimate. Such approach has the potential to complement psychological and social ecological frameworks.

Building on the emergence of the sociology of resilience, this thesis aims to investigate the resilience process of Chinese international HDR students in Australia. It is arguable that Chinese international HDR students do not merely face everyday challenges from their research work, but may also face challenges brought about by structural deficiencies and "symbolic violence" (Bourdieu, 1977, 1989; Bourdieu & Wacquant, 1992). To clarify, symbolic violence refers to "the imposition of systems of symbolism and meaning (i.e. culture) upon groups or classes in such a way that they are experienced as legitimate" (Jenkins, 1992, p. 104). This study thus adopted a sociological perspective framed through Bourdieu's (1990b) relational and reflexive sociology. The theoretical framing of this study was developed in Chapter 3.

After reviewing different conceptualisations of resilience research and proposing a sociological reconceptualisation of resilience, the focus of discussion then needs to shift from the conceptual to the empirical. The next section provides a review of extant knowledge about the resilience process of international students in general, and Chinese international research students in particular.

2.3 EMPIRICAL RESEARCH ON RESILIENCE OF CHINESE INTERNATIONAL RESEARCH STUDENTS

International students may be vulnerable to a range of psychological and academic challenges during their transition to studying in a new environment. As a result, research on international students' resilience has gained significant attention in recent years, with an agenda to promote their life quality and wellbeing despite the challenges they face in the host country. However, empirical investigation that specifically focuses on the resilience process of international research students remains rare and resilience research concerning Chinese international research students is even more limited. Thus, Section 2.3.1 provides a brief summary of previous resilience studies on international students' resilience. Section 2.3.2 therefore looks at the challenges faced by international research students as well as their perceived empowering factors and desirable outcomes. It should be acknowledged, however, that many studies reviewed in Section 2.3.2 do not investigate resilience directly; rather, these studies commonly look at the adaptation of international research students to the foreign research environment. Section 2.3.3 presents a reanalysis of the reviewed empirical studies in relation to the paradigm shifts in resilience research.

2.3.1 Empirical Evidence on the Resilience Process of International Students

International students encounter a variety of challenges, including the loss or diminishment of previous social networks, difficulty in building new friendships and engaging with the local community, academic challenges, financial problems, as well as some potential traumatic events such as life-threatening illness and physical violence (Alharbi & Smith, 2018; Galatzer-Levy et al., 2012). These challenges may lead to sense of isolation, discrimination, and depression (Alharbi & Smith, 2018; Ramia, 2021; Zhang & Goodson, 2011). For example, previous studies on international students in America, Australia, and Hong Kong have reported higher levels of depression, anxiety, and suicidal ideation than the general population (Forbes-Mewett & Sawyer, 2019; Lian & Wallace, 2020; Yu et al., 2021). Extant research has contributed to knowledge about the difficulties that international students face. Yet the problem-based view largely cloaks potential opportunities for change and development in adverse conditions. As such, resilience research has emerged as a positive tool to transform vulnerabilities into opportunities even in precarious situations. Findings from studies on international students in various countries indicate

that resilience is positively related with improved mental health, as well as successful transition and adjustment to university life (Brewer et al., 2019; Gall et al., 2000). Other research suggests that resilience decreases the detrimental effects of migration on mental and physical health (Sabouripour & Roslan, 2015). Factors that empower the resilience process of international students include acculturation (Lee et al., 2004), social support (Chavajay, 2013), meaning of life (Pan, 2011; Pan et al., 2008), local connectedness (Cheung & Yue, 2013), self-esteem (Kwek et al., 2013), and optimism (Sabouripour & Roslan, 2015). Drawing insight from these factors, it is possible to infer that certain factor such as self-esteem, self-compassion, and optimism come from within, while others such as social support and local connectedness may serve as ecological strategies.

Some studies have taken into account demographic variables including race and gender in the resilience process. Clauss-Ehlers et al. (2006) discovered that race and gender identities have been significantly linked with the level of resilience in difficult situations. Furthermore, other studies have indicated that Asian students report more acculturative stress than European students because of a greater cultural gap between Asian culture and the culture of the host nation (Lee et al., 2004). These studies have adopted a comparative approach to understanding group differences in the resilience process of international students. Such a "groupist" view is similar to the "solved Rubik" approach to child and youth resilience criticised by Mu (2018, p. 39) where children from different sociocultural backgrounds are construed as separate, monolithic groups rather than a cohesive population with a range of diversities in multicultural contexts when international students study and work in dynamic academic and social communities like Australia.

With reference to research methods that investigate various aspects of resilience, most studies are quantitative as reviewed above. There are few qualitative studies that investigate how promotive factors bolster positive outcomes in the process of resilience (Bhowmik et al., 2018; Khawaja & Stallman, 2011). Smith and Khawaja (2011) claim their study to be the first Australian study using qualitative methodology to understand the challenges faced by international students as well as their coping strategies to promote resilience. As such, in resilience research, quantitative and qualitative studies are all of significance in unveiling the diverseness of the process.

Given the abovementioned literature, it can be claimed that international students' resilience is a complex process. Glass (2017) emphasises the significance of resilience research on international students:

> A resilience perspective asks how to support people and create organizations that know how to recover, persist, and even to thrive in the face of change. As national politics fluctuates, we must understand the structures and forces within our institutions that buttress international students' resilience. (p. 1)

Following suit, this PhD research sought to respond to the significance of building resilience of international research students and to address the complexity of their resilience process by adopting a sociological framework and a mixed-methods design. There has been little, if any, work on the resilience process of research students. The ensuing section aggregates and analyses this work sporadically scattered in the literature.

2.3.2 Empirical Evidence on the Resilience Process of International Research Students

Although existing literature has extensively discussed the resilience process of international students, the majority of the literature fails to distinguish between non-research students, that is, undergraduate, and research students, such as masters by research and doctoral students. However, it is problematic to treat all international students as a monolithic whole, and to assume that they engage in an identical resilience process. To develop the empirical basis of the resilience process of Chinese international research students, which is the focus of this thesis, this section draws insights from the literature concerning international research students. Due to the limited amount of literature focusing specifically on the resilience process of international research students, this section reviews resilience-related studies including adaptation, acculturation, coping, and transition.

The ensuing review on the resilience process of international research students is organised according to Ungar's (2019) three-dimension framework, namely, risk exposure of relevance in different contexts, promotive and protective internal and external resources associated with resilience process across systems, and desirable outcomes as privileged by stakeholders in different cultures and contexts (see Section

2.2.2). To clarify, the two terms, protective factors and promotive factors, are often used interchangeably in the literature (Luecken & Gress, 2010; Masten et al., 2004; Rutter, 1985). Even seminal resilience researchers (Fergus & Zimmerman, 2005; Masten & Garmezy, 1985; Zimmerman et al., 2013) do not mark a clear definitional boundary between the two terms. As a result, the term 'empowering factor' is used in this thesis because data analysis at a later stage suggests little distinction between the two.

The Challenges Faced by International Research Students

In Australian and other Western universities, an internationalised postgraduate research culture continues to develop. Before COVID-19, an increasing number of Chinese students enrolled in research programs in Western universities (Wu & Hu, 2019). However, international research students, including Chinese research students, with distinctive learning traditions and values, may had difficulty in adapting to their new environment in the Western higher education system (Aspland et al., 2021; Cadman, 2000; Yu & Wright, 2016). International research students potentially encounter diverse challenges such as language barriers, acculturation stress, unfamiliarity with and inadequate access to available resources, as well as lack of an established social support system and/or social network (Mesidor & Sly, 2016; Smith & Khawaja, 2011; Xing et al., 2021).

To explicitly and specifically expound the challenges associated with Chinese international research students, the subsequent review delves into six themes. These are confusion about new teaching and learning systems, crisis in self-identity, tense relationship with supervisors, divergent perceptions of critical thinking, insufficient support for English-as-an-Additional-Language (EAL) research learners, and the dilemmas involved in integrating into the host society. These themes highlight and represent the most common and typical struggles experienced by many Chinese international research students in Western universities.

Confusion about new teaching and learning systems

Chinese international research students are imbued with cultural and educational values that may be incompatible with what is expected of them in Western learning environments (Chen & Bennett, 2012; Shen et al., 2017; Wu & Hu, 2019). For example, traditional Chinese research training encourages students to learn through

reflection on existing knowledge or by emulating the examples of experienced seniors, which may potentially restrict student autonomy to a varying degree (Hu et al., 2016; Wu & Hu, 2019). As a result, some Chinese international doctoral students may expect their supervisors to provide specific guidance when supervising their research projects. However, their supervisors, on the other hand, may expect them to take the lead in carrying out their research project due to the fact that student autonomy is perceived as an important aspect of developing an independent researcher in many Western universities (Shen et al., 2017; Wu & Hu, 2019). As a result of such contradictions, international research students may feel bewildered and experience difficulty in adapting to the new academic research training systems (Xing et al., 2021).

Crisis in self-identity

For Chinese international students, admission to highly competitive research training programs at universities abroad can be viewed as a significant accomplishment in their life (Zhang, 2016). This is due to the fact that academic achievement is deeply ingrained in Chinese traditional culture as an honour to oneself and one's family (Yan & Berliner, 2009). Chinese international students, thus, may leave their home countries with high expectations of academic success and the belief they are well prepared for future academic research training. However, in the transition to the research environment at a foreign university, their identities as successful students can be severely challenged. For example, Chinese international research students confessed having a desire to prove themselves while ending up being unknown or unrecognised (Zhang, 2016). Such an unanticipated identity crisis may lead to a range of personal insecurities such as lacking confidence in their doctoral studies, and concerns about being treated as less qualified when compared to domestic students or being regarded as an invisible member of the student population (Son & Park, 2014; Winchester-Seeto et al., 2014; Zhang, 2016).

Tense relationship with supervisors

A considerable amount of literature has extensively demonstrated the obstacles for international research students to develop strong and harmonious student-supervisor relationships (Due et al., 2015; Manathunga, 2014; Soong et al., 2015; Winchester-Seeto et al., 2014). With respect to international Chinese research students, Hu et al. (2016) summarise three types of misunderstandings in the intercultural supervision relationship. These include first, how formal the supervision should be

conducted; second, how feedback and assessment should be provided and interpreted such as strict versus implicit critiques, open praise for excellence versus praise to encourage; and third, how the student is expected to learn including factors such as expecting answers versus providing questions, learning from modelling versus learning by trial and error. Hu et al. (2016) also note that these misunderstandings between students and supervisors are deeply rooted in their cultural differences such as power distance, individualism, and masculinity; and educational differences relating to whether the educational goal or outcome is oriented towards a qualification or pursued for personal development. For example, it has been argued by some researchers that international research students from culturally hierarchical societies, such as China for example, may be unwilling to openly express their expectations and discuss difficulties with their supervisors (Son & Park, 2014; Wang & Li, 2011). Some research has noted that Asian international students, including Chinese HDR students, have a tendency to keep problems and challenges to themselves and may perceive seeking help as a sign of weakness (Heggins & Jackson, 2003; Zhang, 2016). In this way, when misconceptions occur between international Chinese research students and their supervisors, strong emotional or conceptual conflicts can be elicited on both sides and impede the academic process and research progress.

Divergent perceptions of critical thinking

In the Australian education paradigm, the capacity to think critically is considered to be an important graduate student attribute. Supervisors may expect their students to express their interpretations and analysis of research problems and associated literature, and critically engage with the standpoints of their supervisors (Lee, 2008). However, empirical studies suggest that Chinese research students tend to appreciate the scholarly perspectives of their supervisors more than their own, which in turn, may be misinterpreted as indicators of passive student learning and uncritical thinking in the absence of a "meta-awareness of cultural issues and their complexities" (Ryan, 2011, p. 638).

While Western teaching pedagogy tend to emphasise learning through robust exchange of dialogic question and answer, Chinese education focuses on modelling as a fundamental essential of learning, and as a result, supervisors are viewed as the model and authority (Hu et al., 2016). As a result, Chinese HDR students may feel it is culturally inappropriate to challenge or negotiate with their supervisors and rely on

implicit and unarticulated ways to express their ideas and perspectives (Manathunga, 2014; Wu & Hu, 2019; Yu & Wright, 2016). Moreover, as critiques are not often welcomed from a subordinate, Chinese HDR student may lack the skill to express their critique in a respectful, friendly, and constructive manner. As such, their implicit approach of arguing about their opinions may be considered as less-able by supervisors and other students (Wu & Hu, 2019; Zhang, 2016). Furthermore, the divergent perceptions of critical thinking may pose risks to the student learning and research process (Wu & Hu, 2019).

Insufficient support for EAL research learners

Many international research students contend that they struggle as EAL research learners. Most student support services are institutionally catered to the requirements of undergraduate students whereas the needs of international research students, EAL research learners in particular, are more likely to be neglected by instructors in graduate programs (Zhang, 2016). Furthermore, Mu and colleagues (2019b) note that Chinese research students in an international academic setting had to grapple with the assumed superiority of English. In English dominant monolingual setting, they had no choice but to negotiate the relative social positions of English users such as those who use English as a native language and those who use English as a second or additional language. In the face of English hegemony, some Chinese international HDR students had generated a sense of inferiority when using English for research purposes (Sato & Hodge, 2009; Xing et al., 2022). As a consequence, these students feel marginalised due to their distinctive accent, inadequate English proficiency, or culture-specific communicative styles. In addition to the language challenges, Singh (2009) also noted that international research students were not granted the potential to utilise their own intellectual heritage through Western educational research. The exclusion of international research students' own intellectual resources in the global knowledge flows further disadvantages them and render them impotent.

Dilemmas in integrating into host society

Research in Australia has suggested that international students frequently feel it is a struggle to integrate into their host society (Cotterall, 2011; Owens & Loomes, 2010; Wang et al., 2015). This also applies to some Chinese international HDR students. Major barriers to integration include, but not limited to, poor understanding of cultural norms, a lack of opportunities to interact with local students, as well as

prejudice and/or discrimination from domestic students and academic staff (Yu & Wright, 2016). For example, some Asian international research students, including Chinese students, may feel marginalised and have difficulties engaging in social activities with their native peers (Guilfoyle & Harryba, 2009; Zhang, 2016). International research students find it challenging to integrate into the mainstream society and hence, tend to seek support from those within their existing socio-cultural group (Yu & Wright, 2016).

The aforementioned issues may inhibit the academic success of international Chinese research students. However, these identified problems should not be arbitrarily conceptualised as impediments; rather, they may serve as enabling challenges with the potential to facilitate learning under certain circumstances (Wu & Hu, 2019). Such challenges can be both destructive and constructive depending on whether empowering factors are available and accessible for them to engage in the resilience process.

The Empowering Factors for Facilitating Resilience Process

The transition into a foreign research culture poses risks to international research students. Many researchers have proposed some empowering factors to boost resilience that attenuate the risky nature of the range of challenges faced by international students. With specific reference to international research students, empowering factors are often referred to as coping strategies in some of the literature (Bhowmik et al., 2018; Wu & Hu, 2019; Zhang, 2016). Extant discussion points out that support from institutions, supervisors, peers, and family is conducive to their journey to resilience (Guilfoyle, 2006; Harman, 2003; Zhang, 2016).

Institutional support

Many host institutions have prioritised language and academic skills support as an important resource for improving the academic success of international research students. Indeed, some findings indicate the positive relationship between language support and international research students' satisfaction with university (Yu & Wright, 2016). Apart from language support, universities can help international research students establish a supportive network and provide them with more opportunities to interact with students from other cultures. Such culturally and academically enabling networks are critical factors in promoting international Chinese research students to

successfully adjust to their new learning environment (Huang, 2012). By contrast, if students perceive their host institutions as being less supportive, they may struggle academically or psychologically (Hodgson & Simoni, 1995). In this respect, institutional support serves as an empowering factor in the resilience process of international research students; and lack thereof, can expose them to the risk of academic failure. Some Chinese international research students highlight the importance of administrative assistance in understanding university procedures, including mundane tasks such as access to printing services and library resources (Zhang, 2016). Such institutional support in the routine contexts is similar to what (Johnson, 2008, p. 385) identified as the "little things" and Masten (2001, p. 235) noted as the "everyday magic of ordinary, normative human resources" that buttress child and youth resilience.

Academic staff support

Supportive supervisors are essential for leading to a satisfying overseas learning experience (Aspland et al., 2021; Ives & Rowley, 2005). Some Chinese international research students have emphasised the value of receiving encouragement from their supervisors as well as supervisors' understanding of the nature of EAL researchers' experiences during the supervision process (Zhang, 2016). Similarly, Chinese HDR students appreciate the efforts of faculty members who work with them and have better understandings of their unique transition challenges and needs (Yan & Berliner, 2009). In an American context, resilience is likely to emerge when the instructors and advisors perform necessary pedagogical reforms according to the differences in learning styles between Chinese learners and their American peers (Huang, 2012). Moreover, previous research suggests that mentoring programs such as faculty-student and peer mentoring could promote international research students' transition experiences (Ku et al., 2008; Mason & Hickman, 2019; Rose, 2005). Furthermore, the literature suggests that academically engaged and ambitious supervisors, together with well-facilitated research laboratories are all important factors in fostering research students' academic achievements (Paglis et al., 2006). The aforementioned learning dynamics relating to supervisors and university staff are thus potentially empowering factors conducive to the resilience process of international research students.

Peer and family support

A supportive relationship with family members and peers may have a direct relationship with increased levels of educational resilience, as evidenced by satisfaction with academic programs (Perrucci & Hu, 1995). Interacting with their peers on campus is reported as an efficient way to overcome challenges (Shen et al., 2017; Yu & Wright, 2016). Many Chinese international research students also seek support and assistance from long-lasting relationships in China (Shen et al., 2017). Social support from the home country would be particularly important in situations when there is limited social contact in the host country which may increase anxiety, depression, and alienation (Chen, 1999). Similar to institutional support, peer and family support can be an empowering factor in the resilience process, whereas a lack of it can undermine such a process. In addition, when socialised into Western academic norms on campus, international research students also emphasise the opportunity to develop academic networks, improve their foreign language skills, and have easy access to research data, international scientific cooperation, academic exchanges, as well as mutual understanding between China and Western countries (Kyvik et al., 1999; Shen et al., 2017).

Desirable Outcomes in Challenging Conditions

Despite being constrained by a wide range of potential challenges, with empowering factors, some international HDR students in Australia have been identified as relatively satisfied with their research training in the host institutions (Harman, 2003; Yu & Wright, 2016). It was notable that some research indicates that Chinese international research students demonstrated satisfaction with, and engagement in their learning and research (Shen et al., 2017). Yet such desirable outcomes of their resilience as HDR students was not limited to satisfaction and engagement. Drawing insight from Bourdieu, Tran (2016) construes international students' mobility as a process of 'becoming' from three perspectives, namely the profession-based perspective, the instrumental-pragmatic perspective, and the migration-oriented perspective. This three-perspective model is equally helpful in understanding the desirable outcomes associated with international research students.

From the profession-based perspective, international research students' desires are related to facilitating their career advancement or career change through international education. The overseas study experience has the potential to boost their

research output, career development, as well as their future working methods and attitudes (Shen et al., 2017). Many students also witness positive and constructive personal growth. Some HDR students, for example, consider themselves becoming more mature, more responsible, and more independent through the learned, although challenging transition (Zhang, 2016), and ultimately becoming an independent researcher (Harman, 2003; Wu & Hu, 2019).

From the instrumental-pragmatic perspective, desirable outcomes include achieving a higher social status, pursuing a better material life, or becoming the preferred successor of a family business (Tran, 2016). A large proportion of international research students reported to have benefited from increased job opportunities and salary (Yang et al., 2018). Another potential, less obvious desirable outcome may pertain to middle-class students seeking to (re)produce social class advantage through Western-based educational qualifications (Gaulter & Mountford-Zimdars, 2018; Waters, 2006). This viewpoint is shaped by the assumption that while studying abroad, international students gain opportunities to enrich their cultural, professional, and personal outlook (Tran, 2016).

In terms of the migration-oriented perspective, some international research students have been viewed as migration hunters (Robertson et al., 2011; Tran, 2016). For example, according to a review of Australian employer responses to the study-migration pathway, some international research students crave for employment and permanent residency in Australia after completing their studies (Hawthorne & To, 2014). Some students acknowledge that they would carefully investigate the education and migration policies which may impact upon their possibility to pursue a career in the chosen host country (Cameron et al., 2019). In sum, international research student may embrace multiple desirable outcomes in their resilience process.

Summary

Thus far, the review of literature related to the resilience processes of international research students has documented some of the challenges, empowering factors against challenges, and desirable outcomes despite such challenges. To recapitulate, common challenges include confusion about new teaching and learning systems, crisis in self-identity, a tense relationship with supervisors, and divergent perceptions of critical thinking. Also highlighted are insufficient support for EAL research learners, and dilemmas in integrating into the host society. Some of the

empowering factors noted in the literature include support from institutions, supervisors, peers, and family. Desirable outcomes such as achieving career advancement, higher social status, positive and constructive personal growth, and migration to the host country are also discussed in the literature. However, as Zhang (2016) points out, there are few studies focusing on the experience of international research students. Furthermore, little is known about Chinese international research students and the resilience processes of these students largely remains undiscovered despite their increasing enrolments in many Western universities (Shen et al., 2017). Hence, researching the resilience process of Chinese international research students is urgent. Prior to moving to the Chapter Summary, it is necessary to re-analyse the reviewed empirical studies in relation to the paradigmatic shifts in resilience research.

2.3.3 Paradigmatic Shifts in Empirical Studies: A Re-analysis of Extant Literature

As stated in Section 2.2, resilience research has undergone three major paradigm shifts, namely, from the classical psychological individualistic framework, through the social psychological and ecological framework, to the sociological approach. These paradigm shifts are also evident in the empirical studies concerning the resilience process of international research students as reviewed in Section 2.3. This section seeks to re-analyse the empirical studies reviewed in Sections 2.3.1 and 2.3.2. The goal is to tease out the paradigms embedded in extant research and connect Section 2.2 (paradigmatic shifts) and Section 2.3 (empirical evidence).

Within the field of psychology, early inquiry examining resilience represented a "paradigm shift from looking at risk factors culpable for psychosocial problems to the identification of strengths of an individual" (Richardson, 2002, p. 309). For early resilience research, the notion of risk is important (Waller, 2001). Consistent with this approach, early empirical studies related to the resilience process of international research students concentrated on exploring the difficulties faced by these students, particularly during their transition to a foreign learning environment. For example, as summarised in Section 2.3.2, HDR students may experience problems such as confusion about new teaching and learning systems, crisis in self-identity, tense relationship with supervisors, divergent perceptions of critical thinking, insufficient support for EAL research learners, and dilemmas in integrating into the host society. On the one hand, these studies have provided a holistic review of the potential threats

to international research students' wellbeing. Such studies, on the other hand, show traces of the traditional disease model commonly found in early psychiatric and developmental psychology.

However, the deficit or problem-based view of the international HDR student experience in the host country largely cloaks potential opportunities as a consequence of its overemphasis on the adverse effects of problems. To redress the disease model, the concept of resilience has emerged as a positive tool to transform vulnerabilities into opportunities even in precarious situations (Mu & Hu, 2016). This trend can also be recognised in the resilience process experienced by many international research students. Over the past two decades, empirical studies in this regard have shifted their research focus from risk factors to some trait-oriented protective factors such as self-esteem, self-compassion, and optimism (Kwek et al., 2013; Pidgeon et al., 2014; Sabouripour & Roslan, 2015), and further to ecological strategies such as support from institutions, supervisors, peers, and family members (Zhang, 2016). In other words, the interaction between people and their environments such as families, schools, neighbourhoods, and the larger community is an important consideration when conceptualising resilience through a social ecological approach.

However, international research students may be positioned in complex culturally diverse communities. Such cultural complexity has seen the salience of the culturally sensitive approach to child and youth resilience developed by Ungar (2008, 2011b) who proposes the recognition of marginalised voices in the resilience process of young people. In line with Ungar's work, some studies on international research students take the cultural differences into consideration when examining their transition process (Mesidor & Sly, 2016; Smith & Khawaja, 2011; Soong et al., 2015; Yu & Wright, 2016). Other studies with Chinese international research students may attribute the reasons for difficulties and challenges to collective cultural and educational differences between the East and the West (Shen et al., 2017; Wu & Hu, 2019; Yu & Wright, 2016). Whilst not conclusive, these findings raise questions about what resilience means to culturally diverse groups such as international research students attempting or being required to merge into the 'mainstream' learning systems in Western university settings.

Whilst existing literature has contributed to knowledge about the resilience process of some international research students, it has limited explanatory power in

examining some of the less visible factors. These factors include inclusion, access, social justice, and power in relation to the social structures of inequalities, differentiations, and classifications. For example, international research students in general may feel that their social and cultural identities are less valued within a Western higher education environment, and this could undermine or threaten their social identity (Gaulter & Mountford-Zimdars, 2018). Some HDR students hold themselves responsible for lacking appropriate English skills. According to Mu et al. (2019b), the root of this problem can be traced back to the unequal distribution of linguistic power in academia, in English-speaking societies, and in the globalised world more broadly. Within the resilience process, a variety of invisible societal inequalities exist through the flow of capital, power, politics, and participation (Mu, 2018). Yet most extant literature on international research students fail to address the nature and dynamics of resilience to pre-existing structural inequalities.

To address this limitation, Mu (2018, 2021c, 2022; 2019) has developed a sociological framework in order to better capture the socioeconomic and multicultural (in)variances in the individual resilience process. Given that psychological or social ecological frameworks cannot account for the range of hidden factors impacting on international HDR experiences, a sociological approach can be employed to investigate how resilience resources are distributed, accessed, and used (Mu, 2018) as well as how structural constraints can be questioned or even demolished (Mu, 2021c, 2022). In response to latent social forces, a sociological approach not only examines resilience with reference to phenotypical, substantial adversities but also enables investigation of resilience in relation to invisible, structural constraints that Bourdieu would call symbolic violence. Such violence "operates in a much more subtle manner—through language, through the body, through attitudes towards things which are below the level of consciousness" (Bourdieu & Eagleton, 1992, p. 115). The sociological stance of this thesis was established in Chapter 3.

2.4 CHAPTER SUMMARY

To date, the issue of international research students' transition experience has been extensively discussed, with a focus on the acculturation and adaptation of this research population. These studies have provided valuable implications and useful suggestions on guiding international students to adjust to the new environment, such as improving English proficiency, making friends with local peers, and getting

involved in local community. However, the number of international research students suffering from depression and mental problems continues to rise and their satisfaction with their studies is dwindling, as noted in Chapter 1. Part of the reason is that these international students are taught and trained to negatively or unreflectively adapt to new environment. This may, paradoxically, deviate these students from being fully immersed in the resilience process.

In this chapter, the literature review commenced with the definitions of resilience as a form of positive response to adversity and explicates the major paradigm shifts of resilience research. Over the past five decades, resilience research has played a pivotal role in understanding human development in the face of adversity. Like most concepts and constructs in psychology, there has been considerable debates over the definitions of resilience (Luecken & Gress, 2010; Luthar et al., 2000). The definitions of resilience evolve along paradigm shifts from the classical psychological individualistic framework, through the social psychological and ecological framework, to the culturally sensitive approach. More recently, researchers have found that resilience factors vary in different contexts, lending credence to the notion that resilience is a process.

A sociological approach creates a useful discursive space for exploring and explicating the process of resilience. This approach emphasises that resilience is not merely an individual and ecological capacity to manage adversity but also a sociological process that unfolds in contexts of atypical exposure to invisible forces such as symbolic violence. Furthermore, to explain why some individuals (or systems) perform unexpectedly well when facing adversity, three dimensions of resilience, namely risk exposure, empowering factors, and desirable developmental and behavioural outcomes, are interconnected core components of resilience that need to be understood in interaction with one another (Ungar, 2019). It should be noted that the review of empirical evidence of the resilience process of international research students has also been organised according to the three interconnected core components of resilience.

Previous findings on the challenges faced by international research students as well as empowering factors and desirable outcomes summarised above have enriched knowledge about international research students' resilience process. However limited literature has addressed these issues with a particular focus on Chinese international

HDR students. This study thus endeavours to investigate the resilience process of Chinese international HDR students in Australia. To fully address this issue, there is a critical need for a sociological perspective to enrich the understanding of Chinese international research students' resilience process, and Bourdieu's theory has offered insight on the topic. The theoretical framing of this study was informed by Bourdieu's (1990b) relational and reflexive sociology, notably his triad of habitus, capital, and field. The following chapter, using Bourdieu's theoretical framework, explored how the resilience process of Chinese HDR students in Australia could be captured and interpreted in the face of everyday challenges as well as structural constrains such as symbolic violence.

Chapter 3: Theoretical Framework

Drawing on Bourdieusian theory, this study applied a sociological lens to frame the resilience process of Chinese international HDR students in Australia. In this sense, it resonates with several other sociological studies of resilience (Bottrell, 2009a; France et al., 2013; Mu, 2018, 2021c; Uekusa, 2018; Uekusa & Matthewman, 2017). A Bourdieusian theoretical framework is valuable to recognise the "embeddedness of resilience in social inequities, social processes, and the differentiated societal and ideological expectations of young people" (Bottrell, 2009b, p. 321). Bourdieu's relational thinking (1990b) is useful to break the binaries of the individual and the social in the resilience process.

To establish the theoretical framework of this study, this chapter is composed of six sections. Section 3.1 reconceptualises resilience as a logic of practice through Bourdieu's triadic thinking tools, that is, field, habitus, and capital (Bourdieu & Wacquant, 1992). Section 3.2 provides a brief introduction to symbolic violence and the significance of applying them in this study. Section 3.3 elaborates the concept of field and delineates the most relevant field for this study, that is, the higher education field. Section 3.4 explicates the concept of habitus as well as its relation to the field. Section 3.5 discusses the concept of capital in general and highlights the conversion among different species of capitals and the relation of capital to field in the resilience process. Section 3.6 provides a brief summary of this chapter and further retheorises the purpose of the research questions based on the theoretical framework.

3.1 RESILIENCE AS LOGIC OF PRACTICE

Pierre Bourdieu (1930-2002) has emerged as a major contemporary social thinker due to his significant contributions to the social sciences. Bourdieu's *logic of practice* (1990b) is the cornerstone of his sociological platform. Bourdieu's sociological theory of practice is forged to "capture the intentionality without intention, the knowledge without cognitive intent, the prereflective, infraconscious mastery that agents acquire of their social world by way of durable immersion within it and which defines properly human social practice" (Bourdieu & Wacquant, 1992, pp. 19-20). This theory offers scholars a unique and comprehensive approach for

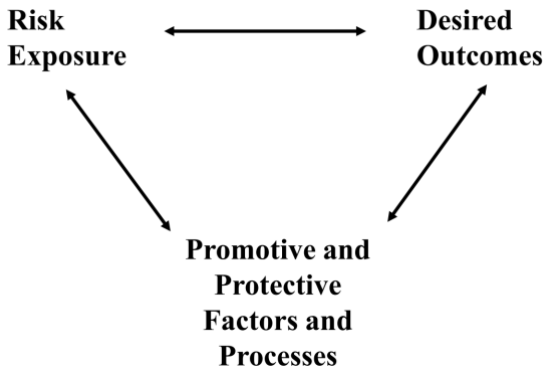
probing differentiated social practices that are constructed through a dialectic of objective social relations and actions based on subjective dispositions in contemporary societies.

Bourdieu's *logic of practice* consists of three main "thinking tools" (1990b), namely capital, habitus, and field. These tools are mutually dependent and interconnected and can only achieve their full value when interpreted in conjunction with one another. The inherent connections between field, habitus, and capital feature in Bourdieu's sociological relationalism. Bourdieu (1984, p. 101) has offered the equation: "[(habitus) × (capital)] + field = practice", which conceptually and empirically summarises the essential relationships amongst capital, habitus, and field, informing social agents' practices. Working through Bourdieu's equation, Mu (e.g., Mu, 2018, 2019b, 2021c; Mu & Pang, 2019) has made consistent attempts to retheorise resilience as a form of social practice unfolding through a process of socialisation that, despite structural constraints, enculturates young people into a system of dispositions (habitus) and a set of capacities (capital) required for generating desirable outcomes within given social spaces (field).

To recall, Chapter 2 discussed the three foundational dimensions of psychological resilience research (Ungar, 2019), namely, risk exposure, promotive and protective factors and processes (PPFP), and developmental and behavioural outcomes represented in Figure 3.1. As Ungar (2019) suggests, these three dimensions were interactive processes, collectively relating to threats and shape resilience.

Figure 3.1

Three Dimensions of Resilience Research



The integration of the three dimensions has informed and guided much resilience research (Ungar, 2019). However, the three-dimensional framework lacks sufficient

efficacy to delve into positive reactions to latent system deficiencies, and is inadequate to grapple with the possibility of transforming them. Thus, a sociological framework is required to empower researchers to come to grips with resilience building in both "tangible threatening conditions and symbolic structural constraints" (Mu, 2021c). Through a Bourdieusian lens, the structural constraints can be understood as symbolic violence, to which the next section turns.

3.2 SYMBOLIC VIOLENCE

A growing plethora of literature portrays Chinese international HDR students as sharing values, norms, and behaviours that differ from their non-Chinese supervisors and domestic peer students (Cotterall, 2011; Wu & Hu, 2019; Yu & Wright, 2016). This literature commonly construes such differences from a deficit and Eurocentric, or Western standpoint, attributing the nature of the problem to individual deficiencies such as the lack of language proficiency and cultural capital valued by the host institution (Pham & Tran, 2015). My PhD study differs for the intention is to question such unequal power relations through the investigation of resilience to structural constraints. This endeavour is supported by Bourdieu's sociology which aims "to uncover the most profoundly buried structures of the various social worlds which constitute the social universe, as well as the 'mechanisms' which tend to ensure their reproduction or their transformation" (Bourdieu & Wacquant, 1992, p. 7).

Bourdieu essentially reveals that higher education functions as a powerful system to maintain and reproduce social inequality (Mills, 2008). Such social inequality is embodied in not only those tangible challenges but also in the symbolic violence that social agents in this field may encounter. For Bourdieu, symbolic violence is essential in understanding how hierarchies and inequalities are reproduced (Bourdieu, 1977, 1990b; Bourdieu & Wacquant, 1992). It is "the violence which is exercised upon a social agent with his or her complicity" (Bourdieu & Wacquant, 1992, p. 167). When social agents are subjected to determinisms, they may contribute to producing the efficacy of the determinisms "as they structure what determines them" (Bourdieu & Wacquant, 1992, pp. 167-168). In essence, symbolic violence refers to the imposition of thought and perception categories on the dominated social agents, such as Chinese international HDR students in this study, while concealing the underlying power relations.

Symbolic violence involves "consent to domination" as part of the habitus of those in particular social positions (Mu & Pang, 2019, p. 63). Bourdieu has argued symbolic violence may be exercised by "misrecognition" (Bourdieu & Wacquant, 1992, p. 168) where agents are subjected to an inferior social position, limited resources, and restrictions on social mobility. Bourdieu (1989) makes this clear in the following passage:

> Legitimation of the social order is not … the product of a deliberate and purposive action of propaganda or symbolic imposition; it results, rather, from the fact that agents apply to the objective structures of the social world structures of perception and appreciation which are issued out of these very structures and which tend to picture the world as evident. (p. 21)

According to Bourdieu, symbolic violence is an act of violence imposed indirectly without perceivable acts of force or coercion, leading to the subordination of individuals (Mu & Pang, 2019). In some ways, it is more powerful than physical violence because agents may follow the legitimatised existing social structures without realising the devastating impact (Mu & Pang, 2019). As Bourdieu and Eagleton (1992) lament, symbolic violence is "something you absorb like air, something you don't feel pressured by; it is everywhere and nowhere, and to escape from that is very difficult" (p. 115). The subtlety and unconsciousness of symbolic violence make resilience to it rather difficult. Those who are inflicted with symbolic violence can inevitably experience "bodily emotions" (Bourdieu, 1995, p. 169) such as feeling out of place, embarrassment, awkwardness, anxiousness, shame, amongst others.

However, according to Bourdieu and Wacquant (1992), a reflexive sociology can liberate intellectuals from their illusions and prevent them from passively and unconsciously contributing to symbolic domination. Furthermore, Mu and Pang (2019) propose that resilience has the potential to prevent misrecognition of the arbitrary value of "a whole range of postulates, axioms, which go without saying and require no inculcating" (Bourdieu & Wacquant, 1992, p. 148). They also confirm that resilience sparks reflexivity which can resist the symbolic violence of racialised stereotype, question the *doxic* situation, and bring "the undiscussed into discussion, the unformulated into formulation" (Bourdieu, 1977, p. 168). Through a Bourdieusian

prism, resilience to symbolic violence has potential to bring transformational change that is often not the focus of psychological resilience research.

In this study, as discussed in Chapter 2, Chinese international HDR students may encounter symbolic violence in a range of contexts, such as through language bias, identity crisis, and racialised stereotypes which cause them to them to feel inferior in universities and/or in society at large. Thus, it is critical to retheorise resilience through a sociological lens and grasp the potential to overcome structural constraints and symbolic violence. To understand the ways in which resilience emerges from the contexts of structural constraints and symbolic violence requires the analysis of the mechanisms of social reproduction and social transformation. Bourdieu has applied his sociological concepts of field, capital, and habitus to unveil the function of higher education (Naidoo, 2004). The three central concepts, therefore, have the potential to expound how social reproduction including symbolic violence is achieved in the higher education field. Therefore, to sociologise resilience, in the next section I revisit Bourdieu's notions of field, habitus, and capital then elaborate each notion in relation to my research. This overarching focus facilitates sociological understandings of the resilience process of Chinese international HDR students.

3.3 THE CONCEPT OF FIELD

It is recalled that the resilience process is construed as an "ordinary magic" that unfolds in minds and bodies, in families and relationships, and in communities and institutions (Masten, 2001, p. 227). In sociological terms, resilience can be retheorised through recourse to Bourdieu's *logic of practice* that evolves from social positions and dispositions within and across different social worlds. These social worlds are what Bourdieu means by field.

In Bourdieu's view, the reality of the social world is relational. The concept of field is a relational thinking tool. Bourdieu asserts: "to think in terms of field demands a conversion of the whole ordinary vision of the social world which fastens only on visible things" (Bourdieu, 1990a, pp. 41-42). It is, to be more precise, to permeate visible things to perceive hidden or symbolic relations in the social world. Therefore, the concept of the field "presupposes a break with the realist representation which leads us to reduce the effect of the environment to the effect of direct action as actualised during an interaction" (Bourdieu, 1990a, pp. 41-42). In the course of an

interview with Loic Wacquant, Bourdieu explicated what he meant by field and its meaning and theoretical purposes as well as its place in his thinking. According to Bourdieu (1992), in analytic terms, field is:

> a network, or a configuration, of objective relations between positions. These positions are objectively defined, in their existence and in the determinations they impose upon their occupants, agents or institutions, by their present and potential situation (situs) in the structure of the distribution of species of power (or capital) whose possession commands access to the specific profits that are at stake in the field, as well as by their objective relation to other positions (domination, subordination, homology, etc.). (p. 97)

According to this definition, a field is structured internally in terms of power relations, which transcend what has been merely misrecognised as simple tangible interactions or connections. Jenkins (1992) further apprehends field as "a structured system of social positions—occupied either by individuals or institutions—the nature of which defines the situation for their occupants" (p. 85). Meanwhile, there exists a system of forces among positions, for example, domination, subordination or equivalence (homology) to each other determined by the amounts of resources (capital) at stake in the field available for them (Jenkins, 1992). Each field forms a distinct logic and structure that is both the product and producer of the field-specific habitus (Jenkins, 1992). Agents who enter this field seek to advance their legitimate interest through various resources at stake in the field (Bourdieu, 1990a).

In short, the field can be simply understood as a social space that functions by implicit rules, which in turn are interpreted and practiced by social agents. In accordance with their social positions in a field, agents are endowed with existent and potential resources of relational advantage. The value of resources, or capital, in Bourdieu's terms, is determined by the principles and rules specific to a field. By virtue of these capitals, social agents either struggle for the transformation or preservation of the field. Here, to provide clarity, I decode the concept of field and further reinterpret it by taking my research as an example.

First, each field prescribes its own governing values and regulative principles. In Bourdieu's work, the concept of field is used to reveal the principles of social regularities and reproduction (Deer, 2003). This research conceptualises Australian

HDR education as a field or a sub-field of higher education field. Like the intellectual field of university education (Naidoo, 2004), Australian HDR education can be conceptualised as a field with a high degree of autonomy in that it generates its own values and behavioural imperatives (Xing et al., 2021). This field is complicated as it is shaped by the interplay between diverse social, cultural, and economic structures. The practices that distinguish itself from other fields such as policy and economic fields are the credentialing of knowledge-intensive labour and basic research. Moreover, the rules or regularities of the field are "only ever partially articulated, and much of the orthodox way of thinking and acting passes in an implicit, tacit manner" (Grenfell & James, 1998, p. 20). This indicates that the legitimate rules and regularities within the field are never made fully explicit to Chinese international HDR students. They may inevitably feel like outsiders in such unfamiliar higher education environments and struggle to fit in (Gaulter & Mountford-Zimdars, 2018; Pham & Tran, 2015).

Second, an adequate theory of field requires a theory of understanding the power relations between social agents. Social agents refer to those agents in the field, as players in a game. They, as socialised organisms, are endowed with, or deprived of, certain resources which imply both the tendency and the ability to enter and play the game (Bourdieu, 1989).

In this research, the agents in the Australian HDR education field include at least supervisors, professional staff such as sessional academics and administrative staff, and HDR students who hold dominant or subordinate positions. These positions are determined by the amounts of specific resources possessed in comparison to other occupants. Supervisors, in particular, are authorised representatives of the educational institution, who act as powerful agents in supervising, teaching, and assessing students. They therefore occupy more advantageous social positions in this field, owing to, at least in part, their advanced disciplinary knowledge and institutional power. Professional staff are the graduate and/or professional entry staff with high levels of autonomy and responsibility for leading and managing the operations of institutions (Gander, 2018), often in way that aligns with the neoliberalised principles and guidelines. They hold considerable control of the resources—funding such as scholarships, grants, as well as timelines and milestones. In this context, professional staff are able to wield considerable power in HDR students' training and in the

progression of their research degree, controlling the experience not only of students but also of supervisors. By contrast, students may find they are at a less-advantaged position and seek recognition and help from the authorised representatives who by virtue of their superior social position can demonstrate their approval, or disapproval, through assessment measures. When Chinese international HDR students enter this field, some discriminatory behaviours towards them from academics, administrators, and domestic students can create a sense of inferiority, as discussed in Chapter 2, and their sense of marginalisation may stem from the differing power relations within this field.

Third, a field is synchronously a social space of forces and struggles. According to Bourdieu and Wacquant (1992, p. 101), a field is "a structure of objective relations between positions of force" that undergirds and guides the strategies taken by the occupants of different positions in the field, individually or collectively, to safeguard or improve their position. In this way, a field is filled with conflict and competition where social agents adopt various strategies depending on their position in the field.

A major insight into Bourdieu's work suggests the field of higher education is not a space of total agreement, but a space of ongoing conflict (Naidoo, 2004). In the Australian HDR education field, agents and institutions, either individually or collectively, adopt strategies to improve or maintain their positions in relation to other agents. In this field, those who possess valuable assets such as proficient English literacy and deep engagement with the Australian academic culture may occupy a dominant position. They further legitimise social ranking by urging both dominant and marginalised groups to accept existing hierarchies of social distinction. In this way, some Chinese international HDR students may employ strategies such as capital accumulation to improve their social positions in this field. As such, they misrecognise the legitimate hierarchies within the field, and thus rarely recognise the hidden rules behind these hierarchies.

To summarise the foregoing discussion, when Chinese international HDR students enter the Australian HDR education field to pursue their study, they may find that the politics and contexts of various social spaces are significantly different from their previous experiences of work and study in their homeland. Many Chinese international HDR students, may feel obliged to fit in, or conform to what they encounter. They may assume they are being treated differently because of cultural

differences and they feel compelled to adopt various strategies to adapt to the Anglo-Australian academic culture. Yet such assumptions and pursuits, however adaptative, may undermine the sociological process of resilience to arbitrary, inconspicuous forces in the field. It is difficult to reveal the roots of these assumptions and pursuits without understanding the concept of habitus, that is, previously unconscious dispositions in, and perceptions of, the world. The next section turns to a discussion of habitus.

3.4 THE CONCEPT OF HABITUS

In what follows, I address the concept of habitus (Bourdieu, 1977) and its relationship to field (Bourdieu & Wacquant, 1992). First, I introduce habitus by focusing on its conceptual meaning and identifying its role in tracing social practice. I then probe habitus through its manifestations, that is, its dispositions. Following that, I examine the relation of habitus to field, highlighting two types of relations, namely the possible mismatch between habitus and field and possible reconstruction of habitus to fit into new fields. This section seeks to theorise how habitus functions across different fields and how new habitus emerges to inform resilience or restraining practice in new fields.

3.4.1 The Concept of Habitus: Tracing Social Practice

Bourdieu creates the concept of habitus to comprehend the generative principles underlying practices (Bourdieu & Wacquant, 1992). In Bourdieu's words, habitus refers to "an acquired system of generative schemes objectively adjusted to the particular conditions in which it is constituted" (Bourdieu, 1977, p. 95). One most frequently cited definition was given by Bourdieu where habitus is defined as:

> … systems of durable, *transposable* dispositions, structured structures predisposed to function as structuring structures, that is, as principles of the generation and structuring of practices and representations which can be objectively 'regulated' and 'regular' without in any way being the product of obedience to rules, objectively adapted to their goals without presupposing a conscious aiming at ends or an express mastery of operations necessary to attain them and, being all this, collectively orchestrated without being the product of the orchestrating action of a conductor. (p. 72)

According to this definition, habitus functions as a structured schema that internalises external social orders and a structuring mechanism that operates from within (Bourdieu & Wacquant, 1992). As the internalisation of external structures, habitus is a "socialised subjectivity" (Bourdieu & Wacquant, 1992, p. 126). Chinese international HDR students, as social agents, might have already internalised their historical social worlds through family upbringing, school education, or research training before they enter the Australian higher education field. As such, previous socialisation may have forged different layers of habitus upon their body, which may generate different understandings of, and various responses to, the challenges and adversities encountered in the Australian higher education field. Owing to different historical trajectories and previous experiences, Chinese international HDR students may engage in different patterns of practices and different dynamics of resilience in the face of challenges and adversities. To explain the resilience processes through the highly nebulous concept of habitus, it is necessary to discuss its manifestations, that is, dispositions.

3.4.2 Capturing Habitus through Dispositions

Habitus underpins durable cognitive structures and a dispositional sense of action, which in turn, positions an individual to respond to a given situation (Bourdieu, 1998b). However, it is not a straightforward task to uncover habitus. One of the greatest challenges lies in operationalising the fluid, nebulous concept of habitus. Wacquant's appropriation of habitus as "being endowed with built-in inertia" (2005, p. 314) signifies the empirical challenge in relation to habitus. Nevertheless, some researchers imply that habitus can be observed indirectly through sets of dispositions (Costa et al., 2019). Habitus encapsulates social practice through dispositions embodied as the evolving process of individuals' actions, thinking, perceptions, and responses to the world (Costa & Murphy, 2015). In short, individual dispositions reflect their experienced trajectories and their approaches to practice (Bourdieu, 1990b).

Dispositions refer to an individual's 'natural' tendency to take a specific position in any field (Bourdieu & Wacquant, 1992). Individuals in a particular field who hold similar positions tend to have similar dispositions and, as a result, to generate similar practices (Bourdieu, 1985). As previously stated, the durability of habitus in both its dispositions and forms of practice allows for empirically scrutinising its ruling effect

(Burke, 2015a, 2015b; Costa et al., 2019). That is, habitus can be observed through the repetitive attitudes and propensities (Bourdieu, 1987), that is, via its ongoing and lasting dispositions.

However, it is problematic to only capture habitus by merely observing and examining social agents' dispositions without considering the field. This is due to the fact interactions with a particular field 'triggered' habitus. Resilience can be understood as a process embodied in the relation between habitus and field: the challenges encountered during the resilience process could be caused by the mismatch between habitus and field; while the resilience process may involve the reconstruction of habitus to new fields, and to a much less degree, the transformation of field through habitual agency. In the next section, in order to theoretically explain the resilience process, I discuss the relationship between habitus and field, and further highlight two aspects of this relationship: the possible mismatch between habitus and field; and possible reconstruction of habitus to new fields.

3.4.3 Relationship between Habitus and Field

Bourdieu emphasises that habitus cannot be interpreted independently of a specific field (Bourdieu & Wacquant, 1992). The unequivocal relationship between habitus and field has been explained by Bourdieu and Wacquant (1992):

> On the one side, it is a relation of conditioning: the field structures the habitus, which is the product of the embodiment of the immanent necessity of a field. On the other side, it is a relation of knowledge or cognitive construction. Habitus contributes to constituting the field as a meaningful world: a world endowed with sense and value, in which it is worth investing one's energy. (p. 127)

An individual's habitus mirrors the habitus of a field, in Bourdieusian terms, through a "feel for the game" (Bourdieu, 1990b, p. 66); that is, through socialisation. The concept of field negates that habitus is fixed, while it can be transformed through constant exposure to the ever-changing configurations of fields (Bourdieu & Wacquant, 1992; Gaulter & Mountford-Zimdars, 2018). This implies that the relation between habitus and field is far more complicated than merely the metaphor of a "fish in water" (Bourdieu & Wacquant, 1992, p. 127). When social agents encounter a field with which they are not familiar, the resulting disjuncture can generate mismatch

between the individual and the social, and reconstruct the individual and/or the social (Reay, 2004), with the transformation of the latter much rarer than that of the former. In the subsequent two sections, I first discuss the situations where habitus-field mismatch may emerge, and this is followed by a discussion of potential change in habitus due to such mismatch.

Habitus Mismatch with Field

When habitus comes in contact with a field of which it is the product, "it takes the world about itself for granted" (Bourdieu & Wacquant, 1992, p. 127). Bourdieu further explains this: "It is because this world has produced me, because it has produced the categories of thought that I apply to it, that it appears to me as self-evident" (Bourdieu & Wacquant, 1992, p. 127). That means when there is a match or alignment between habitus and field, social agents acquire a feel for the game. However, there are circumstances when discrepancies emerge between habitus and field in which practice turns out to be unintelligible in the field (Bourdieu & Wacquant, 1992). When individuals move across fields, it may lead to "habitus divided against itself" (Gaulter & Mountford-Zimdars, 2018). When encountering new fields, disjuncture can generate a sense of "disquiet, ambivalence, insecurity and uncertainty" (Reay et al., 2009, p. 1105). Such a sense is often accompanied by identity crisis where agents strive to compartmentalise and maintain "different parts of the self, keeping them separate but allowing them to co-exist" (Aries & Seider, 2005, p. 435).

Numerous empirical studies corroborate the self-division of the habitus that international students enrolled in higher education institutions felt like cultural outsiders and failed to readily fit in. As discussed in Chapter 2, identity crisis related to gender roles and societal expectations has led to challenges for international research students. As is the case with Chinese international HDR students in Australian higher education, when their habitus encounters a new field, their previously unconscious dispositions and understandings of the social space maybe brought to awareness as they strive to construct their self-concepts in connection to their previous education background and new environment.

The encounter of the old habitus and the new field, as proposed by Bourdieu, has the potential to transform habitus by internalising new dimensions to previous socialisations and dispositions (Bourdieu & Wacquant, 1992). However, change to habitus may not occur immediately due to "a hysteresis effect" (Bourdieu, 1977, p. 78)

or inertia in the primary habitus formed through earlier educational experiences and family upbringing (Bourdieu & Wacquant, 1992). It must be noted however, that the hysteresis effect does not exclude the possible reconstruction of habitus.

Habitus Reconstruction in Field

The concept of habitus has incurred several disputes over its being extremely deterministic and reproductive (Jenkins, 1992). Nonetheless, such misunderstanding may be due to the overemphasis on the "immutable" aspects of habitus, in some of the canonical definitions posited by Bourdieu (1977). For example, habitus is:

> the strategy-generating principle enabling agents to cope with unforeseen and ever-changing situations … a system of lasting and transposable dispositions which, integrating past experiences, functions at every moment as a matrix of perceptions, appreciations and actions and makes possible the achievement of infinitely diversified tasks. (pp. 72,95)

On the one hand, "lasting" implies that habitus possesses a predisposed nature. This indicates that habitus, as the embodied sedimentation of the social structures, is relatively unchangeable or impossible to fully erase or unmake.

