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**Learning to thrive:  
A longitudinal mixed methods  
exploration of the  
intercultural doctoral experience**

**By: Trang Mai Trần**

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*A dissertation submitted to the University of Bristol  
in accordance with the requirements of the degree of  
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# ABSTRACT

## Research aims

For intercultural doctoral students (IDSs), arriving from outside the UK means that they need to interact with and re-adjust to a variety of new contexts, resulting in multidimensional changes, namely affective, behavioural, and cognitive adjustments. This thesis explored IDSs' experience in the UK through the lens of developmental ecology, focusing on the multidimensional process of change, how the individuals interact with their contexts, and how they develop their knowledge and identity over time.

## Data collection and analysis

To guide data collection and analysis, a theoretical framework of three theories was applied. Using a longitudinal mixed methods approach, the quantitative strand included three waves of questionnaires on adaptation and well-being. IDSs in Russell Group completed the longitudinal survey ( $N_1 = 80$ ,  $N_2 = 63$ ,  $N_3 = 51$ ), analysed using regression and mixed effects models.

The qualitative strand collected 24 longitudinal, semi-structured interviews of eight IDSs at University of Bristol, with three interviews per participant. The interviews spanned 15 months and explored the challenges the participants faced, and the development of their coping strategies. A longitudinal approach to hybrid thematic analysis was adapted and developed in this study, and a further structural narrative analysis was used to capture changes over time in.

## Main findings

This study puts forward the evidence for viewing the doctoral journey, specifically that of intercultural students, as a developmental process in which both context and the individual play an important role. Overall, the most important finding is the interactions between contexts and the developing person, demonstrated by the significant interactions in quantitative strand and by the bi-directionality in qualitative strand. There is evidence to show that while contexts influence IDSs' experience, their previous knowledge and experience can also enrich their new contexts.

Specifically, quantitative analysis indicated the significant interaction between factors at individual and contextual levels. *English language*, *doctoral time*, their *age*, and their *discipline of study* accounted for 27% of variance in well-being. *Age* was the only significant predictor of adaptation, accounting for less than 8% of its variance. In terms of development over time, the effect of *doctoral time* on well-being significantly varied by both *English language* and *discipline of study*.

Qualitative findings further demonstrated that to support well-being as an affective dimension, (1) behaviourally, the learning process needs to recognise and incorporate the old and the new knowledge, and (2) cognitively, the identify formation process should be embedded in personal and academic communities.

## Methodological and theoretical contributions

Methodologically, the development of *Longitudinal hybrid thematic analysis* contributed to the analysis of data from the longitudinal interviews. Equipped with the theoretical framework, the study presented further evidence for the multi-dimensional and multi-level nature of the IDS experience. At the contextual and individual levels of development, the theoretical framework contributes significantly to an in-depth understanding of the IDSs' development during academic, socio-cultural, and psychological adaptation. Thus, this thesis informs future research that seeks to cross methodological, conceptual and interdisciplinary boundaries in their exploration of the intercultural and doctoral experience.

**Keywords:** *Doctoral education; Doctoral well-being; Eco-developmental process; Intercultural doctoral experience; Socio-cultural adaptation; Psychological well-being; Longitudinal hybrid thematic analysis*



# DEDICATION

*To Mom.*

*To Great-grandma, Grandpa, Grandma, Uncle, and Miso.*

*None of us were/are particularly good at communication, so I guess this will do.*



# ACKNOWLEDGEMENTS

This thesis took much longer to finish than I had anticipated. Throughout these 5 years, 2 months, and 27 days, I was lucky enough to be indebted to so many wonderful people.

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My Mom, *Mẹ Hoàng Thu Hà*, with whom I could not be in the same space for more than five seconds without a heated argument. I know you have sacrificed a lot as a single mom who was the breadwinner for four different generations at once. I don't think you realise how amazing you are. My wish is that you won't have to sacrifice, that this word will no longer be part of your world. Ever since Grandma told the 5-year-old me that you gave your entire first pay cheque to her, I had decided that it would soon be my turn to save enough money and send it home to you.





# **AUTHOR'S DECLARATION**

I declare that the work in this dissertation was carried out in accordance with the requirements of the University's *Regulations and Code of Practice for Research Degree Programmes* and that it has not been submitted for any other academic award. Except where indicated by specific reference in the text, the work is the candidate's own work. Work done in collaboration with, or with the assistance of, others, is indicated as such. Any views expressed in the dissertation are those of the author.

SIGNED: .....**TRANG MAI TRAN**..... DATE:.....**19/12/2019**.....



# TABLE OF CONTENTS

<b>Abstract</b> .....	<b>iii</b>
<b>Dedication</b> .....	<b>v</b>
<b>Acknowledgements</b> .....	<b>vii</b>
<b>Author’s Declaration</b> .....	<b>ix</b>
<b>Table of contents</b> .....	<b>xi</b>
<b>Glossary</b> .....	<b>xvii</b>
<b>List of Abbreviations</b> .....	<b>xviii</b>
<b>List of Figures</b> .....	<b>xix</b>
<b>List of Tables</b> .....	<b>xxi</b>
<b>Introduction</b> .....	<b>1</b>
Context matters: HE internationalisation and the knowledge-driven economy .....	1
Crossing boundaries: The experience of intercultural doctoral students.....	4
Rationale for the study .....	9
Theoretical rationale.....	9
Personal rationale .....	11
Significance of the study .....	11
Research objectives.....	13
Overview of the thesis.....	13
<b>Chapter One Being intercultural and doctoral</b> .....	<b>17</b>
1.1 Chapter overview .....	17
1.2 Being doctoral: Context, individual, and process .....	18
1.2.1 Contextual and individual levels .....	19
1.2.2 Processes over time: academic and social development .....	23
1.3 Being intercultural: More than an object transitioning between cultures .....	26
1.3.1 Culture learning frameworks and socio-cultural adaptation theory .....	28
1.3.2 What the individual brings to the intercultural experience.....	32

1.4	Chapter summary .....	34
<b>Chapter Two Being well and thriving.....</b>		<b>36</b>
2.1	Chapter overview .....	36
2.2	Why does well-being matter to IDSs?.....	37
2.3	Being ill or being well: The presence of wellness .....	42
2.3.1	A paradigm shift: Pathogenic vs. salutogenic .....	43
2.3.2	Happiness through growth: Hedonic and eudaimonic perspectives .....	45
2.4	Psychological well-being: A salutogenic and eudaimonic approach for IDSs .....	47
2.5	Chapter summary .....	49
<b>Chapter Three Looking through the eco-developmental lens .....</b>		<b>50</b>
3.1	Chapter overview .....	50
3.2	Adult development: The developing person and their ecologies.....	51
3.3	Person, process, context, and time: Bronfenbrenner’s ecological systems theory ...	51
3.4	Final theoretical framework and research questions.....	55
3.5	Summary of literature review.....	58
<b>Chapter Four Pragmatism and mixed methodology.....</b>		<b>60</b>
4.1	Chapter overview .....	60
4.2	The philosophy of pragmatism: More than just being pragmatic .