On the other hand, Bourdieu (1990a) argues that effects of fields, in particular new "expectations and aspirations" (p. 116), may potentially re-align habitus to new forces of the field (Lin, 2014), despite the transposability of habitus that remains relatively coherent across fields. That means, although habitus is extremely enduring, a significant shift in environment may lead to an altered habitus (Bourdieu & Wacquant, 1992). In the case of the current study, Chinese international HDR students, upon entering Australian universities, have opportunities to interact with individuals or/and environments that may radically change their understandings of the game and their levels of confidence/expectations, that is, their dispositions.

To sum up, habitus is never culturally fossilised or passively inscribed; rather, it is always potentially subject to change, with gradual evolution or involution, at least to a certain extent (Mu, 2016). In other words, habitus is an open system of dispositions that are continuously constructed and reconstructed by the external world. It is exposed and subjected to sociological conditions, such as family upbringing, education, and life chances and challenges (Mu, 2016). Sometimes, habitus has to be confronted with

imposed, repeated counter-responses. All these experiences may help to create emergent properties for habitus. In the case of Chinese international HDR students, when they enter the Australian higher education field, their habitus shaped in previous fields may display 'mismatch' with this new field. The mismatch may create challenges for them but may also urge them to engage in a resilience process that reconstructs new forms of habitus to better fit the new field, or even transform the field.

However, the reconstruction process of habitus and field is impossible without taking into consideration the relative positions objectively defined by capitals owned by social agents. The next section centres on the concept of capital and connects it to habitus and field.

3.5 THE CONCEPT OF CAPITAL

In this section, I employ the concept of capital (Bourdieu, 1986) as an empowering facilitator of the resilience process. First, I discuss the concept of capital in general. I then enumerate the different forms of capital including economic, social, cultural, and symbolic capital, followed by a discussion of the conversion amongst these different types of capitals and the relation of capital to field (Bourdieu & Wacquant, 1992). The discussion in this section theorises the potential roles of capital accumulation and conversion in the resilience process of Chinese international HDR students in Australia.

3.5.1 The Concept of Capital

The term "capital" usually has an economic connotation; however, Bourdieu extends the conventional economic notion to resources of different types which are transferred and converted within and across different fields (Moore, 2014). According to Bourdieu (1986), capital refers to field-specific resources occupied by social agents which take time to build and accrue. Capital allows "possessors to wield a power, an influence, and thus to exist, in the field under consideration" (Bourdieu & Wacquant, 1992, p. 98). For example, the higher education field is socially stratified because the particular capital required for success in higher education is usually obtained by the dominant classes (Blackmore et al., 2017). Students from privileged backgrounds are generally able to access more resources and achieve more success than those from less

privileged circumstances owing to the unequal distribution of capital among different student populations.

Bourdieu's (1986) concept of capital has offered considerable explanatory power in explicating the ongoing social stratification of the higher education field (Brooks, 2008). Yet capital theory has been critiqued for attempting to legitimise dominant cultural practices by elevating the nature of structure and limiting the effects of agency, implying that individuals are restricted by structural constraints that are largely beyond their control (Pitman, 2013). Yosso (2005) proposes that the Bourdieusian conceptualisation of cultural capital largely reflects what the dominant classes valued rather than what forms of cultural knowledge are valued by more marginalised and less powerful groups. In the current study, however, capitals were found to empower Chinese international HDR students in the face of challenge, and to a less extent, enable them to take issue with the symbolic violence in the Australian higher education field. These capitals manifest in different forms, which are discussed below.

3.5.2 Forms of Capital

Bourdieu's notion of capital encompasses not only materialised forms such as monetary assets, cultural products, and educational credentials, but also those embodied in various forms including but not limited to preferences, social networks, as well as linguistic and symbolic reputation (Bourdieu, 1986, 1991). Depending on the field in which capital functions, and the efficacy of capital conversion in the field in question, Bourdieu conceives of four fundamental types of capital including economic capital, social capital, cultural or informational capital, and symbolic capital (Bourdieu, 1986). I now elaborate upon the four capitals and incorporate each of them in turn as applicable to my research.

Economic Capital

By Bourdieu's (1986) definition, economic capital is the material assets "immediately and directly convertible into money and may be institutionalised in the form of property rights" (p. 242). In other words, economic capital is manifest in monetary forms of resources acquired by individuals or organisations. For international research students, their economic capital mainly comes from three channels, first, financial support from their families to cover partly or in full tuitions

and living fees; second, institutional sponsorship in the forms of scholarships, subsidies, government or industry funding; third, salaries from employment, such as part-time or casual jobs. This has been confirmed by Harman's (2003) findings on international research students in Australia which reports that students' financial support sources are income, employment, and research support. In this research, Chinese international HDR students may lie in a similar case in terms of the economic capital that supports their study.

As for Chinese international HDR students, their major financial support relies on scholarships. Some HDR students hold an Australian Postgraduate Award (APA) with stipend or a university scholarship, and some others hold a variety of financial aid from funding agencies and/or home governments such as the China Scholarship Council. As discussed in Chapter 2, Chinese international HDR students are often misunderstood as less financially challenged because they have access to these scholarships (Zhang, 2016). However, while most students hold scholarships, some of them still experience major financial problems (Harman, 2003) due to the high costs of accommodation and living expenses. Others may bring their spouses or families to live with them, which can increase their economic burden. A significant number of these students may also come from financially disadvantaged families and may be the first to attend university in their family. Their research journey may be further complicated by limited access to other forms of fiscal capital that supports success. Considering limited financial support from their families, Chinese international HDR students may find it essential or are forced to undertake considerable part-time or casual work. It is assumed that a basic income or sufficient financial support is vital for these students to undertake and complete their research projects. This PhD study examined the possible ways that economic capital facilitates the resilience process of Chinese international HDR students in Australia.

Social Capital

Bourdieu (1977) defines social capital as "the aggregate of the actual or potential resources which are linked to the possession of a durable network or more or less institutionalised relationships of mutual acquaintance or recognition" (p. 51). This definition implies two crucial conditions: first, that stable social connections constitute the foundation for group membership, and second, that resources are (made) accessible to group members (Brooks, 2008). In other words, social capital consists of

mobilisable resources, actual and potential, amassed in social agents' individual, familial, and academic networks. Scholars such as Reay (2000) proposed emotional capital as a variant of social capital to denote emotionally valued resources such as love, affection, support, patience and commitment generated through affective relations built over time particularly within families.

It is recalled, from Chapter 2, that international students encountered a range of stresses, such as the loss of or dwindling previous social relationships, difficulties in establishing new friendships and integrating into the local community. If reframed through a Bourdieusian lens, it can be inferred that international students may lack enough social capitals to engage in their resilience practice. Consequently, they need to generate new social networks to gain new social capital. As previously discussed in the literature, acquiring sufficient and pertinent social capital is also an important empowering factor that significantly affects international research students' potential to cope with a new learning environment. In the current study, it was clearly crucial for Chinese international HDR students to accrue enough social capital to help themselves thrive in this new field. In general, the social capital available for them usually comes from previous social network, such as family relationship and friendship; and newly emerging social networks, such as supervision relationship and peer relationship. These forms of social capital were found to be critical for Chinese international HDR students to engage in the resilience process.

Cultural Capital

According to Bourdieu, cultural or informational capital is defined as "the long-term dispositions of mind and body, institutionalised as forms of education qualifications, objectified as forms of cultural goods, and embodied as forms of knowledge, language, and taste" (Bourdieu, 1986, p. 243). Bourdieu (1986) distinguishes three different states of cultural capital:

> Cultural capital can exist in three forms: in the embodied state, that is, in the form of long lasting dispositions of the mind and body; in the objectified state, in the form of cultural goods (pictures, books, dictionaries, instruments, machines, etc.), which are the trace or realization of theories or critiques of these theories, problematics, etc.; and in the institutionalized state, a form of objectification that must be set apart because, as will be seen in the case of educational

> qualifications, it confers entirely original properties on the cultural capital that it is presumed to guarantee. (p. 79)

Embodied cultural capital can be socialised through individual's upbringing and education. As Bourdieu (1986) explicates, the earliest phase of socialisation is carried out in the family. This is the most important phase because it allows for the embodiment of subsequent socialisation such as schooling. Language, speech patterns, tastes, and other cultural traits that vary depending on the social context are all examples of embodied cultural capital. Chinese international HDR students essentially acquire this form of cultural capital based on their home country cultural norms and social systems, e.g., manners, linguistic skills, religious beliefs, Confucian dispositions, and Communist ideology.

Objectified cultural capital refers to material objects with recognised value in a particular field, such as writings, paintings, monuments, and instruments, which are directly inheritable in its materiality. It should be acknowledged that the production and consumption of objectified cultural capital require skills and abilities that are valuable in certain fields. In higher education field, research publications are important objectified cultural capital which require scholarship to produce and consume/understand.

Institutionalised cultural capital refers to the accomplishment of socially recognised credentials including academic qualifications, credentials, awards, and so on (Bourdieu, 1986). According to Bourdieu, such a qualification "represents a cultural competence which confers on its holder a conventional, constant, legally guaranteed value with respect to culture" (Bourdieu, 1986, p. 248). For Chinese international HDR students, a research degree awarded by a Western higher education institution may symbolise more than just an objective credential; rather, it may symbolise a wide range of cultural, embodied characteristics that are beneficial to professional achievement in a global academic setting.

It must be noted that the value of cultural capital varies according to fields. Chinese international HDR students may find their original cultural capital obtained in previous fields potentially devalued or undervalued when they begin their studies in Australia. This can be attested by some of the empirical studies reviewed in Chapter 2. For instance, in one study, Chinese international students confessed they were being treated as less qualified when compared to domestic students or regarded as invisible

in the student population (Zhang, 2016). To struggle for a better position in the new field, these students consciously or unconsciously strive to meet the educational and intellectual demands of the new academic culture (Son & Park, 2014; Winchester-Seeto et al., 2014), that is, to accumulate sufficient "recognised" cultural capital in the new field.

To be more explicit, cultural capital can be embodied in relevant knowledge, skills, abilities, or other symbolic elements that are of value in certain fields, such as speech and posture mannerisms (Bourdieu, 1984). For example, in an academic field, some knowledge or abilities, such as familiarity with certain authors or terminology, writing or speaking styles, or confidence and comfort in participating in discussion groups, may be considered as cultural capital (Carter, 2003).

The value of cultural capital can be arbitrarily determined by privileged groups in society who also take advantage of possessing, inheriting, and accumulating cultural knowledge, skills, and abilities. Thus, cultural capital may serve as a source of social inequality (Bourdieu, 1986; Carter, 2003; Yosso, 2005). In the analysis of Chinese international HDR students in Australia, their original cultural capital, such as their mother tongue, English accent, credentials, and knowledge about the higher education system at home may become less valued when compared with the cultural capital owned by domestic students in Australia.

Symbolic Capital

The final form of capital included in Bourdieu's capital portfolio is symbolic capital. Bourdieu (1986) explains it as:

> Symbolic capital, that is to say capital—in whatever form—insofar as it is represented, that is, apprehended symbolically, in a relationship of knowledge or, more precisely, of misrecognition and recognition, presupposes the intervention of the habitus, as a socially constituted cognitive capacity. (p. 81)

In the case of Chinese international students in Australia, their dispositions to assimilate to the Australian academic culture stems from a sense of subordination to the dominant English speaking, Anglo-Australian community as they interact and connect with their teachers and domestic students (Pham & Tran, 2015). Behind such logic of practice, they (mis)recognise the Australian culture and customs as symbolic

capital that can guarantee them more social advantages (Pham & Tran, 2015). As a result, these students employ assimilative strategies to acquire such symbolic capital in order to secure their social positions in the universities. However, as they pursue cultural assimilation in the Australian university context, they may consciously or unconsciously place themselves on a marginalised position in the host institution (Pham & Tran, 2015). In this thesis, I examined Chinese international HDR students' engagement in the resilience process within their host institutions and how symbolic capital acts as enablers or inhibitors for resilience building. More importantly, this study sought to critically examine the arbitrary legitimacy of such symbolic capital.

3.5.3 Capital Conversion

Existing Bourdieusian research in social science has been critiqued for focusing only on a singular form of capital rather than the combined and integrated forms of capitals (Wood, 2014). Wood's insight is significant because various forms of capital are inextricably linked and convertible to one another. Bourdieu opines that all forms of capital have economic value and are to some extent interchangeable within and between fields. Bourdieu and Wacquant (1992) further confirm that every form of capital can operate as symbolic capital on condition that it is recognised or misrecognised as legitimate value. Empirical studies have also evidenced that different forms of capital are mutually dependent. For instance, the economic capital of parents can be converted into the cultural capital of their children via fee-paying or scholarship-earning higher education (Li & Bray, 2006).

To sum up, these various forms of capital are "not mutually exclusive or static, but rather are dynamic processes that build on one another" (Yosso, 2005, p. 77). In this research, it is proposed that Chinese international HDR students need to draw from a set of capitals to survive, recover, and/or thrive during their research journey in Australia. Their engagement in the resilience process can be understood in terms of their strategies to increase, conserve, or exchange their possessed capitals. This research examined how the accumulation and conversion of capitals can contribute to Chinese international HDR students' engagement in the resilience process.

3.6 CHAPTER SUMMARY

This chapter has unpacked the key and inter-related conceptual tools in Bourdieu's theory, namely field, capital, and habitus to re-examine the resilience

process of Chinese international HDR students. Drawing insights from Bourdieu's theory, the theoretical stance of the current study is that the dispositions of Chinese international HDR students in Australia (habitus), the resources and social positions that they take (capital), and the politics and principles of various social spaces where they work and live (field) all collectively shape the mechanisms of resilience to everyday challenges and structural constraints (practice). Accordingly, the theoretical questions are:

a) in which fields have Chinese international HDR students in Australia ever learned, lived, and stayed; and what are the relations across these fields that come to shape the resilience process of these students?

b) what are the power relations and positioning rules within fields, as defined by what forms of capital, that come to shape the resilience process of Chinese international HDR students in Australia?

c) what are the relations between habituses and fields that either transform the individual or the social in the resilience process of Chinese international HDR students in Australia?

To enable robust empirical responses to the theoretical questions posed here and the research questions posed in Chapter 1 and Chapter 2, the next chapter details the research methodology of the thesis.

Chapter 4: Methodology

Chapter 3 proposed a Bourdieusian theoretical framework for better understanding the resilience process of Chinese international HDR students in Australian universities. This chapter first engages with a meta-theoretical argument to link the methodological and theoretical frameworks. It then presents methods for data generation of the study and analytical approaches that include thematic analysis, factor analysis, and multiple correspondence analysis.

The chapter is composed of eight sections. Section 4.1 addresses the Bourdieusian philosophical premise of the study, and its link to the research design and analysis. Section 4.2 describes the purposes, rationales, and typologies of mixed-methods research design and highlights the sequential exploratory mixed-methods research design adopted in this research. Section 4.3 presents a detailed illustration of the qualitative phase and Section 4.4 delineates the quantitative phase in terms of data collection, and data analysis, followed by data integration in Section 4.5. Section 4.6 outlines ethical considerations for the research process while Section 4.7 responds to the important issue associated with researcher subjectivity through Bourdieu's participant objectivation. Section 4.8 provides a brief summary of this chapter.

The research methodology sets out to investigate the overarching research question "In what ways and for what reasons do Chinese international HDR students in Australia engage in the resilience process?" In this study, the overall research question requires two phases of data collection and analysis, namely qualitative and quantitative. It should be acknowledged that this study focuses on participants' engagement in the resilience process, hence while reasons and forms of disengagement in the resilience process are research-worthy problems, they fall beyond the scope of this study.

4.1 THINKING THROUGH THE OBJECTIVE AND THE SUBJECTIVE

Bourdieu's ontology assumes the existence of a social world understood as a multidimensional space composed of independent but interconnected "fields", where agents compete for favourable social positions objectively defined by "capital" at their

disposal and engage in doing, thinking, and being subjectively structured by their "habitus" (Bourdieu & Wacquant, 1992).

At the heart of Bourdieu's relationalism is the idea that "the stuff of social reality ... lies in relations" (Bourdieu & Wacquant, 1992, p. 15). These relations exist under two major forms:

> first, reified as sets of objective positions that persons occupy (institutions or "fields") and which externally constrain perception and action; and, second, deposited inside individual bodies in the form of mental schemata of perception and appreciation (whose layered articulation compose the "habitus") through which we internally experience and actively construct the lived world. (Wacquant, 2013, p. 275)

Wacquant (2013) adds, a thoroughgoing relationalism can overcome the opposition between two antithetical and equally truncating stances, objectivism and subjectivism. According to Bourdieu, subjectivism focuses too much on individual experience and perceptions of the social world while overlooking the power of structures within the social world; whereas objectivism rejects taking account of individual capacity but relegates and shackles individuals to objective relations of social structure (Mu, 2016). His relational perspective argues that neither objectivism nor subjectivism is sufficient to be an adequate intellectual orientation (Bourdieu, 1991). His epistemology and methods attempt to "escape from the ritual either/or choice between objectivism and subjectivism", combining both in a 'theory of practice' (Bourdieu, 1977, p. 4). Bourdieu's theoretical-methodological tools transcend "meaningless oppositions" (1991, p. 628) between ontological and epistemological binaries. Indeed, the famed sociologist himself was rather reluctant to "apply a label" (Bourdieu, 1990a, p. 123) to his work; if he had to characterise his thinking with a few words, he "would talk of constructivist structuralism or of structuralist constructivism" (1990a, p. 123).

In this vein, Bourdieu advocates the combination of objectivist and subjectivist perspectives in empirical research. As a resolutely empirical researcher, Bourdieu (1985) wrestles with the idea of the necessity of aligning onto-epistemologies with research questions, working creatively and productively across the quantitative/qualitative divide (Gale & Lingard, 2015). He endorses statistical analysis

as a way to objectively manifest the structure of the social space (Bourdieu, 1985), but the objective perspectives need to be supplemented by a subjective understanding from the inside (Fries, 2009). The subjective perspective enables the researcher to understand the mechanism of how social agents are impacted by the structure and their reactivity.

The current study investigated the resilience process of Chinese international HDR students in Australian universities. As discussed in Chapter 3, resilience is also a social practice whereby social agents, in this case, Chinese international HDR students, utilise their actual or potential capitals to (re)construct their habitus in order to positively respond to challenges or adversities when entering into a new field. It is contented that to comprehend the resilience process, either a subjective or an objective approach by itself could only reveal a biased truth. However, a relational approach could provide researchers with possibilities in not only elucidating the structures and principles that underpin subjective experience but also in seeking to grasp the comprehension of lived experiences and dispositions.

Following Bourdieu's relationalism, this study adopts a mixed-methods research design to understand the social practice at stake, that is, the resilience process emerging from the inner world of the research population and responding to the outside worlds. Put simply, the study aims to demystify the matrix of dialectic relations between structures, positions, and dispositions, and reveal how they take effect in the resilience process of international Chinese HDR students in Australian universities.

4.2 RESEARCH DESIGN: MIXED METHODS

The term "Mixed Methods" refers to a research methodology that employs both qualitative and quantitative methods within a single study or in multiple phases of a study that encompasses philosophical assumptions, research methods of data collection and analysis, and the interpretations of results (Creswell, 2018; Johnson & Onwuegbuzie, 2004; Leech & Onwuegbuzie, 2009; Teddlie & Tashakkori, 2009). In broad terms, mixed methods research involves an approach to knowledge that seeks to consider multiple viewpoints, perspectives, positions, and standpoints informed by qualitative and quantitative research in order to gain a better understanding of the research problem (Creswell, 1999; Tashakkori & Teddlie, 2003). The basic premise of mixed methods research is that the combination of qualitative and quantitative

methods broadens and deepens understanding of the research phenomenon more than either method alone does (Creswell & Plano Clark, 2018; Johnson et al., 2007). Mixed methods research design therefore is regarded as the third research paradigm in educational research (Johnson & Onwuegbuzie, 2004; Johnson et al., 2007).

Purposes and Rationales for Using Mixed Methods

Mixed methods research has been heralded as a solution to the long-running, circular, and remarkably ineffective debates over the benefits and drawbacks of quantitative versus qualitative research as a result of the paradigm 'wars' (Yvonne, 2010). A plethora of literature has discussed the purposes for conducting mixed methods research. Greene et al. (1989) summarised five broad purposes, namely, triangulation, complementarity, development, initiation, and expansion. More recently, with the development of mixed methods, a more detailed but considerably less parsimonious scheme was devised. Bryman (2006) extended the five rationales to sixteen common rationales, including triangulation or greater validity, offsetting weakness and providing stronger inferences. Furthermore, completeness, process, answering different research questions, explanation, unexpected results, instrument development, sampling, credibility, context, illustration, utility or improving the usefulness of findings, confirming and discovering, diversity of views, and enhancement or building upon quantitative or qualitative findings, are also included in this categorisation. This comprehensive scheme indicates that mixed methods could be used for a variety of reasons and in a wide range of situations.

However, although Bryman's schema is regarded as thorough, the complexity of the extended rationales is too abstract to fully implement. Collins et al. (2006) specified four rationales for using mixed methods that are closely related to the implementation process, including participant enrichment, instrument fidelity, treatment integrity, and significance enhancement. Of these, instrument fidelity is of significance to the present study. It refers to "steps taken by the researcher to maximise the appropriateness and/or utility of the instruments used in the study" so "the investigator could assess the validity of information (i.e. qualitative or quantitative) yielded by the instrument(s) as a means of putting the findings in a more appropriate context " (Collins et al., 2006, p. 76). The instrument fidelity rationale explicates the necessity and appropriateness of using mixed methods when developing and/or validating an instrument. Moreover, a mixed-method design can potentially increase

the richness of the project by integrating both qualitative data and quantitative data. The current study therefore also adopts significance enhancement to implement a mixed methods design for the purpose of investigating Chinese international HDR students' resilience process.

According to Creswell (2018), a mixed methods design is appropriate when there is "a research problem that incorporates the need both to explore and to explain" (p. 208). This study adopts a sociological approach, which has the potential to open up a useful space to explore and explicate the process of resilience. This approach emphasises that resilience is not merely an individual and ecological capacity to manage adversity but also a sociological process which unfolds in contexts of atypical exposure to invisible structural constraints often in the form of hidden rules and inconspicuous principles, that is, symbolic violence. Furthermore, as discussed in Chapter 3, following Bourdieu's relational thinking, resilience can be operated as social practice. Therefore, understanding Chinese international HDR students' engagement in the resilience process requires an approach that can capture data reflecting habitus (re)construction, as well as capital accumulation and conversion through their engagement with resilience in and across fields. As such, this research requires both qualitative questions to explore Chinese international HDR students' resilience process on challenges, protective factors, and desirable outcomes; and quantitative questions to further explore the sociology of resilience by quantifying these factors. Clearly, a mixed methods design is most appropriate for this study.

Typologies of Mixed Methods Research Designs

Aside from considering the rationales for using mixed methods, a strategic selection of a specific mixed methods research design is required to inform the study in expressing the logic and the way of mixing qualitative and quantitative methods. A number of researchers have discussed the typologies of mixed methods research designs (Creswell & Plano Clark, 2018; Greene et al., 1989; Guest, 2012; Leech & Onwuegbuzie, 2009).

As shown in Figure 4.1, the study adopted a sequential exploratory mixed methods design (Creswell, 2018), with a qualitative substudy (Phase 1) followed by a quantitative substudy (Phase 2). The first phase is generally given more weight, and the data are mixed through by connecting the qualitative data analysis and the quantitative data collection. According to Creswell and Plano Clark (2018), there are

numerous advantages to using a sequential exploratory design. First, this design is best suitable to initially explore a phenomenon, and second, the sequential exploratory design is well placed "as the procedure of choice when a researcher needs to develop an instrument because existing instruments are inadequate or not available" (p. 212). This is the case for the current study as the subsequent quantitative phase developed a survey to explore the patterns of resilience process based on the qualitative findings. However, while the sequential exploratory design is simple to implement and straightforward to describe and report, this design requires a substantial amount of time to complete both data collection phases, which can be a barrier in some research situations (Creswell & Plano Clark, 2018).

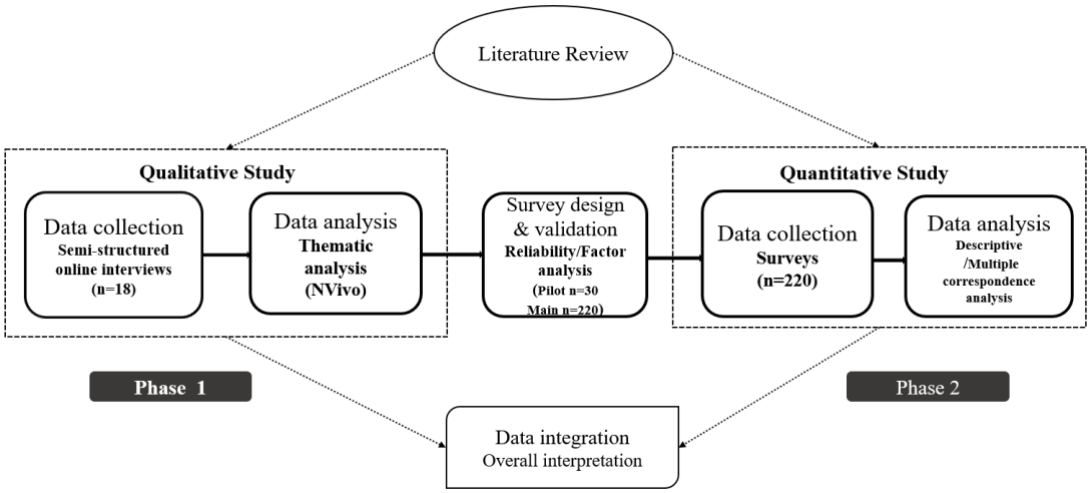
The rationale for using the exploratory instrument design in this study is three-fold. To begin, qualitative approaches are typically preferred when investigating an under-studied phenomenon. In this research, the sociology of resilience is an emergent theory in resilience research. The review of literature in Chapter 2 suggests the resilience process of Chinese international HDR students has not yet been explored from a sociological approach. As a result, the qualitative phase provides an in-depth description and analysis of Chinese international HDR students' resilience process. Second, the exploratory design is particularly well suited for instrument development. Mixed methods design is used for instrument development or "instrument fidelity" (Collins et al., 2006, p. 76). In the exploratory instrument design, the qualitative results from the first phase can be used to inform the development of the instrument. This study requires a scale that can quantify the resilience process of Chinese international HDR students. Third, the follow-up quantitative survey is critical to the study. Although the initial qualitative phase delves into the details of Chinese international HDR students' resilience engagement, it is difficult to produce such results to a large population. In the study, the quantitative phase is not only built on the qualitative findings, but it also helps with analysing and testing the newly developed instrument.

In closing, the exploratory mixed methods design is well suited for the study's research problem. On the one hand, the preliminary qualitative findings aided in the development of the instrument for the follow-up survey; on the other hand, the combination of qualitative and quantitative methods provided a comprehensive picture of the resilience process of Chinese international HDR students in Australia. Figure 4.1 below, sets out the study's sequential exploratory mixed-methods design.

There are three major steps in implementing this sequential exploratory design. First, as shown in Figure 4.1, during Phase 1, semi-structured interviews were used to collect qualitative data, which was then analysed using thematic analysis. Together with the literature review and the theoretical framework, the qualitative findings contributed to the development of the survey instrument (questionnaire) used in the quantitative phase. Second, the quantitative data collection based on the self-designed survey instrument and data analysis were aided by statistical modelling during Phase 2. Finally, the results of the two data sets were merged, cross-analysed, and interpreted. This procedure allows for the exploration of an under-researched area by developing preliminary knowledge about this area of study and testing the knowledge in a larger sample. The ensuing sections covers the details of implementing the sequential exploratory mixed-methods design of this research. Section 4.3 focuses on the qualitative phase, while Section 4.4 delineates the quantitative phase. Each section outlines the participants, site, and researcher positioning as well as some limitations of the methods.

Figure 4.1

The Sequential Exploratory Mixed-Methods Design of the Study



4.3 QUALITATIVE PHASE

Qualitative research seeks to gain a deep, holistic perspective and understanding of the experiences that people have constructed during interactions with their social worlds (Fraenkel et al., 2011). The fundamental tenet of a qualitative study relies on the in-depth meanings embedded in people's experiences. Qualitative researchers aim

to achieve rich descriptions of how people make sense of these experiences, interpret the process of meaning making, and analyse how people interpret their experiences by asking broad and general questions. Hence, the overarching goal of qualitative research is to unearth and interpret the constructed meanings (Merriam, 1998).

This study explored the sociological dynamics within the resilience process of Chinese international HDR students in Australia from the perspectives of these students. As previously discussed in Chapter 2, there is a paucity of empirically supported knowledge in this area, which necessitates a qualitative approach at the first phase of the study. This is due to the fact that qualitative methods allow for the diverse nature of these experiences to be captured by aiming to understand "what people actually do in real-life contexts" (Silverman, 2014, p. 4). Further, qualitative methods are robust for understanding "latent, underlying or nonobvious" issues with strong potential for revealing complexity, as influences of local, site-specific contexts are taken into account (Miles et al., 2014, p. 11). The qualitative phase of the study produced well-grounded data, with rich descriptions and explanations of the resilience process of Chinese international HDR students in Australia from their perspective. By "fruitful explanations" (Miles et al., 2014, p. 4) of this resilience process, the qualitative phase addressed the "how" and the "what" of this process (Maxwell, 2013). This section details the implementation of the qualitative design in terms of its data collection and analysis. The data collection places its emphasis on the research methods, participants, and research site, while the data analysis highlights thematic analysis and articulates the trustworthiness of this study.

4.3.1 Qualitative Data Collection

Research method---one-on-one semi-structured interviews

In qualitative studies, interviews are one of the most important and commonly found sources of evidence (Ryan et al., 2009; Yin, 2014). This study employed individual or one-to-one semi-structured interviews (Kitzinger, 1995; Morgan, 1997) to empower Chinese international HDR students in Australia, allowing them to express their thoughts and share their experiences. A semi-structured interview is defined as "a verbal interchange where the interviewer attempts to elicit information from another person by asking questions" (Longhurst, 2003, p. 143). A semi-structured approach allows for flexibility during the interview process as questions can be adjusted as the interview process unfolds (Kvale, 1994). To be more specific, a semi-structured

interview protocol enables the interviewer to prepare a list of questions on predetermined topics, which can then be revised and adjusted to explore those unanticipated responses or issues that emerge as the interview proceeds through the use of open-ended questioning. It grants researchers to delve deeper into the issues pertinent to their research questions.

In this study, I adopted a sociological approach to investigate the resilience process of Chinese international HDR students in the face of varieties of challenges. Thus, the flexibility of the semi-structured interview allows me to pursue a series of less structured questions and to explore unforeseen dynamics behind the power relations raised spontaneously by the participants during the course of the interview. This facilitates the generation of richer and more textured data from the participants than would be possible with formally structured questions in standardised interviews. As a result, in the qualitative phase, a semi-structure interview design was used.

Individual interviews allow for a data collection procedure that involves asking questions and capturing responses from just one person at a time. It is a useful method for gaining insight into participants' perceptions, understandings, and experiences of a given phenomenon under specific circumstances (Ryan et al., 2009). The qualitative phase seeks to address participants' perspectives and viewpoints on their own resilience process as they progress through their research journey in Australian universities. Thus, in this study, the one-to-one semi-structured interview method was selected to ensure both the flexibility and an in-depth exploration given that it provides opportunities for probing and expanding on responses (Merriam, 2009).

In this study, given the emergent situation caused by the unexpected outbreak of COVID-19, online interview via Zoom was adopted in order to avoid unnecessary social contacts that could jeopardise safety and wellbeing in the emergency situation (Moises Jr, 2020). Furthermore, online interviews are also cost-and time-effective. In comparison to traditional face-to-face interview, remote video-conferencing is sufficient to collect data on real-time, live, and face to face (Moises Jr, 2020). An online interview has been proved to be more cost-efficient and easier to organise. Meanwhile, online participants appeared to be more open and expressive with the support of remote and video-conferencing technologies such as Skype, Microsoft Teams, or Zoom in this study. Participants could also contact me via telephone or online software if they felt the need to add something relevant after the interview. This

provided the opportunities to explore details that had not been covered during interview. As a result, all interviews were conducted through the online conference software, Zoom. After I negotiated the interview time with each participant, a Zoom link was created and sent to them. Before each interview, a reminder was sent to them, and the internet connection was checked prior to each interview.

Interview techniques

The premise of acquiring good quality of data requires the interviewer having considerable interview knowledge and skills (Ryan et al., 2009). In this case, interviewing techniques are required to collect in-depth data in order to discover participants' feelings or their interpretation of the world around them. The primary goal of this research was to explore the resilience process of Chinese international HDR students in Australia, including their exposure to challenges, protective factors, and desirable outcomes. An interview protocol for asking questions and recording key points during the interview was developed (see Appendix C: Interview protocols). The interview protocol, as recommended by Lodico et al. (2010), involves a heading that records date, place, and interviewee code, a brief introduction of the study, the preliminary questions to be asked, general questions and possible probing questions during the interview.

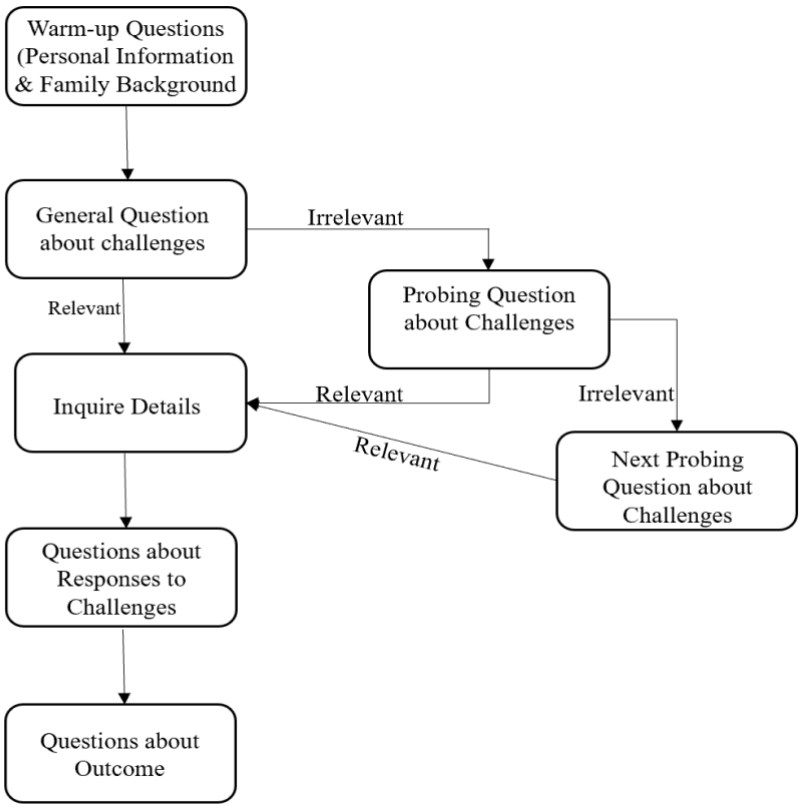
The development of the interview questions listed in the interview protocols were informed by the research questions of the study, theoretical framework, and previous literature on the adaption and wellbeing of international HDR students. Instead of a mechanical translation of the research questions into an interview guide, the development of interview questions requires creativity, sensitivity, and insight (Mu, 2016). Questions were asked from a variety of angles, including questions about experiences, opinions, feelings, values, knowledge, and background or demographic information (Patton, 2015). There are six types of questions that are commonly used during interviews in qualitative research, including experience/behaviour, opinion/belief, feeling, knowledge, sensory, and background/demographic (Merriam, 2009). This study was set to examine how the participants express or verbalise their understandings of their experiences. Informed by previous literature (see Chapter 2), interview questions focused on participants' language usage, social and research networks, academic challenges, acceptance or denial of Australian mainstream academic and cultural practices, and desirable outcomes from their research degree

(see Appendix C: Interview protocols). Theoretically, these interview questions cast insight into how participants navigate their habituses, e.g., linguistic habitus, and capitals, e.g., social capital to 'fit into' the Australian higher education field.

Prior to the interview, the information sheet (see Appendix A) was sent to the participants. The provision of contextual information about the research project was expected to minimise the unequal distribution of research knowledge between the researcher and the researched. It thus could "reduce as much as possible the symbolic violence exerted through the relationship" (Bourdieu, 1999, p. 609). In order to establish rapport and trust with the participants, I commenced each semi-structured interview with providing relevant information. The participants were reminded of the interview purposes and procedures, as well as their confidentiality rights and the freedom to withdraw from the study. I also checked if participants had any questions or concerns about the study before starting the interview questions.

Figure 4.2

The Interview Workflow



Note: Probing process is not shown in the figure for questions about responses to challenges and outcomes.

As the interview questions required the participants to have deep self-reflection and understanding of themselves, general questions were used first to encourage participants to respond freely and openly. It should be noted that the questions were used flexibly and in no particular order. Some probing questions were used to prompt elaboration or clarification of responses. To be more specific, the interview workflow is depicted in Figure 4.2, which outlines the interview procedures. With participant approval, the interviews were audio recorded via Zoom recording functions. The 18 interviews last from 52 mins to approximately 120 mins. Each interview was saved in a digital folder on a password-protected laptop and the files were then downloaded directly to transcription software on the laptop for subsequent transcription.

Language of interview

The language of the interview is another factor to consider. Although the research participants are bilinguals, they were more familiar with their mother tongue and felt more at ease and free to express themselves in Mandarin Chinese. This was also the case for me—a native Mandarin speaking HDR researcher completing the thesis in English. As the aim of this interview design is to get in-depth data, therefore, the language of interviews was set as Mandarin Chinese. Using Mandarin Chinese placed the participants in a comfortable situation to share their experiences, increasing the likelihood of receiving thorough and extensive information.

Rationale for Selection and Recruitment of Research Participants

In the qualitative phase, eighteen participants were selected for data production. They all met the selection criteria, including that all the participants must be Chinese nationals, who were enrolled as HDR students at an Australian university at the time of data collection, or who have recently graduated (within the last 12 months) with a higher research degree from an Australian university, and who were willing to participate in the study. They were not required to reside in Australia at the time of interview. Those who have recently completed their degree and returned to China can retrospectively recall their entire HDR experiences in Australia and could provide distinctive insights of their HDR journey.

To incorporate a comprehensive and longitudinal sense into this study, participants were selected taking into account of their disciplinary backgrounds and stages of study. As shown in Table 4.4, participants were selected based on three major

discipline areas, that is social sciences and humanities (e.g., education, psychology, sociology), natural sciences (e.g., chemistry, biology, mathematics) as well as applied sciences (e.g., business, engineering, medicine) (adapted from "Revised Field of Science and Technology (FOS) Classification in the Frascati Manual"). Participants were also chosen based on various stages of their study that can be classified in terms of the research milestones (TEQSA, 2021), such as confirmation, internal examination, and external examination.

The qualitative phase adopted a snowball sampling technique (Goodman, 1961) to select and recruit participants after receiving ethical approval to conduct the research. The snowball technique commenced with identifying prospective participants via the social networks of myself and my supervisors, with a potential to extend to the networks of some participants to seek other Chinese HDR students. Bourdieu has emphasised the importance of social proximity and familiarity in avoiding "intrusion effect" (Bourdieu, 1999, p. 610), which is caused by naively egocentric or inattentive questions, particularly when interviewing unfamiliar participants. Thus, the use of the snowball technique could also serve such purpose as the snowball started from personal and professional networks where the social distance between myself and the participants is limited. All participants were voluntary, and each individual signed consent (see Appendix B). Table 4.1 summarises the selection of eighteen participants from various disciplines and stages of their studies.

Table 4.1

The Selection and Numbers of Participant for Interview

Discipline	Pre-confirmation	Post-confirmation	Pre-internal examination	Pre-external examination	Post graduation
Social Sciences & Humanities	1	2	1	1	1
Natural Sciences	1	1	1	2	1
Applied Sciences	1	2	1	1	1

4.3.2 Qualitative Data Analysis

The exploratory sequential design requires a significant amount of time to implement, potentially including time spent developing a new instrument. As a result, after the first interview, I began analysing data and identify themes and patterns in order to facilitate subsequent data collection and analysis. Each interview data recorded was transcribed in a Word document.

The transcript plays "a central role in research on spoken discourse, distilling and freezing in time the complex events and aspects of interaction in categories of interest to the researcher" (Edwards & Lampert, 1993, p. 3). However, choices made concerning what types of information to preserve (or to discard), what categories to use, and how to organise and display the information in a written and spatial medium can all have an impact on the impressions the researcher derives from the data (Edwards & Lampert, 1993). When transcribing, Bourdieu indicates that they have never "replaced one word with another or changed the order of the questions or the progression of the interview, and all the cuts have been indicated with ellipses" (Bourdieu, 1999, p. 623). The transcription should reflect the genuine information given by the participants. As a result, the transcription process in this study adhered to principles such as retaining the information required for the research study and remaining as close as possible to the interaction in the interview. First, the audio recorded interview was transcribed verbatim with the facilitation of a transcription tool—iflyrec (https://www.iflyrec.com/). Some obvious linguistic errors were corrected to make sure the transcribed talk remained readable and consistent. Second, once transcribed, the semi-structured interview transcripts were sent to each participant so that they could read the transcript for accuracy, make any alterations, add or remove any details as they deem appropriate. Following the member checking and the return of the checked transcription, the final transcripts allowed me to focus efficiently on the fleeting events of an interaction with a minimum of irrelevant and distracting details. The interview transcripts were then analysed using NVivo, a qualitative data analysis software program.

The interview transcripts were coded guided by Braun and Clarke's thematic analysis (2006, 2019, 2020) for "identifying, analysing, and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 6). It is effective in qualitative data analysis for not only organising the data, but also facilitating detailed and in-depth

interpretation of the data. Braun and Clarke (2006) outlines six phases for implementing thematic analysis: first, familiarising with the data through "repeated reading"; second, generating initial codes by identifying basic elements of the data; third, searching for themes by combining codes; fourth, reviewing the themes to combine or segment themes; fifth, providing a name and operational definition for each theme; sixth, producing a report of the findings. This study adopted the six phases in approaching the data in order to have a systematic and efficient coding from the interview transcripts. Furthermore, Braun et al. (2019) clarified two approaches to identify themes, inductive (data-driven) and deductive (theory-driven). In this study, the preliminary analysis was inductive, with codes and themes emerging from the data associated with three key elements of resilience process, including challenges, empowering factors, and desirable outcomes. After the key codes emerged from the data, themes were identified by the researcher. They were further analysed following Bourdieu's sociological notions and the three-dimension resilience framework to enable a theory-laden deductive approach.

Following this process, the key interview accounts were translated into English for the purposes of thesis supervision, reporting, and writing. To ensure conceptual equivalence between the original (i.e., Chinese) and the translation (i.e., English), I first translated interviews conducted in Mandarin Chinese into English by virtue of my capacity in Chinese-English translation as English major and over 18-year English learning experience. Then I invited a volunteering Chinese-speaking PhD who were studying in an Australian university with a strong command of English proficiency to check and verify the accuracy of all my translated documents. Furthermore, my supervisory team, with a strong bilingual capacity and in-depth understanding of the educational context, further proofread my reported translated transcripts and asked me to clarify any ambiguity. Following their feedback, I corrected the grammatical mistakes and further enhanced the preciseness and appropriateness of the vocabulary choice. In this way, the accuracy of the translation was ensured after multiple rounds of proofreading and refinement.

Throughout the process of qualitative data production and analysis, trustworthiness was a major consideration. Trustworthiness refers to "the degree of confidence in data, interpretation, and methods used to ensure the quality of a study" (Connelly, 2016, p. 435). A core aspect to ensure the trustworthiness of the qualitative

data is credibility (Lincoln & Guba, 1985). Credibility refers to the truthfulness of the data, which can be enhanced by extended engagement with participants, member checking and so on (Lincoln & Guba, 1985).

As for the qualitative data collection, the credibility of the interview questions was ensured by frequent debriefing sessions with my supervisors. Their rich experience in designing interview questions as well as supervising Chinese international HDR students has widened my vision and assisted me in not only developing ideas and interpretations but also recognising my own biases and preferences. For example, my supervisors suggested adding more relevant interview questions such as "If appropriate, please also refer to opportunities and experiences for co-authoring journal articles and book chapters.". After the completion of the interview question in English, I translated them into Chinese. To ensure the consistency between the English version and Chinese version, my principal supervisor, whose first language is Chinese, oversaw the whole translation process to make sure the Chinese version accurately reflect the true meaning of the English version. Two Chinese-speaking colleagues also provided useful comments on the wording of Chinese version.

Another way to improve the credibility of the interview questions was member checking (Creswell & Plano Clark, 2018). Two pilot interviews with two Chinese international HDR students were conducted to check whether the research questions can be understood by the potential participants. According to the feedback from the interviewees, some interview questions were further refined or added to avoid any confusion or intrusion to the potential participants. For example, when asked about the parents' occupations, one interviewee felt uneasy and was unwilling to share this. As a result, I changed the interview questions into their family attitudes towards and support to their study in Australia. In this way, participants were given more freedom to talk about their family without feelings of being offended.

The trustworthiness of the qualitative data findings was also well considered. During the data analysis, the supervisory team oversaw the whole process including translation, coding, integrating as well as evidence reporting. These techniques abovementioned all contribute to the protocol of securing the trustworthiness of the qualitative findings of this study, providing in-depth and rich depictions of the participants' resilience process in Australian universities.

4.4 QUANTITATIVE PHASE

Quantitative research is the process of gathering numerical data and generalising results to larger populations in order to explain a specific phenomenon (Creswell, 2018). In this study, considering that the initial qualitative phase can provide some preliminary details, the subsequent quantitative phase could further explore the qualitative findings by utilising a statistical analysis of trends, attitudes, or opinions of the research sample. The sections that follow outline the quantitative research design in terms of research methods, participants, and data analysis methods.

4.4.1 Quantitative Data Collection

Research method---Survey

A survey is defined as "a systematic method for gathering information from (a sample of) entities for the purposes of constructing quantitative descriptors of the attributes of the larger population of which the entities are members" (Groves et al., 2011, p. 2). In quantitative research, surveys have become a commonplace research tool. In a survey design, a questionnaire is a form of instrument that participants complete and return to the researcher (Creswell, 2012). This study adopted an online survey approach for the following reasons. First, the advancement of information technology, as well as widespread use and access to the internet, can ensure that the online survey is accessible to a large sample. This is particularly true in the current study working with Chinese international HDR students in Australia, who use the Internet in their daily work and life contexts and have the necessary digital literacy to complete the survey in an online environment. Second, an online survey is a non-intrusive method of gathering feedback because respondents provide input in a stress-free and convenient environment. Due on the above advantages, an online survey was implemented in the quantitative phase.

Given the lack of well-developed questionnaire instrument on the resilience process of Chinese international HDR students from Australian universities, a new questionnaire was developed informed by the qualitative findings (see Chapter 5 and Chapter 6) and previous literature review (see Chapter 2). Bourdieu's sociological tools, such as habitus, capital, and field were also taken into account as the theoretical underpinnings when designing questionnaire items. The detailed development of the

questionnaire was described in Chapter 7. The questionnaires including both the English and Chinese version were attached in Appendix D.

Survey Respondents

The selection criteria of survey respondents remained consistent with those in the qualitative phase. Participants all met the following criteria: a) they should be Chinese nationals; b) they were studying for or have recently graduated (within 12 months) with a higher research degree from an Australian university at the time of data collection; c) they were willing to participate in the study. For the pilot study, 30 respondents from universities in Queensland were invited to complete the online survey. They were approached via my social networks. An online survey link created by Questionnaire Star was sent to them. For the main study, the online survey link was distributed to the potential respondents via email or a Chinese social app WeChat, an equivalent version to Facebook or WhatsApp, where there are numerous Chinese postgraduate groups. After two-week snowball-sampling distribution, 220 respondents who met the criteria completed the questionnaire. The demographic information of all respondents was summarised in Chapter 7.

Validity and Reliability

Validity in quantitative research refers to how well an instrument measures what it is supposed to measure (Creswell & Plano Clark, 2018). Content validity refers to "the extent to which an instrument adequately samples the research domain of interest when attempting to measure phenomena" (Wynd et al., 2003, p. 509). In this study, the content validity of the questionnaire was ensured by working with my supervisory team who are highly qualified individuals with knowledge and experience in survey design as well as working with Chinese international HDR students. Based on their feedback, any unclear or confusing survey items were removed from the survey questionnaire; and necessary survey items were added to better address the research questions. Face validity is defined as the degree to which the content of a test and its items are relevant to the context in which the test is being administered (Holden, 2010, p. 637). The face validity of the survey was achieved with four Chinese international PhD students from Australian universities who provided their comments regarding the survey items. The detailed information was presented in Chapter 7.

After the completion of the questionnaire, a pilot study was conducted to test its internal consistency reliability. Thirty participants were invited by convenience sampling to complete the survey. These participants were also asked to provide feedback on whether the questionnaire items make sense. Furthermore, the survey data collected through pilot study was analysed by SPSS software to test the internal consistency reliability (Cronbach's alpha test) of the newly designed instrument. Revisions to the survey was made accordingly. Then the instrument was further validated through confirmative factor analysis with 220 respondents. Both the Cronbach's reliability test and confirmative factor analysis affirmed the robustness of the self-designed questionnaire (see detailed validity and reliability test results in Chapter 7).

4.4.2 Quantitative Data Analysis

The data collected through the online survey was imported to SPSS statistical software 28.0. According to Groves et al. (2011), the quantitative analysis includes "descriptive statistics" that illustrates the size and distributions of various attributes in a sample such as the quantity, means, percentages; and "analytic statistics" which measures how two or more variables are related. The major statistic models applied to the data analysis in the main study were descriptive statistics, confirmatory factor analysis (CFA), and multiple correspondence analysis (MCA). These analytical approaches were effective in discovering the patterns of the sociological resilience process of Chinese international HDR students as well as probing the possible relations between sociology of resilience and their socio-educational characteristics.

Descriptive analysis was first used to sketch the whole picture of Chinese international HDR participants in the current study. Descriptive statistics such as frequency and percentage were calculated to profile the demographic features of research participants such as gender, discipline, university, stage, scholarship sources, previous research and overseas learning experiences, supervisors' backgrounds, family backgrounds (see Chapter 7).

Factor analysis is a statistical technique used to investigate how underlying constructs influence the responses on a number of measured variables (Osborne et al., 2008). Confirmatory factor analysis (CFA) tests whether a specified set of constructs is influencing responses in a predicted way (Kline, 2014; Thompson, 2004). In this study, confirmatory factor analysis was used to examine the underlying constructs

generated in the questionnaire, namely, symbolic violence and resilience to symbolic violence (see detailed analysis in Chapter 7).

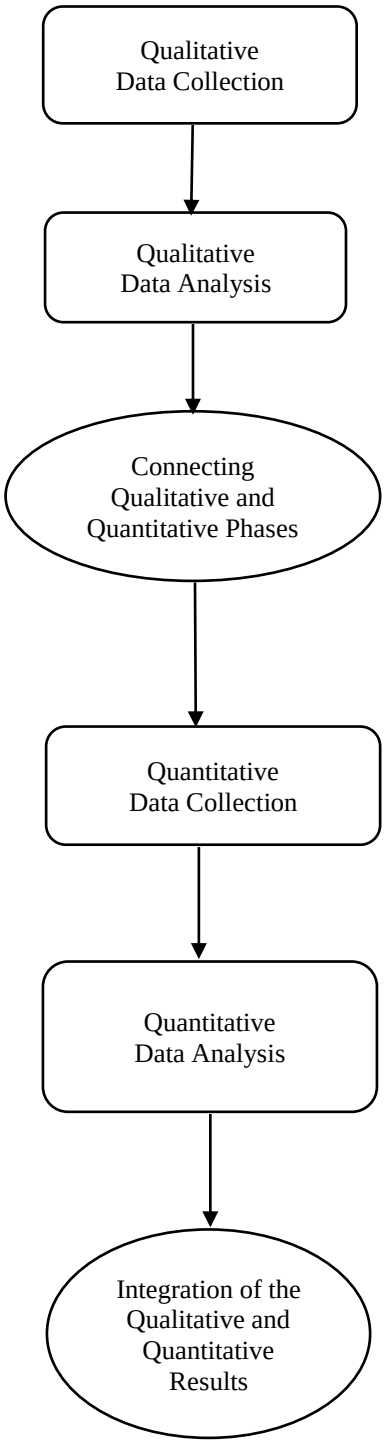
Multiple correspondence analysis (MCA) is an extension of correspondence analysis (CA) which allows one to analyse the patterns of relationships of several categorical variables (Hjellbrekke, 2018; Le Roux & Rouanet, 2010). Most quantitative analyses conducted by Bourdieu and his colleagues systematically made use of MCA which enjoys the flexibility to interpret the data and further develops theory (Hjellbrekke, 2018; Le Roux & Rouanet, 2010; Lebaron, 2009). In this study, Chinese HDR students' socio-educational characteristics such as geographical origins, previous education experiences, reasons for studying abroad, and types of admission or scholarships were collected. Academic experiences in Australian universities were sought from Chinese HDR students across different disciplines and stages, including experiences drawn from interactions with peers and supervisors, challenges associated using academic English, supervisor authority, and neoliberalised HDR training, as well as strategies of coping with these challenges. All quantitative variables were transformed into categorical variables. In conjunction with the categorised questionnaire data, MCA aided in the discovery of the patterns and dynamics embedded in the sociological resilience process of Chinese international HDR students in Australia. This type of analysis facilitated understanding the "logic of practice" (Bourdieu, 1977, 1990b) in the sociological resilience process. The detailed data analysis and results were illustrated in Chapter 7.

4.5 DATA INTEGRATION

According to Creswell and Plano Clark (2018), the intent of the integration in an exploratory sequential design is to "build from one database to another or generate a quantitative feature from a qualitative exploration" (Creswell & Plano Clark, 2018, p. 112). As discussed in Section 4.2, the research findings from the initial qualitative exploration were used to develop the instrument for the subsequent quantitative phase, which further testified or generalised, at least to a certain extent, the findings from the qualitative phase. The integrative data analysis procedure in the exploratory sequential design is composed of qualitative data analysis, an interim phase of designing a quantitative feature informed by the qualitative results, and subsequent quantitative data analysis (Creswell & Plano Clark, 2018).

Figure 4.3

Visual Model for Mixed-Methods Sequential Exploratory Design Procedures



Phase	Procedure	Product
Qualitative Data Collection	• Individual semi-structured interviews with 18 participants	• Text data (interview transcripts)
Qualitative Data Analysis	• Transcription (NVivo) • Coding and thematic analysis	• Codes and themes • Similar and different themes and categories
Connecting Qualitative and Quantitative Phases	• Developing survey questionnaire • Pilot study with 30 sampled participants	• Questionnaire
Quantitative Data Collection	• Online-survey through Questionnaire Survey tool (n=220)	• Quantifiable data
Quantitative Data Analysis	• Descriptive analysis • Factor analysis • Multiple correspondence analysis	• patterns and mechanisms of resilience
Integration of the Qualitative and Quantitative Results	• Interpretation and explanation of the qualitative and quantitative results	• Consistencies and inconsistencies across the two datasets

The data integration for the current research was conducted as follows (see Figure 4.3 above): first, to analyse the qualitative data by thematic analysis for themes

and codes to describe participants' experiences of resilience. Resilience theory and Bourdieu's relational thinking tools provided a theoretical framework for understanding the phenomenon of interest; second, to link the themes and codes specifically to establish elements of the quantitative feature and design items for the online survey, e.g., the resilience process of Chinese international HDR students questionnaire; third, to conduct a pilot test to refine the questionnaire; fourth, to test the quantitative feature with a large sample of participants; fifth, to interpret how the quantitative results relate to the qualitative results. The integration of both qualitative data and quantitative data could comprehensively facilitate the understanding of the overarching research question, that is, "In what ways and for what reasons do Chinese international HDR students engage in the resilience process in Australia?"

4.6 ETHICAL APPROACH OF THIS STUDY

All research involving human participants conducted in Australia is governed by Human Research Ethics Committees (HRECs) according to guidelines encompassed in the National Statement on Ethical Conduct in Human Research (National Statement) (Council, 2018) Such guidelines aim to protect the rights and wellbeing of the participants and bear the researcher and institutions with specific responsibilities, including research merit and integrity, justice, beneficence, and respect. Ethical clearances safeguard against inappropriate research demeanours including deception, discrimination, disturbance, and privacy invasion. This study worked and interacted with Chinese international HDR students as human participants. In this way, the ethical practice was highly valued and reflected throughout the whole process of this research including research design, data collection, analysis, interpretation, and report. After confirmation, an application for ethical review was submitted to the low-risk review team in the Faculty of Education, which was reviewed by the Faculty Research Ethics Advisors. Ethical clearance was approved by the Queensland University of Technology Human Research Ethics Committee (UHREC) on 5 May 2020 (QUT ethics approval number 2000000248). The data collection was conducted after the approval from the university's office of research ethics and integrity. The ethics progress reports were sent to the Human Ethics Advisory Team annually.

First, following the grant of Ethical Clearance, the project was conducted under the guidelines of the University Human Research Ethics Committee (UHREC), which has been established to review and monitor the conduct of human research by QUT

staff and/or students in compliance with the requirements of the National Statement on Ethical Conduct in Human Research (Health & Council, 2018) and the QUT Code for responsible conduct of research. The research instruments and all other research documentation were reviewed by the UHREC to avoid any violations to the participants' rights. The potential risks lied in some uncomfortable emotions inadvertently triggered by reflecting on one's own experience about challenges. While I carefully managed these potential risks so as to protect the participants' wellbeing in this study.

Second, a statement of relevant information about this study (see Appendix A) and a letter of consent (see Appendix B) was sent to each participant. Prior to the interviews and surveys, a statement of ethical concerns was presented to each of the participants, and their consent to voluntary participation were obtained. Each of them was informed that they had the option to take or refuse the interview or survey, as well as reject to answer any questions or withdraw from the interview or survey at any time. The consent letter stated that their responses were kept anonymous, and no response would be linked to any of the respondents. They were also assured that when the research was completed, any documents that potentially disclose their true identity would be destroyed.

Third, confidentiality and safety of the data collected through interviews and surveys were safeguarded. For confidentiality concerns, I was the only one who had access to the raw data. All E-files were kept on a QUT password-protected network drive, while USB drives were only used for data transfer. After the transcription was completed, all the interview audio-files were deleted. Pseudonyms were used in the transcripts or any other documents, such as thesis, articles, to protect the identity of participants. No individuals could be recognised from the report.

4.7 PARTICIPANT OBJECTIVATION

Another difficulty in this research lies in the researcher's objectivity and subjectivity. In this project, I worked as a researcher who was responsible for the whole project. Meanwhile, similar to the participants in this study, I have been immersed into the practice of resilience as a Chinese international HDR student in Australia. Although I may claim that I adopt the stance of the impartial investigator, however, my dual identity could have been a source of subjectivity and bias. To reconcile the

contradictories, Bourdieu crafts the tool of "participant objectivation" (2003a; 1992). Participant objectivation undertakes not to objectify "the 'lived experience' of the knowing subject" but aims at "objectivising the subjective relation to the object" (Bourdieu, 2003a, p. 282). This implies that participant objectivation does not mean that researchers must put nothing of themselves into their work. Quite the contrary, according to Bourdieu, what needs to be objectivised is

> … the social world that has made both the anthropologist and the conscious or unconscious anthropology that she (or he) engages in her anthropological practice—not only her social origins, her position and trajectory in social space, her social and religious memberships and beliefs, gender, age, nationality, etc., but also, and most importantly, her particular position within the microcosm of anthropologists. (2003a, p. 283)

As such, participant objectivation essentially requires "a break with the deepest and most unconscious adherences and adhesions" (Bourdieu & Wacquant, 1992), those that drive the objectifier to make the most decisive scientific choices of topic, method, and theory. Participant objectivation requires researchers to re-examine the inducement behind their research or the possibility of the effects or limits caused by the inducement. In short, it is a search for bias behind the research. Informed by Bourdieu's reflexive sociology, Mu and Pang (2019, p. 147) perform participant objectivation through field-analysing their sociological selves. In this vein, they respond to three types of bias that Bourdieu has revealed. These include (1) "the social origins and coordinates (class, gender, ethnicity, etc.) of the individual researcher" (Bourdieu & Wacquant, 1992, p. 39); (2) "the position that the analyst occupies, not in the broader social structure, but in the microcosm of the academic field" (Bourdieu & Wacquant, 1992, p. 39); and (3) "the intellectualist bias" (Bourdieu & Wacquant, 1992, p. 39) that fails to respond to a systemic critique of "the presuppositions inscribed in the fact of thinking the world, of retiring from the world and from action in the world in order to think that action" (Bourdieu, 1990c, p. 382).

It is no doubt revealing bias is the most difficult exercise of all as the bias can only be disclosed by the strong reflexivity operated by the researcher him/herself. Far from encouraging narcissism and solipsism, the reflexivity fostered by participant objectivation "invites intellectuals to recognise and to work to neutralise the specific

determinisms to which their innermost thoughts are subjected and it informs a conception of the craft of research designed to strengthen its epistemological moorings" (Bourdieu & Wacquant, 1992, p. 46). Accordingly, researcher reflexivity has the potential to produces real cognitive effects as it enables the social analyst to grasp and master the pre-reflexive social and academic experiences of the social world that the researcher tends to project unconsciously onto ordinary social agents (Bourdieu, 2003a). Bourdieu contends that this is the only way to partially escape from the social, economic, political, and philosophical determinisms which are necessarily at work in any knowledge field (Grenfell, 2010). This research followed the strategy of Mu and Pang (2021) to perform reflexivity:

> First, introspections of the gendered, racialised, classed, and politicised academic habitus bring to light the hidden and taken-for-granted scholastic interest. Second, strategies for mobilising scientific capital for epistemic justice shift the power relations between researchers and participants. Third, reflexive foray into the academic field creates opportunities to reveal the complicity of power and knowledge, redefine legitimate scholarship, reshape intergenerational indoctrination, and rethink the pathways to research innovation and development. (pp. 8-9)

To conclude, as a researcher consuming and producing knowledge simultaneously in the research context, I performed reflexivity not only by considering my embodied practice in the research such as the specific interests associated with the resilience process of Chinese international HDR students. Moreover, I considered these practices in conjunction with the complex social arena in which the question for research is centred, such as my academic habitus within the current intellectual and academic field. I resorted to Bourdieu's participant objectivation to grapple with my dispositions and positions to the research, my personal historical disposition related to Chinese international HDR participants in this study. Here follows a reflexive narrative of my PhD journey and my research.

As a matter of fact, pursuing a PhD degree in Australia diverted me from my original life path and trajectories. I was not born in an affluent and well-educated family. My parents just got their diploma from middle school despite the fact that my father dropped out of high school due to my grandparents' poor financial situation at

that time. Since my early childhood, my father would always share his stories of being an outstanding student during his school time—not only did he earn good scores on each exam, but he was also good at sport, such as basketball. I was never bored by his endless sharing and felt so proud of him. He would always share his learning skills with me, such as memorisation. I still remember the message he conveyed to me—"Don't read aloud repeatedly, shaking your head from left to right [摇头晃脑]. You are just pretending to memorise". Since then, I suddenly found the knack to quick memorisation, that is, list and understand the real gist of the text before recitation. As a result, learning turned to be easier for me and I gradually outperformed my peers in exam grades. My teachers were also taken aback by my spurt of progress and designated me as class representative of subject Chinese in my class. At school, I turned from 'invisible' to 'visible', from 'ordinary' to 'outstanding'. Learning became a pleasure for me, and I enjoyed the sense of being valued and cherished through my excellent learning performance. Everyone praised me as "Dongshi" (Xu, 2021), that is, understanding my parents' hardships and sacrifices for supporting the whole family and taking initiative in charge of my own study and caring for my family; but my parents never bragged about my learning achievement in front of our neighbours and relatives. They constantly reminded me of 'Pride goes before a fall [骄兵必败]'. Moreover, they never criticised me but provided a lot of comfort and encouraged me to be strong, persistent, and diligent when I felt bad about my exam failures. They are not well-educated, but they teach me by precept and example [言传身教] and grant me sufficient freedom to prove myself.

In my interviews with the participants, many participants mentioned how their parents stimulated their research interest and played a significant role in their pursuing research journey in Australia. I knew there was no such learning achievement without parents' guidance, but until I read Bourdieu's work, I reflected that such 'teach by precept and example' constituted our primary habitus, which can trigger our unconscious propensity, predisposition and inclinations to actions and practices (Bourdieu & Passeron, 1990). When our primary habitus matched with the school field, we feel 'fish in the water'. This explicates the question that bewilders me all the time—"I am not a born genius, and my family are not wealthy, why am I the one able to complete my bachelor and Master from a prestigious Chinese university and embark on my PhD journey in Australia?". Before I was endowed with Bourdieu's sociological

thinking tools, I used to believe that I was blessed and fortuitous to make all learning achievements and attributed my academic success to my own diligence and determination, as I was told by my teachers. This actually reflects the teaching pedagogy is generally dominated by psychology—overemphasis on individual effort. Now I realise my parents have brought me up as an individual with favoured habitus that smoothly aligns with the school field. As a result, almost all my schoolteachers had showed their preference for me with extra care and support. My classmates admired my good grades and were very friendly to me. All these privileges secured my 'advantage' in entering into the Australian HE field.

However, the PhD journey in the Australian HE field is not as smooth as it appears to be. On the one side, I felt proud of myself and enjoy the feeling of being praised as the first to pursue a PhD degree abroad in my whole family. Most of them perceived that I am successful. A sense of superiority thus emerged when I talked to my parents, my friends, and my relatives. While on the other side, I felt inferior most of the time. I was intimidated to talk to native speakers and felt shamed and blushing when they cannot understand me or pointed out my pronunciation mistakes; I felt unease and embarrassed when attending a Bourdieu reading group or seminars where I could not understand the discussion; I felt nervous and clumsy when I had meetings with my supervisors; I felt nervous and timid when I interviewed participants from top and prestigious universities … I was not as competent as I was before. I was immersed in a sense like 'I didn't belong here'. My supervisors Guanglun Michael Mu and Deborah Henderson then endowed me with invaluable theoretical tools—Bourdieu's notion of symbolic violence. The 'bodily emotion' (Bourdieu, 1995, p. 169) or sense of inferiority was due to 'misrecognition' (Bourdieu & Wacquant, 1992, p. 168) to symbolic power or symbolic capital, such as linguistic capital possessed by native speakers, pedagogic authority of supervisors and so on. As a result, I put myself into a subordinated position, consciously or unconsciously. Such perception subverted my original worldview and outlook constructed on psychological beliefs. But meanwhile, I realised that the participants in my research project potentially had similar experiences: they used to be the 'winners' in their previous learning and research journey who were endowed with power and capital—either symbolic, cultural, social, or perhaps economic—which offered them a favourable position. Nevertheless, their privileges may diminish after they ventured into a new field with different 'game rules'

and lost their privileged position. How would they manage such discrepancies? This turned into my research interest—their resilience to symbolic violence. I also shifted my analytical lens from the psychological perspective that most of the literature undertakes to sociological perspective. From then on, I endowed myself with Bourdieu's sociological thinking tools and constantly question myself so as to be reflexive about my positions and dispositions and avoid taken-for-grandness with respect to my research and PhD journey.

4.8 CHAPTER SUMMARY

This chapter presents the methodological framework as well as the research design for the study. Bourdieu's relationalism underpins the employment of a mixed-methods research design in this study. The sequential exploratory design with the initial qualitative phase and the subsequent quantitative phase together fully addressed the overall research question. The detailed information on data collection, data analysis, site, population, and sample selection are illustrated along the qualitative and quantitative phases respectively. Data analysis and strategies that guarantee reliability and validity across the qualitative and quantitative portion are discussed in detail. To ensure the quality of the research study, at the end of the chapter, ethical considerations, and participant objectivation are expounded. Taken together, the design and implementation of the study assisted in ensuring that the results of data analysis are credible and informative. Importantly, Bourdieu's participant objectivation function as a tool to help me grapple with my dispositions and positions in relation to the production of knowledge about Chinese international HDR students' resilience across social spaces of Australia and China.

Chapter 5: Challenges along the HDR Journey

This chapter presents the analysis of semi-structured interviews with 18 Chinese international HDR students from four Australian universities. As suggested in Section 3.1, in Ungar's (2019) three-dimension resilience model utilised for this study, 'challenge' is underscored as the first dimension. Given that any resilience research could not proceed without an appropriate account of what such 'challenge' might entail, the chapter therefore analyses the various challenges participants experienced during their HDR journey. Accordingly, Chapter 5 addresses RQ1: What challenges do Chinese international HDR students at Australian universities face?

As informed by Bourdieu's field theory (see Chapter 3), when the participants in this study migrated from their previous field (Chinese universities) to a new field (Australian universities), they encountered a range of challenges prompted by the differences between their habitus and capital acquired in the previous field, and the logic of practice within the new field. Hence, to explicate the nature of the potential and the actual challenges, the chapter is organised into three sections. Section 5.1 presents a synopsis of the 18 interview participants in this study with a specific focus on their research background and experience; namely, their dispositions underpinned by habitus and their capital portfolio prior to their entrance to the Australian higher education field. Section 5.2 details the analysis and findings in relation to the challenges faced by participants in this study, which are classified into three categories: habitus-field mismatch, capital deficiencies, and symbolic violence. In the final part of the chapter, Section 5.3 briefly highlights the challenges reported by participants to set the scene for their engagement in the resilience process, which is analysed in depth in Chapter 6.

5.1 THE SYNOPSIS OF THE INTERVIEW PARTICIPANTS

This section provides an overall summary of the backgrounds of the interview participants in this study. As discussed in Chapter 4, the participants constitute a heterogenous group in terms of their previous research experiences, disciplinary

backgrounds, stages of study, as well as demographic features such as age and gender. Section 5.1.1 enumerates some demographic characteristics of the participants, including their marital status, prior overseas experience, and scholarship. Section 5.1.2 provides a short biography of each participant, regarding their family background, education, and research-related experience. Section 5.1.3 identifies and summarises the similarities and differences among these participants.

5.1.1 Overview of the Interview Participants

At the time of data collection, the 18 interview participants all currently pursued or had been just awarded an HDR degree during the past twelve months from four Australian universities. Amongst them, 16 participants studied for a PhD degree and two participants were enrolled for a Research Master's degree. These students were from diverse disciplinary backgrounds yet evenly distributed across social sciences, natural sciences, and applied sciences with each discipline comprising participants from various stages of study, namely, from pre-confirmation to graduation. Table 5.1 summarises the demographic and educational backgrounds of the 18 participants.

As Table 5.1 displays, participants varied in ages (25-49 years old). Sixteen out of 18 participants were at their late 20s or early 30s, and two were at their late 30s and early 40s. A relatively even gender balance was achieved with eight females and 10 males. Regarding their marital status, four participants were married, and five participants were in a de facto relationship. Of these nine participants, five participants were accompanied by their partners in Australia. Moreover, it was worth noting that two thirds of the participants (n=12) had overseas study or exchange experience prior to their HDR studies in Australia. Eight participants had working experience prior to their overseas study. Of the 16 PhD candidates, 15 participants received scholarships to support their learning and research; and the two participants pursuing a Research Master's degree were both self-funded. In terms of the scholarship sources, two participants were sponsored jointly by the Chinese Scholarship Council (CSC) and by their Australian university. Thirteen participants obtained scholarships from Australian government, namely, the Australian Government Research Training Program (RTP) scholarship, or from their universities, or their supervisors' project funding.

Table 5.1

Demographic Information of the Interview Participants

Discipline	Pseudo	Sex	Age	Faculty	Stage	Degree	Marital Status	Prior Overseas experience	Scholarship	Birthplace (Principal supervisor / Associate supervisor/s)
Applied Sciences	Mo	M	27	Material Engineering	Pre-Confirmation	PhD	No	Yes	Yes (AU)	Australia / Vietnam
	Bei	M	26	Environment Engineering	Post-Confirmation	PhD	No	Yes	Yes (AU)	Both in Australia
	Lin	F	33	Chemical Engineering	Post-Confirmation	PhD	No	Yes	Yes (AU)	Both in China
	Chen	M	25	Chemical Engineering	Pre-internal examination	Master	No (Partner)	No	No	Both in China
	Han	M	34	Chemical Engineering	Pre-external examination	PhD	Yes	Yes	Yes (AU)	China / Korea
	Meng	M	32	Chemical Engineering	Post-graduation	PhD	No	Yes	Yes (CN)	China / China / Australia
Natural Sciences	Jia	F	25	Biology	Pre-confirmation	PhD	No (Partner)	Yes	Yes (AU)	Both in America
	Le	F	30	Biology	Post-confirmation	PhD	No	No	Yes (AU)	Both in America
	Fan	M	31	Hydrology	Pre-internal examination	PhD	No	Yes	Yes (AU)	India / Australia
	Yang	M	29	Biology	Pre-external examination	PhD	No (Partner)	Yes	Yes (AU)	Hungary / New Zealand
	Xin	F	30	Biology	Pre-external examination	PhD	No	Yes	Yes (AU)	Hungary / Poland
	Ning	M	25	Information Technology	Post-graduation	Master	No (Partner)	Yes	No	Nepal / China
Social Sciences	Ying	F	38	Education	Pre-confirmation	PhD	Yes	No	Yes (AU)	Australia / India
	Fei	F	25	Accountancy	Post-confirmation	PhD	No	Yes	Yes (AU)	Australia / China
	Huang	M	27	Public Health	Post-confirmation	PhD	No (Partner)	No	Yes (AU)	China / China / Australia
	Su	M	27	Education	Pre-internal examination	PhD	No	No	Yes (CN)	China / Australia
	Tang	F	29	Education	Pre-external examination	PhD	Yes	No	Yes (CN)	Australia / China
	Xi	F	49	Education	Post-graduation	PhD	Yes	Yes	No	Australia / China

In addition, as Figure 5.1 shows, most (n=16) participants had two supervisors and only two participants had three. Participants noted that their supervisors came from diverse cultural backgrounds. In sum, the participants recruited for interview manifest diversity in terms of their demographic information, which secures the potential to incorporate more perspectives and insights into their resilience process in Australian universities.

5.1.2 Brief Biographies of the Interview Participants

Mo, aged 27 years, was born into an affluent family in a northern coastal city in China. His father worked in a large state-owned corporation included in Fortune's Global 500 list[7]. Mo's mother taught in a primary school and encouraged him to develop an interest in research at an early age, and both parents were very supportive of his learning and efforts to gain a higher education degree. Subsequently, Mo completed his undergraduate degree from a "Project 211[8]" university in China, majoring in Chemical machinery. Then with his family's financial support, Mo self-funded his Master's degree in one of the Go8[9] Australian universities where he shifted to medical material research. Mo received an RTP scholarship and had just commenced his PhD journey in another prestigious Australian university, however the impact of COVID-19 delayed his experimental research.

Bei was a 26-year-old PhD candidate in the environmental research field. His parents both worked in the government sector and believed that a PhD degree could help him seek better employment opportunities at a time of limited domestic employment. Following the College Entrance Examination, and securing the admission score required

[7] The Fortune Global 500 is the annual ranking of the largest 500 corporations worldwide as measured by total revenue. See https://fortune.com/global500/.

[8] Project 211 university was the Chinese government's endeavour aimed at strengthening about 100 institutions of higher education and key disciplinary areas as a national priority for the 21st century. There were 112 universities included in Project 211. The Project has developed into the current 'Double First Class University' Project.

[9] The Group of Eight (Go8) comprises Australia's leading research-intensive universities, including the University of Adelaide, the Australian National University, the University of Melbourne, Monash University, UNSW Sydney, the University of Queensland, the University of Sydney and the University of Western Australia.

for key universities[10] , Bei was admitted to a joint Chinese-foreign university where he was able to participate in an exchange program in a New Zealand university. The experience of participating in the exchange program stimulated Bei's desire to pursue his Master's degree abroad and he was able to enrol in a Go8 Australian university with financial support from his parents. When he was about to complete his Master's degree, Bei met his current principal supervisor who invited him to join his research team and offered Bei a scholarship from his research funding. Bei accepted this offer and at the time of interview was one year and eleven months into his research degree.

Lin was 33 years old at the time of the interview from the faculty of chemical engineering. Lin's parents ran a business and accumulated a considerable amount of economic capital. Following her graduation from a Project 211 university situated in the southern part of China, Lin was motivated to study abroad when she found out that students majoring in engineering could be granted an Australian Permanent Residency (PR). Despite her parents' concern about their daughter studying overseas by herself with limited English proficiency, Lin's application to study a Master's degree in a Go8-Australian university was successful and after she completed her Master's degree, Lin obtained PR as expected. Although Lin was able to obtain full-time employment, she did not find the work rewarding and decided that more opportunities might be forthcoming if she studied a PhD degree. Following a friends' recommendation, Lin contacted her current supervisor and was then able to participate in his research team. Lin also sought to widen her social networks through this learning opportunity in Australia.

Chen, 25 years old, was born into a rich family. His hometown was a small but prosperous city located in northeast China. Chen's father was employed in a large corporation, China National Petroleum, listing in Fortune's Global 500, and his mother performed home duties. Chen was a good student, and he was accepted to study at a

[10] Key universities referred to prestigious universities which received a high level of support from the central government of the People's Republic of China. But in this study, it refers to leading universities in China but are not limited to Project 211 universities.

"Project 985[11]" university in a northern coastal city. Chen followed his father's advice and studied for a major in petroleum engineering. Upon completion of his Bachelor's degree, he applied to study at universities in Britain and Australia for a Master's degree. As the tuition fees for studying were high in British universities, Chen decided to study at a highly ranked Go8-Australian university where he could continue studying petroleum engineering. Chen assumed that acquiring an overseas degree would enable him to secure a position in China National Petroleum upon his return to China. In order to improve his English proficiency, Chen participated in a language program provided by the university and subsequently passed the language program examinations. Although he commenced a Master's degree by Coursework, Chen found that some of the units he was required to study duplicated what he had already learned during his undergraduate studies. As Chen experienced concerns with the course schedule, he decided to study for a Master's by Research degree supervised by a Chinese-speaking supervisor. It was fortuitous that Chen met his girlfriend who also attended the same university, and he was able to share his concerns about his research projects with her. During his last year, after he took a holiday leave in China, Chen had to stay in a third country for a week before he could return to Australia due to the outbreak of the COVID-19 pandemic. During his interview, Chen conveyed that this experience was quite challenging.

Han, aged 34-years, was accompanied by his wife and mother-in-law in Australia. Born into an impoverished family, Han grew up in a small village in southwestern China. He was an outstanding at studies, and his results in the College Entrance Examination enabled his admittance into a Project 985 university, majoring in Mining Processing. After graduation, Han worked for five years and then decided to pursue his Master's degree in an Australian university. Han participated in a language program for half a year prior to commencing his coursework in oil and gas. Following two years of study, Han applied for a PhD and his supervisor offered him a scholarship from his mining-related project

[11] Project 985 university was a state-funded project for constructing world-class universities in the 21st century in the People's Republic of China. In the initial phase, nine universities were included in the project. The second phase, launched in 2004, expanded the program until it reached 39 universities. The universities listed in this project were called '985 project' universities. The 985 Project universities were further selected from universities involved in the 211 Project, which indicated that universities listed in the 985 Project were the most selective and prestigious.

funding. Han completed the mid-thesis review and at the time of interview was busy with his thesis writing. Han's aim was to complete his PhD and secure an Australian PR status.

Meng commenced his PhD when he turned 28 years of age. He was from a modest background with two older sisters in his family. Meng's parents and sisters were very supportive of his doctoral study. He obtained a Bachelor's degree from a Project 211 university and was then admitted to a Project 985 university via the National Postgraduate Entrance Examination[12], or Kaoyan (Chinese abbreviation). After Meng completed his Master's degree, he successfully obtained a Chinese Scholarship Council (CSC) bursary and travelled to Australia by himself. Following four years of hard work, Meng completed his PhD research project.

Jia, aged 26 years, was born into a wealthy family as her father ran a successful architectural business. Her parents were open-minded and supportive of Jia's studies at a key university in the southern part of China majoring in biological science. Jia also successfully joined a research training program to learn some laboratory skills early in her studies. Following this experience, she was attracted to the possibility of further research, and applied to a Go8 Australian university to study for a Master's by Research with financial support from her family. Jia completed her degree and, as she was not considering pursuing a PhD at that time, returned to China and worked in a hospital for one year. Jia applied for PhD at another Australian university to continue her research career. At the time of the interview, Jia was alone in Australia as her partner was studying for his PhD in another city in Australia.

Le was born in 1990 and was single. Her parents both worked in large state-owned corporations and raised her to make a contribution to the country and attain a sense of self-worth and achievement by developing personal skills or skills in technology. Le gained admittance to a Project 211 university known for the Pharmaceutical major where she studied all primary courses related to biology and chemistry. Following her excellent academic achievement, Le was eligible for the Postgraduate Recommendation, which means that she became a Master's degree candidate without sitting for the National

[12] National Postgraduate Entrance Examination, Chinese (Kaoyan) also called Postgraduate Admission Test, is a standardised test that is an admission requirement for all graduate schools in mainland China.

Postgraduate Entrance Examination (Kaoyan). During her Master's degree, Le was supervised by a Chinese scholar who had conducted research in the U.S. for 10 years. Upon the completion of her Master's degree, Le decided to pursue her PhD study abroad and aimed to gain admittance to a university ranked in the world's top 50. Whilst waiting for the outcomes of her applications, Le worked for two years prior to securing a scholarship from the Australian government to enrol in a PhD.

Born in 1989, Fan grew up in a poor family. His parents earned an income by farming and working in factories. As a result of his diligence and effort, Fan was admitted into a Project 211 university where he then gained a Postgraduate Recommendation for further study. However, after one year, Fan withdrew from that course and travelled to a European university to study for a dual Master's degree. Upon gaining this degree, Fan worked as a research assistant in a Singaporean university and then decided to pursue a PhD degree. As Fan knew one of his employer's students was working in a Go8 Australian university, he made contact with him to find out more information. Fan's application to study in Australia was successful and he was granted a scholarship. Now in his third year, Fan had achieved two publication outputs at the time of the interview.

Yang was born in 1990. His parents paid a lot of attention to his study and encouraged him to participate in academic competitions, which in turn, stimulated his interest in research. However, Yang was diagnosed as colourblinedness during his secondary school studies, which restricted his choice of some study majors that exclude achromate at universities. So Yang travelled to Australia to study for a Bachelor's degree, majoring in chemistry and after three years, achieved a First Class Honours[13] degree in a Go8 Australian university. Following this academic achievement, Yang was awarded a PhD scholarship during this second year and has just completed his thesis review and was preparing for thesis submission at the time of the interview.

[13] In Australia, an Honours degree is generally a one-year qualification taken after an undergraduate degree or available for a final-year undergraduate in some areas. It is recognised as a prestigious qualification that further develops research, writing, and organisational skills. Achievement of a First Class Honours degree means the recipient performed at the highest academic level and indicates that they have had research potential and an ability to undertake a high-level study.

Xin was born in 1990 and received excellent educational opportunities. Xin's university, a prestigious Project 985 university, offered a research training program for Bachelor students. When Xin was a sophomore, she joined her Master supervisor's team, and in the third year, was accepted into an exchange program to study at a British university through a competitive process. During the exchange experience, Xin refined her research interests and was accepted into the Postgraduate Recommendation and completed her Master research project under the same supervisor. Xin then applied to study for a PhD at several Australian universities and was awarded a scholarship from Australian government. When interviewed, Xin had completed her thesis review milestone and was preparing to submit her thesis for the external examination process.

Ning was from a well-educated family. His father had postgraduate qualifications and his mother had a Bachelor's degree and both were employed in important positions in the government sector. As both Ning's parents encouraged him to pursue further study, he sought and gained admittance into a Project 985 university, majoring in water supply and drainage science and engineering. During his second year, Ning enrolled in a Summer Exchange Program and was funded to study in an Italian university for two months. This overseas experience became one of Ning's motivating experiences to pursue further study abroad. In Ning's last year, one of his lecturers recommended that he apply to study at a highly ranked university in Australia. Ning initially applied to study a Master's by coursework degree, and then after six months of study articulated to Master's by Research. During his studies, Ning was financially supported by his family and was accompanied by his girlfriend. When interviewed, Ning had just been awarded his Master's degree and was applying for a PhD.

Ying, aged 38 years, was a university lecturer in a Project 985 university with twelve-year teaching experience in English Language and Literature and Applied Linguistics. Ying's goal was to improve her professional and academic research skills by studying for a PhD degree in Education with the aim that this qualification would position her well for career advancement. Furthermore, Ying was hopeful that her two children could benefit from the opportunity to study in an English-speaking country, and she finally received a scholarship from an Australian university. When interviewed, Ying's husband

was employed in a state-owned corporation and her family was providing financial and emotional support for her decision to study abroad.

Fei, a 25-year-old PhD candidate in accounting, had participated in a China-Australia "2+2" program which involved studying for the first two years in a joint Chinese-foreign university in China, followed by completion of the remaining two years of the Bachelor's Degree in Australia. After completing the Honours component of this degree during the subsequent year, Fei applied to study for a PhD in another Australian university. During the interview, Fei noted that the application was fortuitous, as she put it, like 'A canal is formed when water comes' [水到渠成]. Fei noted that her decision to study abroad was influenced by her cousin who had studied in an American university, and she was mindful that her parents were supportive of the decisions she made to pursue her studies overseas. When interviewed, Fei had just successfully completed her confirmation milestone.

Huang, born in 1993, was a second-year PhD candidate in the faculty of public health in a Go8 Australian university. His girlfriend was also studying for a PhD in the same city. Although Huang's parents had received a limited education and only completed primary school, Huang was encouraged to pursue further study. Huang's educational achievements were demonstrated by his admittance to a prestigious Project 985 university where, over seven years, he pursued undergraduate and postgraduate study. Huang achieved a double degree comprising health and economics in his fifth year. Huang met his PhD supervisor when he gave a presentation at his university in China. As Huang was interested in pursuing a Doctoral study in a similar field under his supervision, Huang decided to study for a PhD in the prestigious Go8 Australian university. Huang was awarded a CSC scholarship and at the time of interview, was preparing for the second milestone of his Doctoral studies.

Su, born in 1993, was pursuing his PhD studies in a faculty of education whilst funded by a CSC scholarship. Prior to this, Su had completed his undergraduate study in a key Chinese university and then gained admittance into a Project 985 university through the National Postgraduate Entrance Examination (Kaoyan). Su's family were supportive of his decision to study abroad. During his studies in Australia, Su was able to support

himself financially by working part-time and was concentrating on writing his thesis when interviewed.

Tang, aged 29 years, also from a faculty of education, was married and had a daughter. She required a scholarship to study abroad as her parents were unable to assist her financially. Tang studied at a provincial university after the College Entrance Examination and was also admitted into a Project 985 university through the National Postgraduate Entrance Examination (Kaoyan). Influenced by her senior colleagues there, Tang decided to study abroad and was awarded a CSC scholarship to study in Australia. At the time of interview, Tang had submitted her thesis for external examination and was looking for an academic position.

Xi, born in 1971, was 44 years old when she commenced her journey to achieve a PhD in education. She had graduated from a Project 211 university and then worked for 20 years as an English teacher in a major high school located in a metropolitan city. During her teaching career, Xi completed her Master's degree from an American university. Following this experience, Xi was motivated to pursue further study for her own and for her family's benefit. As her daughter had just finished her middle school education (Year 9), Xi considered that she would benefit from pursuing her schooling in Australia. Although Xi was not successful in obtaining a scholarship, she decided to self-fund her PhD study. She was supported in this regard by her husband, who was also employed as a high school teacher, as he agreed to travel to Australia to be with Xi and their daughter who also pursued further study in Australia. When interviewed, Xi had gained her PhD from a Go8 Australian university following three and a half years of study.

5.1.3 Summary of interview participants

The 18 participants recruited for the interview came from diverse backgrounds. They also possessed some similarities. First and foremost, participants all had excellent educational backgrounds irrespective of their family backgrounds. In Bourdieusian terms, such distinguished education degrees are conceptualised as institutionalised cultural capital. As shown in Table 5.2, for undergraduate education, most participants (n=13) received education from 211 Project or 985 Project universities or participated in 2+2 articulation programmes such as China-Australia 2+2 articulation programmes, or some

prestigious overseas universities such as Australian Go8 universities. Although five participants completed their undergraduate degree from non-211 Project or 985 Project universities, they were all admitted into key universities that are ranked second to 211 Project and 985 Project universities. Only participant Tang, who studied in a provincial university, was the exception.

Table 5.2

The Family and Education Backgrounds of Interview Participants

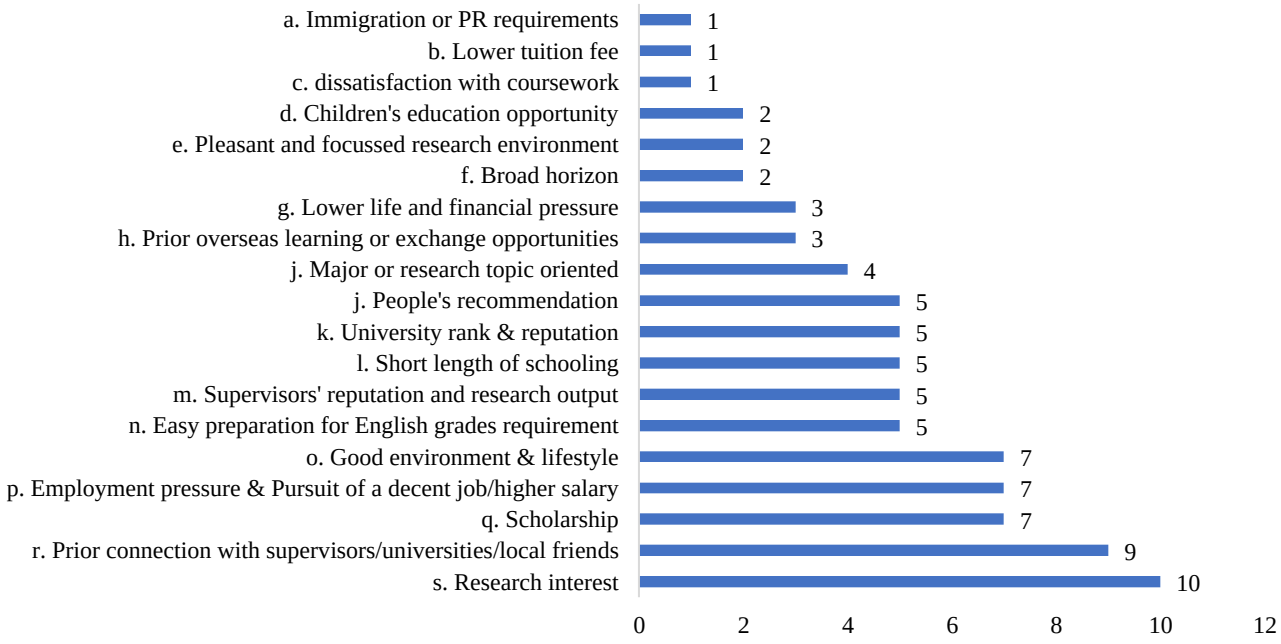
Participants	Family Background	Education Background		
		Undergraduate	Master/Honour	PhD
Mo	Affluent	Project 211	Au Go8	Au Go8
Bei	Affluent	Non-Project 211/985	Au Go8	Au Go8
Lin	Affluent	Project 211	Au Go8	Au Go8
Chen	Affluent	Project 985	Au Go8	
Han	Modest	Project 985	Au Go8	Au Go8
Meng	Modest	Project 211	Project 985	Au Go8
Jia	Affluent	Non-Project 211/985	Au Go8	Au Go8
Le	Affluent	Project 211	Project 211	Au Go8
Fan	Modest	Project 211	European Uni	Au Go8
Yang	Affluent	Au Go8	Au Go8	Au Go8
Xin	Modest	Project 985	Project 985	Au Go8
Ning	Affluent	Project 985	Au Go8	
Ying	Affluent	Non-Project 211/985	Project 211	Non-Au Go8
Fei	Affluent	2+2 Project	Non-Au Go8	Non-Au Go8
Huang	Modest	Project 985	Project 985	Au Go8
Su	Modest	Non-Project 211/985	Project 985	Non-Au Go8
Tang	Modest	Non-Project 211/985	Project 985	Non-Au Go8
Xi	Affluent	Project 211	USA Uni	Au Go8

With reference to pursuing a Master education, all participants enrolled in 211 Project or 985 Project universities or prestigious foreign universities. Regarding their PhD study, 12 out of the 16 participants who continued their research journey were studying in Australian Go8 universities. In Bei's and Jia's case, although their undergraduate studies were not completed in 211 Project or 985 Project universities, they successfully enrolled in Go8 universities. In sum, it can be concluded that all participants had accumulated considerable institutionalised cultural capital prior to their research journey abroad. Such institutionalised cultural capital serves as the basis for their pursuit of higher research degrees abroad and initiates their resilience process in Australian universities.

Second, aside from their accomplished education background, these participants all desired to obtain higher research degrees in Australian universities despite that their motivations varied (see Figure 5.1 below).

Figure 5.1

Motivation for Pursuing Higher Research Degree in Australia



As displayed by Figure 5.1, their motivations for higher research degrees varied, but the most common factors that motivated the participants to pursue higher research degrees in Australia are their enthusiasm for research, prior connection with supervisors,

universities, or a local friend, scholarships, as well as the pursuit of better career development and a good living environment. Put simply, the participants all aspired to advance their life and career through a recognised overseas research degree.

It is arguable that participants accumulated institutionalised cultural capital prior to their HDR journey in Australian universities. Yet, the accumulation of such cultural capital did not negate the possibility of further challenges. Will the participants' accumulated institutionalised cultural capital guarantee a smooth research journey in Australian universities? Will their different family or educational backgrounds exert different influences on their research journey? These questions aggregately point to the research core of the thesis: In what ways and for what reasons do Chinese international HDR students in Australia engage in the resilience process? Section 5.2 attempts to present the challenges faced by these participants, which partly answers RQ1.

5.2 CHALLENGES FACED BY CHINESE INTERNATIONAL HDR STUDENTS

According to Ungar's (2019) three-dimensional model, resilience is a process composed of challenges, positive outcomes despite these challenges, and contributors to positive outcomes in challenging situations. It is therefore inappropriate to explore the nature of resilience without understanding the forms of challenge. Previous studies have demonstrated the difficulties and predicaments of international students in various contexts. However, such research is often framed through classical social psychological and social-ecological perspectives, as discussed in Section 2.2. This study adopts a sociological approach with the aim of unravelling the hidden challenges, such as symbolic violence, that have been neglected or overlooked by previous research. Through detailed inductive and deductive thematic analysis of transcripts of interviews with participants, those challenges identified are abstracted and theorised as habitus-field mismatch, capital deficiencies, and symbolic violence. Each of these three themes has its unique focus but is interdependent in some circumstances with other themes. As Bourdieu asserts that "social reality ... lies in relations" (Bourdieu & Wacquant, 1992, p. 15), the three themes are not independent of one another but grounded on the relations constructed through capital, habitus, and field. For the sake of thematic reporting of the analyses and findings,

the following sections reveal, step-by-step, the challenges that threaten participants' wellbeing and learning during their HDR journey.

5.2.1 Habitus-field Mismatch

According to Bourdieu and Wacquant (1992), habitus refers to a system of long-lasting dispositions such as language and mindset specific to a certain field and the natural tendencies of each individual to take a certain position in that field. In contrast, habitus-field mismatch refers to a dialectical confrontation when durable dispositions encounter conditions (including fields) different from those in which they were constructed and assembled. For example, some interview participants entered the Australian higher education field with their previous habitus historically constructed in the Chinese higher education field. When that habitus is incompatible with the current Australian higher education field, discordances can emerge and challenges arise. These incompatibilities can make students feel like a "fish out of water" (Bourdieu & Wacquant, 1992, p. 127) and generate a sense of "disquiet, ambivalence, insecurity and uncertainty" (Reay et al., 2009, p. 1105).

In this study, seven out of the 18 participants reported that they had no overseas experience before they commenced their HDR study in Australia, while eight participants confirmed that they received their Bachelor or Honour degree from Australian universities with two of these students continuing their doctoral study at the same university. The other three participants studied in British, American, and Italian universities respectively before they came to Australia, as established in their biographies (see Section 5.1.2). Although those students who had overseas experience tended to adapt to the Australian higher education field more smoothly when compared to those without overseas experience, all participants disclosed a sense of maladjustment when they attempted to engage in their research within the Australian higher education field. These participants mainly articulated a sense of mismatch with reference to academic English language usage, supervision, and the research environment and standards.

Use of Academic English

Previous research has identified lack of English language skills as a major barrier to academic adjustment for international HDR students in Australia (Sawir, 2005; Son &

Park, 2014; Yu & Wright, 2016). Many of these HDR students have frequently struggled with academic reading, writing, oral presentations, and communications with their supervisors (Yu & Wright, 2016). These studies commonly attribute HDR students' academic failure to their poor English proficiency including inadequate vocabulary, poor mastery of grammar, inaccurate pronunciation, strong accents, and inefficient English reading skills. The assumption is that once international HDR students reach a certain level in the English language, they should be able, with little difficulty, to function successfully in any English-dominant academic environment. However, the acquisition of knowledge of required linguistic forms is always not equal to the ability to apply these in order to communicate and engage fully in a range of contexts (Benzie, 2010). In Bourdieusian terms, language application in forms of accent, vocabulary, as well as ways of speaking, reading, and writing are aspects of habitus. As such, it is strenuous and demanding for international HDR students to freely or immediately shift their original linguistic habitus to one that can make sense of the English academic writing principles. In this study, all (n=18) participants stated that they felt constrained when they had to use English for research purposes. As Bei commented, it was not easy to accurately 'translate' what he thought in Chinese into English:

> Because personally, my academic writing was in Chinese before, but when you come over here, you find that the way they (native English speakers) tell stories is very different. Definitely it is different. Because if you write in Chinese, you can, because, after all, it is your mother tongue, it is easy to express a certain problem accurately, but how to use English to express what you can express accurately in Chinese is very difficult, because what came up to our brain must be Chinese, but if translating a Chinese conclusion into English, it is difficult. (Bei, environmental engineering)

Clearly Bei's words "Definitely it is different" indicate habitus-field misfit. Throughout Bei's interview excerpts, the repetition of "difficult" indicated that he was thwarted by English academic writing. As Bei asserted, he was used to writing in Chinese. In Bourdieusian terms, Bei had developed a linguistic habitus in Chinese prior to entering the Australian higher education field. Bei's emphasis that "the way they tell stories is very different", suggests that the challenge of communicating clearly is not only a matter of

language translation, but more broadly, the challenge lies in those different thinking patterns that underpin the use of the language. Xin also realised that "there are differences in the thinking patterns between Chinese people and foreign people". In Xin's case, she had prior experience in publishing English articles when she was in a Chinese university. However, she found:

> After I came here (Australia), I found that a lot of things that I wrote, maybe according to foreigners' reading habits, they could not understand what you were saying. This is a problem that I found. (Xin, biology)

When Xin wrote in English in China, she was cognisant that her supervisor or other Chinese colleagues were able to understand her work. As Xin noted, this might be because she wrote English in a way that "conforms to the reading habits of Chinese people". However, this habitus failed to conform to "foreigners' reading habits" for after Xin came to Australia, she found that "a lot of things" she wrote no longer made sense and she realised there were "differences in the thinking patterns between Chinese people and foreign people". In this case, there appears a mismatch between Chinese international HDR students' previous habitus of using English through Chinese thinking and the legitimate way of using academic English in the Australian higher education field. To recapitulate, the analysis of participant interviews indicates that the Chinese linguistic habitus stood out as different and inappropriate in the Australian higher education field where English is the only acceptable academic language. This meant that participants had to painstakingly strive to shift their Chinese linguistic habitus to English linguistic habitus to fit into the Australian higher education field.

Supervision

Another mismatch for Chinese HDR students lies in the supervisory protocols of practice. In this study, some (n=8) participants demonstrated that they realised the discrepancies in terms of supervisory systems and processes between Chinese universities and Australian universities. For example, Ying, from a Faculty of Education, commented, "The supervisor-student relationship in China is more like a supervisor-leading and students-following relationship. In Australia, perhaps the students themselves should interact more actively with the supervisory team". Ying noted that she was required to

play a leading or active role in her current supervisory team within the Australian higher education field, and that this contrasted with her dispositions of 'following the supervisor's lead' developed during an apprenticeship or paternalistic supervision model in Chinese universities. Such discrepancies may also prompt participants such as Tang to experience a sense of loss. As Tang reflected:

> From the second stage to the confirmation, I think the biggest challenge for me is that, I don't know how the other students think, but I feel that my supervisors are a little bit 'herding sheep' [放羊, laissez faire]. From the beginning to the end they didn't push me to do that and do this, but we met regularly, and sometimes I made reports to them, but it seems that I didn't receive any clear instructions or guidance like 'what you should do'. I just followed my own plan and reported my research progress. This was very different from when I was studying for my Master's degree in China, where the supervisor usually gave instructions like 'this task should be finished by what time', then I would do this task. (Tang, education)

Tang expected to receive clear instructions and demands from supervisors conforming to her previous student habitus that internalised the supervision practice within the Chinese higher education field. However, within the Australian higher education field, her supervisors did not "push" her; rather, Tang had to devise her own plan and voluntarily report her research progress to her supervisors. Su also indicated that "this is different from that in China, and the supervisors do not 'push' the students". Huang also echoed this sentiment, declaring that his supervisors rarely actively checked his research proceedings or enquired about his research problems. As such, Chinese HDR students' dispositions of relying on supervisors' dominance formed in the previous field may bring them challenges such as misunderstanding their current supervisors' practice as perfunctory or indifferent.

In contrast, some participants such as Meng and Xin reported that supervisors from Australian universities may have more engagement or guidance in students' research projects when compared to their previous supervisors in China. As Meng observed, "In China, supervisors can be less involved in students' research project, while in Australia, supervisors have more engagement". Meng described Chinese supervisors' style as "free-range" [散养], in that supervisors in Chinese universities intervened less, but relied more

on students' capacities without engaged supervision. In contrast, the supervisors in Australian universities had a higher degree of engagement in students' research projects. This was considered to be what Xin referred to as a "constrained" or "captive" style [圈养] of supervision. Similar to Meng, Xin noted:

> It may also be because the guidance of my supervisor in China may, he merely gave guidance but didn't lead. He just gave you the general direction and then you can decide for yourself. Then you can communicate with him, if he thought it was feasible, he would agree to it. Maybe there was too much freedom before, so after I came here, the supervisor became more dominant, that is, a bit of feeling constrained. (Xin, biology)

In Chinese universities, both Meng and Xin were supervised under a "free-range" supervision model, in which they had to rely on themselves to solve many research problems, yet they were also granted more freedom to explore their own projects. In contrast, Meng and Xin found their supervisors in Australian universities tended to supervise students in a "captive" way with more engagement in, and detailed feedback to students' research projects. It should be noted that these supervision practices cannot be construed as forms of complete control. Rather, supervisors from Australian universities may expect students to take charge of their own research projects, work autonomously, and eventually develop into independent researchers. However, both Meng and Xin experienced a sense of maladaptation. As Meng confided, "I am suitable for a 'free-range' style. I don't belong to a 'captive' way". This statement indicates that a habitus previously formed under Chinese supervision style became a mismatch with the current supervisory practice within the Australian higher education field.

To reiterate, having been trained in an education system where teachers are viewed as authoritative figures and students are expected to respect such forms of authority, Chinese students might have internalised a sense of submission to supervisors' authority through their habitus. Throughout the interviews, participants commonly referred to their supervisors as their 'boss' (Mo, Xin, and Ying) regardless of how much they were encouraged to take responsibility for their own work. With this habitus, the 'good intention' of their supervisors to offer the best possible support and feedback was perceived by participants as demands or directions. As shown in Xin's data, her

"dominant" supervisors led to her experiencing a sense of "feeling constrained". Previous findings also suggest that Chinese PhD students have difficulty in becoming independent when they pursue their research degrees overseas (Hu et al., 2020). The underlying reason behind such difficulty, as suggested by the findings here, might be Chinese students' submissive habitus in front of their supervisors' authority, which does not align with the field where the teacher-student relationship is less hierarchical in nature.

The Australian research environment

As most of the participants received their initial research training in Chinese universities, they reported some challenges when they operated in an unfamiliar research environment upon entering the Australian higher education field. As illustrated by Meng:

> The PhD cultivation system in Australian universities is completely different from that in Chinese universities, and this causes some trouble for me. After all, I have been educated in China for a long time, and some traditional thinking patterns have been stereotyped. While after I came, it is another new mode of cultivation. (Meng, chemical engineering)

In Bourdieusian terms, Meng's "traditional thinking patterns" can be understood as a system of durable dispositions generated through a "stereotyped" habitus due to his "long time" education in China. Some participants (n=8) reported that in comparison with the Chinese research environment, they found the Australian research environment was rather flexible, which posed a challenge to their self-discipline and productivity. This was clearly stated by Su, "I think the entire university environment is quite loose, so a big challenge for me is self-discipline". According to Su, he became accustomed to his previous research environment in Chinese universities where he experienced pressure to perform and felt prompted to improve his research productivity. Thus, Su developed a research habitus that requires discipline from the environment. Hence, his self-discipline and regulation were challenged when he entered the Australian research field where the external pressure of supervisors was diminished. These cases indicate that students who had their initial research experience in Chinese universities tended to have developed a research habitus that relied on university regulation and supervisor guidance to discipline themselves. Yet the Australian research environment highlights research students' autonomy and independence, which did not match students' research habitus.

Most importantly, participants reported that Chinese universities and supervisors stressed the importance of student publication as this is a requirement for graduation. As Meng said:

> Regarding the graduation criteria, there may be some corresponding requirements for research achievement in Chinese universities, which is strictly quantified. For example, as far as I know, no matter whether it's the institutional or the potential requirements, you have to publish a certain number of articles, then you can graduate. (Meng, chemical engineering)

As such, participants like Meng and Xin already internalised a sense of the need and pressure to produce publications as an outcome of their HDR research. As illustrated by Xin:

> Because I had domestic graduate experience (in Chinese university), I know you definitely have to publish … probably he (current supervisor) would tell you, he said you can think about it and how to arrange your publication. Yet, he didn't say you have to publish; there is no mandatory requirement. (Xin, biology)

Whether a mandatory institutional requirement or not, participants like Xin developed a habitus of getting published during the HDR journey. For Bourdieu (1977, p. 72), habitus "can be objectively regulated and regular without in any way being the product of obedience to rules". With habitus, participants adapted to the rules of student publication even without being explicitly told by their supervisors as their bodies knew the importance of getting published. Nevertheless, in Australia, most HDR students obtain their degree through thesis by monograph and can graduate without any publications. In this study 16 out of the 18 participants were completing or have completed their HDR study through thesis by monograph and five of them affirmed that "you can graduate if you finish the thesis" (Mo). As thesis by monograph was the prerequisite for graduation, other academic work, publication included, became less important. In this respect, Chinese research students' desire to publish was not always favoured or supported by the Australian higher education system. For example, those students from social sciences were barely supported to publish by their supervisors. Xi, from a Faculty of Education, a recently completed doctoral student, shared her supervisor's attitudes towards publication:

> But in general, she did not actively 'push' me, and her plan was always that you should write your thesis first. I don't know, but someone, and later others told me, in fact, the best way to publish is that your supervisor urges you to publish your paper during your PhD. Otherwise, you will be very embarrassed when you seek a job. I noticed that too, but that was not how she did it. She kept saying you finish the thesis first. (Xi, education)

Generally, some participants perceived those Australian institutions and supervisors took a laissez-faire attitude towards publication and seldom actively 'push' them to publish. In this vein, a mismatch appears between students' publication habitus developed in Chinese universities and the graduation standards set by Australian institutions together with education training and support. Such contrasting expectations may prompt Chinese HDR students to experience stress and anxiety. On the one hand, they have to obey the graduation standards set by Australian institutions; while on the other hand, they face the risk of being less competitive in the labour market or being unemployed if they fail to secure any publications during the course of their research journey when they return to China.

In sum, based on analysis of participants' responses, it can be identified that participants tensions and anxiety were intensified when the gaps between their habitus established in Chinese universities and the 'rules of the game' that apply in the field of Australian higher education loom large. Without intervention, students' anticipation of a successful outcome can be undermined due to ongoing habitus dislocation and mismatch between subjective expectations and objective constraints.

5.2.2 Capital Deficiencies

According to Bourdieu, capital refers to a set of field-specific resources, which enable "possessors to wield a power, an influence, and thus to exist, in the field under consideration" (Bourdieu & Wacquant, 1992, p. 98). In this study, structural deficiency in certain forms of capital was reported by many participants as a significant challenge during their HDR journey. Here capital deficiencies refer to participants' perceived deficiency in owning, acquiring, and accumulating sufficient field-specific capitals, including economic capital, cultural capital (such as research experiences), social capital (such as academic networks that empower research capacity), and symbolic capital (such

as publications). When participants entered and attempted to succeed in the Australian higher education field, they found that some of their capital accumulated in previous fields became invalid or devalued (capital loss or depreciation); and that some forms of capital were in deficit or inaccessible due to the migration to the new field (capital deficit or inaccessible capital). In addition, the outbreak of COVID disrupted participants' accumulation of capital. This section offers instances of capital deficiencies reported by participants.

Capital loss: Insufficient care from family due to 'separation'

Previous literature has noted that Chinese international doctoral students prefer to seek support and help from long-lasting relationships such as families and friends in China (Shen et al., 2017), which can ameliorate the negative impact of studying abroad in a culturally different country. Informed by Bourdieu, Atkinson conceptualises family as a field within which "love—or the care and affection for specific others can be described as a capital" (Atkinson, 2020, p. 156). However, in this study, it was found that many (n=15) participants could not receive adequate care or support from their families due to the long-time, insurmountable physical distance to their homeland.

Interestingly, the data also suggest that the challenges brought about by physical distance were further complicated by emotional tensions. In Meng's case, he was reluctant to share his difficulties with his family members because he assumed they could not provide any support due to the insurmountable physical distance. Meng feared that sharing these concerns could have brought his family an extra mental burden. In this vein, he withdrew himself from getting care or support from his family members voluntarily. Xi chose not to share her research-related negative emotions with her family members for a different reason. She noted:

> No, no, because my husband is completely unable to understand the problems in my research. What he felt is that how idle I am, sitting there and doing nothing every day … When you are in writer's block, in fact, this is very exhausting and mentally suffering, but because my husband does not do research, he thinks it is very simple, just write an article, [however, it] is nothing like doing labour work, you do not need a lot of effort. (Xi, education)

Xi confessed that her husband was "completely unable to understand" her research problems and misunderstood her as "idle", "doing nothing" or research as "simple". Such misunderstandings made it difficult for Xi to share her research problems with her husband and gain his support. Similar to Xi's case, other participants (Mo, Jia, Xin, Fei, Xi and Ying) also held the view that it was pointless to talk about their research difficulties with their family members who cannot understand their sense of feeling demoralised due to research failures. As Mo said, "because they are not in this situation, so they don't understand, so it's useless for you to complain these to them". By saying "they are not in this situation", Mo indicated that his family was away from the Australian higher education field where he was situated. As social outsiders, his family was unable to provide care or support for him when he encountered research problems. In these cases, loss of care is attributed to social distance.

Due at least in part to the physical and social distance, participants often reported homesickness and loneliness. As Fei asserted, "This emotion may appear from time to time or exist for a long time. It is, because you're in a foreign country and your family isn't here, is something that can't be solved so far". Fan commented, "I feel rather lonely, and I want to live in a more familiar environment, such as where there are families and friends". In sum, the separation led to both physical and social distance, which contributed to the loss of care from families. The absence of capital from the family field became a significant challenge for the participants in this study.

Capital deficit

In addition to capital loss, participants considered their previously accumulated capital to be insufficient when they entered the Australian higher education field. Four forms of capital deficit are evident in the interview data. These are insufficient background knowledge, insufficient support from supervisors, insufficient connection with colleagues, and insufficient institutional support.

Insufficient background knowledge

In *Homo Academicus*, Bourdieu defines scientific capital as "a set of properties which are the product of acts of knowledge and recognition performed by form of cultural capital within the scientific field" (Bourdieu, 2004, p. 55), such as the mastery of pertinent

concepts, logic, and methodology (Atkinson, 2020). The logic of practice in the field of higher education revolves around a belief in the struggle for, and the acquisition of, scientific capital (Naidoo, 2008). In this study, 11 out of 18 participants reported that it was challenging for them to conduct their HDR project when they were deficient in cultural capital to produce scientific capital. Some (n=6) participants reported that they lacked pertinent background knowledge due to the shift to a new research field. Such deficiency resulted in their difficulties at the initial stage of their research journey. Participants used the wording "completely no concept" or "in a blank state" to describe the beginning phase of their candidature. As Lin noted:

> Because before my PhD, I was mostly doing analytical chemistry stuff, but only after I started my PhD, my research project was related to engineering. Hence, my basic background knowledge was terrible, and there were so many things I didn't know. My background knowledge was too far behind, too much behind. (Lin, chemical engineering)

Lin felt concerned about her superficial knowledge in the new research direction. In her own words, this knowledge was expressed as "too far behind". In Bourdieusian terms, Lin was challenged by a marked deficiency in scientific capital. Many participants echoed Lin's feelings and confirmed the challenges due to a lack of background knowledge. For instance, Xin indicated that the key challenge for her was to reconstruct her basic knowledge background before the first milestone, which required the investment of excessive self-learning time. Similarly, Jia had to read an article related to her new research area five or six times in order to understand it, noting that "because I had no experience in this area, I couldn't understand the articles when I first started reading … so it was quite difficult when I just got started". In the case of Ning, because he was required to learn new software that he had not mastered before, he had to postpone his milestone.

In addition to challenges such as delayed milestones and excessive self-learning, insufficient scientific capital reportedly led to unexpected research challenges and even failures. For example, before Xi became a PhD candidate, she was an English teacher in a middle school. Whilst capable as a teacher, she had limited knowledge about conducting research for her Doctorate. Xi reflected that it was not until she reached the stage of data

analysis that she realised there was a major mistake in the design of her questionnaire because of her inadequate knowledge. This factor meant that Xi "encountered great problems later in the data analysis". As such, it was quite demanding for those participants to obtain scientific capital required for their research projects but not available through their previous research training.

Insufficient support from supervisors

Previous literature has shown that the support from supervisors occupies a significant role in facilitating a student's research journey (Ives & Rowley, 2005; Zhang, 2016). As discussed in Chapter 3, supervisory support serves as an important source of social capital for international HDR students. However, in this study, 13 out of 18 participants disclosed situations that indicated they failed to acquire adequate support from their supervisors during their research journey. This experience hindered these students from accumulating, through social capital, the required scientific capital for the successful completion of their research degree.

In this study, nine out of 18 participants found that their supervisors were disengaged in their research projects. For example, Xi, from the faculty of education, disclosed that her associate supervisor "exists in name only [名存实亡]". As Xi suggested, her associate supervisor "almost withdrew from the supervisory team" and "barely read any drafts". Hence, it was difficult for her to get any support or guidance from her associate supervisor. This is also the case with Jia and Fei. Their associate supervisors seldom showed up in their supervisory meetings or provided any support for their research. While the level and form of commitment of associate supervisors might have been negotiated within the supervisory team or arranged according to the workload system, it appears that such negotiation (if any) or arrangement was not made transparent to participants such as Xi, Jia, and Fei. Furthermore, in Ning's case, he felt "abandoned" by his associate supervisor who accepted an academic position elsewhere. In these cases, the absence of supervisor support—social capital—undermined the amassing or development of scientific capital required for a successfully HDR journey.

In other cases, many (n=10) participants reported that their supervisors were too busy and preoccupied with other tasks to provide adequate supervision. For instance, Jia

noticed that her supervisor was involved in cooperative projects with industry partners and spent most of his time applying for various forms of funding. Xin observed that as her supervisor was away from campus travelling to meetings before the pandemic, he was unavailable for guidance. In light of their busy schedules, it seems that supervisors cannot guarantee regular meetings, correspondence and even limited contact with their HDR students. Mo noted, "luckily, I can meet him face to face once a month, but unluckily, there will be two months. Currently I haven't met him for almost a month". Lin echoed this, "We seldom meet, and we just send e-mails or something. I think his guidance is very limited". With limited contact, Lin reportedly felt "helpless", "unmotivated" and "less beneficial". These cases suggest that, although both email communications and face-to-face meetings with supervisors can be understood as social capital necessary for a successful HDR journey, participants seemed to consider the latter as a more valuable form of social capital.

Moreover, some supervisors failed to distribute their time and energy fairly for each student. This is evidenced in Le's interview data:

> … he treats me differently from his other students … He spends a lot of time helping them with brainstorming and collaboration, and then he contacts all kinds of people to give them resources, and he even calls the students in bioinformatics a lot to check their progress with their experiments and data processing. Yet, he seldom asks me except for meetings. During the meeting with other students, he shares a lot of his thought and ideas in other research projects, but in our meeting, I have to talk for 40 minutes, and when I ask him questions, he only gives me some very perfunctory very general answers … (Le, biology)

Lin also noted, "A supervisor can be partial or whatever, and not every student he will try his best to help". Supervisors' unfair distribution of social capital made Le and Lin consider terminating the relationship with their supervisors.

In addition, some participants reported that they felt most pressured when their supervisors were unable to provide any constructive feedback. According to Xi, her supervisor "just corrected a few simple grammatical errors, basically there was no constructive guidance". As a consequence, Xi failed her thesis review. In Le's and Fan's

case, they had to change their research projects because their supervisors "understood nothing in this research project and could not provide any support".

Some participants (Mo, Fan, Jia, Le, Xin, and Xi) suggested that their principal supervisors were less likely to provide detailed and constructive feedback due to their busy schedule. As stated by Fan, "he has no feedback on very detailed issues; even if you write to him, because he is quite busy, so basically it's difficult for him to give feedback". Mo shared a similar statement because his supervisor was supervising so many HDR students. In this context, participants had to rely on themselves, which in turn, can also impact upon their research efficiency and progress. As Le noted, "it led to my low efficiency in my learning, and a very low efficiency in my collaboration with him, which led to a very unproductive result". Hence, when supervisors failed to provide detailed and constructive feedback due to lack of expertise, busy schedules, or favouritism, the intergenerational transmission of scientific capital was disrupted.

Insufficient connection with colleagues

Previous literature affirmed that social interactions between international research students and their peers can be an efficient way to overcome academic challenges (Shen et al., 2017; Yu & Wright, 2016). Yet this study revealed that many (n=13) participants struggled to develop new social capital in the form of connections with their research peers. One major reason was the tight research schedules which reduced the time available to spend on social activities, particularly forming social connections with colleagues. As Fan said, "I don't maintain a close relationship with my colleagues, because I have spent all my energy on research". Mo also shared a similar experience, "we usually just say hello and have a simple chat. We don't have many conversations as we don't have time".

While research candidates in Chinese universities meet frequently with their research colleagues for social and/or academic purposes, data reveal the context to be different in Australian universities. Tang reported: "Most of them [students] are different in terms of age and backgrounds, and they have their own families, and many of them do not come to campus every day, so there are fewer opportunities to meet them". Moreover, Chen observed, "Usually, we do not meet each other … we're not in the same office or having meals together", whilst participants such as Bei described their "limited contact"

with their research colleagues as a "head nod in the hallway friends" [萍水相逢点头之交].

Participants also reported that different cultural dispositions (for example, Yang) and political stances (for example, Tang) also challenged the development of inter-peer communication. Limited connections with research colleagues resulted in a deficiency in social capital, which also brought about participants' negative emotions. As Mo indicated, "Meanwhile, due to the narrow social circle, you have fewer people around you, less time to hang out, then the major challenge is boredom and tedium". Lin felt concerned that "I feel like that the PhD cohort was isolated from the society". She reflected:

> I feel that I am in a group with few research colleagues. Most of the time I feel alone, and I think it is very torturing to be alone for three or four years. Everyone just focuses on their own research and seldom communicate, then you can't meet your supervisors. I don't think I can benefit much from this kind of training … Now for my PhD, basically we do our own research and are isolated. (Lin, chemical engineering)

The citations of "boredom", "tedium", "torturing" and "don't benefit" are indicative of participants' distress due to the deficiency in social capital. Furthermore, this deficit of social capital contributed to participants' sense of isolation and loneliness during their candidature.

Insufficient institutional support

Previous literature suggests that Chinese international research students from American universities were not adequately supported by their institutions (Zhang, 2016). Some participants (n=16) in this study also reported a deficiency in institutional support. Different from research students in American, Canadian, and European universities, Australian HDR students commence a research project with little or no formal coursework (Bentley & Meek, 2018). Yet the course-free model can pose challenges, particularly to students who had no previous independent research experience. As Xi reported, "… after I came to Australia, I just found it is very important to take courses … if you shift to a different direction, it would be very helpful to take courses". One way for participants to accumulate scientific capital was through attending various workshops. For example,

participants such as Fan, Xi, Han and Mo, reported that they found the academic writing workshops were quite useful for non-English speakers. However, these HDR students also found that such workshops were so popular that not everyone could gain access to participate in them, as Han observed, "You have to apply, and there is a limited number of places, I think some students may not be able to take it".

In contrast, some participants reported that the workshops were not very useful because most workshops were so "basic" (Bei) that they failed to obtain in-depth information related to their research. Tang shared a similar sentiment, "the more you attend, the more you have the feeling that the stuff is not particularly deep. I feel it may not be that useful". Su also reflected that "Overall, I feel I cannot gain much from the workshops" and he described them as "an array of eye-dazzling student service but mainly provided by the institution's administrative team with little involvement with real academics and systematic support". Xi also reported:

> But we've been discussing an issue, we think that the institution has offered too limited support, too little … especially (for) our international students, from language to various aspects, there is (support), but you have to pay, you have to find someone to help, just like even we have to pay for someone to review our thesis … So I didn't know any substantial (support), I personally think the help should be more proactive in giving the help, not just there, (like) we have counsellors, you can go or you go consult or something. (Xi, education)

These participants revealed three potential problems pertinent to not only the current nature of Australian institutions' services to international HDR students, but also to HDR students in general. The first problem is that there is no systematic coursework available for them that is specifically relevant to their research projects. Second, such workshops are not always accessible due to their popularity with HDR students. Third, some workshop content is not provided in appropriate depth and/or in a relevant discipline-specific mode. Collectively, these problems associated with a lack of institutional support limited participants' accumulation of scientific capital.

Disrupted capital accumulation due to COVID-19

The devastating COVID-19 pandemic disrupted the accumulation of capital for the participants in this study. Due to the lockdowns and restrictions such as social distancing and the closure of venues implemented by the government, working from home became the new norm. As such, many workshops or university events or activities shifted to the online mode or were cancelled. This unexpected situation posed challenges and hindrances to participants' access to university resources. As Le stated:

> My original plan was to attend these events systematically and deeply got involved this year, but now due to the outbreak of the pandemic, and then many of the events were changed to some other format or simply cancelled, so I haven't gone further into it yet. (Le, Biology)

For those events that were not cancelled, the large-scale emergent digitalisation of them led to some technical issues and many participants shared their experiences of this during their interviews. Fei observed:

> First, there are a lot of various problems with the software in the midst of online teaching, such as possible problems with, like the screen display, problems with switching, all kinds of problems can happen. There is also less interaction (compared to face-to-face meetings), and the overall feeling and state of listening in the (virtual) classroom are really different from sitting in the classroom. I feel that sitting at home can be more relaxed while less focused. (Fei, accountancy)

The COVID-19 pandemic also contributed to the deterioration of the social connections with research colleagues. Fei complained that the mandatory work-from-home mode made it difficult for her to make contact with her research colleagues, and that this in turn undermined her research productivity. Moreover, Jia claimed that the lockdown deprived her of the opportunity to make new friends as a newcomer to the campus.

Moreover, the pandemic impacted upon students' participating in accessing conferences in Australia and internationally. In Bourdieusian terms, participation in international conferences serve as a form of social capital that enables access to scientific capital, that is, "the capital of scientific power" of those with research expertise (Bourdieu,

1988, p. 40). However, nine out of 18 lamented that they could not participate in any conferences following the outbreak of the COVID-19 pandemic. As Han articulated, “due to the pandemic, COVID-19 viruses, I finally failed to attend the scheduled conferences”.

In addition, 10 out of 18 participants reported that COVID-19 aggravated their concern and anxiety about their job prospects, as noted by Fan:

> Because of the pandemic, for many universities, their recruitment plans or something similar, or your journal publications have been impacted. But your ultimate goal is to look for a job after getting the doctoral degree. If the employment situation is bad, you cannot find a teaching position, not even a postdoc position. (Fan, hydrology)

Fan was concerned that there would be fewer academic positions due to the pandemic when he obtained his research degree. Xin also had a similar concern, “because of the pandemic, as the economy has been impacted, the overall research funding will be reduced at the national level, and then there may be a reduction in staff recruitment for some institutions”. Yang also added, “because international students cannot return this year, in fact, so the Australian universities operate on tight budgets, and I think it’s not easy to get employed this year”. All participants noted that they felt perturbed and distressed by the uncertainties about their career options brought on by the outbreak of the pandemic. As noted in Chapter 1, survey outcomes reported in *Nature* indicated that uncertainty about the future has the potential to impact on student disappointment and anxiety (Woolston, 2019). Moreover, due to funding losses prompted by the COVID -19 pandemic, there were fewer academic positions.

To summarise, institutional, supervisory, and peer support are forms of important academic resources understood as social capital that can benefit the amassing of scientific capital (such as research capacity) and institutionalised cultural capital (such as a research degree). However, when the path to social capital was disrupted including the severe impact due to COVID-19 pandemic, it would be arduous for participants to accrue sufficient capital required for the successful completion of their HDR degree.

5.2.3 Symbolic Violence

According to Mu (2021c), resilience research remains incomplete without accounting for symbolic forms of "threats", namely, symbolic violence. Symbolic violence "tends to take the form of a more effective, and in this sense more brutal, means of oppression" as it operates as a hidden adversity (Bourdieu & Eagleton, 1992, p. 115). As discussed in Chapter 3, symbolic violence is an invisible force that imposes "a cultural arbitrary by an arbitrary power" (Bourdieu & Eagleton, 1992, p. 115) and "operates in a much more subtle manner—through language, through the body, through attitudes towards things which are below the level of consciousness" (Bourdieu & Eagleton, 1992, p. 115). In this study, symbolic violence enticed participants to "voluntarily" accept the imposition of neoliberalism pervasive in Australian universities, as well as other arbitrary forms of symbolic power such as the authority of supervisors, the hegemony of English, and the pressure from standardised milestones and peer groups. In so doing, participants internalised these forms of symbolic violence through their habitus, hence might have reproduced their subordination to symbolic violence even without knowing it. The following sections analyse each form of symbolic violence in turn.

Overwhelmed by supervisors' pedagogic authority

Previous literature reveals that the cultural differences in dealing with hierarchy have impacted upon intercultural supervisor-student relationships mostly involving Asian candidates (Winchester-Seeto et al., 2014). In this study, many (n=10) participants also tended to display a subservient attitude when confronting their supervisors' authority. That is, participants felt obliged to conform to their supervisors' decisions (six out of 18), sustain a positive image in front of their supervisors (four out of 18), and sustain their supervisors' reputation (six out of 18).

The pervasiveness of power and authority in supervisor-HDR student relationships was evident in various contexts relayed by the participants. For example, Mo identified himself as a student employee of his supervisors and would take their research-related decisions as commands. This was evident in decision making about research processes, so that when Meng's supervisors made a decision, he felt obliged to "think about how to solve the problem, not to change the decision, or raise a new problem". Ying also

portrayed herself as a "follower" in her supervisory team and indicated that she was "adaptive" and "found her place". From their statements, it can be argued that these HDR students reportedly took a passive and reserved attitude in the supervisory relationship and would rather sacrifice their own voice in order to avoid any conflicts with their supervisors.

Having positioned themselves in a subordinate position, some participants felt obliged to please their supervisors and even contribute to sustaining their supervisors' reputation. As asserted by Bei, "No, I will certainly not bring negative emotions to my supervisor … I always let him perceive me as bright, energetic, and confident". However, behind the highly favourable image that students crafted in front of their supervisors lay considerable pressure, stress, and anxiety. This is evident in the following excerpts from interviews with Fei and Xin. Fei confided, "sometimes I feel, although I spare no effort, I still worry about whether my progress is still slow in the eyes of my supervisors". Due to such concern, she disclosed, "… when I complete every task of my PhD research, I can feel invisible pressure". Xin indicated that she experienced "a lot of psychological pressure and burden" when she felt that her supervisor was disappointed with her. As she said, "it took a long lone time to overcome (my sadness)". Both Fei and Xin situated themselves in a hypothetical situation where they failed their supervisors' expectations. They consecrated their supervisors with higher status and considered that any failure in front of them would be disrespectful and unacceptable.

With such power imbalance sustained, participants were unwilling to jeopardise their supervisor's reputation even if they were dissatisfied with their supervision. In the case of Lin, although she had doubts about her supervisor because of the numerous negative research outcomes she experienced when following his guidance, she reiterated that: "what I don't want to complain about to you is my supervisor". She even reappropriated her supervisor's behaviours by doubting herself: "I don't have a research background in this field … and I don't think I was able to make any decisions for the last two years". Such deficit discourse towards the self was not uncommon amongst the participants in the study.

In sum, some participants unconsciously enculturated themselves into submissive dispositions given their supervisors' symbolic authority and power. Following Bourdieu,

by virtue of the pedagogical authority, such power is concealed and misrecognised as legitimate (Bourdieu & Passeron, 1990). Hence, when participants misrecognised their supervisors' authority, they took their own subordinate position for granted. However, such submission was often accompanied by considerable psychological unease, described by participants as "invisible pressure", "burden", or self-blame. Such unease is a form of "bodily emotion (shame, timidity, anxiety, guilt)" through which the dominated often unwittingly form a practical recognition of their own subordination "by tacitly accepting, in advance, the limits imposed on them" (Bourdieu, 1995, p. 169). In Bourdieu's terms, these HDR students fell prey to the symbolic violence imposed on them while concealing the underlying power relations through their habitual "ontological complicity" with symbolic violence. As a consequence, participants became disempowered during intercultural supervision in a largely unconscious manner, often giving rise to negative emotions.

Mental pressure due to non-native English language proficiency

Previous literature suggested that international students feel intimidated when they use English (Mu et al., 2016; Mu et al., 2019a; Sawir, 2005; Son & Park, 2014; Yu & Wright, 2016). In this study, 11 out of 18 participants confessed that their language usage was often accompanied by tension and anxiety. For example, participants like Huang, Fei, and Jia reported they had difficulty in communicating with native speakers especially when they just commenced their research journey in Australian universities. As Huang stated:

> I had difficulty in communicating with local people particularly at the beginning. They speak too fast, sometimes you cannot catch up. Now I can adapt a little bit, but sometimes you still can't fully understand if they speak too fast. (Huang, public health)

According to Huang, he often struggled to understand native speakers when they spoke quickly. Fei echoed this experience and noted that she could not completely understand her supervisors who also spoke very quickly during meetings or in phone calls. Further insights were provided by Jia as she felt "unable to jump in the conversation" with her American colleagues who spoke extremely fast. As Jia put it, this experience made

her feel “a bit of timidity”. Like Jia, Le, who was the only non-native speaker in her research group, confessed that “I felt unconfident and doubted myself and felt that I was unable to communicate with native speakers at the beginning”. In all cases, the participants reported they felt intimidated when they communicated with native speakers. In addition to communication challenges, many (n=8) participants reported that it was more challenging to give English public presentations, notably during the oral component of a HDR milestone. This was evident in Chen’s comments:

> Because it’s my second language, I am sure that now I am not so proficient, and then for example, I am afraid that when I make defence, I will get stuck or pause or forget the words, making the situation very embarrassing. (Chen, chemical engineering)

Chen further added that it would be problematic for him if he failed to understand spontaneous questions asked on the spot. Xi also alluded to this. As she said, “Another pressure comes from the live questions. I always think I cannot understand. I really cannot understand. I have such feeling. I don’t know why I cannot understand”. It must be noted that although Xi made considerable efforts to prepare herself for the oral component by attending ‘presentation club’ events and was awarded in a presentation contest, she confided that: “I still feel not very confident in English”. Ying shared another concern:

> I feel that when I share my study, because I am an EASLL (English as a second language Learners), that is, a non-native speaker of English, I can’t understand others. I also think that whether what I say can be understood by others, and then how to effectively convey what I have prepared in a limited time, I think this is a great difficulty. (Ying, education)

Fei also experienced unease in terms of the quality of her academic writing, sharing that: “I feel that my English is not good, and then I feel that my writing is not clear, and others may not understand or may misinterpret”. Moreover, participants like Jia also had to deal with this pressure in terms of reading and writing: “I felt fine now, but my reading efficiency is still not as fast as local people”. Han lamented that “there is no way that you can write like native speaker with rich and accurate expressions”. Such statements reveal that participants had conceptualised that they were ‘no match’ for native speakers in terms of English usage.

From their interview excerpts, the citation of words such as "timidity", "unconfident", "doubted", "embarrassing" demonstrated participants' feeling of inferiority when using English. According to Bourdieu (1995), emotional responses such as blushing, inarticulacy, clumsiness, and trembling can be the visible manifestations of submission to dominant judgments (p. 169). Hence, the emotions experienced by these participants disclosed their submission and acquiescence in recognising the legitimacy of English within the Australian higher education field. It is clear that English exercises a powerful hegemony upon social agents who shared a misrecognition that English is the superior and dominant language. In this vein, although participants struggled in understanding native speakers who spoke too quickly, none of them dared to ask native speakers to lower their pace. Rather, participants assumed it was their problem, namely, a problem of being linguistically deficient. Moreover, participants were concerned whether they could make themselves understood. By contrast, in the same situation, those native speakers who spoke very quickly may not be aware of the difficulty encountered by EALs, so they adhere to their original linguistic habitus and maintain the same pace of speed they use when communicating with other native speakers. Clearly, both participants and native speakers internalised through their habitus the differentiating structures within the field. With habitus-informed classificatory schemata, the symbolic violence of English-dominant academic environment, or English hegemony persists because it is so "legitimised" that does not warrant any justification both for the linguistic dominant and the linguistic others.

Bearing 'linguistic others' in mind, some (n=3) participants expressed their concerns about potential impediments to pursuing academic work in Australia. When asked about the job opportunities for international research students in Australia, Fan was not optimistic. He stated, "It may not be because your academic ability is weak, but sometimes may be due to your poor language, so there are many factors". Similar concerns have been noted in the literature. For example, a study investigating the employment outcomes of international students graduating from Australian universities revealed that many international student candidates were often filtered out by biased recruitment practices, such as objective criteria like visa eligibility and English language ability (Blackmore & Rahimi, 2019). In Bourdieu's work investigating the issue of French

feminism, he argued that "the foundations of symbolic violence reside … in tendencies to adjust to the structures of domination of which they are the product" (2003b, p. 26). Symbolic violence therefore involves "consent to domination" as part of the habitus of those in particular social positions (Mu & Pang, 2019, p. 63). It is found that as participants in this study tacitly accepted their disadvantaged position compared with native speakers, they effectively put themselves in a permanent state of insecurity or anxiety, or in Bourdieu's word, symbolic violence.

Neoliberal Constraints: Standardised HDR Education

Bourdieu and Wacquant (1992) conceptualises a field to be a structured social space with its prescribed values and regulative principles which can serve to distinguish or exclude. The hierarchical nature of the field is sustained through its "sets of constraints, inscribed in the very reality of that world, which governs its functioning in a durable way, determining the chances of success for practices" (Bourdieu, 1986, p. 241). Such constraints can seriously restrict a socially structured space and cause agents to struggle, and depending on the position they occupy in that space, to either change or preserve its boundaries or form (Bourdieu & Wacquant, 1992). As such, it is essential to take into account the structural inequalities systemically created and reproduced when it comes to resilience building (Mu, 2021c). Accordingly, this section presents how some structural regulative principles, particularly neoliberalism, can restrain participants during the course of their research.

Since the 1980s, Australian higher education systems have been transformed by neoliberalism (Bottrell & Manathunga, 2019). Following the reduction of government funding and the attendant fee deregulation for higher education, neoliberal managerialist practices within the higher education sector have increasingly focused on securing efficiency, encouraging competition, and intensifying accountability (Rea, 2016). As such, guided by Higher Education Standard Framework (Threshold Standards) 2021 (TEQSA, 2021), HDR research is performatively governed through sequenced milestones during graduate research training. However, such standardisation ignores the fact that research is inherently unpredictable (Manathunga, 2019). In this study, many (n=14) participants admitted that they had encountered unexpected research failures or issues, such as change

of research topics, repetitive research experimental failures, or delay in arranging seminars, which resulted in extensions of their milestones. For example, Han had to change his research topic when there were only one or two months before his scheduled confirmation milestone. As he recalled:

> At that time, one or two months before my confirmation, I was asked to find a new topic, so my time was very tight, very tense. I feel this is a major difficulty for me during my PhD time. The time was very short, about one or two months, and then I had to propose a new thing, so my milestone was extended by three months. (Han, chemical engineering)

The unexpected change in topic prompted Han to experience considerable mental stress as he suggested this was "a major difficulty". Fei also added that some of her colleagues had to apply for extensions to their milestones as they had changed the focus and topic of their research. In addition to topic change, unexpected research difficulties pose threats to completing milestones on time. For example, Meng selected a research topic which was considered to be a research conundrum in his field. During this research, Meng encountered numerous research experimental failures which made his milestones even more challenging to achieve. As he stated:

> The first problem is to solve one of the most important research conundrums, so it makes the first milestone so intensive. Because the experiments have been failing numerous times, so there was little useful experimental data. That means, I set three research questions during my PhD, and I want to solve these three questions. But in my first year, the first question was not solved, and there was no progress at all. So by the Confirmation seminar, my progress is just a literature review and a failed experiment. ... So I was facing a lot of pressure, even for the second milestone, the research question was almost solved, not completely solved. (Meng, chemical engineering)

Meng experienced high level of stress as he was not able to generate the research outcomes required to demonstrate that he had reached the standardised milestones. Similarly, Jia and Xin all contented they felt frustrated with research failures. Although they realised research failures were normal, as Xin said, "it's likely to succeed or fail in doing research", the milestones make any failures somewhat unacceptable. This suggests,

as Meng argued, that the pressure international Chinese HDR students experience during their research varies from person to person in terms of the difficulty of the research projects. Moreover, some unexpected issues such as the laboratory movement or refurbishment, or negotiating panel members' time also can cause delays to meeting milestones. Although HDR students can apply for extensions, they had to bear heavy psychological and emotional pressure during his process. As Xi suggested, "Once you failed to pass the milestone, you would be immersed in severe negative emotions". According to these participants, the unpredictable nature of research made meeting the milestones in a timely way extremely challenging. Moreover, this milestone mechanism overlooks the fact that the depth and sophistication of producing original knowledge takes time to achieve.

Furthermore, the focus on prompt and timely completion can create significant practical difficulties and emotional burdens for these participants who are already pressed by time-limited scholarships and visas. In this study, most (n=16) participants contended that they have undergone excessive pressure and anxiety in order to pass each milestone and meet the regulated deadline. As Tang said:

> When it came to the final milestone, during the last month, I was really 'burned', because I was like, "Oh, my God, I'm not going to finish this." … At that time, I also felt desperate and anxious when I did revision according to their (supervisors') feedback. During the last month, it was really hard to endure the feeling of hastiness and urgency. Every day, I got up at 5 a.m. and went home at 11 p.m. or midnight. I would sit in front of the computer in the office and kept typing without stopping. I was very exhausted … I think I almost collapsed and couldn't bear it anymore. (Tang, education)

Tang cited terms such as "desperate", "anxious", "hastiness", and "urgency" to describe her situation in meeting the required milestone. Xin shared a similar experience, "It was a very exhausting time, and I was really worried that I was going to die because I wasn't getting enough sleep". Both Tang and Xin had to work extremely long hours to meet deadlines and pass milestones. Moreover, participants like Fan reported that he had to sacrifice his time for social activities. As Fan said, "I don't try to maintain a good relationship with my colleagues, because I have spent all my energy on research". Mo

echoed, “we usually just say hello and have a simple chat. We don’t have many conversations as we don’t have time”. Although relentless hard work did help participants meet deadlines and pass milestones, they were also caught in forms of self-exploitation. In so doing, as shown in the data, participants lamented their physical, mental, and social breakdown.

Moreover, as Bourdieu reflects, the neoliberal market is a ‘Darwinian world’ where there is a struggle across all levels of the hierarchy (Bourdieu, 1998a, para. 9). The neoliberal *doxa* prevailing in HDR education section exacerbates the competition among the student cohorts. In a point of fact, the field of higher education is not a product of total consensus, but the product of a permanent conflict (Naidoo, 2004), as discussed in Chapter 3. In this study, seven out of 18 participants confirmed that they were under great pressure when their peers had produced more publications or achieved more progress in their research outcomes. Such concern has also been noted by some researchers that doctoral students may fall prey to constant peer pressure (Schmidt & Hansson, 2018). For example, Bei contended that one of the difficulties for him was to deal with the peer pressure. As he explained:

> When you are in the same laboratory, as your colleague is doing experiment, you are also doing experiment, but after a period of time, your colleague has published an article, but you haven’t published, which can be a pressure invisibly, namely, all kinds of invisible pressure due to competition. (Bei, public health)

Bei indicated that he felt “invisible” pressure when his colleague produced publications ahead of him. Jia also echoed such sentiments, noting that when she commenced her PhD study with other two colleagues, that fact that they had produced papers and progressed well, made her experience that “there is a lot of pressure” and that much of it was “negative”. She also added that such pressure “is not always in your head, but sometimes when you quiet down, sitting there alone, you may suddenly feel that others all have (papers), but I have nothing”. Meng and Fan also indicated that they felt stressed when their research colleagues achieved faster progress in their research. When Meng found his research colleagues solved three research questions during the second year while he was still struggling with his first research question, he lamented, “this invisible horizontal comparison will bring pressure on myself”.

From cases abovementioned, almost all participants denoted such pressure as "invisible". This is what Bourdieu and Passeron (1990, p. 115) described as symbolic violence: "something you absorb like air, something you don't feel pressured by; it is everywhere and nowhere, and to escape from that is very difficult". Whilst such pressure is not without foundation, it is apparent when the imposition of systems of meaning and value upon groups is experienced as legitimate (Bourdieu & Passeron, 1990, p. 4). Any form of capital may exert symbolic violence once it is misrecognised in its truth as capital and imposes itself as an authority calling for recognition (Bourdieu & Wacquant, 2013). As discussed in Chapter 3, within the higher education field, research publications are extremely important forms of cultural capital which may guarantee favourable positions in this field. Previous study also suggests the significance of research publications for Chinese research students (Huang, 2021). Hence, social agents like Bei had to implement strategies to accumulate valued capital such as research publications in order to improve or defend his position in relation to other agents. Participants in this study were also aware of such conflict. As indicated by Bei, such pressure was "due to competition" and Meng noted his pressure was prompted by "comparison". Therefore, when their colleague successfully accrued the valued capital or demonstrated a tendency to obtain this capital, they subjectively committed to, in the sense of recognising, the very rules of distinction by which they were excluded and dominated. As such, participants experienced feelings signifying disorientation such as being out of place, anxiousness, awkwardness, shame, stupidity or pressure. Indeed, such sentiments were expressed in different degrees of intensity by most participants. In this vein, participants fell prey to symbolic violence when they believed that they had accrued less valued capitals in comparison with their peers.

In sum, it is noted that the logic of the mechanism governing HDR research is based on how promptly candidates can be processed through the university system and how quickly they can generate research publications. On the one hand, a 'one-size-fits-all' principle assumes that each HDR candidate is able to demonstrate progression via a standardised timeline. On the other, this mechanism ignores the diversity of the participants, such as their nationalities, disciplines, and the complexity of each candidate's research project. Hence, this mechanism has the potential to undermine HDR students'

wellbeing and make them vulnerable to forms of self-exploitation in order to achieve the required deadlines. Further, in doing so, this mechanism can dehumanise participants who, for reason of the complexity of the research process, are unable to meet milestone deadlines, and experience failure and even exclusion from pursuing their goals in a specified field.

5.3 CHAPTER SUMMARY

This chapter first presented the demographic information and brief personal biography of the 18 interview participants. Throughout the analysis of the data, it can be concluded that these participants all demonstrated meritorious educational backgrounds and research potential irrespective of their family backgrounds. With such an outstanding performance, this student cohort can be acknowledged as an 'exemplar' of the highly competitive examination-based education system in China. As a result, this student cohort is often assumed to naturally have acquired the essential resources to endure any difficulties because they have had long been enculturated into the resilience process (Walker et al., 2006). Yet, the chapter reveals that participants had to face multiple and concurrent challenges including habitus-field mismatch, capital deficiencies, and symbolic violence.

To be specific, regarding the habitus-field mismatch, the analysis of participants' interview accounts identified that their prior habitus shaped in the previous higher education field often collided with the Australian higher education field in terms of academic English language usage, supervision, as well as research atmosphere and standards, as shown in Table 5.3. Previous literature concerning international research students' challenges also identified language and supervision as major barriers in their successful adaptation to Australian higher education (Son & Park, 2014; Xu et al., 2020; Yu & Wright, 2016). This study provided distinctive insights to enrich these findings. Notably, it found that participants struggled with academic English not only because of a lack of sufficient linguistic knowledge such as vocabulary, grammar and so on, but also because they felt constrained by the different thinking patterns behind both languages. Hence, their linguistic habitus formed in previous field was found to be inappropriate in the Australian higher education field. Moreover, the different supervision style between

participants' previous supervisors in Chinese universities and their current supervisors in foreign universities has also been noted by some researchers (Hu et al., 2016; Winchester-Seeto et al., 2014; Wu & Hu, 2019). Interestingly, this study found that some participants felt ambivalent when their current supervisors engaged more deeply in their research projects. This approach to supervision conflicted with their previous habitus of being supervised in a "free-range" style, which was used by their supervisors in Chinese universities. Of major significance was that some participants also contended that their habitus in relation to self-discipline and research publications was challenged. This was because the flexible Australian research environment and standards attached less importance to publications. From a Bourdieusian lens, when participants attempted to meld into the Australian higher education with their bodies inscribed by previous experience, 'mismatches' stood out. In this vein, participants could experience a sense of being like a "fish out of water" and/or feeling like 'outsiders' in the Australian university environment.

With reference to capital deficiencies, the challenges participants reported include insufficient care from family due to 'separation', insufficient background knowledge, insufficient support from institutions, supervisors, and colleagues, as well as disrupted capital accumulation due to COVID-19 (see Table 5.3). In Bourdieusian terms, participants faced structural barriers to accumulate the pertinent and necessary capital to progress their research projects; and maintain their wellbeing such as emotional capital from their families, supervisors, or colleagues in pursuing their higher research degree.

Such 'habitus-field mismatch' and 'capital deficiencies' are commonly reported and largely perceptible challenges. But this study also disclosed that participants had to grapple with the "symbolic forms of 'threats'" (Mu, 2021c, p. 18), namely, symbolic violence, which has been an underexplored component in the current resilience literature. It was found that participants had to deal with diverse forms of invisible pressure during their research journey, including but not limited to, supervisors' pedagogic authority, English dominance, the symbolic power of publications and those standardised milestones imposed by neoliberal university policies. Although resilience to such symbolic violence is largely overlooked in previous literature (Mu, 2021c; Xing et al., 2021, 2022), it can be argued that many participants cannot be free of them, as indicated in Table 5.3. As

revealed in participants' accounts, many of them succumbed to symbolic violence because of their disadvantaged position in the face of unbalanced symbolic power implicit in the student-supervisor relationship and use of English as the academic language. Moreover, the neoliberal university policies that emphasise efficiency and competition further placed participants in a more competitive environment, whereby they were vulnerable to experiencing considerable insecurity and/or anxiety and associated 'bodily emotions'. In this vein, their mental wellbeing has been at risk.

In summary, despite their previous successful education achievement, the participants encountered multi-dimensioned challenges in the pursuit of their higher research degrees in Australian universities. The challenges for each participant were summarised in Table 5.3 at the end of the chapter. Although these challenges are not commensurate with risks or adversities in traditional resilience research in catastrophic contexts, it should be noted in this study that the aggregate of these common challenges—the accumulated effect of risks (Rutter, 1979) or the frequent occurrence of extensive risks (Mitchell, 2013)—can also pose threat to participants' mental health and wellbeing. Most importantly, the identification of symbolic violence delineates how the existing structure inhibited participants' development in the Australian higher research education sector. Despite such challenges, many participants reportedly drew on different strategies and produced positive outcomes along their HDR journey. The next chapter therefore focuses on participants' resilient responses to challenges.

Table 5.3

Summary of Participants' Challenges

Participants	Habitus-field mismatch			Capital deficiencies						Symbolic violence			
	Academic English language usage	Supervision	Graduation criteria	Insufficient care from family due to 'separation'	Insufficient background knowledge	Insufficient support from supervisors	Insufficient connection with colleagues	Insufficient institutional support	Disrupted capital accumulation due to COVID-19	Overwhelmed by supervisors' pedagogic authority	Mental pressure due to non-native English language proficiency	Symbolic power of publications	'Standardised' Research milestones
Ying		√		√	√			√			√		√
Fei	√	√		√	√	√	√		√	√	√	√	√
Huang	√		√	√	√				√	√	√		
Su	√		√					√					
Tang			√	√	√			√		√			√
Xi			√	√	√	√		√					√
Jia				√	√	√	√	√	√	√	√	√	√
Le	√					√			√	√	√		
Fan				√	√	√	√	√	√			√	√
Yang	√		√	√			√		√		√		√
Xin	√	√	√	√	√	√	√	√		√	√		√
Ning			√	√	√	√	√				√	√	√
Mo	√	√	√	√	√	√	√	√	√	√			
Bei	√	√					√	√		√		√	√
Lin		√	√	√	√	√	√	√	√	√		√	√
Chen	√		√				√	√			√		
Han		√		√			√	√		√	√		√
Meng		√	√	√			√			√		√	√

Chapter 6: The Resilience Process: Empowering Factors and Desirable Outcomes

The previous chapter presented an in-depth analysis of the challenges encountered by 18 Chinese HDR students from four Australian universities. The analysis revealed, in Bourdieusian terms, that students had to grapple with habitus-field mismatch, capital deficiencies, and the "symbolic forms of 'threats'" (Mu, 2021c, p. 18), namely, symbolic violence. Despite these challenges, participants developed various strategies and achieved desirable outcomes, and in doing so, demonstrated resilience. Chapter 6 aims to delineate this resilience process and addresses RQ2 & RQ3:

RQ2: *How do Chinese international HDR students in Australia deal with challenges along their research journey?*

RQ3: *What are the positive outcomes Chinese international HDR students in Australia desire or achieve despite the challenges they face?*

To answer these questions, Chapter 6 is organised into four sections. Section 6.1 presents the factors that facilitate Chinese international HDRs to navigate and thrive in the Australian higher education field. Section 6.2 illustrates the major positive outcomes achieved by Chinese international HDR students despite the challenges they face. Section 6.3 focuses on their reflexive strategies towards symbolic violence, and Section 6.4 concludes with an overview of Chinese international HDR students' resilience process.

6.1 FACTORS FACILITATING THE RESILIENCE PROCESS OF CHINESE INTERNATIONAL HDR STUDENTS

Identifying protective factors and processes has become the primary focus of most resilience studies (Ungar, 2019). Ungar's three dimensions of resilience research indicates that the promotive and protective factors and processes which interact at biological, psychological, social, economic and ecological levels can "buffer the impact of exposure to specific risks and contribute to outcomes of interest" (2019, p. 4). The psychology of

resilience makes a distinction between promotive and protective factors (see Chapter 2). Yet data gleaned from this sociological study blurred the boundary between the two, and it is for this reason that the terms 'protective' and 'promotive' factors are not used here in the data analysis.

Drawing on Bourdieu's sociology, Mu (2021c) further provides a sociological interpretation of the resilience process as "promoting capital and realising habitus" (Mu, 2021c, p. 25). From this sociological lens, the resilience process manifests as social agents' habitus seeking to access and manoeuvre capital, which in turn empowers the habitus when faced with multiple challenges including symbolic violence. As such, this section presents the empowering factors which can enable Chinese international HDR participants' capital accumulation and habitus reconstruction so that they can navigate and thrive in the Australian higher education field despite the challenges. It should be noted that studying protective and promotive factors must be understood in unison with evidence of risk profiles (Ungar, 2019), as with little or no exposure to the risk factor, resilience does not manifest (Luecken & Gress, 2010, p. 243). Therefore, this section only cites participants when they described their resilience process in terms discernibly associated with challenges. In this vein, three clusters of empowering factors were reported by participants, namely, previous experience, family support, and institutional support.

6.1.1 Previous Experience

According to Bourdieu (1986), the value of capital depends on the field. Some capital can be transferred across fields. However, this can occur at the cost of capital losing its efficacy by varying degrees in the new field. In this study, when Chinese international HDRs ventured into the Australian higher education field, they highlighted the significance of their previous research and overseas experience in helping them to become established in the new field and mitigate the potential challenges.

During the interviews, those participants (n=11) who had studied overseas prior to their HDR study in Australia relayed positive comments about their previous university experience. In Fei's case, because of her previous learning experiences in an Australian university, she referred to her application for PhD as 'a canal is formed when water comes' [水到渠成]. Fei noted:

> Because when I applied for a PhD, I was already in Australia, so it was like applying consecutively. Because the doctorate applicant needs to find a supervisor, and I was in Australia, so I could directly know the supervisor. It was relatively easy. But if I go to other countries, all kinds of procedures like visa and life issues, knowing nothing about the supervisor, I simply feel there will be a lot of difficulties. (Fei, accountancy)

With the help of her previous supervisor during her Honours study, Fei was able to make contact with her current principal supervisor. As such, her previous overseas learning experiences relieved her from "a lot of difficulties" such as finding supervisors. In Bourdieu's words, Fei's social capital freed her from worrying about approaching and selecting supervisors. Moreover, as Fei suggested, entering the Australian higher education field requires the negotiation of various procedures and formalities, such as applying for a visa. Yet Fei's previous overseas experience facilitated her capacity to manage such procedures. Similarly, Xin affirmed that her previous overseas study experience in England enabled her to overcome the fear of entering a new field. Xi noted:

> … when I was at home, I didn't realise it had great influence until I came to Australia. Because when I came to Australia, I didn't know anyone here, but at that time I didn't feel that I would be afraid of going to a country that was completely new to me. Maybe because of the experience I had in England, I didn't feel that it was hard for me to accept the life here although I came alone. (Xin, biology)

It can be argued that Xin's previous study experience in England has already enculturated her into a habitus of independence. She had experience in pursuing study abroad on her own. Hence, even if she "didn't know anyone" and had no social capital, she could easily adjust to a new research context because of that habitus of independence. Another participant, Mo also noted that his previous overseas study experience enabled him to continue his research journey in the Australian education system, and deal with a new learning and research environment, language, and living conditions. Mo reflected:

> Personally, I think it helps a lot. Although some people may feel that the Master research is relatively simple, and there is no specific role, but I personally think that as it is the first time for you to experience research, it is this experience that

> can stimulate your ability to resist research pressure, and the spirit of self-research. … When you came here, you have to conduct research on your own, and even your work and life, you have to do by yourself, including cooking, allocating monthly living stipends, all require your own management. So I consider (overseas study experience) helped me a lot now, at least I can well manage my work, study and life pressure, and all resources. (Mo, material engineering)

Mo explicitly discussed what he thought he gained through his overseas study experience. Like Xin, Mo enculturated himself into a habitus of independence, and was able to manage his work, study, and life independently. Moreover, having studied in an Australian university, Mo became familiar with the Australian higher education system and research environment. Unlike those who felt like a "fish out of water", as discussed in Chapter 5, Mo considered that his Master's study experience in an Australian university prepared him for his PhD, because his previous research experience in an Australian university stimulated his ability to "resist research pressure". In Bourdieusian terms, Mo successfully developed a research habitus, so he was able to cope with the demands of doctoral study as independent researcher. In accordance with Mo's experience, participants such as Chen also emphasised the significance of his previous research experience in boosting his confidence to shift from a Master by Coursework to a Master's by Research in an Australian university. As he stated:

> I can (adapt to the Australian research environment), because the (cultivation) model is almost the same in China, and then it's probably a little bit easier here. In China, I also went through the undergraduate design, and the difficulty is actually the same, but the thesis in Australia is relatively more difficult or the content is more difficult. But if talking about doing experiments, because I have done a lot of experiments before, (my research skills) have been greatly improved in detail, and I also feel I have strong hands-on ability, and I have never been timid or feel 'I can't', I feel quite confident in doing experiments. (Chen, chemical engineering)

Chen's statement indicates that he was confident to perform experiments because of his previous research experience which conditioned, or prepared, him for the "difficult" HDR journey. Such research skills were commonly recognised (cultural or scientific)

capital in different higher education fields. That capital enabled him to attain a favourable position in the new field. The relatively favourable position defined by capital corresponded to a favourable disposition—a habitus of confidence. Le had a different story to relate about "confidence". Unlike Chen, although Le had a difficult time with her supervisors when she commenced her research journey in Australia, she recalled:

> As for the academic aspect, I actually didn't lose confidence, because I know how I got my Master's degree, I also know I can do well in science. So after I almost struggled for half a year, I quickly let it go, so far I am confident in myself. (Le, biology)

Whilst Le felt demoralised because of the negative research experience with her supervisors, she was able to persist with her research by recalling her previous research experience during her Masters. As she reflected, "I know how I got my Master's degree, I also know I can do well in science". These beliefs prevented Le from being immersed in self-doubt and were drawn from the scientific capital she gained from previous research experience including, but not limited to, research skills. Hence, Le's existing scientific capital and habitus of confidence enabled her to continue with her studies.

In sum, prior overseas university study and previous research experience equipped participants with the necessary capital to enter a new field. Not only did they gain cultural capital such as a degree, research experience and English language proficiency, they also secured valuable social capital, such as their prior connections with supervisors and/or friends which positioned them favourably in the new field. The capital identified thus far contributed to these HDR students' admittance and adaptation to the new field. Furthermore, they have been enculturated into a habitus of independence and confidence by virtue of their overseas learning experience and previous research experience and such familiarity with the new field can ease their sense of ambivalence or feeling like a "fish out of water". In brief, previous experience contributed to empowering capital and habitus that freed participants, at least in part, from the challenges of capital deficiencies and habitus-field mismatch.

6.1.2 Family as a Field for Resilience Building

Previous literature has highlighted that a supportive relationship with family members may promote the resilience process of Chinese international research students. In this study, all (n=18) participants confirmed that family support was an indispensable part in their resilience process to navigate through the Australian higher education field. As noted in Chapter 5, Atkinson conceptualises family as a field within which "love—or the care and affection for specific others can be described as a capital" (Atkinson, 2020, p. 156). In this study, 16 out of 18 participants accentuated the significance of the emotional support from their family in their resilience process within the Australian higher education field. Bei's comments are indicative of this sentiment:

> I think the biggest support is emotional support, because if you study for a PhD, it is a lonely and tedious process, but with the 'participation' of your mom and dad, life won't be so lonely. Because if you have something on your mind, or if you encounter something unhappy, you can communicate with them, and they will give you some advice. That can, both relieve your lonely feeling, and then also get something off your chest. (Bei, environmental engineering)

According to Bei, the overseas research journey can be "lonely" and "tedious". The frequent care and support from his families rescued him from such loneliness. In addition, as research is full of uncertainties, participants can encounter a variety of challenges and they have to deal with negative emotions such as frustrations and self-doubt (see Chapter 5). In this respect, emotional support from family can be indispensable. Fei's comments align with Bei's. She noted, "when I feel depressed, my parents often encourage me, using video or voice calls to encourage me to persevere". Tang stated that with the support from her family, her negative emotions "wouldn't turn into some psychological illness". In these cases, parents' emotional support constitutes emotional capital—a variant of social capital such as love, affection, support, patience and commitment generated through affective relations built over time particularly within families (Reay, 2000; Zembylas, 2007). Finally yet importantly, according to participants Chen and Ning, another important emotional support was that their parents rarely put pressure on them but were willing to support them by any means. As Chen reported:

> … but mainly (they can give) some psychological comfort, or release my pressure, ask me not to have pressure, such as saying they will support me whatever happens, so I feel that no matter what happens, there are still people who care about me and support me. Then my family gave me some freedom. They didn't force me to finish my degree within a year and a half, and they didn't limit my spending, or they didn't force me to find a job or anything like that, to put a lot of pressure on me. (Chen, chemical engineering)

Chen was not afraid of failures due to his parents' consistent support. From a sociological lens, the family's supportive attitude enhanced participants' dispositions towards studying a research degree abroad and also empowered them to continue their research career by providing backup sustenance. For example, Chen also indicated that his parents "didn't limit spending" which relieved his financial pressure. Such financial support was noteworthy for as Bei shared, the stipend provided by his scholarship did not cover all the expenses he incurred during his research journey. Accordingly, Bei had to rely on financial support from his family:

> The second aspect I think is probably the financial support. Because sometimes, for example, a scholarship can only cover part of living expenses, but if you have to rent a house, and then you have to buy a car, and then you have to eat and so on, sometimes you will overspend, but the overspending part, since you do research and you can't look for a part-time job. … I think a PhD candidate who is really engaged in research does not have any time to do a part-time job. If you overspend, the only way you can find is to rely on your mom and dad. (Bei, environmental engineering)

In sum, it can be concluded that family support was a significant factor in the participants' resilience process. On the one hand, frequent connection with family can protect participants from suffering loneliness and isolation. Such family emotional comfort can also assist them in dealing with frustration or negative emotions resulting from research challenges or life overseas. Participants can also feel relieved when they are not pressured by family expectations. This finding accords with previous literature that suggested when international students study abroad, they look to their parents to help them deal with their emotional-social problems, such as loneliness (Sawir et al., 2007). On the other hand, the family functions as a financial buffer by contributing to participants'

shortage of economic capital. In this way the participants' close relationships with their parents function as a form of social capital, which Bourdieu (1977) defines as "the aggregate of the actual or potential resources which are linked to the possession of a durable network or more or less institutionalised relationships of mutual acquaintance or recognition" (p. 51). Furthermore, the family field is not merely a domestic, local social space within a particular national context; rather the family field nurtures the resilience process of Chinese international HDR students from afar geographically with an effect that is transnational.

6.1.3 Support from or within Australian Universities

According to Bourdieu, the position of agents in a field depends on the volume and configuration of capital they possess or own (Bourdieu & Wacquant, 1992). As such, social agents strived for accumulating sufficient capital to seek or secure themselves a position within the Australian higher education field. In this study, participants reported they could accrue capital via basic institutional training services, support from supervisors and from research colleagues. The Australian research system or environment can also facilitate international HDR student capital accumulation, which in turn promotes their resilience process in response to challenges due to capital deficiencies, as discussed in Chapter 5.

Institutional support

According to all (n=18) participants in this study, one major way for them to obtain capital is through institutions or faculties which offered international research students a series of HDR options, including research workshops and seminars, support to attend conferences, and psychological counselling service. This was explicated by Bei as follows:

> Because I was not a student who had been engaged in research for a long time and had a lot of experience in research, when I used a new instrument, I would be at a loss, but after attending a workshop, which introduced explicitly from the basic principle to how to operate it. (It's) very detailed. It then accelerated my experimental progress. (Bei, environmental engineering)

Bei asserted that as someone without much research experience he would be "at a loss" without acquiring necessary information from these research workshops. Such workshops functioned to help Bei accumulate what Bourdieu referred to as scientific capital—a form of cultural capital. In addition, Huang added, institutions and faculties also assist students in dealing with their research-related problems:

> … some other issues like, if you have any computer problems, you can call them at any time to solve the problems immediately, (they) provide the technical support. There is also a special security officer on each floor to manage the equipment and security, and you can ask them any questions. Much better, in terms of funding, for example, to attend meetings or travel on a business trip, like the reimbursement, there is specialised staff to help you. (Huang, public health)

As Huang noted, this form of support helped to prevent him from being distracted by tedious paperwork and enabled him to focus on his research project. This finding also accords with previous studies. As reported in the literature review, some Chinese international research students highlight the importance of administrative help that facilitates their understanding of university procedures, including mundane tasks such as access to printing services and library resources (Zhang, 2016). Such institutional support in routine contexts is similar to what (Johnson, 2008, p. 385) identified as the "little things" and Masten (2001, p. 235) noted as the "everyday magic of ordinary, normative human resources" that buttress resilience. In Bourdieusian term, institutional support constitutes social capital.

In addition, institutions also provide psychological counselling services to international HDR students. As Lin commented, "Actually, PhD candidates all have various psychological problems". In this study, 3 out of 18 participants reported that they have utilised psychological counselling service and found it useful. Xin detailed her experience of consulting the psychologist in her university:

> I went there once. At that time, I felt so entangled, and then I felt that I had to find someone to talk to. Perhaps before I went there, I had an idea that maybe he could give me a solution, but after you talked to him, you would find that he would not give you a solution, or you would not accept it even if he provided it, maybe you just want to talk to a person who is a stranger to you. Or like when you talk to a

> stranger, you actually talk to yourself, you don't hide anything from him, maybe that's your true voice from your heart, so after talking to him, your thoughts could be clearer and they could calm you down, although they didn't offer specific solutions. (Xin, biology)

Xin felt so "entangled" that she almost collapsed in response to a serious experimental failure. However, the provision of psychological counselling services offered her emotional support. Lin also affirmed the value of such support, "Just like a friend, you talked to him, but he won't tell what you said to anyone else". Similarly, Le shared her experience, "In short, he acknowledged what I've done and thought. So I am not too hard on myself". These extracts from participants' experiences, indicate that psychological counselling service serves as emotional capital for participants. However, this form of emotional capital is not built upon long-term affective ties or family-based support as conceptualised by other scholars cited thus far in this section. Rather, such emotional capital occurs when participants feel unwilling to share their negative emotions with their family, friends, colleagues or supervisors.

Support from supervisors

Supportive supervisors are critical for a successful studying abroad experience (Ives & Rowley, 2005). In this study, 17 out of 18 participants indicated that support from supervisors played a pivotal role in their resilience process. As discussed in Chapter 3, according to Bourdieu, cultural capital can be acquired through education unconsciously in the absence of any deliberate inculcation (Bourdieu, 1986). In the higher education field, supervisors are assumed to possess more cultural capital than students and are expected to 'transmit' their cultural capital to students through the supervision process. In this study, participants found their supervisors were supportive when they encountered research problems and had difficulty in academic writing and publications. For example, Han reported that he had benefited from frequent contact with his associate supervisor apart from the regular scheduled meetings. He noted, "if I had any problems, I would show him my result and ask for his advice, then he would offer me some constructive ideas … He helped me a lot". Xin indicated that her supervisors were ready to help her with her research problems:

> Even if during my first year, … the progress was relatively slow, but my supervisor is very nice, he had been encouraging you, and my associate supervisor was always with me, and he always said let's check where the problem is together, so this supported me to persist. I think my first year is like a process of finding a balance. I feel the progress in the first year is very slow, but I think it's probably a process that every new PhD has to go through. (Xin, biology)

According to Xin, her supervisors were very supportive and reassuring, especially during her first year when she was dissatisfied with her research progress. With her supervisors' constant encouragement and support, Xin was able to get through a challenging phase of study. In this case, Xin's supervisors offered her cultural capital, namely, research solutions to her research problems and emotional capital, that is, constant encouragement. Bei also mentioned that he encountered many experimental problems during the first year, however his supervisor would teach him step by step. He further added, "when I had difficulties, and I need to discuss some experimental designs, or any problems, I would discuss with my principal supervisors". Chen also felt encouraged when his supervisor comforted him by saying "this is not your problem, and there is no need to blame yourself". The abovementioned findings further corroborate a previous study of Chinese international doctoral students who emphasised the value of receiving a professor's encouragement (Zhang, 2016).

As discussed in Chapter 5, many participants reported significant challenges in academic writing due to their lack of linguistic capital, that is, academic literacy in English. Some (n=7) participants considered that the detailed feedback they received from their supervisors helped them deal with this challenge. Although the supervisor support here does not echo Michael Singh's (2017) call for postmonolingual theorising in thesis writing nor does it challenge the *doxic* position of English as the academic lingua franca, it does mitigate the negative effect of structural deficiency in linguistic capital and build participants' academic literacy in English writing. In this vein, participants and their supervisors engaged in the "compensatory model" (Mu, 2018, pp. 42-43) of resilience building. This is extrapolated from some of the participants as follows. For example, with reference to supervisors' provision of feedback, Han noted:

> So the revision including the thesis, report, and anything that I've written, their comments or modifications are very helpful, and very specific. It's not a brief check, like check not seriously, no, including every formula, many formulas, they will spend a lot of time, (to make sure) there is no problem, or where they feel confused, I then further clarify it, very, very carefully. They will check every point and every sentence, not just have a general check. (Han, chemical engineering)

Bei also pointed out that his supervisor revised his writing meticulously including the punctuation. In Xin's case, her associate supervisor not only provided detailed feedback, but also explained the reason why he made such revisions. As such, Xin felt grateful for her associate supervisor, "I kept writing and revising with him, so I have made a lot of progress and I believe this is the major factor". Both Han and Xin highlighted that their improvement of academic writing heavily relied on supervisor feedback. As Han reflected:

> But you will feel that what you write is not as good as others or the article you read, that is, English writing skills, I think, are not what you can develop in a short period of time, even if you read more, you have to write, even you write more, you have to find someone to revise for you, then you will be able to improve. … But when your supervisor or your co-author make some revisions, then you find the revised logic can be clearer, then you know that writing in this way is right, next time you know how to write. (Han, chemical engineering)

In this vein, these international HDR students pinpointed the importance of supervisors' feedback, which is a process for participants to accrue linguistic capital. In addition, a minority of participants (n=6) also highlighted that their supervisors would find some experts who could help participants to solve their research problems by virtue of their expertise. For example, Huang and Xi related that their supervisors were able to introduce them to some experts who could help them solve research problems. In Huang's case, because he shifted to a new research area, he then encountered many research challenges as he did not have sufficient research background knowledge. In this respect, his principal supervisor invited an expert in this research area to join his supervisory team as his associate supervisor. With his associate supervisor's help, Huang gradually mastered the basic knowledge in the new area. Xi also shared a similar experience. Her

principal supervisor recommended an expert to assist in her data analysis. This expert not only gave her instructions on data analysis, but also provided feedback on her thesis writing. As Xi reflected, "the data expert helped me a lot (in finishing methodology and data analysis chapters). He also pointed out my problems in writing and reminded me to think about the logic of my discussions". When faced with the challenge of capital deficiency such as lack of research skills or disciplinary knowledge, some participants noted that their supervisors' social networks provided them with access to valuable resources such as specialised knowledge, so they could obtain the sufficient cultural capital required for the completion of their research projects.

Help from research colleagues

Previous studies suggested interacting with their peers on campus is an efficient way to overcome challenges in academic study (Shen et al., 2017; Yu & Wright, 2016). Consistent with the literature, 14 out of 18 participants in this study, declared that the help from research colleagues, particularly the senior research colleagues, has favoured them in terms of solving research problems, sharing experience in research-related assignments and providing emotional comfort. Nine out of 18 participants reported that they received help from their research colleagues when they were unable to solve certain research problems. For example, Jia noted, "like experimental things, you can ask the postdocs, the research assistants in the group, or those senior PhDs in the group, and you can ask them for advice". Xin, Bei, Ning, and Tang also confirmed that they would seek help from senior research colleagues who have more research experience and knowledge. In Bei's case, he asserted:

> Or I will ask some experienced seniors, because for some experiment methods, the school may not have the instrument, but after you ask some seniors, they will give some more reliable experimental methods. (Bei, environmental engineering)

Tang also shared her similar experience, "There are some colleagues, who are in my major but a year ahead, have done these things, so I also took lessons from them". For those participants such as Han and Jia, who have been involved in a 'big group' supervised by the same supervisors, they also acknowledged benefiting from their group meeting or roundtable meeting through which they can access advice from other research colleagues.

As Han put it, "if you have problems, you can share, and then all of us, although we don't understand the research project, will give you some advice from some other aspects". On the whole, these participants demonstrated that their research colleagues could provide very practical suggestions based on their research experience, which is supplementary to the support provided by supervisors. In Bourdieusian terms, such academic advice received from research peers can be envisaged as participants' cultural capital. Moreover, some participants (n=5) affirmed that it was crucial to receive emotional support from research colleagues when they were experiencing negative emotions such as anxiety, frustration, or self-doubt. This was evident in Tang's comments about her final-year pressure and anxiety when a deadline was looming. Tang recalled:

> At that time, I had a colleague in my office who was also in a rather anxious state, and we both encouraged each other. But other colleagues were also very nice, like the colleague in my office, she felt empathy for me that I still worked really hard on writing the thesis paper at Christmas, so she brought me a small Christmas gift, and said when you write your thesis, if you feel extremely exhausted and so on, you can touch this furry toy, and you may feel better. And at the final stage of catching up on my thesis, I also didn't have time for cooking, other colleagues in the office would bring me food every day, and then I feel that I have a group of people around me and very cared about me. In fact, I feel quite touched, because if without these colleagues, I think I can still grit my teeth and get through but may experience an emotional breakdown. (Tang, education)

As Tang emphasised, she would have "experience(d) emotional breakdown" without the care and support from her research colleagues, such as constant encouragement, a sense of empathy, and the provision of food. Participants such as Fei and Chen also mentioned that when they had difficulties or lost confidence, they felt reassured when their research colleagues encouraged them. Chen's comment is indicative of this: "they would reassure me, and say 'this problem was fine, it would not affect you, it would not affect your research process a lot', so then I would feel less concerned". In Fei's and Chen's case, as they were not familiar with the Australian higher education field, it was common for them to feel nervous or anxious when they prepared for a compulsory milestone. In this context, both participants were placed in a sense of uncertainty because the assessment criteria were ambiguous for them at that time. However, when some of

their research colleagues provided positive comments based on their experiences of this process, Fei and Chen felt "less concerned" or "[didn't] worry too much". In Bourdieusian terms, participants such as Fei and Chen may feel empowered or recognised by their research colleagues who had already acquired that cultural capital. As such, Fei and Chen's sense of anxiety was mitigated, and they gained confidence in acquiring the cultural capital.

In addition, Jia shared that she felt that she was emotionally supported when she 'make complains [吐槽]' about or shared her anxieties about research difficulties with her research colleagues. As Jia recalled:

> Yes, of course, when we all share together, it becomes a 'roaster'[吐槽], because you would find that you are not the only one who was having these problems, everyone was having these problems. Yes, at that time you would actually feel 'this is science'. … In fact, I think it was quite useful, at least at that time you would know these things are normal, you would stop chasing a dead end [钻牛角尖], saying why I cannot do it, but still not, right? At least when you talked to others, you escape from the dead end. (Jia, biology)

Here, Jia pointed out the reason that she felt relieved from research pressures after she 'made complaints' and shared her concerns with her research colleagues. Through sharing mutual 'complaints', participants such as Jia realised research difficulties were common amongst the research student cohort. Furthermore, these students were able to grasp the nature of research by understanding that it is full of unpredictable challenges. This can be seen from Jia's specific comments during her interview such as "this is science" or "these things are normal". Such comments indicate Jai did not feel like an 'outlier' in this field when she encountered research problems, so she could stay calm and "stop chasing a dead end". In sum, such emotional support from research colleagues is similar to parents' love and supervisors' encouragement, which empowered participants as emotional capital.

Taken together, research colleagues often drew on their research experience to help participants unravel the rules or principles of the Australian higher education field and relieve their sense of being like a "fish out of water". When research colleagues can share

their accumulated cultural capital to help participants solve their research problems and provide emotional comfort for participants, this in turn, empowers students during very difficult or challenging situation along their research candidature in Australia.

6.2 DESIRABLE OUTCOMES DEFINED AND ACHIEVED BY CHINESE INTERNATIONAL HDR STUDNETS

Research on resilience would be incomplete without probing the desirable outcomes "associated with recovery, adaptation and transformation" (Ungar, 2019, p. 2). Drawing on a sociological perspective, Mu (2021c) highlights that the exploration of potential outcomes should remain cautious to pre-existing conceptualisations that involve "consciously or unconsciously, dominant value judgement on, and mainstream assumptions of, undesirability and desirability" (p. 25). Accordingly, this section seeks to demonstrate the positive outcomes defined and achieved by the participants despite the challenges they experienced during their HDR journey (see Chapter 5). These outcomes include achieving a higher research degree (Section 6.2.1), improving academic English language proficiency (Section 6.2.2), and developing abilities of handling research frustrations (Section 6.2.3). The potential reasons behind the desirability of these outcomes are also discussed and analysed according to participants' interview accounts.

6.2.1 Achieving Higher Research Degree and Realising its Exchange Value

When asked about what they desired to gain from the research journey in Australian universities, 16 out of 18 participants unequivocally confessed that their prime goal was to obtain a higher research degree. These participants also indicated that they would not relinquish this goal even if they were stressed by the range of challenges they encountered, as noted in Chapter 5. This implies that achieving a higher research degree is a 'bottom line' or non-negotiable goal for participants, and the realisation of this outcome was critical to their resilience process. These participants (n=16) reported that their desire for achieving a higher research degree overseas was linked to achieving to future goals. Such goals ranged from securing an academic position, attaining other forms of employment such as working in another country, or making contributions to society. For example, many (n=14) participants reported that they expected to advance their career options by

virtue of the value of an Australian academic qualification. This was evident in Mo's comments:

> Because now there is great employment pressure, I felt that it was difficult to seek an academic position in a university with my Master's degree, and I couldn't find a job with higher salary because my major is already saturated. I just think getting a PhD degree means an opportunity, right. First, you could get into colleges and universities. You should at least have a PhD degree to be recruited by universities. Secondly, the starting salary for a PhD is a little bit higher than a Master's degree in different companies, right. (Mo, material engineering)

Mo indicated that without a PhD degree, it would be impossible for him to seek an academic position in a university or find a research-related position in an industry. Like Mo, other (n=7) participants also revealed they intended to improve their career options via obtaining the research degree. Prior to her study, Xi was a school teacher in China, and reflected: "At that time, I really wished to work in the university, I had such an idea that I need to do research or to improve my social status". In Ying's case, although she was already a university teacher before she commenced her research journey in an Australian university, she emphasised, "… there are requirements of university teachers' degree for promotion and income increase. So considering the actual economic benefits or social status, I need to get a PhD degree". Meng also indicated that he thought an overseas qualification would provide him with an advantage when he sought academic positions in Chinese universities. As he suggested, "This degree proved to be a great help to me when I was looking for a job. Because the number of my publications did not meet the requirements and then having the overseas degree is of great help". Ning affirmed that with the Research Master's degree, he "got the opportunity to pursue a PhD degree with scholarship".

From participants' interview accounts, it can be argued that an overseas research degree acts as a form of institutionalised cultural capital with exchange value. According to Bourdieu (1986), institutionalised cultural capital can be converted into other forms of capital, including economic capital, such as higher salary, and symbolic capital, such as higher social status. Almost all participants yearned for a higher research degree to transform their life and career. Such ambition reflects aspirational capital conceptualised

by Yosso (2005), namely, the ability to aspire for possibilities beyond their present circumstances despite some real and perceived obstacles. With aspirational capital, successful obtainment of a research degree became one of the desirable outcomes of the participants despite the multiple challenges they faced along their HDR journey. For these participants, the positive outcome of the resilience process is that they positions aspirational academic and career status as attainable; thus extending the notion of 'wellbeing' in the present to 'well becoming' or a desired future.

6.2.2 Improving Academic English Language Proficiency

Mastery of academic English writing is regarded as a highly significant research capability for a HDR student given its critical role in producing research publications. In this study, some (n=6) participants confirmed that their English language proficiency had improved despite the language challenges such as the ambivalent academic English language usage and mental pressure due to non-native English proficiency (see Chapter 5). As Huang shared:

> Yes, it was a challenge at the beginning. But then I got used to it, because in this environment, I eventually found that it seemed that I write more fluently in English than in Chinese, and now I'm not so good at writing in Chinese. Yes, it's actually an environment. It was very hard to write in English when you were in China. Every time I thought of a sentence, sometimes I had to think about it in Chinese and then translated it into English, which is troublesome. Here, you can write directly in English, and you'll find that it's faster to write directly in English after you've read more and written more in English. (Huang, public health)

Huang acknowledged that he felt challenged to write in English at the beginning of his studies in Australia. However, after he kept reading and writing in English, Huang found he could write more fluently in English than in Chinese. This shift indicated that Huang developed his academic language habitus of writing in English by virtue of prolonged exposure to the Australian research environment. Aside from English academic writing, participants also found they had difficulty in reading English literature, as disclosed by Lin, "Perhaps my English level is not very good, and the literature reading is relatively slow, and I fail to understand, so I had a lot of pressure". Xi alluded to this notion but she also added:

> So I don't think there is too much difficulty in this part, just the workload is quite heavy, and I keep reading books every day in a boring way, and then I suddenly enter the state of reading English. (Xi, education)

Words like "Entering the state of reading English" suggested that reading English literature was internalised into Xi's body through habitus. In these cases, the participants all contended that they found it hard to write, read, and present in English at the initial stage of their research journey. However, after they consistently applied themselves to the task of writing clearly in English, they became used to use academic English in their research. In Bourdieusian terms, the participants' academic English language habitus reconstruction was due to the constant exposure to English as the dominant language in a research environment. This is what Bourdieu (2000, p. 172) implies by "a thoroughgoing process of countertraining" that involves "repeated exercises … to durably transform habitus". Wacquant (2011) also indicates that habitus, as a set of dispositions, can be modified by social trajectory (p. 86). Once participants had their academic English language habitus reconstructed through a prolonged resilience process of exposing themselves to academic English, they achieved a positive outcome and found themselves more aligned in Australian higher education field which prioritises academic English in research.

6.2.3 Developing Abilities of Handling Research Frustrations

Previous studies found that when some HDR students reflect on their research experiences, they are conscious of becoming more mature, more responsible, and more independent through their study and, although challenging, these students are able to transition (Zhang, 2016), and ultimately become independent researchers (Harman, 2003; Wu & Hu, 2019). Findings from this study confirm and extend the findings in such literature. Many (n=15) participants stated that they found themselves becoming better at handling research frustrations, including experimental failures, manuscript rejections or any other negative emotions related to research. Yang's comments are notable in this regard:

> In fact, my mindset has changed. At the very beginning, even if there was a small problem, I would see it as a big setback. But now I feel it's okay, so they are no longer big problems for me, that's it. … My mentality becomes a little more

> resistant to challenges, then I feel such challenges are not so terrible. The more you encounter it, the more you get used to it, like 'habit is second nature' [习惯成自然]. (Yang, biology)

According to Yang, even a minor problem could make him struggle at the beginning of his HDR journey. But later, as he reflected, having encountered such problems many times, his mindset gradually developed, and those problems were no longer intolerable for him. Xin also disclosed similar feelings, "Maybe more tolerable, more able to accept some setbacks, or some issues unexpected". Both Yang and Xin suggested that their mindset and mental capacity to process challenges evolved so they were more tolerant to challenges after being exposed to many research problems. Huang shared his experience in relation to publishing articles. At the initial stage of research, Huang found it was hard to deal with the frustrations due to rejections, however over time his attitude gradually changed:

> Of course, when you encounter something that you really can't control, sometimes you can just brush it off. For example, the article was rejected or something, after having been rejected a lot, in fact, finally, you take it less seriously, that's it. (Huang, public health)

Huang confided that after having his work rejected several times, he became more accustomed to rejection and tended to take it not as seriously. Lin also echoed this sentiment. She confirmed that "perhaps the more you experienced (it), the more you would feel it's okay". These cases indicate that as participants became engaged in dealing with the range of research problems, they became accustomed to the nature of research which is full of uncertainties and challenges. Concomitantly, these participants also developed some efficient 'habits' in response to the negative emotions triggered by research frustrations. They became accustomed to adopting a resilience strategy of strategic withdrawal (Mu, 2020) to divert their attention away from their negative emotions, such as taking a break or leave, and/or taking up their hobbies. For instance, Jia, Yang, and Xin would take one or two days off and do other things to relieve their research pressure when they felt frustrated because of experimental failures. Bei, Le, and Fan also shared that they would participate in some sporting activities to divert their attention and release their pressure, such as swimming, running, playing basketball, or fitness exercise. As Le noted,

"Then I would do some exercise, develop my hobbies, so I can get out of this emotion for a while, and then the emotion will be got rid of more quickly". Bei also affirmed that "fitness is a process of relieving stress". In sum, most participants adopted a similar strategy, that is, diverting their attention away from their research frustrations and stress. The desirable outcome of this resilience strategy, arguably, is the improved wellbeing of participants.

From the abovementioned examples, participants normalised the challenging nature of their HDR journey and desensitised their emotional response to research-related stress. Such normalisation or desensitisation are important resilience mechanisms termed as "inoculation" (Rutter, 1987, p. 326), "immunisation" (Rutter, 1993, p. 627), or "steeling effect" (Rutter, 2002, pp. 10, 15). That is, repeated experience of or prolonged exposure to adversity may not necessarily lead to vulnerability but can give rise to resilience in certain situations. Resilience building does not equate with the insulation of people from adversity; rather, it is a process of resistance to adversity (Rutter, 2006b). In Bourdieusian terms, such disposition of dealing with research frustration can be 'accumulated' every time and then can be gradually internalised through habitus, as Yang said, "habit is second nature". Here habitus reconstruction became a positive outcome of the resilience process.

6.3 SOCIOLOGICAL RESILIENCE TO SYMBOLIC VIOLENCE

According to Mu (2021c), resilience to symbolic violence is largely absent in current resilience research which often revolves around strategic coping with subsistent forms of adversity such as catastrophic events and everyday challenges. While as discussed in Chapter 5, although symbolic violence presents itself as an invisible force, it is powerful in propelling social agents to reproduce their subordinate position unconsciously. Hence, one focal point of a sociology of resilience is to "mull over the habitus in the face of symbolic violence often hidden in unquestioned *doxic* conditions" (Mu, 2021c, p. 21). In this vein, sociological resilience may emancipate social agents from structural constraints and further promote social transformation and achieve social equality. Accordingly, this section attempts to demonstrate how participants reflexively responded to symbolic violence. That is, their sociological resilience to symbolic violence contributes to power shift in the student-supervisor relationship (Section 6.3.1), questions English dominance

(Section 6.3.2), and prompts reflexive thinking towards neoliberal constraints (Section 6.3.3).

6.3.1 Power Shift in the Student-Supervisor Relationship

As discussed in Chapter 5, many participants unwittingly succumbed to supervisors' pedagogic authority and placed themselves in a subordinate position in their relationships with supervisors. While not all participants remained servile to their supervisors' authority, some participants demonstrated a sense of reflexivity. Instead of just following their supervisors' guidance, they gradually shifted to thinking critically and independently. Xin's comments were indicative of this:

> When you first came here, maybe because of your limited ability, you may feel that everything the supervisors said, you feel justified. But then you gradually made some progress, you may feel I have a doubt in this respect, you can put forward. If your supervisor thinks your point makes sense, he will listen to your opinion. (Xin, biology)

At the onset of her research journey, Xin was overwhelmed by her supervisors' extensive research knowledge and experience, so she felt that "everything the supervisors said" was "justified". In Bourdieusian terms, Xin was enticed to "consent to domination" (Mu & Pang, 2019, p. 63) due to her inferior social position defined by limited scientific capital and the attendant symbolic violence exercised by "misrecognition" (Bourdieu & Wacquant, 1992, p. 168). But as Xin accumulated more scientific capital in her own research, she could think independently in that she dared to question her supervisors' opinions and put forward her own ideas. Huang also mentioned similar issues. When he had disagreements with his supervisors in terms of writing an article, he would rely on his own judgement, that is, "I cannot completely follow the feedback, as some of the views may be obviously wrong, so I will just change it by myself". This attitude was also echoed by Tang, who would make her own decision when she had disagreed with her supervisors. As she explained:

> But I think it's ok to disagree (with your supervisors). Because you are clear about your research, you know the best about what you want to do, what you want to express. When I don't agree with them, sometimes because they may think you shouldn't put it here or there, but you don't see in their way. I don't think in this

> way, why I shouldn't put it here? I still want to put it here. So I will explain to them, this is what I think, why I do in this way. (Tang, education)

Tang rejected her supervisors' directions by virtue of her accumulated scientific capital. She claimed ownership of her research on the grounds of her better understanding of her project and defended her own view. Throughout these cases, participants demonstrated a sense of reflexivity that enabled what Bourdieu (2007, p. 1) referred to as "self-socioanalysis". In other words, some participants reflexively questioned the taken-for-granted stance of "limited ability"—a habitus of inferiority underpinned by the existing power relations with their supervisors. Such reflexivity cannot happen without supervisor empowerment. In Tang's case, she shared the reason why she could insist on her own opinion. She recalled:

> They (the supervisors) sounded very assertive that it would be better if you make some changes. But now, especially at the final stage, they make it very clear to me that the decision is up to you. So there's no such feeling of being coerced. (Tang, education)

Tang's accounts indicated that her supervisors' straightforward supporting attitudes had apparently empowered her to follow her own decisions in the thesis writing. Su, a third-year PhD candidate, also indicated that his supervisory team nurtured his sense of autonomy in and ownership of his research project, as he said:

> I think especially at the beginning, when we had our first meeting, our group set a rule, that is, it is I who decide what we are going to discuss … and how we are going to move forward. This rule was all agreed by us. (Su, education)

Both Su's and Tang's supervisors were open to accept their HDR students' disagreement and to respect their autonomy in research. Such deliberate concessions on the part of supervisors served to empower their students, which can minimise students' sense of awe and assist them in becoming more willing to voice their standpoints and more confident in their research projects. Such empowerment is particularly visible at a later stage of candidature when students have developed a certain level of expertise in their research topic (see Xin's and Tang's case). This reflects the developmental nature of the HDR journey; one which involves a progressive process of gradually building scholastic confidence, academic authority, and scientific capital. Following their capital

accumulation, the participants were also enculturated into a new positionality, a new habitus that was no longer submissive to the arbitrary power relations in HDR supervision. In sociological terms, such habitus transformation was a form of resilience to symbolic violence (see Mu, 2021c). In this vein, participants could liberate themselves, at least to a certain extent, from the symbolic violence imposed by supervisors' pedagogic authority and promote a more balanced power relations with their supervisors. Habitus reconstruction through reflexivity can be understood as a positive outcome of the sociological resilience to symbolic violence.

6.3.2 Strategic Response towards the Symbolic Power of English

In Chapter 5, participants were found to experience severe mental pressure due to their disadvantaged position in the face of the symbolic power of English. However, it was found that some (n=7) students in this study manifested strategic response to the symbolic power of English. For example, when Le had "communication barriers" with her research colleagues, she chose to join some language workshops. As Le illustrated:

> … I also joined a language exchange group, and it is similar to a community, you can find all kinds of people … Because I think in our research group, the communication barrier can't be improved in a day or two, so one of my strategies is to keep contacting different people in a short period of time, and since we all only meet once [一面之缘], and then for me, the social pressure was minimised. (Le, biology)

According to Le, "meeting different people in a short period of time" served to mitigate the "social pressure". Here, social pressure not only implies the stress of socialising with others, but such pressure was also from language. It was hypothesised that Le was unwilling to expose her language deficiency to her colleagues, hence, she chose to communicate with some people who "only meet once" in informal language exchange groups. As a result, she could be slightly relieved from the pressure of speaking to her colleagues, but meanwhile, she could practice her English communication abilities. Through her strategy of using English with 'one-off' language buddies, Le emancipated herself, at least to a certain degree, from the symbolic violence of English. The strategy of deformalising the linguistic context was also used by Chinese doctoral students at an international forum to mitigate the symbolic power of academic English (Mu et al.,

2019a). For Bourdieu (1991, p. 71), "as the degree of formality in an exchange situation and the degree to which the exchange is dominated by highly authorised speakers diminish", the symbolic power of language "tends to become less unfavourable to the products of dominated linguistic habitus".

In a parallel fashion, Fei could not completely understand her supervisors who spoke very quickly during the meetings or on the phone calls. Instead of requesting her supervisor to lower his speaking speed, she chose to send emails to let him confirm the assignments he just arranged. In this sense, Fei astutely avoided falling prey to the linguistic power of her supervisors, freed herself from a disadvantaged linguistic position (e.g., yet-to-be competent listening), and capitalised on alternative tools in her linguistic repertoire (e.g., writing) to assume a better position in the face of the *doxic* status of English in the Australian higher education field. Although both Le and Fei were not fully immune from the symbolic power of English, they successfully 'hid' their language deficiencies and avoided being put in an inferior position.

In addition, participants including Su, Fei, and Xi also attempted to break loose from the constraints of English dominance. Although they strived to improve their academic English, they still turned to their mother tongue when necessary. For example, Su and Fei affirmed that when they communicated with their Chinese supervisors alone, they would directly speak Chinese for which can be "more convenient" (Su) and "avoid barriers" (Fei). Xi further indicated that she sometimes relied on her home language to access learning materials. As Xi stated, "I think taking courses in English without any foundational knowledge was not effective … so I took a Chinese-version course given by a Chinese teacher, and I felt it was easier". Although Su, Fei, and Xi sought to learn English as necessary to their academic practice, they were not entirely assimilated or acculturated into the English dominant academia. Rather, they sought opportunities to use Chinese to facilitate their research journey. Here, such strategic language choices broke with the symbolic violence imposed by English hegemony to some degree and it demonstrates a form of sociology of resilience that rejects the structural jeopardies and pejoratives imposed on the dominated groups (Mu, 2021c). In these cases, participants purposefully and deliberately responded to the English hegemony in the higher education

field. Their ‘simple’ and ‘little’ strategy creates a certain level of liberating force to emancipate themselves from the symbolic power of academic English.

By contrast, participants such as Meng and Mo frankly accepted their ‘shabby’ English proficiency without feeling ambivalent or inferior. As Meng stated:

> Personally, I am the kind of person who dares to speak English. I am not afraid of making mistakes, but I am afraid of keeping silent. The more you talk, the better you will be. (Meng, chemical engineering)

Meng contended that he took his “poor English proficiency” naturally and was “not afraid of making mistakes”. He would not feel ashamed or embarrassed when native speakers corrected his pronunciation or expressions. Meng also contended that native speakers’ tolerant attitudes towards their misunderstandings or language mistakes can relieve their sense of inferiority in terms of English proficiency. He continued, “My English is not good, and this has been recognised by everyone in the (research) centre, so everyone is very forgiving. They would correct my bad pronunciation, or when I expressed myself in a wrong way.” Mo also shared a similar experience. His supervisors were lenient with him although sometimes he failed to understand them appropriately during the supervisory meetings and they perceived misunderstandings as normal. Mo shared: “They (native speakers) don’t think mishearing (was) very wrong, they just think it’s a normal thing, so I don’t feel any pressure either. When I misheard or made a mistake, I just say ‘sorry’ to them.” Therefore, Mo felt less pressured to communicate with his supervisors.

According to Bourdieu, any capital implies symbolic violence as soon as it is (mis)recognised in its truth as capital and imposes itself as an authority calling for recognition (Bourdieu & Wacquant, 2013). In this study, as discussed in Chapter 5, many participants felt unconfident or humiliated when they talked in English as they perceived themselves with insufficient language capital compared with native speakers. While in Mo’s and Meng’s case, their sense of ambivalence in using English could be alleviated by native speakers’ tolerant attitudes. From a sociological lens, when native speakers did not ‘dislike’ non-English speakers, they gave up their symbolic capital in terms of the symbolic power behind the language. As such, participants like Mo and Meng felt less intimidated due to the symbolic violence behind linguistic capital but felt empowered by

native speakers' tolerant attitudes when they attempted to use English and improve their English proficiency. But more importantly, Meng and Mo strategically withdrew themselves from the symbolic power of language, which would otherwise lead to 'bodily emotion' in forms of embarrassment, stress, and shame as discovered in Chapter 5.

6.3.3 Reflexive Thinking towards Neoliberal Constraints

In this study, participants were found to struggle with standardised research milestones and the symbolic power of publications in the neoliberalised higher education field that accentuates the standardisation, performativity, efficiency, and managerialism. As reported in Chapter 5, it was found that most (n=16) participants reported being unable to escape from the pressure of required time constraints for completion of their studies. In response to this, most of the participants tended to exploit themselves by sacrificing their private time and working overtime to meet timeline requirements by any means. Such 'self-exploitation' approach enabled some participants to meet required milestones, yet it was often accompanied by some cost such as the negative impact upon their physical and mental wellbeing. However, some participants were not fully accustomed to the demands of standardised milestones. For example, Su argued that research should not be evaluated by "speed":

> There is no saying like 'I'm fast'. We should never evaluate according to speed, you are too fast or too slow. [We] only say in terms of your progress, your research is good or not good, it is about the progress, the overall situation of your research is good or not. Just 'being fast', that's not our goal. (Su, education)

Unlike those participants who were deeply concerned about gaining an "extension" of time, Su perceived an "extension" as being a neutral factor instead of a negative one. As he reflected, an "extension was a particular moment of a research journey, which means you merely required more time to finish your project". In Yang's case, instead of seeing research failures as an impediment to the completion of milestones, he shared a distinctive attitude towards research failures. He said:

> In fact, it didn't impact a lot, because from the discovery of the error to the solution, and from the analysis of the error to the solutions, actually, it was a pretty

> interesting story, and I also mentioned these issues in my confirmation presentation. (Yang, biology)

Yang took his unexpected experimental failures from a positive perspective. Rather than regarding it as a problem, he saw it as "a pretty interesting story" and shared this experience during his confirmation seminar. Such reflexive thinking questions the rigidity of standardised milestones which neglect the varied sophistication of research projects and rejects the deeply entrenched *doxa* of efficiency in the neoliberalised higher education field. Here both Su and Yang demonstrated a certain level of emancipation from the neoliberal agenda, and freed themselves, at least to a certain degree, from the standardised timeline during their research journey.

In addition, as discussed in Chapter 5, some (n=7) participants experienced peer pressure when their research colleagues achieved faster progress in their research or had generated more research publications. In essence, such peer pressure stems from the competing nature and the emphasis on performativity in the neoliberalised higher education field. Hence, it was strenuous for participants to resist such *doxic* constraints. However, participants such as Bei, Han, Yang, and Bei demonstrated reflexive thinking towards such neoliberal constraints. Bei shared how he dealt with peer pressure, as noted in the following comments:

> If you look at this stuff properly, it will motivate you, but if you take this stuff too seriously, look at it in a utilitarian approach, you may feel 'I am not as good as others', or 'my research progress is so slow', 'how can I graduate successfully' and so on, then there will be a lot of invisible pressure. (Bei, environmental engineering)

Bei shared his solution of peer pressure as "not look at it in a utilitarian approach" in order to free himself from the symbolic violence of the "invisible (peer) pressure" (also see Chapter 5). He instead chose to focus on his own progress. Han echoed this view, and he chose to work at his own pace, noting, "everyone's research project is different, and I don't have to keep a close eye on their (his HDR peers') pace". Here both Bei and Han demonstrated a certain level of emancipation from peer pressure and from utilitarianism in their HDR work. This can be interpreted as a habitus of freedom that buttressed sociological resilience to symbolic violence hidden in the neoliberalised higher education

field. By dint of this very resilience, these participants claimed ownership of their HDR projects, took control of their progress, and redefined their research as something worth the time without needing to race against the clock or compete with their peers. Moreover, participants like Yang and Meng also suggested that they had changed their attitudes towards research and publications. Yang perceived himself as "not as ambitious as before" but became "down-to-earth". Meng's case is also telling. At the very beginning, Meng expected to have more publications while conducting his research projects, but now he revealed:

> … to a varying degree, my thinking pattern has been altered. (I would) pay more attention to the research project, less attention to publications, because publications may function as a quantitative indicator on some level, but it is not an indicator that can measure your research level. (Meng, chemical engineering)

Instead of merely valuing the number of publications, Meng shifted to a research project-oriented disposition and underscored the importance of research quality over quantity. Such reflexivity may help him get away from a neoliberal publication habitus experienced by Chinese research students as they wanted to be competitive when they sought academic positions in Chinese universities (Huang, 2021).

Apart from their reflexivity, participants became less pressured within the Australian research environment that allows for research extensions. When asked whether they felt concerned about their extensions, five participants reported that their supervisors or institutions generally took a supportive attitude towards their extensions.

> I think the supervisors and the institution, feel it is reasonable because after all, there are many uncontrollable issues in doing scientific research. Moreover, if counted in COVID-19, in fact, our whole building was basically locked down during the most serious time, from March to April, so there must be a lot of students who could not follow their original time plans, so it was reasonable if they apply for extensions. (Yang, Biology)

Yang emphasised here that both his supervisors and the institution perceived students' extensions as 'reasonable', particularly due to unpredictable challenges during COVID-19 times. Meng also echoed Yang's view. He declared that his supervisors seldom placed pressure on him in this regard because they were involved in "each

experimental design and result discussion" and knew any research delays were not due to personal factors. Therefore, as his research project was dealing with a research conundrum in his field, even Meng failed many times and did not make any progress for the first two years, the head of his research centre still insisted and supported him to continue his research projects. Xi also shared her supervisors' attitudes towards extension, noting: "it doesn't matter. They feel it's okay to apply for an extension if you need. No problem, nothing serious". Huang also added that supervisors or the institution would not push an HDR candidate during extension except that the institution may cease to offer them scholarships. From their statements, it can be confirmed that their supervisors and institutions generally supported them when they had the need to apply for an extension. Such attitude implies that high degree research should be project-oriented instead of milestones-oriented. As such, participants felt less pressured by research extensions but could concentrate on their research projects.

Moreover, supervisors' attitudes towards publication also impacted upon students' neoliberal publication habitus. Rather than pursuing quantity of publication to compete for a better position in the neoliberal university, Han reported his supervisor's high standards on publications:

> … the good point of our supervisor is that he has very high requirements for publishing articles. Because in our field, many people just publish one 'point' … Our supervisor calls for a full story, not just one point. You need to do systematic research, and then he asks you to publish an article … I think his approach is great. I don't necessarily pursue quantity; quality is very important. My supervisor cares a lot about his research reputation, and his articles are all relatively in high quality. (Han, chemical engineering)

According to Han's accounts, his supervisor enabled an intergenerational transmission of habitus, thus facilitating a humanising publication habitus for the sake of scholarship (Huang, 2021). This empowering transmission shifted students' neoliberal publication habitus through everyday HDR supervision. Meng's experiences also revealed such habitus transformation which may not succeed without supervisory empowerment.

Overall, participants demonstrated their resilience to symbolic violence of supervisor authority, English dominance, standardised milestones, and academic

publishing. While examining their strategies throughout the process of resilience to symbolic violence, two major approaches were identified. First, their resilience to symbolic violence stems from their own agency and reflexivity. According to Bourdieu and Wacquant (1992), in normal circumstances, the habitus operates in a taken-for-granted, non-reflexive manner without the activation of rationally-based strategies. When there is a lack of fit between dispositions and positions, reflexivity and rational strategies enter the scene and become a new form of disposition. As Archer (2010) powerfully discussed, Bourdieusian sociology needs more attention to reflexivity as a response to the perennial criticism of determinism embedded in Bourdieu's habitus. In this study, some participants abandoned their taken-for-granted orientations and adopted reflexive practice in response to symbolic violence. For example, they took a level-headed attitude towards supervisors' authority and had their own judgement. Second, resilience to symbolic violence cannot be completely fulfilled without the empowerment of other social agents in a dominant position in the field, such as supervisors or peers in this study. Bourdieu argues symbolic violence may be exercised by "misrecognition" (Bourdieu & Wacquant, 1992, p. 168) where agents are subjected to inferior social position or limited social resources. In this way, when agents in a privileged position are willing to grant power to those who are in a dominated position, symbolic violence may diminish. For instance, when supervisors in this study deliberately support participants' autonomy in their research projects, symbolic violence due to their pedagogic authority can be minimised. It can be concluded that student reflexivity and agency as well as supervisor and peer empowerment are essential in participants' resilience to symbolic violence.

6.4 CHAPTER SUMMARY

Based on a comprehensive analysis of challenges encountered by Chinese international HDR students in the Australian higher education field in Chapter 5, this chapter focused on the second and third pillars of Ungar's (2019) three resilience dimensions, namely, empowering factors and positive outcomes. The chapter first presents the empowering factors which facilitate Chinese international HDR participants' capital accumulation and habitus reconstruction so that they can navigate and thrive in the Australian higher education field despite the challenges. Through the analysis of interview

accounts, the empowering factors reported by participants mainly include previous experience, family support, and institutional support. The results of family and institutional support as empowering factors are consistent with previous findings (Guilfoyle, 2006; Harman, 2003; Zhang, 2016). Chapter 6 further reveals the support from the family and the HE field can secure participants to access or accumulate sufficient cultural, emotional, and economic capital for positive response to capital deficiencies, as discussed in Chapter 5. However, previous literature seemed to ignore participants' previous overseas experience and previous research experience as empowering factors. This study revealed its significance in guiding participants to the research career as well as facilitating their engagement in the new field. The summary of the empowering factors for all interview participants is presented in Table 6.1.

Table 6.1

Empowering Factors for Chinese International HDR Students

Participants	**Empowering factors for Chinese international HDRs**					
	Previous overseas experience	Previous research experience	Family support	Research training services	Support from supervisors	Help from research colleagues
Ying			√	√	√	
Fei	√		√	√	√	√
Huang		√	√	√	√	√
Su		√	√	√	√	
Tang		√	√	√	√	√
Xi			√	√	√	√
Jia	√	√	√	√	√	√
Le		√	√	√		√
Fan	√		√	√	√	
Yang	√		√	√	√	√
Xin	√		√	√	√	√
Ning	√		√	√		√
Mo	√	√	√	√	√	
Bei	√	√	√	√	√	√
Lin	√		√	√		√
Chen		√	√	√	√	√
Han	√		√	√	√	√
Meng			√	√	√	

Second, this chapter illustrates the desirable outcomes defined, or achieved by the participants despite the challenges they experienced during their HDR journey (see Chapter 5). These outcomes include achieving a higher research degree and realising its exchange value, improving academic English language proficiency, and developing abilities of handling research frustrations. These findings confirm the ideas that international research students' desirable outcomes are related to facilitating their career advancement or career change through international education (Harman, 2003; Wu & Hu, 2019; Zhang, 2016). In the HE field, higher research degree, academic English language proficiency, and abilities of handling research frustrations constitute capitals. The possession of these capitals may safeguard or improve the position of Chinese international research students in the HE field. The summary of the positive outcomes achieved by all interview participants is presented in Table 6.2.

Table 6.2

Positive Outcomes Achieved by Chinese International HDR Students

Participants	**Positive outcomes achieved by Chinese international HDRs**		
	Achieving higher research degree and realising its exchange value	Improving academic English language proficiency	Developing abilities of stress management
Ying			√
Fei			
Huang		√	√
Su			
Tang		√	√
Xi	√	√	
Jia			
Le			√
Fan			√
Yang			√
Xin		√	√
Ning	√	√	
Mo			√
Bei			
Lin			
Chen		√	√
Han		√	
Meng	√		√

Third, this chapter further reveals the traces of sociological resilience to symbolic violence. Unlike those who succumbed to the structural constraints and fell prey to symbolic violence, some participants in this study resiliently navigated through the structural problems and attempted to resist symbolic violence. With supervisor and peer empowerment as well as student agency and reflexivity, their sociological resilience to symbolic violence contributes to power shift in their relationships with supervisors, questions English dominance, and sparks reflexive thinking towards neoliberal constraints regarding milestones and publications. Such reflexive strategies, though only sporadically scattered across the dataset, are of paramount importance for moving towards a sociology of resilience for system-level change. An in-depth analysis of such sociological resilience through a quantitative approach is then presented in the next chapter.

Chapter 7: Quantifying Sociology of Resilience

The previous two chapters discussed the study's Phase 1 findings about the resilience process based on the qualitative analysis of the interview transcripts with 18 Chinese HDR students pursuing or having recently completed their research journey within 12 months in Australian universities. Chapter 5 outlined the challenges encountered by the participants, namely, habitus-field mismatch, capital deficiencies, and symbolic violence. Chapter 6 encapsulated the facilitating factors in response to those challenges as well as the desirable outcomes revealed by participants that arose during their resilience process. This chapter furthers the research by delving into the sociology of resilience, with a sharp focus on participants' responses to symbolic violence. In this vein, Chapter 7 adopts a quantitative approach to probe and identify the potential patterns of sociological resilience of Chinese international HDR students. The chapter is organised into three sections. Section 7.1 presents the purposively self-designed survey instrument informed by the study's qualitative findings on sociological resilience as well as the demographic information provided through the survey sample. Section 7.2 illustrates model building on symbolic violence and resilience to symbolic violence through Confirmatory Factor Analysis (CFA). Based on the validated models, Section 7.3 further identifies the underlying patterns of sociological resilience embodied by Chinese international HDR students using Multiple Correspondence Analysis (MCA).

7.1 DEVELOPMENT OF THE SOCIOLOGY OF RESILIENCE QUESTIONNAIRE

The measurement of resilience has been a major issue in studies of the construct. A number of resilience scales or instruments for adults have been developed such as Adolescent Resilience Scale [ARS] (Oshio et al., 2003), Connor-Davidson Resilience Scale (Connor & Davidson, 2003), and Resilience Scale for Adults (Friborg et al., 2003). Most existing measures of resilience are relatively superficial or conceptually imprecise (Jefferies et al., 2021) and are not designed for a specific population (Connor & Davidson,

2003). Given the absence of a well-developed instrument to gauge the sociological resilience process of Chinese international HDR students in Australia, an online survey was developed by myself as the researcher. The development of the research scale went through a rigorous procedure including an item development phase, a scale development phase, and a scale evaluation phase, which was guided by the best practice in scale development and validating (Boateng et al., 2018). The procedures were undertaken as follows.

First, the language of the survey items was carefully considered. As the respondents' mother tongue is Chinese, it was considered to be more efficient and time saving for them to complete a survey in Chinese rather than in English. Therefore, the survey was designed in Chinese but was translated into English for the purposes of supervision, ethics application, and thesis reporting.

Second, the design of the survey items was informed by the literature (see Chapter 2), the qualitative findings (see Chapter 5 and Chapter 6), and Bourdieu's sociology (see Chapter 3). As indicated in Chapter 1, a core concern of the sociological process of resilience is how social agents respond to symbolic violence. As such, only the qualitative findings regarding symbolic violence (see Section 5.2.3) and sociological resilience to symbolic violence (see Section 6.3) informed the survey design. The sharp focus on resilience to symbolic violence not only ensured that the quantitative survey probed a core dimension of the investigation of the thesis but also produced an instrument that did not include too many survey items, which would otherwise be a burden to the respondents. Originally, a set of 49 items (see Table 7.1 below) were developed to operationalise the constructs of symbolic violence (25 items) and resilience to such violence (24 items). As Table 7.1 displays, regarding symbolic violence, there were three dimensions that emerged from the qualitative findings and informed the design of corresponding survey items. These include Supervisors' Pedagogic Authority measured by 12 items, English Hegemony measured by 7 items, and Neoliberal Constraints measured by 6 items. When it came to resilience to symbolic violence, there were two dimensions that emerged from the qualitative findings and informed the design of corresponding survey items. These are Supervisor and Peer Empowerment (8 items) as well as Student Agency and Reflexivity (15 items).

Third, the content validity and face validity of the survey were examined. Content validity refers to "the extent to which an instrument adequately samples the research domain of interest when attempting to measure phenomena" (Wynd et al., 2003, p. 509). This was ensured by working with the supervisors who have expertise in quantitative and mixed methods research design, Bourdieu's sociology, and resilience research, as well as rich supervisory experience working with Chinese international HDR students. The supervisors are also familiar with the research aim of the survey as well as the qualitative findings. Based on multiple rounds of feedback from them, any unclear or confusing survey items were removed; and some survey items were added to capture more fully the research domain of interest. For example, the item "I am always concerned that my supervisors will raise doubts about my research ability [我总是担心导师怀疑我的学术能力]" was added to better capture the content domain of the first construct—"overwhelmed by supervisors' pedagogic authority"; while the item "I value my research failures and/or frustrations and learn from them [我认为研究失败或挫折也是有意义的]" was deleted as it appeared to be a commonly acknowledged perception that failed to reflect the construct—"reflexive thinking towards neoliberal constraints". Moreover, some ambiguous wording was edited to better reflect each construct. For example, in the item "I sometimes question the legitimacy of milestones [我有时会质疑 milestones 的合理性]", it was decided that the wording 'legitimacy' might confuse the respondents. As such, this item was contextualised and then reworded for clarity to read as "I think research proceedings should be automatically decided by students and supervisors rather than by standardised milestones [我认为研究进展应该由学生和导师自主决定，而不应该受标准化的 milestones 限制]". Following such detailed feedback from the supervisors, the revised survey had capacity to be representative of the constructs of symbolic violence and resilience to such violence.

Face validity is defined as the degree to which the content of a test and its items are relevant to the context in which the test is being administered (Holden, 2010, p. 637). Essentially, it concerns whether the test appears to measure what it claims to. To ensure the face validity of the survey, four Chinese PhD students (two studying at QUT, one graduated from QUT, and one from UQ) were invited to read through the draft survey and

then to provide comments on its wording. These HDR students pointed out some ambiguous wording after having carefully read through the survey. For example, one commented that the item "I always feel dissatisfied with my English reading and writing ability [我总是质疑自己的英语读写能力]" is a double-barrelled or compound question. Hence, this item was split into two items, including "I always feel dissatisfied with my English reading ability [我总是质疑自己的英语阅读能力]" and "I always feel dissatisfied with my English writing ability [我总是质疑自己的英语写作能力]". Moreover, some items containing "negative" wording were reported as potentially confusing for respondents. For example, "my supervisors never encourage me to work overtime in order to meet designated milestones [导师从不鼓励我为了按时完成 milestones 加班熬夜]" was revised as "[my supervisors discourage me from working overtime in order to meet designated milestones [导师反对我为了按时完成 milestones 加班熬夜]". In sum, according to the feedback from all four Chinese PhD students, any ambiguous or unintelligible items were revised to make sure all survey items could be easily understood by the respondents.

After having improved content validity and face validity of the items, the survey scale was structured into two sections. The first section collected demographic and background information from the participants, including age, gender, educational background, marital status, scholarship type, university profiles, supervisors' background information, educational and research background as well as family background. The second section measured participants' attitudinal responses on a 5-point Likert Scale that gauged symbolic violence and resilience to such violence. A 5-point Likert Scale (strongly agree, agree, neutral, disagree, strongly disagree) was adopted as a proxy interval level of measurement widely used in educational research (Creswell, 2012). The scale was considered appropriate as it can generate data not only suitable for a wide range of statistical tests built on linear modelling such as factor analysis but also convertible into categorical data suitable for other statistical modelling such as Multiple Correspondence Analysis (MCA) used in this study. In total, there were 26 demographic information items, 26 survey items regarding symbolic violence, and 23 survey items about resilience to symbolic violence.

Fourth, with the completion of the self-designed survey scale, a pilot study was administered followed by a main study to evaluate and improve this scale. In survey instrument development, a pilot study refers a small-scale preliminary "trial" conducted to evaluate the research instrument prior to the main study with a larger sample size (Thabane et al., 2010). The detailed procedures of pilot study and main study were illustrated as follows.

Pilot study

In this study, as the survey was self-developed, a pilot study was considered to be critical for evaluating the feasibility and internal consistency reliability of the instrument while further evaluating its face validity. Thereafter, the survey scale in Chinese was administered through a Chinese online survey platform "Questionnaire Star" (www.sojump.com/), run by the Sojump team. It is one of the widely used Chinese survey tools owing to its advantageous features such as being easy-to-access, user-friendly, and low-cost. Moreover, the survey data collected via "Questionnaire Star" can be summarised in an Excel file which can be directly imported into IBM SPSS software. As no manual operation was involved, there was little concern about data entry error. An online survey link was created via Questionnaire Star and was distributed to potential respondents.

The selection criteria of respondents remained consistent with those in the qualitative substudy (Phase 1). These are as follows: a) participants should be Chinese nationals; b) at the time of the survey, they should be studying for or have recently graduated (within 12 months) with a higher research degree from an Australian university; and c) they are willing to participate in the study. Through convenience sampling, 30 respondents from universities in Queensland, were invited to complete the online survey. They were approached via my social networks and an online survey link created by Questionnaire Star was sent to them. In order to introduce the research to the respondents and obtain their informed consent for participation, a participation statement outlining the project and explaining ethical considerations was highlighted at the very beginning of the online survey. The Chinese HDR students' agreement to continue the survey and their submission of the completed survey were viewed as their informed, voluntary consent to participate in the study. A question regarding their graduation was provided before the

main body of the survey. Those who graduated beyond one year were deemed ineligible and directed to the end of the survey with a thank you note. For eligible participants, an acknowledgement was presented to them.

To further assess the face validity of the newly designed survey instrument, respondents in the pilot study were asked to provide feedback on whether there were any ambiguous or unintelligible items after they completed the survey. Based on the respondents' feedback, I worked with the supervisory team and further finetuned the wording. For example, one respondent expressed confusion about one demographic survey item—"Your highest degree [你的最高学历]". The respondent felt confused whether he/she could select "PhD" as his/her highest degree while he/she was completing a PhD. Therefore, I revised this item to read as "The degree you are currently pursuing, or the degree completed within the past 12 months, whichever is higher [你的最高学历或在读学历]".

Reliability is another important indicator to gauge the quality of a research instrument. It refers to overall consistency of the research instrument when measuring a construct (Field, 2018). Cronbach's alpha, developed by Cronbach (1951), is widely applied to measure the internal consistency of multiple Likert (or Likert-type) scale items used to gauge a construct such as symbolic violence in the current study. Cronbach's alpha reliability coefficient ranges between 0 and 1. Generally, if the value is over or equals to .70, the internal consistency of the instrument is good; while the value below .70 indicates the internal consistency of the instrument needs to be improved (Field, 2018). The survey data collected through the pilot study were analysed by SPSS 28.0 to test the internal consistency reliability (Cronbach's alpha test) of the newly designed instrument.

There were two constructs evaluated in the pilot study, namely symbolic violence and resilience to such violence. To reiterate, symbolic violence was operationalised as a three-dimension construct measured by 26 items, including 13 items for Pedagogic Authority, 7 items for English Hegemony, and 6 items for Neoliberal Constraints. Resilience to symbolic violence was operationalised as a two-dimension construct measured by 23 items, including 8 items for Supervisor and Peer Empowerment and 15 items for Student Agency and Reflexivity. The results of Cronbach's alpha value of the

overall constructs and their dimensions are displayed in Table 7.1. Almost all Cronbach's Alpha values are above the cut-off value of .70 except the dimension of "Supervisor and Peer Empowerment" (alpha=.66). That means the internal consistency of almost all constructs is reliable while that associated with "Supervisor and Peer Empowerment" is questionable. Accordingly, revisions to this dimension were made.

As Table 7.1 indicates, deletion of item 34 will improve the Cronbach's Alpha value of the sub-construct "Supervisor and Peer Empowerment" from .66 to .71, which is above .70. To further improve the reliability of the sub-construct "Supervisor and Peer Empowerment", I further revised the wording of the remaining items within this sub-construct based on the suggestions of the supervisory team and the feedback of survey respondents. For example, the item "Local colleagues are understanding and non-judgemental with my English language mistakes [Local 同事对我的英语错误非常包容]" was changed to "Local colleagues are understanding and non-judgemental with my English pronunciation and fluency [Local 同事不会挑剔我的英语发音或流利程度]" in the main study. Following suit, another two items were revised. Furthermore, another two items including "My supervisors encourage me to use Chinese concepts or theories in my thesis [导师鼓励我在论文中使用中文理论或概念]" and "I encounter some scholars who think it's problematic if English persists as the dominant academic language [学术交流时，我遇到的很多学者都会认为英语作为学术主导语言是一个很大的问题]" were added to this sub-construct after further examining the literature (Mu et al., 2019b; Singh, 2009) and qualitative findings. After a series of revisions, a survey composed of 50 items was used to collect data for main study. The Chinese original and the English translation of the survey are shown in Appendix D.

Table 7.1

Item Consistency Reliability and Item Description

Symbolic violence (α = .90)	
Supervisors' pedagogic authority (α = .81)	**α if item deleted**
V1 I usually feel that I have to accept all of my supervisors' feedback or guidance.	.81
V2 I always follow my supervisors' advice and/or written feedback to conduct my research project.	.80
V3 I always look up to my supervisors' research expertise.	.81
V4 I treat my supervisors as my "bosses".	.81
V5 I am prepared to compromise my own ideas in order to avoid any conflict with my supervisors.	.81
V6 I am prepared to compromise my own ideas in order to show respect to my supervisors.	.80
V7 I always spare no effort to prove my academic ability to my supervisors and am anxious about 'losing face' in front of my supervisors.	.78
V8 I always demonstrate respect for my supervisors' reputation and never criticize or complain about my supervisors in the public.	.79
V9 I never reveal my dissatisfaction or concern about supervision matters to my supervisors.	.79
V10 I always look for errors or weaknesses in my work rather than blame or criticize my supervisors.	.79
V11 I am always concerned that my supervisors will be dissatisfied with my research progress.	.79
V12 I am always concerned that my supervisors will raise doubts about my research ability.	.80
V13 I always feel pressured to progress my research because I don't want to let my supervisors down.	.81
English Hegemony (α = .91)	**α if item deleted**
V14 I always lack confidence with my spoken English when I talk with native speakers.	.88
V15 I always fail to understand native speakers when they speak too quickly.	.90
V16 I feel embarrassed to ask native speakers to speak more slowly or repeat again even when I can't understand them.	.89
V17 I feel intimidated each time I give a presentation in English.	.90
V18 I feel anxious and concerned about the Q&A after a presentation in English and worry that I will be embarrassed if I cannot understand questions from the audience.	.90
V19 I always feel dissatisfied with my English reading ability.	.90
V20 I always feel dissatisfied with my English academic writing ability.	.89
Neoliberal Constraints (α = .86)	**α if item deleted**
V21 When I try to meet milestones, I experience intense pressure and become stressed if I am behind in meeting my research goals and/or deadlines or experience an unsuccessful research outcome.	.85
V22 I often work long hours to meet deadlines for milestones.	.86

V23 I often feel anxious about milestone deadlines or extensions.	.82
V24 I feel a great of pressure and become anxious when my research colleagues achieve faster rates of progress in their research.	.82
V25 I feel intense pressure when my research colleagues produce publications.	.83
V26 I always feel concerned that I will not be able to produce sufficient articles in quality and quantity before graduation.	.85
Resilience to Symbolic Violence (α = .80)	
Supervisor and Peer Empowerment (α = .66)	**α if item deleted**
V27 My supervisors always respect my autonomy in my research project.	.61
V28 My supervisors are all supportive when I put forward different opinions.	.60
V29 Local colleagues are understanding and non-judgemental with my English pronunciation and fluency.	.55
V30 My supervisors are understanding and non-judgemental with my English language mistakes.	.59
V31 My supervisors do not expect and do not pressure me to work long hours in order to meet designated milestones.	.66
V32 My supervisors are always supportive of my application/s for an extension to meet a milestone.	.62
V33 My supervisors are willing to help me with my academic writing ability through co-authored publication.	.67
V34 My supervisors have high standards for writing publications.	.71
Student Reflexivity (α = .74)	**α if item deleted**
V35 I am confident in questioning my supervisors' feedback.	.72
V36 I am confident in arguing my position and disagreeing with my supervisors about my research.	.73
V37 I sometimes choose to practice English with the individuals I encounter for the first time in workshops to gain more experience speaking English and to relieve the pressure of speaking English with local colleagues.	.74
V38 I don't feel embarrassed when I make errors in my English expression.	.71
V39 I don't feel embarrassed even if my English pronunciation is not standard.	.71
V40 I sometimes use Chinese learning materials to improve my research efficiency.	.75
V41 I often communicate with my Chinese-speaking-background supervisors in Mandarin.	.74
V42 I sometimes doubt the dominant position played by English in research communications.	.73
V43 I value the quality of my research rather than how quickly I am able to conduct my research.	.70
V44 I think it is acceptable and unproblematic to apply for an extension to progress my research.	.73
V45 I would not feel frustrated or anxious even if research failures delay my research progress.	.70
V46 I would not cut down my research contents so as to meet the milestones.	.74
V47 I think research proceedings should be automatically decided by students and supervisors rather than by standardised milestones.	.70
V48 Each research project is unique, so I do not feel pressured to keep a close eye on other students' research progress pace.	.74
V49 I value the importance of achieving high quality research publications and will not publish indiscriminately for graduation or seeking job.	.72

Main study

The pilot study enhanced the validity and reliability of the newly designed survey instrument. The finetuned online questionnaire was then distributed to a larger sample. To enlarge the access to the potential respondents, with the help from the supervisory team, I distributed the online survey link created by Questionnaire Star to the potential respondents via email and a Chinese social app WeChat, an equivalent version to Facebook or WhatsApp, where there are numerous Chinese postgraduate groups. Following a two-week snowball-sampling distribution, 220 respondents who met the criteria completed the questionnaire via the online survey link. The demographic information of the respondents for the main study is summarised below. The respondents demonstrated a diverse range of educational and research backgrounds, supervisors' backgrounds, and family backgrounds.

Basic demographic information

As displayed in Table 7.2, more than half (56.8%) of the survey respondents were female, with 43.2% being male. Most of the participants (85.5%) were born between 1989 and 1998 and were in their 20s and 30s (see Figure 7.2 below). Regarding their marital status, 52.3% of the participants were single. Among the other half, over a quarter (26.4%) were in a de facto relationship and nearly a quarter were married (21.4%). Figure 7.1 presents the Australian universities attended by the survey respondents grouped according to the states of Australia. It can be concluded that most of the survey respondents came from the universities in Queensland (41.4%), New South Wales (27.7%), and Victoria (23.2%). Out of the 25 universities, 63.2% of respondents were from Australian Group of Eight (Go8) leading research-intensive universities, with 36.8% from Non-Go8 universities.

From Table 7.2 below, 65.9% of survey respondents were pursuing their PhD degree, and 15% had previously received a PhD degree. Only 12.3% and 6.8% of the participants were Research Master candidate and Research Master graduate respectively. Nearly 80% of respondents had been awarded a scholarship, with funding sources including China Scholarship Council (CSC, 25.9%), Australian government or university (44.5%), and project-funding (8.6%); two respondents reported they had been awarded a scholarship

from elsewhere, while 44 respondents (20%) were self-supported. The study areas of the participants were evenly distributed across applied science, natural science, and social science, with each discipline area respectively comprising 35.5%, 32.7%, and 31.8%. Meanwhile, they were at various stages in terms of research milestones. One third of the respondents (32.3%) were at post-confirmation stage, followed by 23.2% at pre-confirmation, 17.3% completed, 14.1% approaching external examination, and 13.2% in their first three months. Regardless of their different research milestones, 107 respondents (51.4%) had already generated research publications during their research candidature, ranging from 1 paper to 33 papers (see Figure 7.3 below). Such variance is associated with participants' disciplinary backgrounds, with high publication numbers mostly from natural science and applied science. Regarding the quality of these research publications, 107 respondents reported that at least one of their total publications ranked was a Q1 journal article or a first-author article.

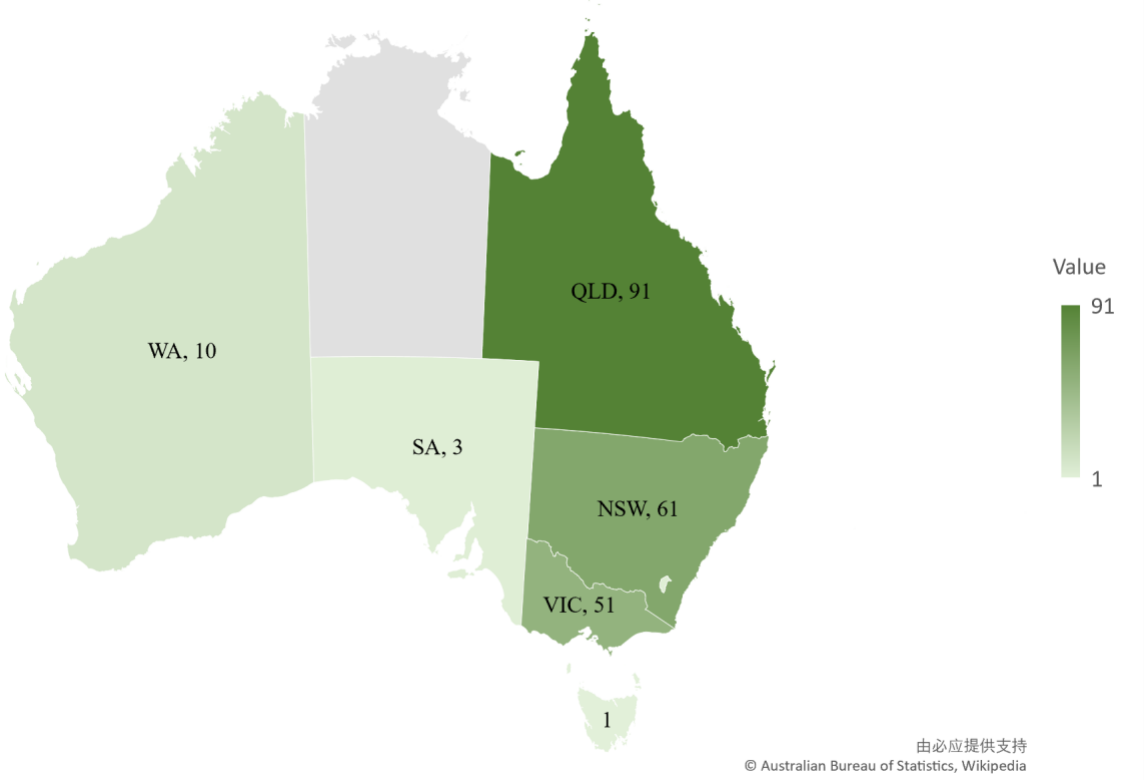
Table 7.2

Demographic Information of Survey Respondents

Variable	Category	Frequency	Percent
Gender			
	Male	95	43.2
	Female	125	56.8
Marital Status			
	Single	115	52.3
	Partner	58	26.4
	Married	47	21.4
Degree			
	Master candidate	27	12.3
	Master	15	6.8
	PhD candidate	145	65.9
	PhD	33	15.0
Discipline			
	Social Science	70	31.8
	Natural Science	72	32.7
	Applied Science	78	35.5
Stage			
	First 3 months	29	13.2
	Pre-confirmation	51	23.2
	Post-confirmation	71	32.3
	External examination	31	14.1
	Completed	38	17.3
Scholarship			
	Self-supported	44	20.0
	CSC	57	25.9
	Australian fund	98	44.5
	Project-funded	19	8.6
	Other	2	0.9

Figure 7.1

Australian University Attended by the Survey Respondents



Queensland (QLD)
Griffith University (10)
James Cook University (1)
Queensland University of Technology (29)
University of Queensland (50)
University of Southern Queensland (1)
Western Australia (WA)
Curtin University (7)
Murdoch University (2)
University of Western Australia (1)
Tasmania (TAS)
University of Tasmania (1)
Southern Australia (SA)
Flinders University (1)
University of Adelaide (2)
Australian Capital Territory (ACT)
Australian National University (3)

New South Wales (NSW)
University of New South Wales (30)
University of Newcastle (6)
University of Sydney (8)
University of Technology Sydney (7)
Australian Catholic University (3)
University of Wollongong (1)
Western Sydney University (6)
Victoria (VIC)
Deakin University (2)
Federation University Australia (1)
Monash University (32)
RMIT University (2)
Swinburne University of Technology (1)
University of Melbourne (13)

Figure 7.2

Survey Respondents' Year of Birth

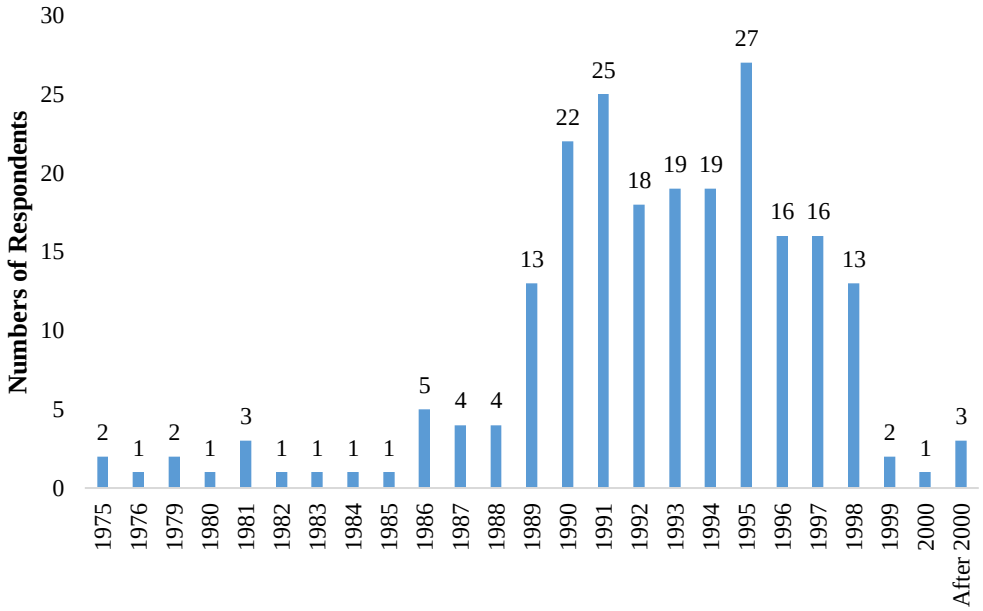
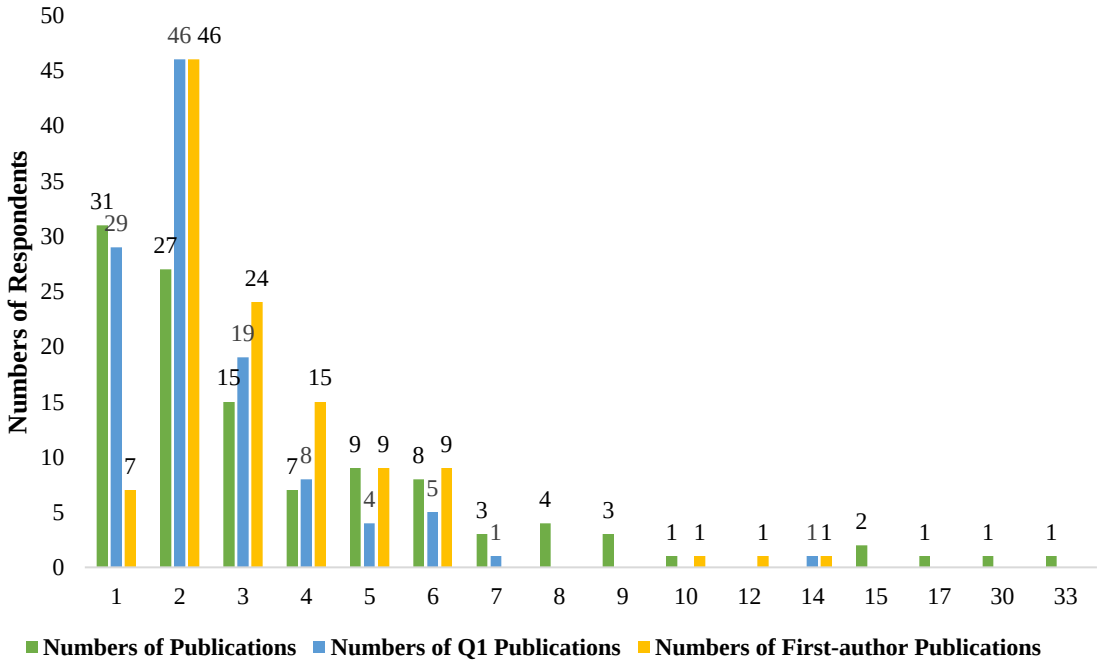


Figure 7.3

Survey Respondents' Research Publications

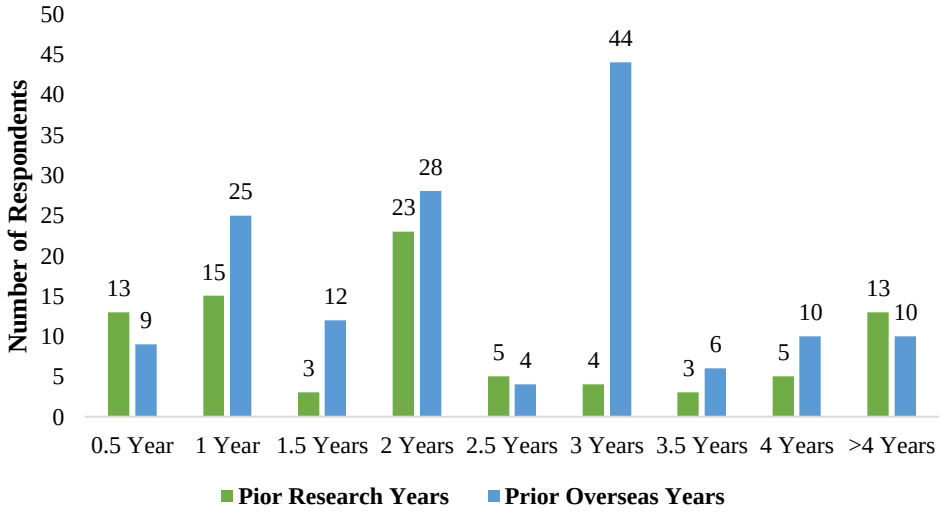


Previous Educational and Research backgrounds

With respect to their previous educational backgrounds, 186 respondents reported that they completed their bachelor's degree in Chinese universities, with 20.5% of respondents from 985 Project universities and 23.4% from 211 Project universities. According to Figure 7.4, of 220 survey respondents, 84 respondents (38.2%) had international learning experience prior to their most recent HDR study in Australia. Among them, more than half of them (59.5%) studied in Australia. The length of their overseas learning varied from half year to over four years. Of the 84 respondents, twenty-three respondents (27.4%) reported to have two-year experience, and 15 respondents (17.9%) spent one year studying abroad, followed by 13 respondents (5.9%) for half year, another 13 respondents (5%) for over four years. Concerning their previous research experience, 148 respondents had research experience ranging from half year to over four years, and the rest did not have any existing research experience prior to the HDR study. As displayed in Figure 7.4, of 148 respondents, 44 respondents (29.7%) had three-year research experience, followed by 28 respondents (18.9%) for two years, 25 respondents (16.9%) for one year, 12 respondents (8.1%) for one and a half years. There are 9, 10, 10 respondents for half year, two-and-a-half years, four years, and over four years respectively.

Figure 7.4

Respondents' Prior Research and Overseas Learning Experience



Family and supervisor information

According to the interview findings from qualitative phase, supervisors and family members played a vital part in the resilience process of Chinese international HDR students. Therefore, in the quantitative phase, the supervisory and family backgrounds of the survey respondents were collected. As Table 7.3 illustrates, 80 respondents (36.4%) reported that they had two supervisors, while 61 respondents (27.7%) of were found to have at least four supervisors. Regarding their supervisors' linguistic backgrounds, 33 respondents (15%) reported that all of their supervisors were Chinese-speaking, and 69 respondents (31.4%) of the respondents' supervisors were all English native speakers. The majority of respondents, 89 (40.5%), had both Chinese-speaking and English-speaking supervisors, with only 18 respondents having neither Chinese-speaking nor native English-speaking supervisors.

Table 7.3

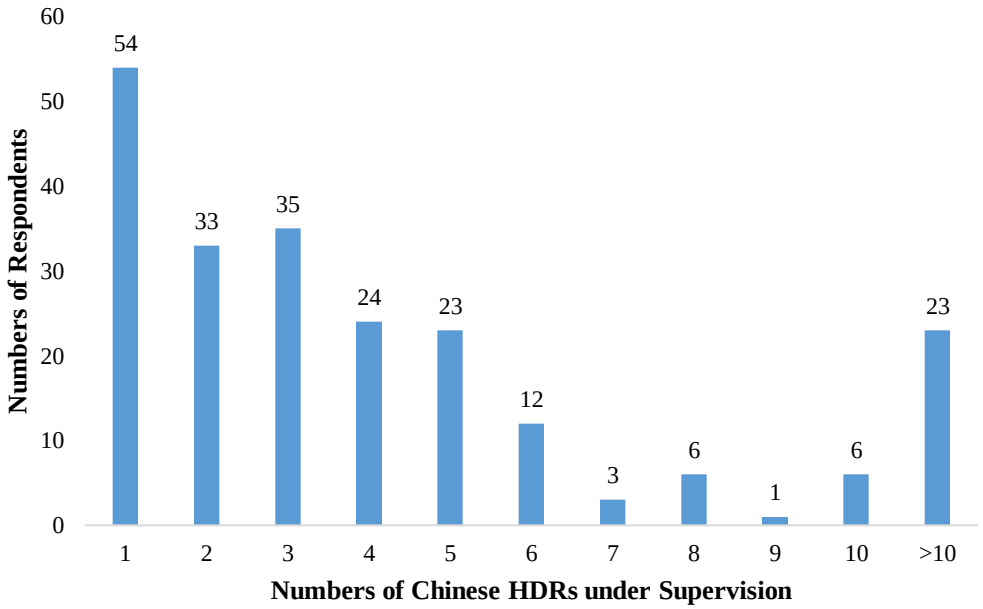
Respondents' Supervisory and Family Backgrounds

Variable	Category	Frequency	Percent
Numbers of Supervisors			
	1 supervisor	29	13.2
	2 supervisors	80	36.4
	3 supervisors	50	22.7
	>=4 supervisors	61	27.7
Supervisors' linguistic Backgrounds			
	all Chinese	33	15.0
	all English	69	31.4
	Chinese + English	89	40.5
	Neither	18	8.2
	Other	11	5.0
Supervisors' experience with Chinese candidates			
	Limited	53	24.1
	Some	70	31.8
	Rich	97	44.1
Accompanies			
	Accompany	64	29.1
	No Accompany	156	70.9
Family Financial Situation			
	No support	47	21.4
	partly support	94	42.7
	completely support	79	35.9

According to the respondents' approximation, all of their supervisors were supervising Chinese HDRs at the time of survey, with 10.5% having roughly more than ten Chinese students under their supervision (see Figure 7.5). Less than half of respondents (44.1%) reported that their supervisory team had rich experience in supervising Chinese students based on their own perceptions. It is admittedly that the numbers were not accurate but can partly indicate respondents' supervisors' experience in supervising Chinese international HDR students.

Figure 7.5

Approximate Numbers of Chinese Candidates Supervised by their Supervisors Reported by the Respondents

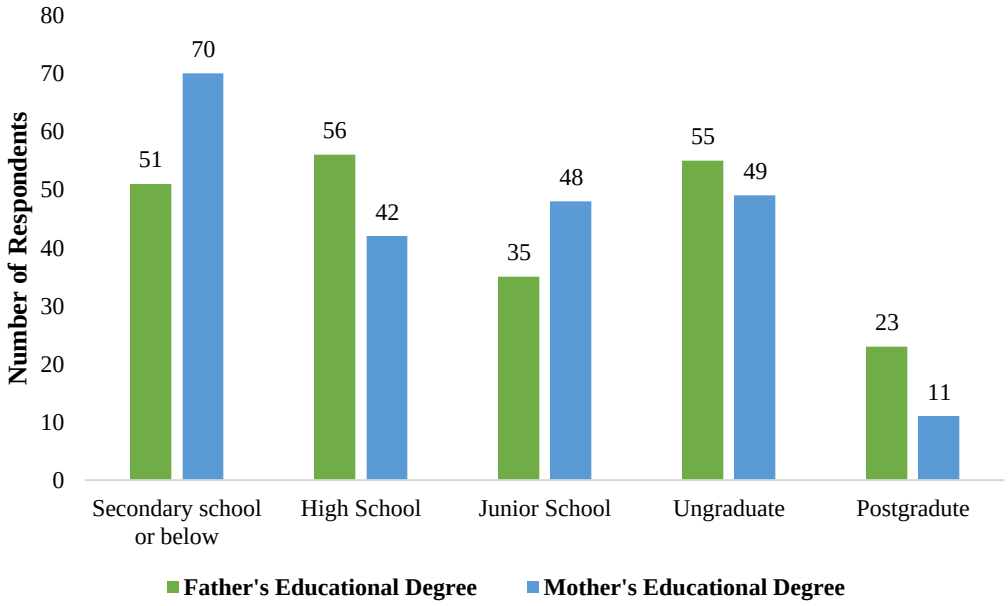


With reference to respondents' family backgrounds, as shown in Figure 7.6, 64.5% and 72.7% of respondents' fathers and mothers respectively had their highest educational qualification at a school level; meanwhile, 35.5% and 27.3% of the fathers and mothers respectively had their highest educational qualification at undergraduate or postgraduate level. When respondents were asked whether their family were able to support their overseas study financially including paying all tuitions and living fees, 35.9% of respondents confirmed that their parents were able to provide complete financial support for their overseas study, and another 42.7% of respondents said their family were able to

partly support their studying abroad. While 21.4% of respondents did not receive any financial support from their family. Furthermore, only a minority of respondents (29.1%) were accompanied by family members or partners in Australia during their HDR journey, while more than two-thirds of respondents (70.9%) were without any accompany from their family members or partners.

Figure 7.6

Educational Degrees of Respondents' Parents



To summarise, an overview of the demographic information of the survey respondents in this study shows that their backgrounds and pathways to HDR education in Australia varied. The respondents were from different disciplines at different research milestones and achieved varied numbers and quality of research publications along their HDR journey. Before their most recent HDR study in Australia, they gained diverse research experience through higher education in China or abroad. Respondents' supervisors had diverse linguistic backgrounds and supervision experience with Chinese candidates. Their parents had completed various levels of education and could provide varying degrees of financial support. These variances may hint at the resilience process of Chinese international HDR students, which was analysed in Section 7.3.

With the collected data from these 220 respondents for the main study, the instrument was further validated through Cronbach's Reliability Test. The Cronbach's Alpha values of the sub-construct 'Pedagogic Authority' increased from .84 to .85 after items V1, V2, V7 were removed. Regarding sub-construct 'Supervisor and Peer Empowerment', its Cronbach's Alpha value marginally increased from .70 to .72 without item 33; while for 'Student Agency and Reflexivity', its Cronbach's Alpha value improved from .74 to .79 with the deletion of items 42 and 43. Overall, as can be seen in Table 7.4, the internal consistency of the whole construct is considered to be reliable for subsequent quantitative analysis as all Cronbach's Alpha values are above .70 and some values are above .90. In what follows, the reliable scale was further validated through confirmatory factor analysis (CFA).

Table 7.4

The Overview of Reliability Test Results for Main Study

Construct	Indicator Code (see Table 7.1)	Cronbach's Alpha
Symbolic Violence		.92
Pedagogic Authority	V3, V4, V5, V6, V8, V9, V10, V11, V12, V13	.85
English Hegemony	V14, V15, V16, V17, V18, V19, V20	.88
Neoliberal Constraints	V21, V22, V23, V24, V25, V26	.91
Resilience to Symbolic Violence		.80
Supervisor and Peer Empowerment	V27, V28, V29, V30, V31, V32, V34, V35, V36, V37	.72
Student Agency and Reflexivity	V38, V39, V40, V41, V42, V43, V44, V45, V46, V47, V48, V49, V50	.79

7.2 INSTRUMENT VALIDATION THROUGH CONFIRMATORY FACTOR ANALYSIS

Factor analysis is a statistical technique used to examine the underlying structures behind a number of measured variables (Osborne et al., 2008). Confirmatory factor analysis (CFA) tests whether a specified factor structure reflects the variance of the survey items (Kline, 2014; Thompson, 2004). In this study, CFA was adopted to test the specified

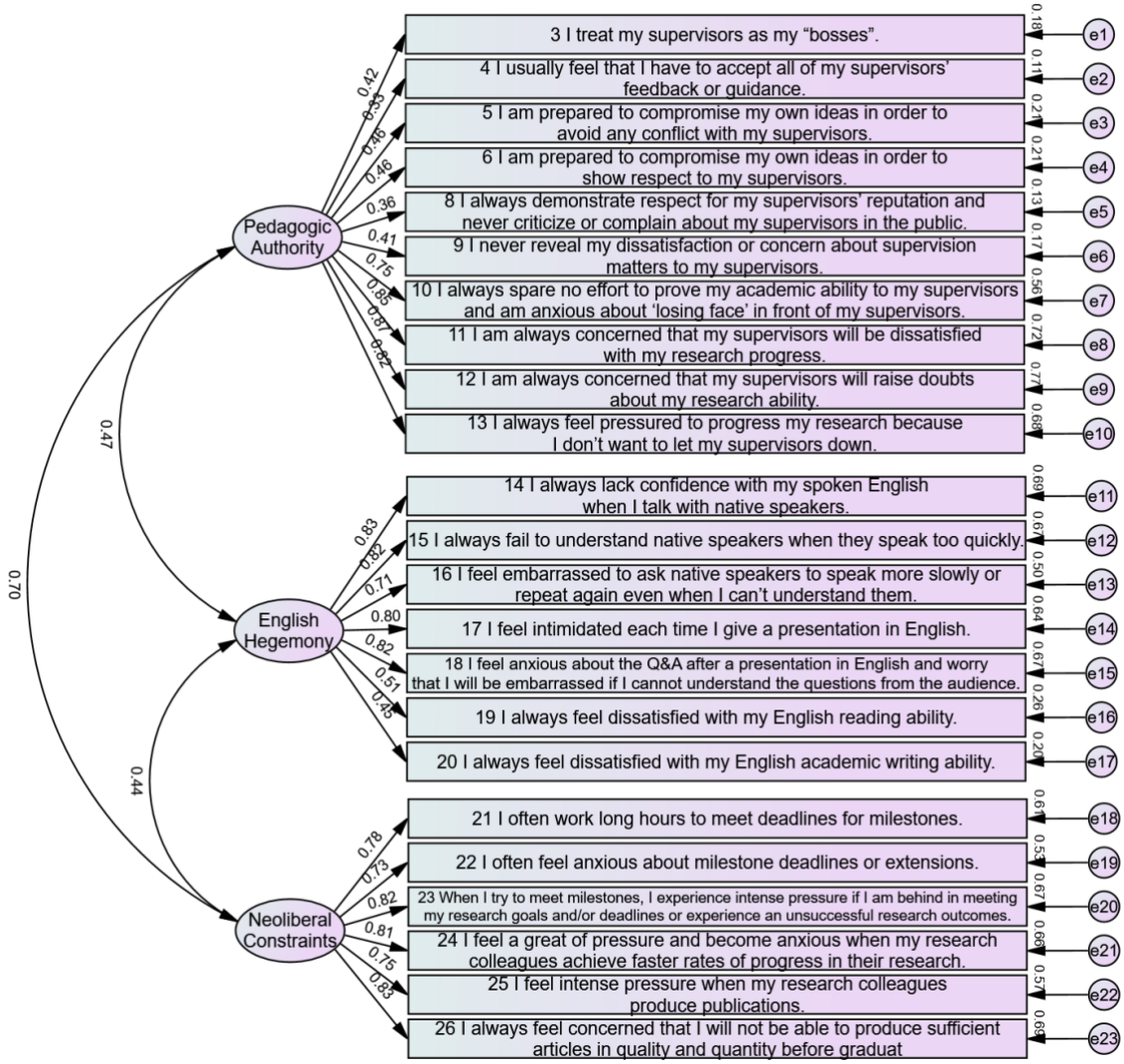
measurement models by examining how well variables (items) reflect the conceptual domain of their corresponding constructs. The sample size of 220 met the minimal sample size requirement for performing factor analysis (MacCallum et al., 1999). Additionally, CFA is only appropriate if the data satisfy the statistical assumption of univariate and multivariate normal distribution (Fabrigar & Wegener, 2012). Univariate and multivariate normalities were hence examined using SPSS Amos 28.0. As a rule of thumb, the value of skewness between -2 and +2 and that of kurtosis between -7 and +7 are indicative of univariate normal distribution (Byrne, 2016; Hair, 2019). As shown in Table 1 and Table 2 (see Appendix E), some values associated with the items for the constructs of symbolic violence and resilience to symbolic violence fall outside the required range, so the data violated the statistical assumption of univariate normal distribution. Regarding multivariate normal distribution, Mardia's coefficient was used as a reference. When a Mardia's coefficient for the critical ratio of kurtosis is greater than 3, the data are considered to violate multivariate normality (Yuan et al., 2002). This is the case for the current dataset as the Mardia's coefficient for the critical ratio of kurtosis is 14.88 and 23.92 respectively for the construct of symbolic violence and the construct of resilience to symbolic violence (see Table 1 and Table 2 in Appendix E).

One approach to handling the presence of non-normally distributed data is to use a procedure known as 'bootstrapping' (Byrne, 2016). This procedure was applied to the current dataset when performing CFA. The three-factor measurement model for the construct of 'Symbolic Violence' was specified in CFA with 23 items. The model with its standardised parameters is shown in Figure 7.7. The two-factor measurement model for the construct of 'Resilience to Symbolic Violence' was also specified in CFA with 24 items. The model with its standardised parameters is shown in Figure 7.8. According to Comrey and Lee (1992), standardised parameter estimates of .70 or higher are considered excellent, .63 as very good, .55 as good, .45 as fair, and .32 as poor. In the measurement model for symbolic violence (as shown in Figure 7.7), most of the factor loadings are higher than .70, which are regarded as acceptable. The parameter estimates of items V3, V4, and V8, however, are lower than .45, and a closer examination of these items were required.

With CFA, a variety of fit indices are used to determine if the model-data fit is acceptable. These indices include Chi-square, Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Normed fit index (NFI), Tucker-Lewis Index (TLI), as well as the Root Mean Square Error of Approximation (RMSEA). For GFI, CFI, NFI, and TLI, values above .95 represent adequate fit and .90 is considered to be acceptable (Bentler, 1990; Hu & Bentler, 1999). RMSEA value of .05 or lower indicates a good model fit (Browne & Cudeck, 1992) and value between .05 and .08 is acceptable, while value greater than 0.1 indicates a poor model fit (Fabrigar et al., 1999).

Figure 7.7

Measurement Model (M0) for the Construct 'Symbolic Violence'



The model fit indices for the construct 'symbolic violence' are set out in Table 7.5 below. It can be seen that the model had a significant chi-square (χ^2) value of 619.72 (*df*=186, $p < .001$). This may not be a serious concern as the ratio of χ^2/df equals to 3.33, which was below the threshold value 5.00 (Tabachnick & Fidell, 2013). Yet, the values of CFI (=.84), NFI (= .78), IFI (= .84), and TLI (= .82) were lower than the cutoff value of .90 and RMSEA value was much higher than the alert value .08. All these indices indicated an unsatisfactory model fit, and for this reason, model modification indices (MI) are examined to identify the areas of misfit in the model.

Table 7.5

Model Fit Indices for the Construct 'Symbolic Violence'

Fit Indices	χ^2	*df*	χ^2/df	CFI	NFI	IFI	TLI	RMSEA
Model	619.72	186.10	3.33	0.80	0.78	0.84	.82	0.11

In MIs, larger values for covariances and regression weights are of concern (Byrne, 2016). Informed by the MIs, the original model (named as M0) was re-specified by deleting items V4 (=0.33), V8 (=0.36), V9 (=0.41) and V20 (=0.45) due to their low factor loadings; as well as item V3 due to its low factor loading (=0.42). In addition, the error terms of item V5 and item V6 as well as item V24 and item V25 were correlated due to two reasons. First, item 24 and item 25 were associated because they are both about peer pressure inflicted by neoliberal constraints. Item 24 measured symbolic violence related to research progress and item 25 was about symbolic violence related to research publications. Second, item 5 and item 6 measured respondents' attitudes towards their supervisors' feedback and opinions, which are associated with each other. After the foregoing modifications, the revised model demonstrated a good fit (CFI=.95, TLI=.91, NFI=.91, and RMSEA=.06). The Model with its standardised parameters is displayed in Figure 7.8 below.

Figure 7.8

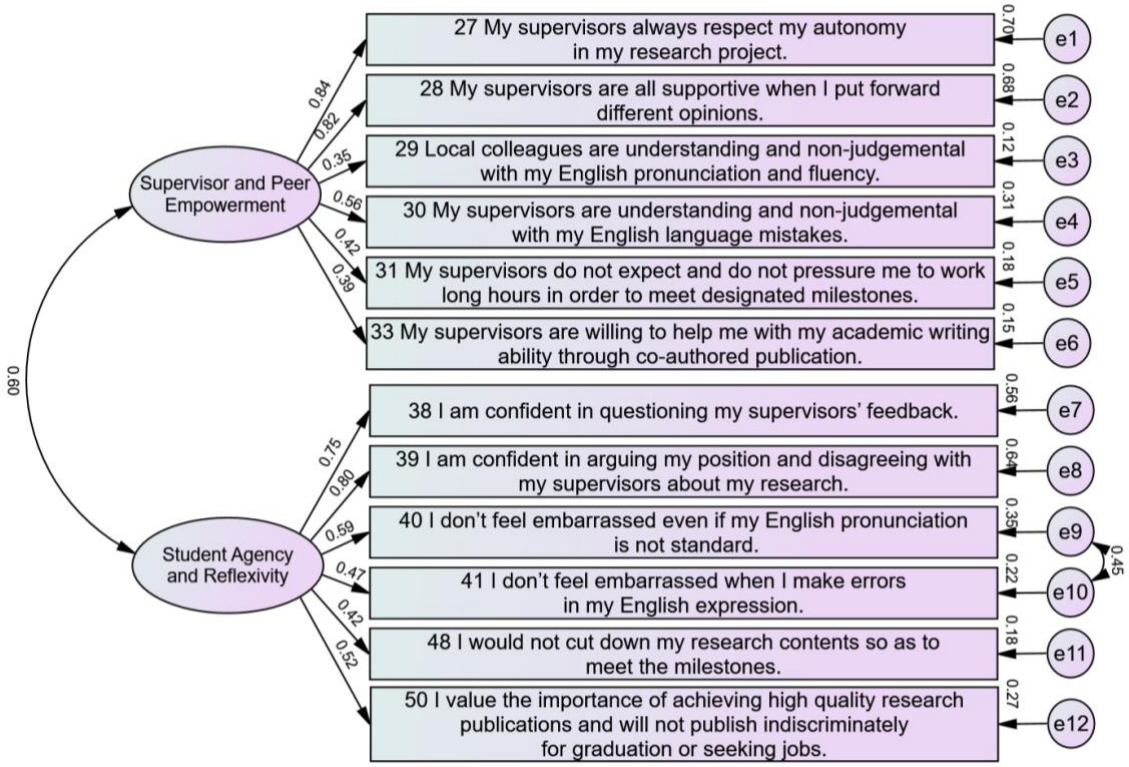
The Final Three-Factor Model of Symbolic Violence

Following the same rationale and procedure, the two-factor measurement model for Resilience to Symbolic Violence was attested by CFA. The final CFA model of resilience to symbolic violence is displayed in Figure 7.9. The final model for Resilience to Symbolic Violence showed a good model fit. The ratio between the Chi-square value and the degree of freedom (χ^2/df=2.27) was below the threshold value 5.00 (Tabachnick & Fidell, 2013). Baseline fit indices of CFI (=.92) and TLI (=.90) were above the cut-off value of .90 and NFI (=.88) was marginally lower than the cut-off value. The value of

RMSEA equals to the cut-off value of .08. All these indexes indicated that the model has a reasonably good fit. To sum up, the modified measurement model for each of the two constructs, namely Symbolic Violence and Resilience to Symbolic Violence, has yielded satisfying results. Building on the validated measurement models, the subsequent quantitative data analysis is presented next section.

Figure 7.9

The Final Two-Factor Model of Resilience to Symbolic Violence



7.3 IDENTIFYING PATTERNS OF SOCIOLOGICAL RESILIENCE THROUGH MULTIPLE CORRESPONDECE ANALYSIS

Multiple Correspondence Analysis (MCA) is a statistical technique and an exploratory quantitative methodology for analysing categorical data. Similar to principal component analysis, MCA aims at detecting patterns of response modalities recurring among respondents (Hjellbrekke, 2018; Le Roux & Rouanet, 2010). Different from other statistical analyses, MCA permits an unlimited number of variables to be included simultaneously in the analysis and takes into account the interdependence among the included variables (Blasius & Thiessen, 2001). According to this premise, MCA is acknowledged as being a useful method for mapping the relations hidden behind the set of variables. In other words, rather than studying isolated answers connected to isolated perceptions, opinions, and judgments, MCA focuses on the interdependency of all the variables of interest. When exploring the interdependency of variables, MCA has a tendency to pull together socially similar participants and their categories/characteristics, while pushing away socially dissimilar participants. In this vein, MCA is a geometric modelling that helps to construct a space of classification. As such, the principles of MCA are coherent with Bourdieu's relational thinking, as Bourdieu himself writes, "Those who know the principles of multiple correspondence analysis will grasp the affinities between this method of mathematical analysis and the thinking in term of field" (Bourdieu, 2001, as cited in Le Roux & Rouanet, 2010). This has been reiterated by some Bourdieusian scholars (Le Roux & Rouanet, 2010; Mu, 2021a). Yet MCA is underutilised or even unknown in Bourdieusian sociology of education (Mu, 2021a). This study makes a contribution by employing MCA to unveil, within a Bourdieusian remit, the possible hidden patterns behind the sociological resilience process of Chinese international HDR students.

To fulfil the purpose, two MCAs were performed. The first MCA was set to construct a space where Chinese international HDR students strategically draw on resilience to grapple with symbolic violence within the Australian higher education field. It serves to visualise the possible patterns of, and relations between, symbolic violence and resilience to symbolic violence. Based on the 'space' constructed through the first MCA, respondents' socio-educational characteristics were then projected onto the 'space'

in the second MCA which aims to examine how respondents' socio-educational characteristics are grounded together with certain forms of symbolic violence and certain strategies of resilience to symbolic violence. In Bourdieusian terms, MCA helps to tease out how respondents' capital and habitus correspond to their practice of resilience to symbolic violence within the Australian higher education field.

As MCA can only group categorical variables, continuous variables need to be transformed into categorical variables. In this study, for example, when transforming 'Pedagogic Authority' into a categorical variable, a scale score was first created by adding the value of the 6 items (each was measured by a five-point Likert scale ranging in value between 1 "strongly agree" and 5 "Strongly Disagree") used to gauge Pedagogic Authority; this scale score was then recoded into a categorical variable with four categories by using quartiles. A quartile approach can secure a relative frequency above 5% for each category, a frequency required for MCA to yield reliable results (Hjellbrekke, 2018). In this way, Pedagogic Authority was transformed into a categorical variable with four categories, namely, Authority 1 (the bottom 25%), Authority 2 (25%-50%), Authority 3 (50%-75%), and Authority 4 (the top 25%). Pedagogic Authority 1 represents the weakest pedagogic authority inflicted on the respondents, while on the opposite, Pedagogic Authority 4 symbolises the strongest pedagogic authority encountered by the respondents. In total, MCA in this study had 29 categorical variables, including the transformed categorical variables. MCA was performed on these variables by using SPSS 28.0.

Analysis 1: Constructing a space of sociological resilience

In the first MCA, variables measuring symbolic violence and resilience to symbolic violence were included as active variables. Active variables refer to those that contribute to the construction of the space (Hjellbrekke, 2018). To recall, three variables measure symbolic violence, including 'Pedagogic Authority', 'English Hegemony' and 'Neoliberal Constraints'; two variables gauge resilience to symbolic violence, including 'Supervisor and Peer Empowerment' and 'Student Agency and Reflexivity'. The reason for choosing variables of symbolic violence and resilience to symbolic violence as active variables in the first MCA is not arbitrary. As discussed in Chapter 3, Bourdieu construes

field simultaneously as a social space of forces and struggles (Bourdieu, 2020). According to Bourdieu, agents may venture into a field of struggles to either preserve or converse the field of forces. The space configuration in Analysis 1 was thus enlightened by 'the field of forces' versus 'the field of struggles'. Regarding the former, Bourdieu explains that social space is a structure of objective relations of forces. Accordingly, Analysis 1 considers a field of symbolic forces fraught with symbolic violence. Regarding the latter, Bourdieu expounds that the social agents of these positions seek, individually or collectively, to safeguard or improve their position. In Analysis 1, participants were understood as venturing into a field of struggles to take issue with the field of forces through a sociological process of resilience to symbolic violence.

In total, the five active variables generate 20 active categories (5 × 4). Of all the 15 dimensions initially generated by MCA, two dimensions were retained using Cattell's scree test (1966). As Figure 7.10 indicates, the eigenvalues (on the y-axis) are visualised in a scree plot in descending order where the inflection point occurs at dimension 3. In this way, the first two dimensions were retained. The sum of variance of the first two dimensions accounts for 73.7% of all variance in the data.

Figure 7.10

Scree Plot of Eigenvalues of Dimensions

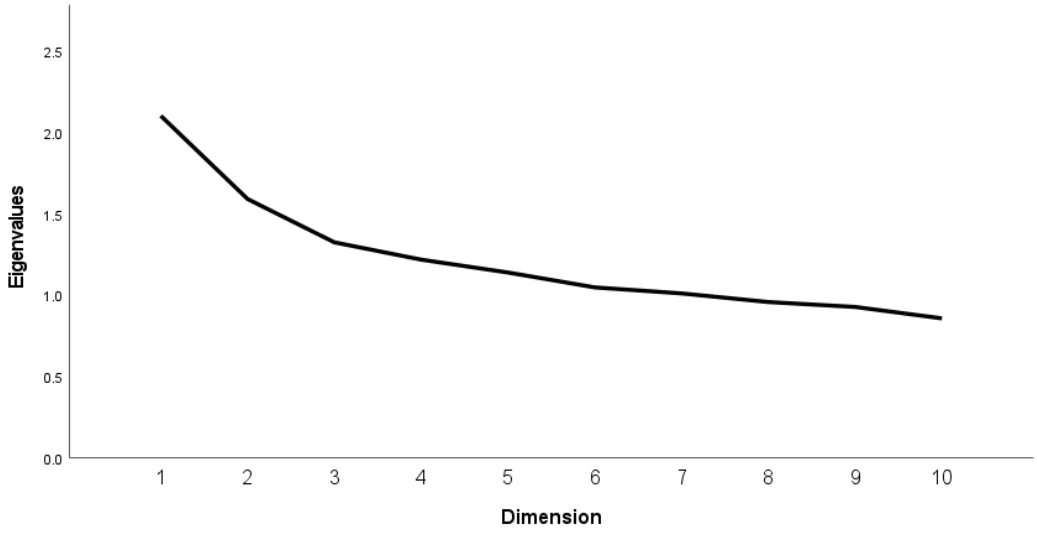


Table 7.6

Contributions of Variables to the First Two Dimensions

Construct	Active variable	Category (code)	Contribution to Dimension 1	Contribution to Dimension 2
Symbolic Violence	Pedagogic Authority	Authority1, Authority2 Authority3, Authority4	.273	.264
	English Hegemony	EnglishHegemony1 EnglishHegemony2 EnglishHegemony3 EnglishHegemony4	.241	.129
	Neoliberal Constraints	Neoliberalism1, Neoliberalism2, Neoliberalism3, Neoliberalism4	.262	.259
Resilience to Symbolic Violence	Supervisor & Peer Empowerment	Empowerment1, Empowerment2 Empowerment3, Empowerment4	.046	.177
	Student Agency & Reflexivity	Agency & Reflexivity1 Agency & Reflexivity2 Agency & Reflexivity3 Agency & Reflexivity4	.178	.171

*Each variable contains four categories. The number at the end of a category demonstrates its corresponding value point, ranging from 1 to 4, with 1 indicating the weakest degree (the bottom 25%/quarter) and 4 indicating the strongest degree (the top 25%/quarter).

Table 7.6 above displays the contributions of the five active variables to the two dimensions and the codes of their corresponding categories. In general, all variables contribute to the space construction to varying degrees while variables with higher values of contribution boast greater ability to configure the space. In this way, the variables of symbolic violence may contribute more to the space construction than variables of resilience to symbolic violence (see Table 7.6).

Figure 7.11

Space Configuration by Symbolic Violence and Resilience to Symbolic Violence

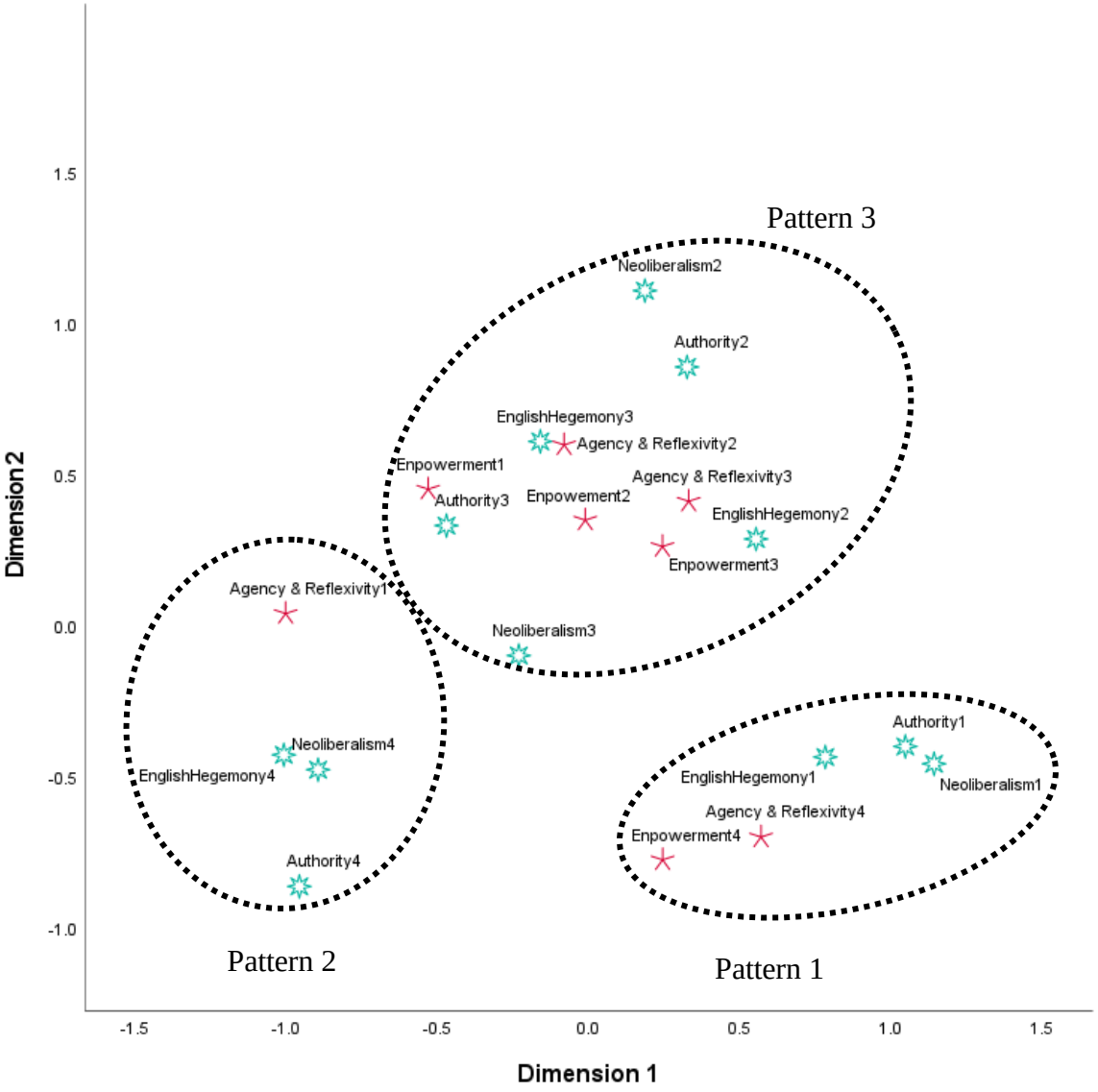


Figure 7.11 demonstrates the joint plot of category points associated with the variables for symbolic violence and resilience to symbolic violence. Categories associated with symbolic violence were marked in green and categories associated with resilience to symbolic violence were marked in red. When examining the value attached at the end of each category label, it can be concluded that the weakest degree of symbolic violence corresponds to the strongest degree of resilience to symbolic violence, and vice versa. This indicates a dialectical relationship between symbolic violence and resilience to symbolic

violence. Moreover, on the first dimension (horizontal), there is a gradual growth level of sociological resilience when moving from the left to the right, with values for categories of symbolic violence ranging from 4 to 1 and an opposite value change for categories of resilience to symbolic violence. This appears to be a tendency of "bipolarisation", suggesting that the first dimension makes a distinction between strong and weak sociological resilience. The second dimension (vertical dimension) tends to make a distinction between the extreme values (see 1s and 4s located on the lower part of the MCA plot) and the middling values (see 2s and 3s located on the upper part of the MCA plot). Taking into account both dimensions, the space constructed by the active variables is configured with three category clouds, demonstrating three patterns of sociological resilience.

Pattern 1 (the category cloud on the bottom-right)—Strong Sociological Resilience: when respondents experienced the weakest symbolic violence in terms of Pedagogic Authority (Authority1), English Hegemony (EnglishHegemony1), and Neoliberal Constraints (Neoliberalism1), they demonstrated the strongest degree of resilience to symbolic violence (Supervisor and Peer Empowerment (Enpowerment4) and Student Agency and Reflexivity (Agency & Reflexivity4)).

Pattern 2 (the category cloud on the bottom-left)—Weak Sociological Resilience: when respondents experienced the strongest symbolic violence in terms of Pedagogic Authority (Authority4), English Hegemony (EnglishHegemony4), and Neoliberal Constraints (Neoliberalism4), they demonstrated the weakest degree of resilience to symbolic violence with limited agency and reflexivity (Agency & Reflexivity1) and there was limited supervisor and peer empowerment available for them.

Pattern 3 (the category cloud on the upper part of the MCA plot)—Moderate Sociological Resilience: when respondents experienced moderate symbolic violence in terms of Pedagogic Authority (Authority2&3), English Hegemony (EnglishHegemony2&3), and Neoliberal Constraints (Neoliberalism2&3), their resilience to symbolic violence was also at a moderate level, seen in middling Supervisor and Peer Empowerment (Enpowement2&3) and Student Agency and Reflexivity (Agency & Reflexivity2&3). The weakest empowerment (Empowerment 1) provided by supervisors

and peers also resides in this pattern but the available data are not able to interpret its geolocation in the space.

Analysis 2: Constructing a space of positions and dispositions

Analysis 2 took a deep dive into the relations between respondents' socio-educational characteristics and the three patterns identified through analysis 1. In Bourdieusian terms, capitals and habitus navigate respondents to certain positions of the space constructed by active variables in analysis 1. In total, there are 23 socio-educational variables containing 85 categories altogether (see Table 7.7). These variables were projected onto the MCA plot as supplementary variables, referring to those with no contribution to the construction of the space, which may help to interpret why the space is constructed as such (Hjellbrekke, 2018). The supplementary variables were grouped based on Bourdieu's model of capitals: economic, social, and cultural capital (see Table 7.8) except for three demographic variables including Year of Birth (3 categories), gender (2 categories), marital status (3 categories). Although these three variables could be interpreted as capital under certain conditions, these conditions, however, are not the interest of the current analysis.

Table 7.7

Supplementary Categories for MCA Analysis 2

Variable	Category	Frequency	Percent	Variable	Category	Frequency	Percent
Demographic Variables				Numbers of Publications			
Gender					1 Paper	31	14%
	Male	95	43%		2 Papers	27	12%
	Female	125	57%		3-5 Papers	31	14%
Marital Status					>5 Papers	24	11%
	Single	115	52%		No papers	107	49%
	Partner	58	26%	Numbers of 1st Author Publication			
	Married	47	21%		1-2 1st author	53	24%
Year of Birth	Before 1990	61	28%		>=3 1st author	60	27%
	Between 1990 and 1993	62	28%		No 1st author	107	49%
	Between 1993 and 1995	46	21%	Numbers of Q1 Publication			
	After 1995	51	23%		1 Q1	29	13%
Educational and Research Backgrounds Variables					2 Q1	46	21%
Educational Degrees					>=3 Q1	38	17%
	Master candidate	27	12%		No Q1	107	49%
	Master	15	7%	***Supervisor Backgrounds Variables***			
	PhD candidate	145	66%	Numbers of Supervisors			
	PhD	33	15%		1 supervisor	29	13%
Discipline	Social	70	32%		2 supervisors	80	36%
	Natural	72	33%		3 supervisors	50	23%
	Applied	78	35%		>=4 supervisors	61	28%
Learning Stages				Supervisors' Linguistic Backgrounds			
	First 3 months	29	13%		all Chinese	33	15%
	Pre-confirmation	51	23%		all English	69	31%
	Post-confirmation	71	32%		Chinese + English	89	40%

	External exam	31	14%
	Completed	38	17%
University			
	Go8	139	63%
	Non-Go8	81	37%
Scholarship			
	Self-supported	44	20%
	CSC	57	26%
	Australian fund	98	45%
	Project-funded	19	9%
	Other Scholarship	2	1%
Previous Overseas Experience			
	0.5-1 Overseas	28	13%
	1.5-2 Overseas	26	12%
	>2.5 Overseas	30	14%
	No Overseas	136	62%
Previous Overseas Country			
	Overseas-Australia	50	23%
	Overseas-Non-Australia	34	15%
	No Overseas Country	136	62%
Prior Research Experience			
	0.5-2.5 Research	78	35%
	>=3 Research	70	32%
	No Research	72	33%

	Neither Chinese nor English	18	8%
	Other Languages	11	5%
Numbers of Supervisor's Chinese Candidates			
	1 Chinese S	54	25%
	2-3 Chinese Ss	68	31%
	4-5 Chinese Ss	47	21%
	>5 Chinese Ss	51	23%
Supervisors' experience with Chinese			
	Limited	53	24%
	Some	70	32%
	Rich	97	44%
Family Backgrounds Variables			
Family Accompany			
	Accompany	64	29%
	No Accompany	156	71%
Family Financial Support			
	No support	47	21%
	partly support	94	43%
	completely support	79	36%

Parents' Educational Level	Father		Mother	
	N	%	N	%
Secondary or below	51	23%	70	32%
High School	56	25%	42	19%
Junior School	35	16%	48	22%
Undergraduate	55	25%	49	22%
Postgraduate	23	10%	11	5%

Table 7.8

Supplementary Variables Relevant to Capital

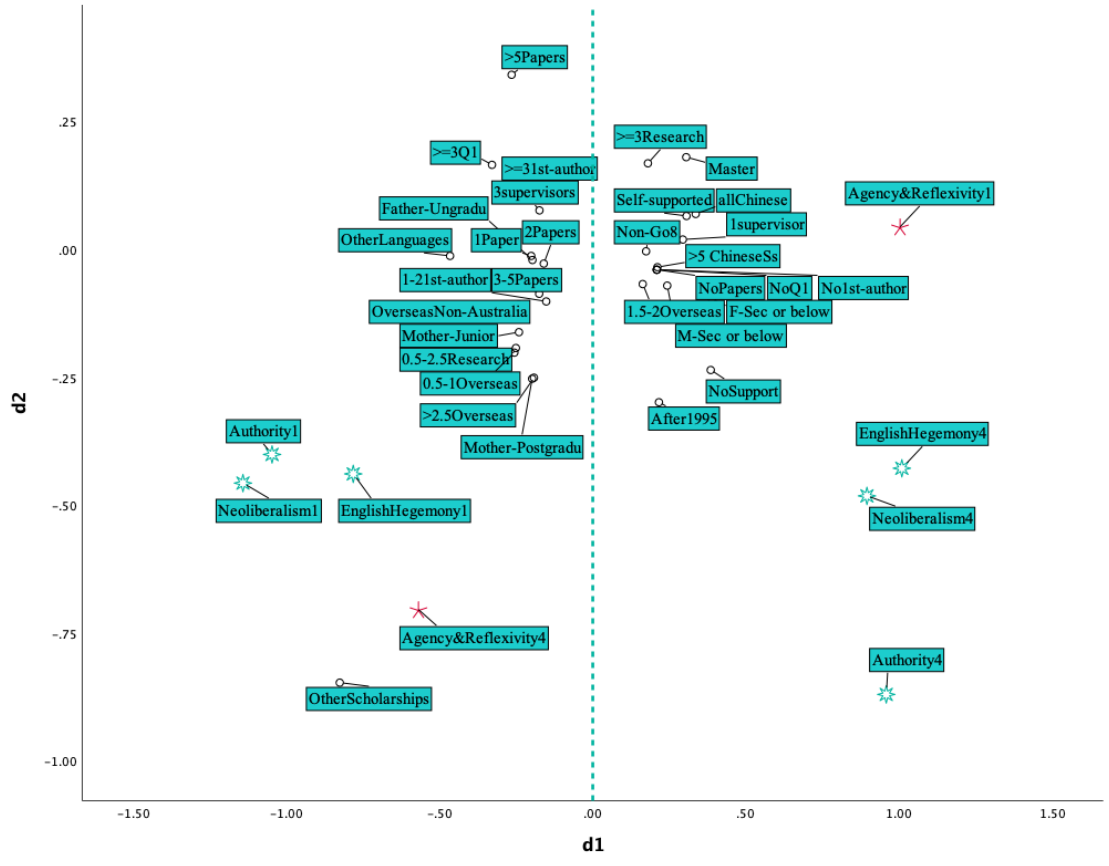
Capital	Supplementary variables and categories
Economic capital (2 variables)	
	Economic capital obtained in the HE field:
	scholarship (5 categories)
	Economic capital obtained in the family field:
	family financial support (3 categories)
Cultural capital (13 variables)	
	Cultural capital in the HE field:
	educational degrees (4 categories), university (2 categories), disciplines (3 categories), learning stages (5 categories), bachelor education (4 categories), previous overseas study (years: 4 categories; countries: 3 categories), previous research experience years (3 categories); publications (number of papers: 5 categories; number of Q1 papers: 4 categories; number of first-author papers: 3 categories)
	Cultural capital in the family field:
	Father's educational level (5 categories) and Mother's educational level (5 categories)
Social capital (4 variables)	
	Supervisors (numbers of supervisors: 4 categories, supervisors' experience with Chinese HDR candidates: 3 categories, supervisors' linguistic backgrounds: 5 categories), family accompany (2 categories)

The categories—whether those of active variables or supplementary variables—are not equally meaningful for interpretation; and categories with limited explanatory power may confound the interpretation. To reduce the complexity of MCA and focus on the primary phenomena embedded in the MCA results, only explicative categories carrying important information to space construction were retained in the MCA plot for analysis 2. According to Hjellbrekke (2018), active categories with a contribution equal to or higher than the average contribution of all active categories count as explicative categories. In the current analysis, there are 20 categories associated with active variables, and the average contribution of all active categories equals .05 (1/20). Active categories with a

contribution less than .05 were therefore removed from the MCA plot and were not taken into account in analysis 2. Regarding the categories associated with supplementary variables, those with lower frequency (<5 percent) such as 'Other Scholarship' were discarded as infrequent categories are easily located at the periphery of the cloud rather than indicating a meaningful social patterning (Le Roux & Rouanet, 2010). Moreover, categories centred around the origin of coordinates where the two dimensions/axes cross are less meaningful for interpretation compared to those located further from the origin. As there is no rule of thumb, in this study, all supplementary categories with larger coordinates than an absolute value of 0.15 on each of the two retained dimensions were included in analysis 2. Figure 7.12 maps the meaningful/interpretable categories of the first dimension (horizontal) while Figure 7.13 outlines the second dimension (vertical).

Figure 7.12

The MCA Patterns of Sociological Resilience (Dimension 1)



As shown in Figure 7.12, the space of sociological resilience was split into two sub-spaces. The left half of the plot represents a space of strong sociological resilience (Neoliberalism1, Authority1, EnglishHegemony1, and Agency&Reflexivity4); while the right half of the plot shows a space of weak sociological resilience (EnglishHegemony4, Neoliberalism4, Authority4, and Agency&Reflexivity1). The left half of the space is populated with the most socio-educationally advantaged respondents. First, these respondents had considerable overseas learning and research experience prior to their most recent HDR study in Australia. They had studied abroad for half to one year or more than 2.5 years, likely in countries other than Australia. They had already accumulated 0.5-to-2.5-year research experience. Second, they were more likely to have three supervisors and their supervisory team were inclined to be established with diverse linguistic backgrounds. They had achieved positive publication records in terms of both quantity and quality during their HDR study in Australia. Next, their parents tended to have high educational qualifications such as an undergraduate or postgraduate degree. These categories indicate that respondents residing in the left half of the space tend to occupy substantial capital sourcing from the HE field and the family field. They may have developed strong academic habitus arising from their abundant overseas learning and research experience as well as positive publication records. To recall, the qualitative findings suggest that capital-rich participants often have an academic habitus with dispositions of confidence and independence that facilitates resilience. According to the MCA plot, it can be argued that when respondents were equipped with sufficient cultural and social capital and internalised strong academic habitus, they were more able to break loose from the threat of symbolic violence. In other words, they experienced the weakest degree of English hegemony, pedagogic authority, and neoliberal constraints; and meanwhile, they demonstrated the strongest degree of agency and reflexivity.

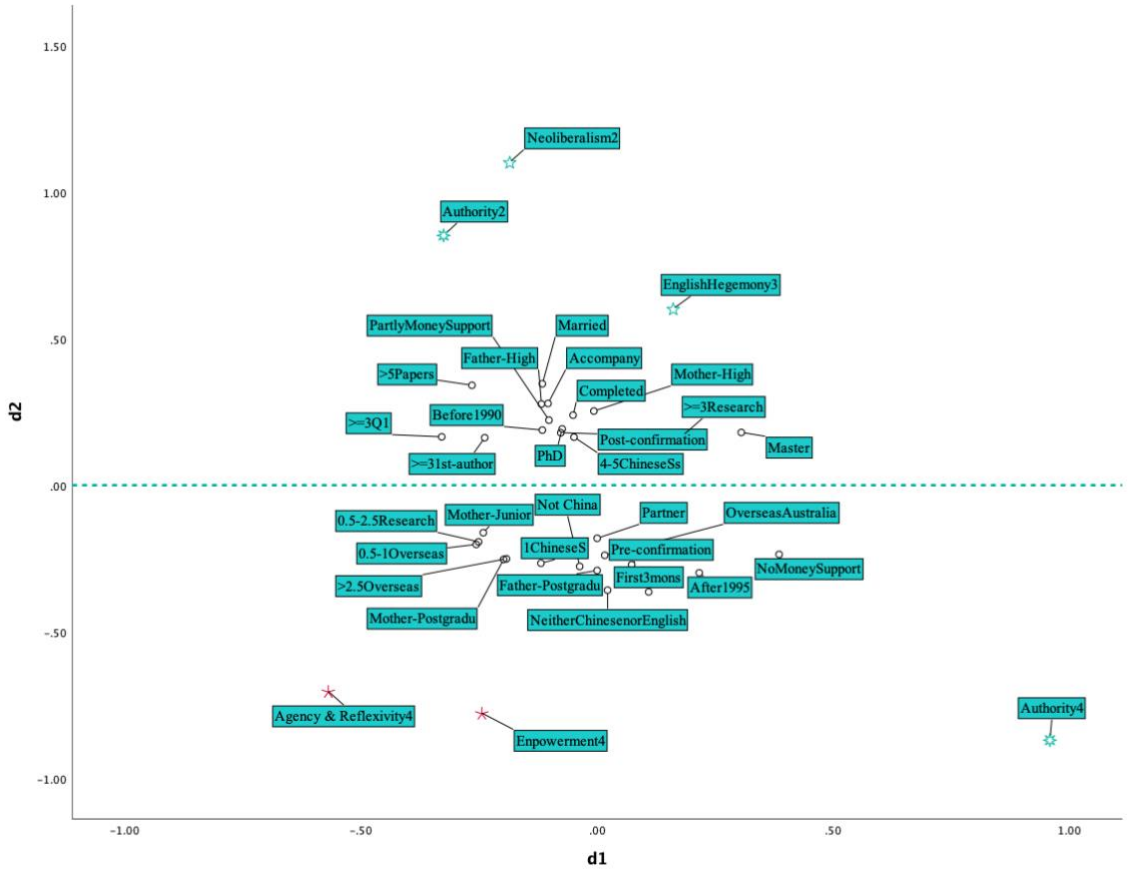
In contrast, the right half of the space is occupied by some socio-educationally disadvantaged respondents. These respondents include those recently awarded a Master's degree, or studying in non-Go8 Australian universities. This suggests the quality of cultural capital also matters to sociological resilience. Those who possessed educational capital with a lower value such as studying at a non-Go8 University appeared to have the lowest degree of agency and reflexivity. Respondents also include those who were self-

supported to study. They were likely to have no publications at the time of the survey. Some respondents' parents graduated from secondary school or below and could not provide any financial support. Some respondents had only one supervisor, likely to come from a Chinese-speaking background. Some respondents had supervisors who supervised more than five Chinese students. It seemed that these respondents could access or accrue a limited amount of cultural, economic, and social capital. In this way, although some respondents also had previous overseas learning and research experience, these respondents were more likely to suffer from the strongest degree of English hegemony, neoliberal constraints, and pedagogic authority with limited agency and reflexivity.

The observation of categories in the left and right sub-space indicates there are some connections between respondents' capital and symbolic violence as well as resilience to symbolic violence. First, regarding cultural capital, the respondents had a great distinction in terms of research publication records and parents' educational levels. This may imply that cultural capital obtained in the HE field and the family field is highly related to sociological resilience. Regarding social capital that participants may obtain from their relationships with supervisors, supervisory team with diverse linguistic backgrounds tended to have a positive impact on sociological resilience to English domination. This is seen in the geodesic proximity and the social correspondence between the category of 'other languages' and the category of 'English hegemony 1'. While regarding economic capital, in the right half of the space, both self-funded respondents from well-off families and respondents coming from a modest family without any financial support were positioned in the same 'hemisphere'. This would mean their position in the economic field may not translate directly into their position in the space of sociological resilience to symbolic violence which unfolds in the academic field. The distinction between the left and the right arena of the MCA plot indicates that sociological resilience corresponds to the overall quantity and quality of cultural capital such as publications, well-educated parents and economic capital tantamount to the type of scholarship accumulated by the respondents. Those respondents who had accrued or had access to pertinent cultural, economic, and social capital or had developed strong academic habitus demonstrated stronger sociological resilience.

Figure 7.13

The MCA Patterns of Sociological Resilience (Dimension 2)



Reviewing how categories of socio-educational characteristics relate to categories of sociological resilience on the second dimension (see Figure 7.13), it can be noted that the entire MCA plot was also divided into two spaces according to the reference line. The upper half of the space is marked with moderate symbolic violence (Neoliberalism2, Authority2, and EnglishHegemony3) but none of the categories associated with resilience was landed on this space. The bottom half of the space is characterised with strong resilience (Agency&Reflexivity4 and Enpowerment4) when the symbolic violence of supervisor authority was also strong (Authority4). When inspecting the categories in the upper half of the space, respondents with the following characteristics were likely to undergo moderate symbolic violence. First, respondents tend to have at least three-year research experience prior to their most recent study in Australia. With reference to the

respondents' learning stage, they had already passed their confirmation or completed their degree. Some respondents already been awarded the PhD or Master's degree or they had generated very promising publications, such as more than three Q1 or first-author articles or a total of five papers. This suggests, once again, that cultural capital would emancipate respondents from strong symbolic violence. Furthermore, they were born before 1990 or were married already. Their family not only could provide a portion of financial support, but also were able to stay in Australia. Interestingly, their parents held a high school certificate rather than a higher education degree. As shown by the qualitative findings, family members may not have enough cultural capital to support participants' research per se, yet they would provide significant emotional support as a form of social capital. Another characteristic was that respondents' supervisors had four to five current Chinese students. It can be inferred that their social capital from family or supervisors could ameliorate the symbolic violence to a varying degree. Collectively, these features indicate when respondents were equipped with certain amounts of cultural, social, and economic capitals, the effect of symbolic violence could be moderated.

In the bottom half of the space (see Figure 7.13), respondents tended to venture into the field of struggles where the strongest degree of supervisor and peer empowerment as well as student agency and reflexivity came to grips with the strongest degree of pedagogic authority. The respondents' characteristics are as follows: First, they were "rich" in cultural capital. They completed their undergraduate education abroad and had overseas experience in Australia for half to one year or more than 2.5 years. Some of them already had research experience for half to 2.5 years. Moreover, their parents were mostly well-educated with a postgraduate degree. Second, it shows that these respondents were born after 1995 or in a *de facto* relationship. They had just embarked on their research journey-that is during the first three months or before confirmation. Their supervisors were neither native Chinese nor native English speaking, and might have only one Chinese student. This possibly indicates those 'newcomers' rich in cultural capital who enjoy the strongest supervisor and peer empowerment at an early stage may experience severe pedagogic authority. By implication, HDR supervision can be a craft of simultaneous empowerment and authority, which are not necessarily two opposing extremes on a spectrum. When

working with high-calibre, capital-rich candidates early in their HDR journey, supervisors can balance wielding power and granting power as a strategy of building resilience.

When comparing the upper and the bottom sub-clouds, it can be found that there are some connections between the learning stages and symbolic violence. To be specific, respondents at an early stage (first-three months, pre-confirmation) may associate with stronger pedagogic authority; while respondents may be exposed to moderate-degree pedagogic authority and stronger student agency and reflexivity at a later stage (post-confirmation, completed). Such distinction may potentially be attributed to the amount of participants' capital. As the qualitative findings in Chapter 6 indicates, participants tended to be more confident as they accumulate more cultural capital along their research journey. In this way, they may gradually break loose with the "misrecognition" (Bourdieu & Wacquant, 1992, p. 168) towards supervisors' pedagogic authority and turn to be more reflexive. In addition, overseas learning experience may counteract the symbolic violence brought about by English hegemony. In the upper half of the plot, respondents who lacked overseas learning experience tended to experience more severe English hegemony in comparison with those who had studied in Australia before in the bottom half of the plot. Finally, to recall, economic capital may play a contingent role in sociological resilience, and this pattern sustained here. The bottom half of the space housed those respondents who received little financial support from their family but demonstrated the strongest resilience to symbolic violence, that is, student agency and reflexivity as well as supervisor and peer empowerment. This indicates that economic capital by itself may not energise or paralyse resilience to symbolic violence; it is the cultural and social capital that tends to booster resilience to symbolic violence in the HE field.

Overall, the MCA results reveal the possible hidden patterns in the respondents' sociological resilience. The first MCA proffers some evidence that there are distinctions among respondents exposed to weak and strong symbolic violence, and respectively with relative strong and weak resilience to symbolic violence. The second MCA suggests that sociology of resilience unfolds in a relational social space where the overall quantity of capital demarcates respondents' positional dis/advantage in the sociological resilience process.

7.4 CHAPTER SUMMARY

In Chapter 5 and Chapter 6, it was found that Chinese international HDR students had resiliently grappled with 'invisible' challenges, that is, symbolic violence due to pedagogic authority, English hegemony, and neoliberal constraints in the Australian HE field. Their resilience strategies responding to symbolic violence are summarised as supervisor and peer empowerment as well as student agency and reflexivity. This resilience process is identified as sociology of resilience to symbolic domination (Mu, 2021c), which is rarely addressed in previous resilience studies on international students. This chapter, therefore, took a deep dive into Chinese international HDR students' resilience to symbolic violence and reported the quantitative exploration of its underlying patterns.

First, as there was no existing instrument that measures sociology of resilience, a survey was developed to gauge Chinese international students' sociological resilience. Informed by the qualitative findings as well the literature and Bourdieu's theoretical framework, the newly designed survey questionnaire was used to measure the symbolic violence encountered by Chinese international research students and their resilience strategies to symbolic violence. The first construct 'Symbolic Violence' was measured through pedagogic authority, English hegemony, and neoliberal constraints; and the second construct 'Resilience to Symbolic Violence' was measured through supervisor and peer empowerment as well as student agency and reflexivity. This self-developed research scale was validated through the pilot study with 30 respondents and the main study with 220 respondents by using the internal consistency reliability test and confirmatory factor analysis.

Second, MCA was used to identify the possible hidden patterns behind the sociological resilience process of Chinese international HDR students. Two MCA analyses were performed. The first MCA analysis recognises three patterns of sociological resilience (see Figure 7.11), namely, Strong Sociological Resilience, Moderate Sociological Resilience, and Weak Sociological Resilience unfolded in the HE field. When examining these patterns, it was found there exists a dialectical relationship between symbolic violence and resilience to symbolic violence. Grounded on this finding,

a second MCA was performed to inspect how Chinese international HDR students' socio-educational characteristics grouped with sociological resilience patterns in the established space. In Bourdieusian terms, the second MCA analysis was designated to answer how the capitals and habituses of participants determine their position in the constructed space of 'sociological resilience'. The MCA results suggest that the level of sociological resilience depends on the overall quality and quantity of capitals accrued by Chinese international HDR students. Of note is that respondents' prior overseas learning experience, research experience, and publications, as well as their parents' educational qualifications, constitute their cultural capital. The respondents also obtained social capital from supervisors in the HE field and their parents in the family field. Such capital acquisition defined their socio-educational advantage as agents within the Australian higher education field and further contributed to their privilege in the sociological resilience process. By contrast, those respondents with less capital suffered from notable symbolic violence as they reported limited supervisor and peer empowerment as well as student agency and reflexivity. These results are consistent with the qualitative findings. However, it is notable that results from MCA indicate that the numbers of supervisors and their linguistic backgrounds, as well as their supervision experience with Chinese candidates, also exerted a critical effect on the sociological resilience process of Chinese international HDR students. It appeared that a supervision team with diverse linguistic backgrounds can promote sociological resilience to the symbolic violence of English hegemony. This finding was not identified in the previous qualitative findings. An in-depth theoretical discussion of both quantitative results and the qualitative findings is presented in Chapter 8.

Chapter 8: Discussion and Conclusion

This thesis has examined the resilience process of Chinese international HDR students. Through a sociological lens, the thesis investigated how Chinese international research students managed to survive and thrive in Australian universities despite numerous challenging situations. Informed by Bourdieu's concepts of field, habitus, and capital, the two-phase sequential mixed method research reported in the thesis revealed significant findings with regard to, first, the challenges encountered by Chinese international HDR students; second, the empowering factors and the positive outcomes defined by this research cohort despite the challenges; and third, their sociological resilience patterns. This chapter is organised as follows: Section 8.1 presents an overview of the research findings. Section 8.2 provides further theoretical discussion of these qualitative and quantitative findings. Based on these discussions. Section 8.3 highlights the contributions of the study and Section 8.4 discloses the limitations of the study. Section 8.5 proffers the suggestions for future studies. The last section concludes with the researcher's reflection of the whole research project that be may of broader interest to HDR students and sociologists of education.

8.1 SUMMARY OF THE RESEARCH FINDINGS

The thesis is contextualised in the Australian higher education field, with the goal of uncovering the resilience process of Chinese international HDR students. The overarching research question is: *In what ways and for what reasons do Chinese international HDR students in Australia engage in the resilience process?* Three research sub-questions were proposed to guide the entire research. Chapter 5 addressed *RQ1: What challenges do Chinese international HDR students in Australia face?* Unlike previous research framed through classical social psychological and social-ecological perspectives, the exploration of challenges in Chapter 5 was informed by Bourdieu's sociological tools. The chapter eventually revealed that the 18 participants had to grapple with multiple and concurrent challenges including habitus-field mismatch, capital deficiencies, and symbolic violence.

Habitus-field mismatch refers to the incompatible frictions when participants' durable dispositions encountered conditions (including fields) that differed from those in which they were constructed and assembled. For example, it was found that Chinese linguistic habitus stood out as different and inappropriate in the Australian higher education field where English is the only acceptable academic language. Findings indicated a mismatch between Chinese international HDR students' previous habitus of using English through Chinese thinking and the legitimate way of using academic English in the Australian higher education field. Such a mismatch made participants 'fish(es) out of water' (Bourdieu & Wacquant, 1992, p. 127) and generated feelings of "disquiet, ambivalence, insecurity and uncertainty" (Reay et al., 2009, p. 1105).

Capital deficiencies allude to participants' perceived deficiency in the possession, acquisition and accumulation of sufficient field-specific capitals, such as research experiences, academic networks, and publications. In Chapter 5, participants mainly reported that it was arduous for them to accrue sufficient capital required for the successful completion of their HDR degree when they failed to access or accumulate sufficient resources from institutions, supervisors, peers, and families. These forms of important academic resources functioned as social capital that can benefit the amassing of scientific capital (such as research capacity) and institutionalised cultural capital (such as a research degree).

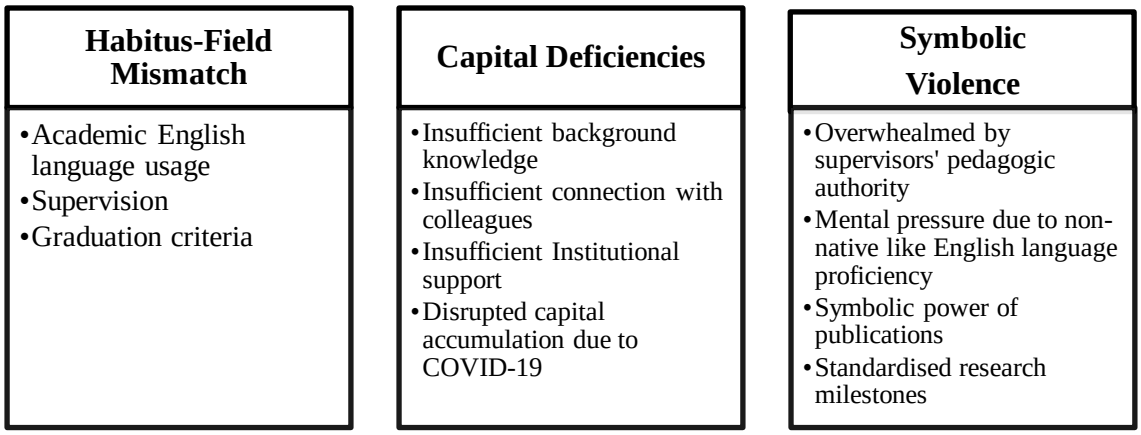
Symbolic violence occurred when participants "voluntarily" accepted their subordinated position when faced with the imposition of arbitrary forms of symbolic power such as supervisors' pedagogic authority, English hegemony, and the pressure from standardised milestones and highly-ranked publications pervasive in neoliberalised Australian universities. Symbolic violence, unlike habitus-field mismatch and capital deficiencies, was less easily perceived or recognised by participants while its negative impact could last longer.

The main qualitative findings reported in Chapter 5 are enumerated in Figure 8.1. The exploration of challenges unveiled the underlying context for Chinese international HDR students to engage in the resilience process. Although these challenges are not commensurate with risks or adversities in traditional resilience research about

catastrophes or traumas, it should be noted in this study that the aggregate of these common challenges—the accumulated effect of risks (Rutter, 1979) or the frequent occurrence of extensive risks (Mitchell, 2013)—can also endanger participants' mental health and wellbeing.

Figure 8.1

Summary of Three-Interdependent Challenges



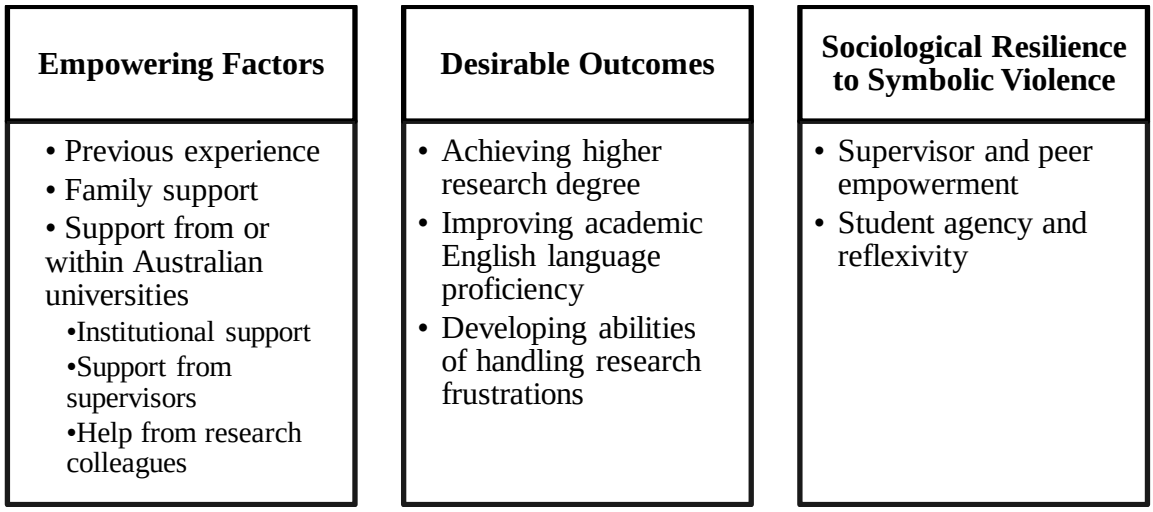
Chapter 6 took a deep dive into participants' positive responses to the challenges reported in Chapter 5. It focused on the empowering factors that facilitated the resilience process of Chinese international HDR students as well as the desirable outcomes defined and achieved along their resilience process. The chapter further highlighted the participants' sociological resilience to symbolic violence which is largely absent in the current resilience research (Mu, 2021c). The chapter thus addressed *RQ2: How do Chinese international HDR students in Australia deal with challenges along their research journey?* and *RQ3*: *What are the positive outcomes Chinese international HDR students in Australia desire or achieve despite the challenges they face?*

The qualitative analysis in this chapter found that the empowering factors most commonly reported by the participants encompass participants' previous study and research experience, family support, and support from or within Australian universities; the desirable outcomes defined and achieved by the participants include achieving higher research degree, improving academic English language proficiency, and developing abilities of handing research frustrations (see Figure 8.2). Notably, Chapter 5 revealed the

traces of sociological resilience to symbolic violence. Unlike those who succumbed to the structural constraints and fell prey to symbolic violence, some participants in this study resiliently navigated through the structural problems and attempted to resist symbolic violence. With supervisor and peer empowerment as well as student agency and reflexivity, their sociological resilience to symbolic violence contributed to power shift in the supervision relationship, questioned English dominance, and sparked reflexive thinking towards neoliberal constraints regarding milestones and publications. Such reflexive strategies, though only sporadically scattered across the dataset, are of paramount importance for moving towards a sociology of resilience for the sake of system-level change.

Figure 8.2

Summary of Empowering Factors and Desirable Outcomes



Chapter 7 investigated Chinese international HDR students' resilience, through a sociological perspective on resilience to symbolic violence. The chapter reported the quantitative exploration of the underlying patterns of such sociological process of resilience. The survey data was collected using a self-designed instrument that was validated through Cronbach's reliability test and Confirmatory Factor Analysis (CFA) with 220 Chinese international HDR students from Australian universities. The following Multiple Correspondence Analysis (MCA) analysis identified three patterns of sociological resilience including Strong Sociological Resilience, Moderate Sociological

Resilience, and Weak Sociological Resilience unfolded in the Australian HE field. When these patterns were examined, it was found there existed a dialectical relationship between symbolic violence and resilience to symbolic violence. While strong symbolic violence constrained resilience, strong resilience forced symbolic violence to retreat. According to the MCA findings, the level of sociological resilience was related to the overall quality and quantity of capitals accrued by Chinese international HDR students. Of note is that respondents' prior overseas learning experience, research experience, and publications, as well as their parents' educational qualifications, constituted to their cultural capital. The respondents also obtained social capital from supervisors in the Australian HE field and their parents in the family field. Such capital acquisition defined their socio-educational advantage as agents within the Australian higher education field and further contributed their sociological resilience to symbolic violence in the forms of pedagogic authority, English hegemony, and neoliberal constraints.

Having revisited the key findings, in the next section I move beyond the empirical level and construct a prototypical model to sociologise the resilience process of Chinese international HDR students. The model was built on the grounds of my empirical findings, Bourdieu's theory, and Bourdieu-informed sociology of resilience.

8.2 SOCIOLOGISING THE RESILIENCE PROCESS OF CHINESE INTERNATIONAL HDR STUDENTS THROUGH BOURDIEU

To recall, in Chapter 3, Bourdieu's theory recast the traditional psychological construct of resilience into a sociological process where the dispositions of Chinese international HDR students in Australia (habituses), the recourses and social positions that they take (capitals), and the politics and principles of various social spaces where they work and live (fields) all come to shape the mechanisms of their responses to challenges and structural constraints (practice). Accordingly, three theoretical research questions were proposed:

a) in which fields have Chinese international HDR students in Australia ever learned, lived, and stayed; and what are the relations across these fields that come to shape the resilience process of these students?

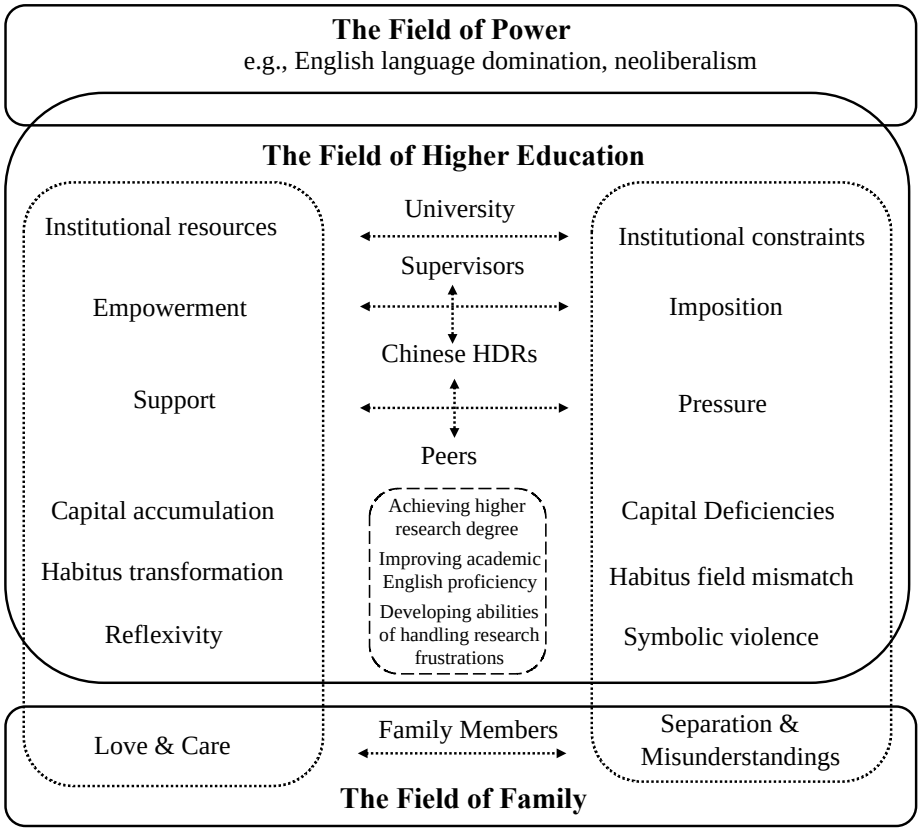
b) what are the power relations and positioning rules within fields, as defined by what forms of capital, that come to shape the resilience process of Chinese international HDR students in Australia?

c) what are the relations between habituses and fields that either transform the individual or the social in the resilience process of Chinese international HDR students in Australia?

To answer these three theoretical research questions, I now present the sociological interpretation of the resilience process of Chinese international HDR students. To this end, I first map three fields where the sociological process of resilience unfolded, and then further explain Chinese international HDR students' social practice related to the resilience process within the three fields. The sociological process of resilience of Chinese international HDR students is modelled in Figure 8.3.

Figure 8.3

The Sociological Model of Resilience Process of Chinese International HDR Students



8.2.1 Fields Pertinent to Resilience

Bourdieu and Wacquant (1992) observe that "the boundaries of the field can only be determined by an empirical investigation" (p. 100). Through the qualitative and quantitative data analysis, three fields pertinent to the resilience process of Chinese international HDR students were identified, namely, the field of higher education, the field of power, and the field of family.

In the case of this research, HDR education occurs within the field of higher education. Within this field, the fundamental principles include but are not limited to English as linguistic capital, supervisors as 'guide on the side', and neoliberalised HDR training that emphasise standardised 'milestones'. The field is thus hierarchically structured where agents such as supervisors, Chinese international HDR students, and peers within a university as an institution occupy dominant and subordinate positions. The field also distinguishes those "resilient" Chinese international HDR students who achieve academic success despite all the odds and those thwarted by challenges, and on the verge of "failure".

The principles within the Australian HE field are not entirely developed from within; rather, the logic of the field of power may infiltrate the HE field. According to Bourdieu (1998c), the field of power refers to "a field of forces structurally determined by the state of the relations of power among forms of power, or different forms of capital" (p. 264). The field of power dictated the dominant principles of domination that "influence societal decision-making processes, resource flows, opinion formation and wider logics of action by strengthening commitment to particular projects or objectives or to the status quo" (Harvey et al., 2020, p. 5). In this study, as displayed in Figure 8.3, the symbolic force of English and neoliberalism is first assumed as "the legitimate mode of reproduction of the foundation of domination" (Bourdieu, 1998c, p. 265) in the field of power, and is then (mis)recognised in the field of Australian HE and often taken for granted by its agents. In this way, when Chinese international HDR students venture into the Australian HE field, they are socially stratified depending on: first, their amount and composition of capital required for successful completion of their thesis in English within the predefined timeline; and second the degree of (dis)accordance between their habitus and the English-dominant, neoliberalised Australian HE field.

The third field is the field of family. Atkinson (2013, 2020) argues family relations constitute a small-scale field with "its specific doxa, the internal struggles over capital, its boundaries and its embeddedness in a wider universe of familial relations" (2013, p. 224). Within the field of family, agents are bound together with a sense of belonging and struggle for love, affection, and care as forms of mutual recognition, that is, emotional capital (Atkinson, 2013, 2020). In this study, the family field was found to be relatively independent of the field of HE and the field of power. This is because the principles of valuation and accumulation of emotional capital are largely free of the logics of the field of HE and the field of power. Although Chinese international HDR students were physically separated from their family field, the study suggested that the family field influenced from afar their resilience process, which was simultaneously influenced by the Australian HE field and the field of power.

8.2.2 Resilience as Social Practice across Fields

As discussed in Chapter 3, the traditional psychological construct of resilience can be retheorised as a form of social practice according to Bourdieu's logic of practice (e.g., Mu, 2018, 2019b, 2021c; Mu & Pang, 2019). The resilience process unfolding in a specific field depends on the quantity and the quality of capital possessed by the agents in that field as well as by the habitual dispositions that are associated with the agents in the field.

As shown in Figure 8.3, the social practice of resilience unfolds within a differentiating social space that straddles the fields of family, HE, and power. This differentiating social space is configured with two relatively opposing poles respectively located on the right- and left-hand side of the space. I commence from the right-hand side of the space—the pole of exposure to challenges. In the field of Australian HE, Chinese international HDR students encountered challenges such as peer pressure, imposition of supervisors' authority, and institutional constraints. In the field of family, due to physical separation, misunderstanding may arise between the students and their family members which hinder the resilience process. In Bourdieusian terms, these challenges can be conceptualised as capital deficiencies, habitus-field mismatch, and symbolic violence. However, as depicted on the left-hand side of the space—the pole of positive outcome despite challenges, resilience is invigorated by a series of empowering factors. The

empowering factors include institutional resources, supervisor empowerment, and peer support within the Australian HE field as well as kinship care and love within the family field. In Bourdieusian terms, these empowering factors promote Chinese international HDR students' capital accumulation, habitus transformation, and reflexivity. Such empowering factors also have a transformative effect. That is, Chinese international HDR students in Australia who engage in the resilience process may transform capital deficiencies into capital accumulation, habitus-field mismatch into habitus-field resonance, and submission to symbolic violence into reflexivity in response to symbolic violence. Such transformative effect could mobilise students from the pole of exposure to challenges to the pole of positive outcomes despite challenges.

In this study, positive outcomes concurrently reported by the participants include achieving higher research degree, improving academic English language proficiency, and developing abilities of handling research frustrations (See Figure 8.3). In Bourdieusian words, higher research degree, academic English language proficiency, and abilities of handling research frustrations all constitute indispensable capital valued in the higher education field. As explicated in Chapter 3, what distinguishes higher education field from other fields are credentialing of knowledge-intensive labour and basic research. As such, any social agents who intend to survive or thrive in the higher education field are consciously or unconsciously desired to accrue those socially 'predefined' institutionalised cultural capital, linguistic capital, or develop pertinent academic habitus that aligned with the logic of the higher education field. In this vein, the positive outcomes are plausibly perceived by the participants, while their perceptions are indubitably rooted on the '*doxa*' (Bourdieu, 1977), that is, the taken-for-granted and unquestionable beliefs prevailed in the higher education field. For Chinese international students, the pursuit of these positive outcomes is akin to the experience by which "the natural and social world appears as self-evident" (Bourdieu, 1977, p. 164). Participants in this study, thus extensively utilise the empowering resources available to them in order to achieve these positive outcomes. They evidently demonstrate a form of resilience in psychological and social ecological terms. It is worth nothing that participants' pursuit of these positive outcomes is not necessarily passive and non-reflexive. In the face of the Australian higher education field fraught with a range of arbitrary symbolic power, such as English

hegemony, supervisors' pedagogic authority, and permeated neoliberal principles, participants demonstrated a form of sociological resilience to symbolic violence by constantly questioning the '*doxa*' and emancipating themselves from the arbitrary social structure.

Putting together, resilience bridges the pole of exposure to challenges and the pole of positive outcomes despite challenges. However, the path is beyond simply adaptation to and recovery from adversities, or in Bourdieusian words, successfully engaging in capital accumulation and habitus transformation to fit into a field. The resilience process of Chinese international HDR students is more complex. This sociological study finally unravels some participants at least to a certain extent, were able to demonstrate reflexivity in the face of symbolic violence and reject to accept the arbitrary structural constraints. Such resilience process is not only "concerned with individual achievements in precarious conditions but also ponders over transformative, reflexive, and power-rejective everyday practices that make social change possible, probable, and even inevitable" (Mu, 2022). As such, resilience thus can be construed as a transforming process that recasts challenges into opportunities for the sake of individual development and system-level change.

8.3 CONTRIBUTIONS OF THIS RESEARCH

This research, as a pioneering study examining the resilience process of international HDR students from a sociological perspective, has made significant theoretical, methodological, and practical contributions to the current resilience research, as illustrated in the following sections.

8.3.1 Originality and Contributions to New Knowledge

This study has effectively extended the theoretical framing of the psychology of resilience (eg., Ungar, 2019) and echoed the call for moving towards a critical sociology of resilience for the sake of system-level change (Mu, 2022). A sociological approach to resilience can complement the psychological approach to adaptive resilience (Mu, 2021c). It "questions the oft-unquestioned liberal adaptation to limitations, explores potential for ushering critical action of transforming them, and comes to grips with resilience building in both tangible threatening conditions and symbolic structural constraints" (Mu, 2021c, p. 19). The current research effectively employed a sociological approach to resilience

research through recourse to Bourdieu's reflexive and relational tools (Bourdieu, 1977, 1990b; Bourdieu & Wacquant, 1992). It revealed the hidden adversities, that is, symbolic violence, which have been neglected by both classical social psychological and social ecological paradigms. Participants were found to be exposed to symbolic violence manifested as the supervisors' pedagogical authority, English hegemony, and the pressure from standardised milestones and high-ranked publications pervasive in neoliberalised Australian universities. Although previous literature on international higher education studies mentioned similar issues (Son & Park, 2014; Yu & Wright, 2016), most of them failed to delve deeper into the nature of these issues—a limitation of previous research and a contribution of this study. Notably, this study identified traces of sociological resilience to symbolic violence, indicating the dialectical relationship between symbolic violence and resilience to symbolic violence.

Furthermore, this study provided a prototype for sociological resilience research of international research students experiencing heightened stress and anxiety, which might lead to severe mental disorders or suicide (Aspland et al., 2021; Lian & Wallace, 2020; Woolston, 2019). The study provided a sociological model on discussing the challenges habitus-field mismatch, capital deficiencies, and symbolic violence. This framework can guide insightful probing into the nuances and complexities behind the challenges faced by a broader population of research students. Moreover, the study differs from the deficit discourse that portrays HDR students as vulnerable victims (Kim, 2012; Manathunga, 2007); it identified traces of agency and reflexivity of Chinese international HDR students in the face of symbolic violence. Without agency and reflexivity, system-level change is not possible. In this vein, the study empirically echoes the call for using Bourdieu as a theorist of social change in educational research (Mu, 2020).

8.3.2 Methodological Contributions

Previous resilience studies on international (research) students tended to adopt qualitative methods such as analytical autoethnography with interactive interview (Wu & Hu, 2019), self-study methodology (Hu et al., 2016), focus-group interviews and field notes (Zhang, 2016), memory-work (Ingleton & Cadman, 2002), in-depth interviews and solicited diary (Yu & Wright, 2016), and reflective autobiographical narratives (Soong et

al., 2015). Ungar (2013) confirms the significance of such diverse qualitative approaches to resilience studies, for example, child and youth resilience, in several ways, such as discovering the unnamed protective processes and describing resilience phenomena in very specific contexts and cultures. Yet a qualitative method alone is insufficient for exploring and testing new possibilities (Mu, 2018). A systematic combination of quantitative and qualitative methods may prove more powerful, allowing for in-depth contacts with the participants' lived experience and a context-specific measurement of such experience in a large enough sample (Mu, 2018). As a result, this study was methodologically innovative by first, qualitatively exploring the resilience process of Chinese international HDR students in Australia, and then second, quantitatively measuring and modelling such resilience process. This study, informed by Bourdieu's sociological theories, finally established a feasible working partnership between the empirical, the theoretical, and the methodological. In order to understand the resilience process of Chinese international HDR students in Australian universities, a Bourdieusian theoretical framework was employed. A meta-theoretical argument was developed to connect the methodological and theoretical frameworks (see Chapter 4). The two-phase mixed methods design resonates with Bourdieu's own methodological pluralism.

Furthermore, the methodological contribution of the thesis is evident in its use of MCA, the principles of which resonate with Bourdieu's relational thinking. MCA, on the other hand, is underutilised or even unknown in Bourdieusian sociology of education (Mu, 2021a). This study makes a contribution by employing MCA to unveil, within a Bourdieusian remit, the possible hidden patterns behind the sociological resilience process of Chinese international HDR students. As a result, the data, the theory, and the analysis demonstrate goodness-of-fit. It is suggested that the framework can be adapted and applied to future resilience studies in various contexts and cultures.

A further methodological contribution is the use of online interview and survey in response to the outbreak of the COVID-19 pandemic. Due to quarantine restrictions and other health protocols implemented by the governments during the pandemic, common data collection techniques for qualitative research through an actual survey or face-to-face interview became infeasible (Moises Jr, 2020). I changed my research design for interview and survey from face-to-face to online. Such methodological flexibility proved effective

in terms of data production and demonstrates a strong potential to reactively and proactively address any "crises" during the research process.

8.3.3 Practical Contributions

The mixed-methods study has offered insight into Chinese international HDR students' resilience process in Australian universities from a sociological perspective. As reiterated in Section 8.1, participants encountered multiple and concurrent challenges including habitus-field mismatch, capital deficiencies, and symbolic violence, while meanwhile, demonstrating diversified and powerful strategies to engage in the resilience process. Informed by these findings, and mindful of the limitations of the research, implications and recommendations were provided for relevant stakeholders: first, Chinese international HDR students themselves, or other international HDR students or domestic HDR students in general both within and outside; second, supervisors and HDR training practitioners; and third, Australian government and university administrators and policy makers in Australia and beyond.

For (Chinese) international HDR students, it is expected that these research findings could assist them in understanding the challenges they might encounter, the empowering resources they can rely on, and the desirable outcomes from their HDR research in Australian universities. On the one hand, this study proposes that international HDR students utilise resources available to them when they grapple with challenges throughout their research journey. It recommends they enhance their cultural capital in terms of language, research abilities, research publications and social capital such as social networks with their supervisors and other scholars, thus maintaining good relationships with their research colleagues, and frequent contacts with their families. On the other hand, it is proposed that international HDR students should exercise agency and reflexivity to build resilience in response to symbolic violence along their research journey. For example, they could reconstruct their habitus and reflexively withdraw themselves from subordinate dispositions such as hesitation in expressing their opinions, feeling overwhelmed by supervisors' research expertise, and being unwilling to challenge supervisors' feedback due to their pedagogic authority. In light of the findings regarding 'self-accusation' in terms of their non-native like English proficiency, it is advised that

non-English speaking background international HDR students should not only adopt strategies to enhance academic literacy in English, but most importantly, cautiously avoid self-blame or self-doubt about their English competence due to English hegemony when completing their thesis in English. They should be encouraged to utilise their diverse linguistic repertoires as a structural advantage that English monolinguals do not have. These suggestions are not only the lessons learned from the thesis but also informed by postmonolingual theorising in knowledge production (Singh, 2017, 2020) and empirical research of sociological resilience to English hegemony (Cited from the author's work, Xing et al., 2022) and supervisory power. Furthermore, it is highly recommended that the international HDR students be responsible and autonomous in their own research projects, while also being vigilant to avoiding self-exploitation imposed by the neoliberal logic of individual responsibilisation, for which could jeopardise their mental and physical wellbeing. Lastly, within the neoliberalised and highly competitive research environment, international HDR students should adopt reflexive attitudes towards peer pressure through a "self-driven" approach rather than a comparative, competitive mindset when sharing work-in-progress with peers.

As supervisors and HDR training practitioners play a critical role in guiding international HDR students throughout their research journey, it is essential they understand the potential discrepancies in supervision approaches prompted by diverse student backgrounds, such as different supervision styles referred to in Chapter 5. Second, the findings of this study have indicated the significance in the intergenerational transmission of cultural capital from supervisors to international HDR students. As many participants lamented that they received insufficient support from their supervisors, it is expected that supervisors could engage in more intellectual work with their students and provide timely and constructive feedback. It is found that an appropriate amount of face-to-face supervision may generate more positive impacts on students in comparison to online supervision only.

Third, one complicated task is to negotiate the power issues between international research students and their supervisors. As described in Chapter 5, participants tended to be overwhelmed by supervisors' pedagogic authority. Supervisors should be encouraged to reflexively scrutinise their supervision in relation to the power imbalance that persists

in the field of HDR supervision. Equal power distribution between supervisors and their students is not something that can be assumed but constantly contested and discussed during their everyday supervision practice. Reflexive questions may include: What does supervisor authority mean to (international) research students? Given the linguistic hierarchy and the expectation that the thesis is presented in English, how can the supervision process be more inclusive of Chinese international HDR students' capital? How would supervisors' scientific capital be taken by students as an unquestioned and unquestionable "truth", and further related to supervisors' academic capital which complicates and heuristically biases decision-making during students' HDR candidature? How can a supervisor strategically empower students to claim ownership and autonomy of their research project while powerfully scaffolding and promoting students' progress, given the limitations imposed upon them by their employing universities?

Fourth, in terms of neoliberal university guidelines and principles, it is expected that supervisors, and staff in the higher education sector in general, are not necessarily neoliberalised bodies but potentially reflexive knowledge workers with collective resilience to neoliberalism. To enable and empower HDR students to question the taken-for-granted neoliberal doxa within the higher education field, this study echoes Deuchar (2008) who proposes a less utilitarian and more critically reflexive view of HDR training. This study further acknowledges Manathunga (2019), who points to developing a more inclusive and inventive systems of HDR education rather than regarding those who fail to follow the standardised timeframe as incompetent. The foregoing suggestions were made on the grounds of the findings from the thesis and informed by the analysis of sociological resilience to the symbolic violence of supervisory authority (Quoted from the author's work, Xing et al., 2021).

For Australian government and universities or policy makers more broadly, there are two major tasks. The first task is to provide pertinent and sufficient support for international HDR students. As discussed in Chapter 5, one of the most significant challenges encountered by the participants in this study was capital deficiencies, such as insufficient background knowledge, insufficient connection with colleagues, insufficient institutional support, and disrupted capital accumulation due to COVID-19. As a result, with the support of the Australian government, on the one side, Australian universities

should provide courses (ideally free of charge) or in-depth workshops about disciplinary knowledge to help international HDR students, in particular, for those interdisciplinary students, access and master sufficient background knowledge for completing their research project to the best of their ability. With respect to insufficient connection with colleagues, it is suggested that Australian universities or faculties should adopt various strategies to prompt different forms of communication and promote harmonious interactions and relationships among culturally and linguistically diverse research cohorts, such as regular forums, discussions or project sharing seminars. Furthermore, the outbreak of COVID-19 pandemic has disrupted international HDR students' normal trajectory to their Research Master or PhD degree in Australian universities (see Chapter 5). In such a time of crisis, overemphasis on self-responsibilities may further marginalise or endanger this population, as discussed by Mu (2021b). It is recommended that Australian government and universities should shoulder more responsibilities and offer more resources to support international HDR students' wellbeing and the completion of their research degree in such a difficult context.

The second task is more challenging but not unachievable, that is, to revamp the institutional environment regarding HDR students training in the neoliberalised Australian higher education. In this study, as discussed in Chapter 5, it was noted that the logic behind neoliberalised Australian HDR research training overemphasises the standardised research milestones and timely completion rates while ignoring the complexity of the research process, the diversity of the international HDR students, as well as its potential harm to HDR students' wellbeing and self-exploitation in order to meet the required milestones. This difficult issue relates to how to return academic freedom to supervisors and research students in a neoliberalised era fraught with the logics of austerity, accountability, standardisation, and regulation. There is a need to change the institutional research culture, to create for students and supervisors empowering scholarly spaces within which they are able to work together for high-quality research instead of focussing on the efficiencies of completion of candidature. Moreover, transparency is a key to unlock the unknown unknowns by communicating to students and supervisors relevant policies and regulations concerning HDR supervision. For example, HDR students should be involved in important decision making pertinent to their research candidature such as

supervisor selection and examiner nomination; supervision arrangements such as "division of labour" between supervisors should be transparently communicated to HDR students. Furthermore, the Australian government and higher education institutions need to acknowledge that universities must be supported in pursuing research and high quality HDR supervision beyond the demands and limitations of the marketplace. A less neoliberalised HDR education provides an opportunity to disrupt the production of homo economicus and cultivate neo-homo academicus within the global academy in the pursuit of truth and knowledge whilst supporting the wellbeing of international research students as they pursue their studies. These suggestions are not only made according to the findings from this thesis but also informed by in-depth analysis of sociological resilience to the neoliberal university (Quoted from the author's work, Xing et al., 2021).

Third, as a multicultural international higher education sector, another important issue that needs to be seriously considered is the monolingual language policy of Australian universities. As long as English persists as the dominant language in higher education, international HDR students, visiting or resident international scholars, as well as academic staff working in Australian universities are not immune from the symbolic violence of English hegemony. This potentially inhibits utilising the potential of diverse linguistic repertoires for knowledge generation and dissemination in universities in Australia and elsewhere. This study, thus, renders a cost-intensive proposal for academic multilingualism where English should not be seen as the only legitimate linguistic capital while other linguistic repertoire should be warrant equivalent recognition. These suggestions sprang from the findings from the thesis, the Bourdieu-informed proposal for post-monolingual theorising (Singh, 2017, 2020), and the in-depth analysis of sociological resilience to English hegemony in the Australian higher education field (Cited from the author's work, Xing et al., 2022).

8.4 LIMITATIONS OF THIS STUDY

Every research project has limitations, and the current PhD project is not an exception. It is essential to acknowledge the limitations of the study due to its defined and justified scope and interest so as to avoid over-interpretation and over-generalisation of the research findings.

The first limitation is related to the sampling. The representativeness of sample was compromised due to the non-random nature of snowball sampling. Owing to the difficulty of identifying and approaching the population under investigation, snowball sampling was considered the best possible approach to recruiting potential respondents. The snowball sampling method captured a diverse range of demographic features of the participants but also resulted in an over-representation of respondents from universities in Queensland (41.4%), where the snow sampling was first initiated, and an absence of respondents from universities in Northern Territory. In this way, the sampling method potentially reduces the heterogeneity of the sample and, as a result, the generalisability of the findings. Secondly, as the online survey was distributed for two weeks, the final sample size (n = 220) was not sufficiently large for a thorough, systematic validation of the self-designed research scale. For example, multi-group analysis was not performed. It is therefore unknown whether the instrument would remain equally robust across participants with different demographic features such as males versus females, PhD versus Masters, science versus social sciences, Go8 universities versus other universities. The findings, therefore, should be interpreted with caution.

The second limitation is associated with the statistical analysis method-Multiple correspondence analysis (MCA). While MCA is well suited to Bourdieu's relational thinking, it has several limitations. First, MCA is applicable to categorical variables while being sensitive to low-frequency categories. Categories with less than 5%, such as 'Other Scholarship Types', were combined with other categories or were treated as passive categories. This leads to the loss of details and accuracies in the data. Second, as argued by Mu (2021a), the interpretation of MCA result is through extrapolation, which lacks statistical inference. The social patterning constructed though such interpretation may become less robust. As a result, the possibility of incorrect interpretation is statistically unknown.

Third, the data analysis in this study is possibly, probably, or even inevitably biased not only by participants' point in the field but also by layers of veils that I could not see through due to my own point in the field. It should be acknowledged that the analysis in this study grounded merely on participants' self-reported perceptions, namely, the viewpoints of the participants—"the point of view they take on the field as a view taken

from a point in the field" (Bourdieu & Wacquant, 1992, p. 101). I also need to duly acknowledge my dual identity in this study, as the researcher but meanwhile, as a Chinese student pursuing my PhD study in Australia. This positionality is a double-edged sword. I shared many of the same experiences as the participants in this study, so it was difficult to avoid potential bias when analysing the interview accounts. As situated knowers, my viewpoints are therefore bounded by my social positions and by the available data. The analyses may only be able to reveal a facet of the resilience process at play. While Bourdieu has offered researchers a reflexive thinking tool, that is, participant objectivation, as expounded in Chapter 4. Throughout the entire research process, I was able to remain reflexive about my position in this study and cautious when interpreting and analysing the interview accounts. Meanwhile, feedback from my supervisors and perceptions from my colleagues enabled me to incorporate viewpoints taken from different positions and through different position-takings in the field.

8.5 FUTURE DIRECTIONS

Framed through a sociological lens, this mixed-methods study has effectively demonstrated the resilience process of Chinese international HDR students from Australian universities, built on the grounds of significant challenges, empowering factors, and desirable outcomes. Bourdieu's sociological thinking tools is profound in this research, guiding the exploration of participants' sociological resilience process. Due to the nuances and complexities of Chinese international HDR students' resilience process, several potential issues emerging from this study may require further investigation.

First, considering the research scope, this study only took a deep dive into Chinese international HDR students' perspectives of their resilience process in Australian universities. Yet as the research findings indicate, other relevant stakeholders, such as parents, supervisors, university administrators, policy makers all contributed a large part to the students' resilience process. As a results, their voices should be explored in order to gain a thorough understanding of the different stakeholders' perceptions about the resilience process of international research students. Moreover, as this research is contextualised in Australia with Chinese international HDR students, it is critical to

expand the research scope into diverse populations and contexts, such as other international HDR students or HDR students in general both within and beyond Australia.

Second, concerning sociology of resilience, further research could continue probing different forms of symbolic violence as well as different strategies of resilience to symbolic violence. It would be important to unveil what factors may impact upon student agency and reflexivity as well as supervisor and peer empowerment. Meanwhile, more quantitative research would be needed to examine the links between participants' sociological resilience on the one hand, and their wellbeing, academic performance, and/or career development on the other hand. Furthermore, more empirical research would be required from a practical standpoint to investigate how to develop sociology of resilience among this research cohorts.

Third, Mu's (2021c) sociology of resilience focusing on child and youth resilience, argues that Bourdieu's sociology not only questions the unequal distribution of opportunities but also has potential to transform structural inequalities. This study echoes this viewpoint and supports the idea that Bourdieu's sociological thinking tools are more than 'reproduction'. To fulfil this theoretical transformation, future work could delve into how sociology of resilience informed by Bourdieu's notions of habitus, field, and capital contributes to system change.

8.6 CONCLUSION

This study is a first-of-its-kind resilience research with Chinese international HDR students from Australian universities. Previous literature tended to research the wellbeing issue of international HDR students from a psychological standpoint and frequently portrayed the research cohort as 'problematic' or 'victims' (Barry et al., 2018; Due et al., 2015; Sverdlik et al., 2018; Xu et al., 2020). In contrast to these studies, this research employed the notion of resilience to investigate the struggles and predicaments faced by Chinese international HDR students from Australian universities, but notably, to probe how they dealt with these adversities positively. Informed by Bourdieu's sociological thinking tools, this mixed methods research has provided nuances and intricacies of the resilience process of Chinese international HDR students. In addition to some commonly reported challenges, this research population also resiliently took issue with the structural

constraints, that is, symbolic violence throughout their research journey. It provokes the question of resilience is not only an individual issue, but also a problem concerning the existing systems or structures. It thus affirms the significance of applying a sociological lens when investigating problems and issues abound in the international higher education. A sociological framework allows decoding "the intersectionality of resilience process and sociocultural dynamic" (Mu, 2018, p. 208), shedding light on the symbolic power behind the logic of higher education and proffering evidence of individual agency and reflexivity towards social constraints. As such, I conclude this thesis with a call for more sociological research on resilience.

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Appendices

Appendix A

Participants Information Sheet

PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT
– Interview –

The Resilience Process for Chinese International HDR students in Australia

QUT Ethics Approval Number 2000000248

Principal Researcher:	Congcong Xing	PhD student
Associate Researcher(s):	Michael Mu	Principal Supervisor
	Deborah Henderson	Associate Supervisor

Why is the study being conducted?

This research project is being undertaken as part of a PhD study for Congcong (Luna) Xing. The purpose of this project is to understand the resilience process of Chinese international HDR students in Australia. You are invited to participate in this research project because you are currently studying as an HDR student at an Australian university or / have recently graduated (within the past 12 months) with a higher research degree from an Australian university. You will be asked questions about your experience of challenges you encounter, protective factors as well as your desirable outcomes along your HDR research journey in Australian universities.

What does participation involve?

Your participation will involve an audio recorded individual 60-minute interview conducted online using a freely available web-conferencing platform Zoom. The interview can be scheduled at a time to suit you. The questions will include:

- What sorts of opportunities and challenges have you experienced during your studies so far?
- How are you managing these challenges?
- What sorts of experiences have you had using English in your research?

You will be able to review a transcript of your responses after the interview.

Your participation in this research project is entirely voluntary. If you agree to participate you can withdraw from the research project without comment or penalty. You can withdraw anytime during the interview and up to four weeks after your interview by emailing Congcong at the email address above. If you withdraw within this timeframe, any information already obtained that can

be linked to you will be destroyed. Your decision to participate or not participate will in no way impact upon your current or future relationship with your university or with QUT (for example your grades).

What are the possible benefits for me if I take part?

Your participation in this research may not benefit you directly, but it will enable you to share your stories of successful coping in challenging situations when you pursue your research journey in Australia and this may benefit others in future. Lessons learnt from the project will be published so that more international HDR students like Chinese international HDR students can share and have access to knowledge about building academic resilience when they pursue a research degree in the Australian higher education field.

What are the possible risks for me if I take part?

There are minimal risks associated with your participation in the research. These risks include inconvenience, minor discomfort, and the possibility that you will feel obliged to participate in the research (coercion). The researcher, Congcong, will take all reasonable steps to ensure that interviews can be scheduled in a way that minimises inconvenience to you. If participating in a research interview is a new experience for you, you may feel some discomfort with the questions and/or with being audio recorded. The researcher will try to make you as comfortable as possible during the interview and will ask for your permission before activating the audio recorder. It is important for you to know that you are free to choose to participate or to not participate in the study – it is completely up to you.

Should you experience anything other than minor discomfort, please know that QUT provides limited free counselling for research participants of QUT projects, who may experience discomfort or distress as a result of their participation in any research. Should you wish to access to this service please contact the Clinic Receptionist of the QUT Psychology Clinic on 07 3138 0999.
*Please note, during COVID-19 restrictions the QUT Psychology and Counselling Clinic will offer telehealth only services.

What about privacy and confidentiality?

Interviews will be audio recorded and transcribed. It is not possible to participate in the project without being audio recorded. Any personal information that could potentially reveal your identity will be removed from the interview transcript and replaced with codes before the files are shared with other researchers or results are made public. Although your interview transcript will be coded to protect your identity the research team will be able to re-identify you. A re-identifying code stored separately to personal information (e.g. your name and email address), will be accessible only to the research team. The code plus identifying information will be destroyed at the end of the project.

Every effort will be made to ensure that the data you provide cannot be traced back to you in reports, publications and other forms of presentation. However, although it is unlikely, it is possible that due to the small number of people taking part in interviews, if you are quoted directly

your identity as a research participant may become known to people who are familiar with you.

Any data collected as part of this research project will be stored securely as per QUT's Management of Research Data policy. Data will be stored for a minimum of 5 years, and can be disclosed if it is to protect you or others from harm, if specifically required by law, or if a regulatory or monitoring body such as the ethics committee requests it. Consent forms will be stored for 15 years as required by legislation.

All paper-based documents will be kept securely in a locked filing cabinet in the researcher's office. E-files and recordings will be stored on a secure QUT password protected network drive. USB drives will only be used for data transfer. Only the researcher and the supervisory team will have access to the raw data.

How do I give my consent to participate?

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate. Please sign and return it via email to congcong.xing@hdr.qut.edu.au.

What if I have questions about the research project?

If you have any questions or require further information, please contact one of the listed researchers:

Congcong (Luna) Xing	Email: congcong.xing@hdr.qut.edu.au	Phone: 0457049783
A/Prof Michael Mu	Email: m.mu@qut.edu.au	Phone: (07) 3138 0236
A/Prof Deborah Henderson	Email: dj.henderson@qut.edu.au	Phone: (07) 3138 3048

What if I have a concern or complaint regarding the conduct of the research project?

QUT is committed to research integrity and the ethical conduct of research projects. If you wish to discuss the study with someone not directly involved, particularly in relation to matters concerning policies, information or complaints about the conduct of the study or your rights as a participant, you may contact the QUT Research Ethics Advisory Team on +61 7 3138 5123 or email humanethics@qut.edu.au .

Thank you for helping with this research project. Please keep this sheet for your information.

Appendix B

The Consent Form for Interview Participants

CONSENT FORM FOR QUT RESEARCH PROJECT
– Interview –

The Resilience Process for Chinese International HDR students in Australia

QUT Ethics Approval Number 2000000248

Research team

Congcong (Luna) Xing	congcong.xing@hdr.qut.edu.au	0457049783
A/Prof Michael Mu	m.mu@qut.edu.au	(07) 3138 0236
A/Prof Deborah Henderson	dj.henderson@qut.edu.au	(07) 3138 3048

Statement of consent

By signing below, you are indicating that you:

- Have read and understood the information document regarding this research project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that you are free to withdraw without comment or penalty.
- Understand that you are free to withdraw your consent, and your data, up to 4 weeks after your interview by contacting the research team via email congcong.xing@hdr.qut.edu.au.
- Understand that if you have concerns about the ethical conduct of the research project you can contact the Research Ethics Advisory Team on +61 3138 5123 or email humanethics@qut.edu.au.
- Understand that the research project will include an audio recording and it is not possible to participate without being audiorecorded.
- Agree to participate in the research project.

Name _____

Signature _____

Date _____

Appendix C

Semi-structured Interview Protocols

INTERVIEW SCHEDULE FOR QUT RESEARCH PROJECT

– Interview –

The Resilience Process for Chinese International HDR students in Australia

QUT Ethics Approval Number 2000000248

Research team

Congcong (Luna) Xing	congcong.xing@hdr.qut.edu.au	0457049783
A/Prof Michael Mu	m.mu@qut.edu.au	(07) 3138 0236
A/Prof Deborah Henderson	dj.henderson@qut.edu.au	(07) 3138 3048

Interview on Chinese International HDR students' Resilience Process in Australia

Pseudonym:
Time and Date:
Place:
Check the audio recorders: Yes No

I. Briefing:

Introduction:
Thank you for making time to participate in this interview with me. I will use an ID code on the transcripts and a pseudonym in any reports. I can allocate you a pseudonym, or would you like to suggest your own pseudonym?
Please feel free to respond to the questions raised during our interview as you think appropriate and feel comfortable with. You are welcomed to provide as much or as little detail as you prefer. I want to reassure you that there are no right or wrong answers and that I have no preconceived agenda. Instead, I am here to listen to you and learn about your experiences.

Please let me know if at any stage during the interview you feel uncomfortable and would like the interview to stop. Please also let me know if you do not wish to answer any questions.
Do you have any questions before we start the interview?

As our interview will be audio recorded, may I commence the interview and start recording now?
This interview with *(add participant's name)* is recorded with their permission on *(add date).*

II. Interview questions:

Q 1. Please provide some insights into why you decided to pursue your higher degree research in Australia. What sorts of challenges did this present for you and your family members? How are you managing these challenges?

Q 2. What sorts of opportunities and challenges have you experienced during your studies so far? Please refer to any significant Milestones (Confirmation, Final Seminar) or other important academic opportunities you think are relevant.
How did you deal with difficult situations? What factors helped you manage and/or overcome them?

Q 3. What sorts of experiences have you had using English in your research? For example, when speaking in English during workshops, or seminar or conferences, or in meetings with your supervisors? What have been your experiences writing in English to produce drafts of your thesis, conference abstracts and/or writing papers to submit to English language journals for publication?

Q 4. Please explain some of the opportunities and challenges you've navigated as you've pursued your research in Australia. How has conducting research in Australia compared with your experiences in China?

Q 5. Have you experienced a lack of confidence about your academic ability, or major concerns about whether you will be able to continue with and/or complete your study?
If so, how did you overcome this? Did you seek help or assistance from the university services? From your supervisors? From your fellow Chinese students, and/or from other international and/or Australian students? Please explain.

Q 6. How significant has your relationship with your supervisors been in progressing your study? What has been difficult? What has been encouraging? What similarities and differences can you identify in supervision between the Australian and the Chinese context (or elsewhere?) in terms of providing feedback on drafts? If appropriate, please also refer to opportunities and experiences for co-authoring papers and book chapters.

Q 7. How significant has the research training or support provided for international HDR students by the University, Faculty/Department? Have you taken advantage of the research training offered by your University, Faculty/Department? Why or why not? Please explain.

Q 8. How do you feel as a Chinese researcher in Australia? How well do you think you've fitted in the Australian research culture? Do you think your university is culturally fair to Chinese HDRs?

Q 9. Are you satisfied with your current project progress? Have you ever experienced any delay in your research for what reasons? If appropriate, could you further clarify how did you overcome any hindrance in your research progress?

Q 10. Have you ever had to re-identify yourself since you started your HDR study in Australia, e.g., your position as a researcher? How did you respond to self-doubt along this journey?

III. Closing
How do you understand "resilience" during your research journey in Australia?

IV. Ending
Thank you again for your time. I will send the transcript for you to check, and you are welcomed to change any wording or details to better reflect your opinions. It may take a couple of weeks for me to get it to you.

Appendix D

Survey Questionnaire

Main Study Version of the Survey

Section 1 English version of the survey for main study

The Sociological Resilience Questionnaire for Chinese International HDR Students in Australian Universities-Main study (English)

<table>
<tr><td colspan="4">Part I Demographic information</td></tr>
<tr>
<td>Year of Birth:
Gender:
□ Male □ Female □ Other
Marital status:
□ Married □ Single
□ In a de facto relationship
Degree：
□ Research Master (e.g., MPhil) or candidate
□ PhD or Professional Doctorate or candidate
University：
Discipline:
□ Social science
□ Natural science</td>
<td>Educational background:
Have you received your undergraduate education in China? Y/N
If yes, which category does your university belong to?
□ 211 Project □ 985 Project □ Other
Have you had overseas learning experience before your most recent HDR study? Y/N
If yes, which country:
For how many years? _____
Have you had any research experience (e.g., as an individual or as part of a team of researchers on a research</td>
<td>Number of supervisors:
□ 1 □ 2 □ 3 □ ≥4
Linguistic background of supervisory team:
□ all native Chinese speaking
□ all native English speaking
□ a combination of native Chinese speaking and native English speaking
□ Neither native Chinese speaking nor native English speaking
□ Other
Supervisors' experience in the supervision of Chinese international HDR students:</td>
<td>Scholarship type:
□ Self-supported
□ Scholarships-CSC
□ Scholarship-Australian government or university scholarship
□ Project-funded □ Other
Family Background
Your parents' highest degree
□ Secondary school or below
□ High school □ Junior college
□ Undergraduate □Postgraduate
Do you think your family is able to support your study</td>
</tr>
</table>

□ Applied science **Stage:** □ First three months □ Pre-confirmation □ Post-confirmation □ Approaching external examination □ Completed	project) before your most recent HDR study in Australia? Y/N If yes, how many years? ____ Have you produced any research publications since your HDR study? If yes, how many ___; the number of first-author publications ____, and the number of Q1first-author publications ____	How many Chinese international HDR students are currently supervised by your Principal Supervisor? (If you are unsure, please choose the closest number) Number list 1-10 >10 How do you think your principal supervisor's experience of supervising Chinese international HDR students: □ limited □ some □ rich	abroad (e.g., paying all tuition and living fees)? □ no support at all □ can partly support □ can completely support Has your partner or family stayed with you in Australia during your HDR study? Y/N

Part II Survey

Dimensions	Constructs	Indicators	Item description
A-Symbolic Violence	Pedagogic Authority	V1	I always look up to my supervisors' research expertise.
		V2	I always follow my supervisors' advice and/or written feedback to conduct my research project.
		V3	I treat my supervisors as my "bosses".
		V4	I usually feel that I have to accept all of my supervisors' feedback or guidance.
		V5	I am prepared to compromise my own ideas in order to avoid any conflict with my supervisors.
		V6	I am prepared to compromise my own ideas in order to show respect to my supervisors.
		V7	I always spare no effort to prove my academic ability to my supervisors and am anxious about 'losing face' in front of my supervisors.
		V8	I always demonstrate respect for my supervisors' reputation and never criticize or complain about my supervisors in the public.
		V9	I never reveal my dissatisfaction or concern about supervision matters to my supervisors.
		V10	I always look for errors or weaknesses in my work rather than blame or criticize my supervisors.

		V11	I am always concerned that my supervisors will be dissatisfied with my research progress.
		V12	I am always concerned that my supervisors will raise doubts about my research ability.
		V13	I always feel pressured to progress my research because I don't want to let my supervisors down.
	English Hegemony	V14	I always lack confidence with my spoken English when I talk with native speakers.
		V15	I always fail to understand native speakers when they speak too quickly.
		V16	I feel embarrassed to ask native speakers to speak more slowly even when I can't understand them.
		V17	I feel intimidated each time I give a presentation in English.
		V18	I feel anxious and concerned about the Q&A after a presentation in English and worry that I will be embarrassed if I cannot understand questions from the audience.
		V19	I always feel dissatisfied with my English reading ability.
		V20	I always feel dissatisfied with my English academic writing ability.
	Neoliberal constraints	V21	I often work long hours to meet deadlines for milestones.
		V22	I often feel anxious about milestone deadlines or extensions.
		V23	When I try to meet milestones, I experience intense pressure and become stressed if I am behind in meeting my research goals and/or deadlines or experience an unsuccessful research outcome.
		V24	I feel a great of pressure and become anxious when my research colleagues achieve faster rates of progress in their research.
		V25	I feel intense pressure when my research colleagues produce publications.
		V26	I always feel concerned that I will not be able to produce sufficient articles in quality and quantity before graduation.
		V27	My supervisors always respect my autonomy in my research project.

B-Resilience Strategies	Supervisor and Peer Empowerment	V28	My supervisors are all supportive when I put forward different opinions.
		V29	My supervisors encourage me to use Chinese concepts or theories in my thesis.
		V30	My supervisors encourage me to read or cite Chinese literature in my thesis to enrich my knowledge.
		V31	Local colleagues are understanding and non-judgemental with my English pronunciation and fluency.
		V32	My supervisors are understanding and non-judgemental with my English language mistakes.
		V33	I encounter some scholars who think it's problematic if English persists as the dominant academic language.
		V34	My supervisors do not expect and do not pressure me to work long hours in order to meet designated milestones.
		V35	My supervisors are always supportive of my application/s for an extension to meet a milestone.
		V36	My supervisors are willing to help me with my academic writing ability through co-authored publication.
		V37	My supervisors have high standards for writing publications.
	Student Agency and Reflexivity	V38	I am confident in questioning my supervisors' feedback.
		V39	I am confident in arguing my position and disagreeing with my supervisors about my research.
		V40	I don't feel embarrassed even if my English pronunciation is not standard.
		V41	I don't feel embarrassed when I make errors in my English expression.
		V42	When I learn new research knowledge, I often use Chinese learning materials to facilitate my understanding.
		V43	I sometimes doubt the dominant position played by English in research communications.

		V44	I value the quality of my research rather than how quickly I am able to conduct my research.
		V45	I think it is acceptable and unproblematic to apply for an extension to progress my research.
		V46	I value my research failures even if they delay my research progress.
		V47	Each research project is unique, so I do not feel pressured to keep a close eye on the pace with which other students progress their research.
		V48	I would not cut down my research contents so as to meet the milestones.
		V49	I think research proceedings should be automatically decides by students and supervisors rather than by standardised milestones.
		V50	I value the importance of achieving high quality research publications and will not publish indiscriminately for graduation or seeking jobs.

Section 2 Chinese version of the survey for main study

中国在澳攻读研究学位留学生社会性抗逆研究调查问卷

您好！我们正在进行一项关于中国在澳攻读研究学位留学生（研究型硕士、博士）的社会性抗逆研究，目的是了解该群体在攻读研究学位过程中所遇到的挑战及应对策略。本问卷为匿名调查，完成问卷需要花费大约 5 分钟时间。请认真阅读以下题项，并根据自己的实际情况和真实想法作答。答案没有对错之分，对您的作答我们会保密。感谢您对本研究的支持！

注：本研究已通过昆士兰科技大学道德伦理委员会审批，审批号为 2000000248。

如果您在填写问卷时已经完成学位，您完成学位的时间是：2020 年之前；2020 年或之后

一、基本信息

出生年份: **性别:** ☐ 男 ☐ 女 ☐ 其他 **婚姻状况:** ☐ 单身 ☐ 伴侣 ☐ 已婚	**教育经历：** 是否在国内接受过本科教育？是/否 如果是，学校属于 ☐ 211 学校 ☐ 985 学校 ☐ 其他	**导师组人数:** □ 1 □ 2 □ 3 □ ≥4 **导师组语言背景：** ☐ 全部以中文为母语	**奖学金类型:** ☐ 自费 ☐ CSC-国家留基委 ☐ 澳洲政府或大学奖学金 ☐ 课题项目奖学金 ☐ 其他___

最高学历或在读学历： ☐ 研究型硕士在读 ☐ 研究型硕士 ☐ 博士或专业性博士学位在读 ☐ 博士或专业性博士学位 **最高学历或在读就读学校：** **最高学历攻读学科:** ☐ 社会科学 ☐ 自然科学 ☐ 应用科学 **学历阶段:** ☐ 刚开始不到三个月 ☐ Confirmation 之前 ☐ Confirmation 之后 ☐ 即将外审 ☐ 学位完成	在澳洲攻读研究型学位之前是否有海外留学或交换经历？是/否 如果是，留学或交换国家为_____；留学年限为_____年 在澳洲攻读研究型学位之前是否有研究经历（例如从本科开始参与或独立完成一个研究课题）？是/否 如果是，研究年限为_____年 在澳洲攻读研究型学位期间是否有学术期刊文章发表？是/否 如果是，发表数量为___篇；其中第一作者___篇，一作中 Scimago Q1/SCI 一区___篇。	☐ 全部以英文为母语 ☐ 既有中文为母语也有英文为母语 ☐ 既不是中文为母语也不是英文为母语 ☐ 其他 **导师指导中国留学生经验：** 主导师**当前**指导中国研究型学位留学生的人数为（如果不确定请选择您认为最接近的数值）1-10 >10 您认为您的主导师**在其学术生涯中**指导中国研究型学位留学生的经验为 ☐ 很少 ☐ 一些 ☐ 非常丰富	**家庭背景** 父亲/母亲最高学历为 ☐ 初中及以下 ☐ 高中 ☐ 大专 ☐ 本科 ☐ 硕士及以上 家庭经济状况： 您认为您的家庭是否有足够经济实力支付您海外留学的全部费用（包括学费和生活费）？ ☐ 完全没有 ☐ 可以支付部分费用 ☐ 可以支付全部费用 在您攻读研究学位期间，您的伴侣或家人也在澳洲吗？是/否

二、关于在澳洲攻读研究型学位的经历

本部分主要了解您在攻读研究型学位过程中在导师学生关系、学术语言、milestones 完成、和论文发表等方面的经历， 请从非常符合到非常不符合 5 个等级中选择最符合您自身情况的一项。

（1=非常符合，2=比较符合，3=难以判断，4=不太符合，5=非常不符合）

序号	题　　项	非常符合	比较符合	难以判断	不太符合	非常不符合
1	我非常崇拜导师的学术造诣。	**1**	**2**	**3**	**4**	**5**

2	我会完全遵循导师的思路进行课题研究。	**1**	**2**	**3**	**4**	**5**
3	我会把导师当作“老板”来看待。	**1**	**2**	**3**	**4**	**5**
4	对于导师给的论文指导意见，我常常会有一种不得不接受的感觉。	**1**	**2**	**3**	**4**	**5**
5	与导师意见不一致时，我经常选择妥协来避免冲突。	**1**	**2**	**3**	**4**	**5**
6	与导师意见不一致时，我经常选择接受其意见以示尊重。	**1**	**2**	**3**	**4**	**5**
7	我总是竭尽全力向导师证明自己的学术能力，很怕在导师面前丢脸。	**1**	**2**	**3**	**4**	**5**
8	我会维护导师的名誉，就算对导师有所不满也从不公开透露。	**1**	**2**	**3**	**4**	**5**
9	就算对导师有所不满，我也从不在导师面前直接显露。	**1**	**2**	**3**	**4**	**5**
10	研究出现问题或遇到挫败时，我会从自己身上找原因，从不归咎于导师。	**1**	**2**	**3**	**4**	**5**
11	我总是担心导师不满意自己的研究进展。	**1**	**2**	**3**	**4**	**5**
12	我总是担心导师怀疑我的学术能力。	**1**	**2**	**3**	**4**	**5**
13	为了不让导师对我失望，我总是承受很大压力。	**1**	**2**	**3**	**4**	**5**
14	与 native speakers 交流学术时，我经常对自己的英文感觉不自信。	**1**	**2**	**3**	**4**	**5**
15	与 native speakers 交流学术时，我经常因为他们说太快而听不懂。	**1**	**2**	**3**	**4**	**5**
16	与 native speakers 交流学术时，即使自己听不懂，我也不好意思让他们放慢速度或再说一遍。	**1**	**2**	**3**	**4**	**5**
17	每次用英文发言我都很紧张。	**1**	**2**	**3**	**4**	**5**
18	每次英文发言后的提问环节会让我感到苦恼，常常担心听不懂观众问题而出糗。	**1**	**2**	**3**	**4**	**5**

19	我总是质疑自己的英文学术阅读能力。	**1**	**2**	**3**	**4**	**5**
20	我总是质疑自己的英文学术写作能力。	**1**	**2**	**3**	**4**	**5**
21	我常常为了赶 milestones 熬夜。	**1**	**2**	**3**	**4**	**5**
22	为了按时完成 milestones，每次的研究失败或不顺都会让我压力倍增。	**1**	**2**	**3**	**4**	**5**
23	我常常因为 milestones 的 deadlines 或延期感到焦虑不安。	**1**	**2**	**3**	**4**	**5**
24	每当同事研究进度更快时，我常常会焦虑不安。	**1**	**2**	**3**	**4**	**5**
25	每当同事有论文发表时，我都会感到一种无形的压力。	**1**	**2**	**3**	**4**	**5**
26	我总担心到毕业时没有发表数量质量足够的文章。	**1**	**2**	**3**	**4**	**5**
27	导师都非常尊重我对自己研究课题的自主权。	**1**	**2**	**3**	**4**	**5**
28	导师都非常支持我提出的不同看法。	**1**	**2**	**3**	**4**	**5**
29	导师鼓励我在论文中使用中文理论或概念。	**1**	**2**	**3**	**4**	**5**
30	导师鼓励我在研究中阅读或引用中文文献来丰富知识量。	**1**	**2**	**3**	**4**	**5**
31	Local 同事不会挑剔我的英语发音或流利程度。	**1**	**2**	**3**	**4**	**5**
32	导师对我的英语错误非常包容。	**1**	**2**	**3**	**4**	**5**
33	学术交流时，我遇到的很多学者都会认为英语作为学术主导语言是一个很大的问题。	**1**	**2**	**3**	**4**	**5**
34	导师从不鼓励我为了按时完成 milestones 加班熬夜。	**1**	**2**	**3**	**4**	**5**
35	导师从不反对我申请 milestones 延期。	**1**	**2**	**3**	**4**	**5**

36	导师很愿意通过合作发表来培养我的学术写作能力。	**1**	**2**	**3**	**4**	**5**
37	导师对我发表文章的质量要求非常高。	**1**	**2**	**3**	**4**	**5**
38	我敢于质疑导师的反馈意见。	**1**	**2**	**3**	**4**	**5**
39	我敢于在导师面前坚持自己的观点。	**1**	**2**	**3**	**4**	**5**
40	学术交流时，即使自己英语发音不标准，我也不会感到羞愧。	**1**	**2**	**3**	**4**	**5**
41	学术交流时，我从不为自己讲英语犯错误而尴尬。	**1**	**2**	**3**	**4**	**5**
42	在学习新的研究内容时，我会经常使用中文资料帮助理解入门。	**1**	**2**	**3**	**4**	**5**
43	我有时会质疑英语在学术交流中的主导作用。	**1**	**2**	**3**	**4**	**5**
44	我非常重视科研质量而不是科研速度。	**1**	**2**	**3**	**4**	**5**
45	我认为科研延期是正常的。	**1**	**2**	**3**	**4**	**5**
46	即便是研究中的瓶颈影响我的研究进展，我也不会有挫败感或焦虑。	**1**	**2**	**3**	**4**	**5**
47	我不会为了完成 milestones 来缩减我的研究内容。	**1**	**2**	**3**	**4**	**5**
48	我认为研究进展应该由学生和导师自主决定，而不应该受标准化的 milestones 限制。	**1**	**2**	**3**	**4**	**5**
49	每个人的科研项目都不一样，不需要太关注同事的研究进展。	**1**	**2**	**3**	**4**	**5**
50	我非常重视论文发表质量，不会为了毕业或求职而盲目追求发表数量。	**1**	**2**	**3**	**4**	**5**

Appendix E

CFA Analysis Results

Table 1

Assessment of normality for the indicators within the construct 'Symbolic Violence'

Variable	min	max	skew	c.r.	kurtosis	c.r.
V26	1.00	5.00	**0.25**	1.49	-1.23	-3.71
V25	1.00	5.00	**0.36**	2.15	-0.96	-2.91
V24	1.00	5.00	0.11	0.68	-1.12	-3.38
V23	1.00	5.00	0.16	0.97	-1.17	-3.53
V22	1.00	5.00	-0.06	-0.39	-1.28	-3.89
V21	1.00	5.00	**0.27**	1.64	-0.97	-2.95
V20	1.00	5.00	-0.15	-0.91	-1.06	-3.21
V19	1.00	5.00	**-0.69**	-4.15	-0.55	-1.66
V18	1.00	5.00	-0.06	-0.36	-1.15	-3.49
V17	1.00	5.00	-0.07	-0.42	-1.18	-3.56
V16	1.00	5.00	**-0.34**	-2.08	-0.91	-2.76
V15	1.00	5.00	0.03	0.18	-1.11	-3.35
V14	1.00	5.00	0.12	0.73	-1.22	-3.70
V13	1.00	5.00	-0.10	-0.58	-0.94	-2.86
V12	1.00	5.00	0.13	0.76	-1.03	-3.12
V11	1.00	5.00	**0.37**	2.26	-0.97	-2.92
V10	1.00	5.00	**0.39**	2.37	-0.82	-2.48
V9	1.00	5.00	**0.38**	2.29	-0.71	-2.14
V8	1.00	5.00	**0.22**	1.35	-0.81	-2.45
V6	1.00	5.00	**0.28**	1.68	-0.50	-1.51
V5	1.00	5.00	-0.06	-0.34	-0.85	-2.58
V4	1.00	5.00	**-0.48**	-2.93	-0.76	-2.30
V3	1.00	5.00	**0.22**	1.31	-1.06	-3.20
Multivariate					68.05	**14.88**

Table 2

Assessment of Normality for the Construct 'Resilience to Symbolic Violence'

Variable	min	max	skew	c.r.	kurtosis	c.r.
V49	1.00	5.00	0.57	3.43	-0.18	-0.54
V48	1.00	5.00	0.58	3.50	-0.09	-0.29
V44	1.00	5.00	0.05	0.31	-0.65	-1.97
V43	1.00	5.00	0.24	1.45	0.07	0.21
V50	1.00	5.00	0.52	3.12	-0.46	-1.39
V47	1.00	5.00	0.48	2.88	-0.69	-2.10
V46	1.00	5.00	0.46	2.77	-0.51	-1.55
V45	1.00	5.00	0.26	1.57	-0.49	-1.50
V42	1.00	5.00	-0.30	-1.83	-0.96	-2.91
V41	1.00	5.00	0.58	3.48	-0.14	-0.41
V40	1.00	5.00	0.33	2.03	-0.70	-2.11
V32	1.00	5.00	0.14	0.82	-1.15	-3.47
V31	1.00	5.00	0.54	3.29	-0.58	-1.76
V28	1.00	5.00	0.81	4.88	0.51	1.55
V27	1.00	5.00	0.71	4.29	0.16	0.47
V37	1.00	5.00	0.94	5.66	0.65	1.97
V36	1.00	5.00	0.95	5.76	0.48	1.46
V35	1.00	5.00	-0.48	-2.90	-0.82	-2.48
V34	1.00	5.00	-0.47	-2.86	-0.63	-1.89
V30	1.00	5.00	0.87	5.28	0.24	0.72
V29	1.00	5.00	1.05	6.35	0.85	2.56
Multivariate					100.26	23.92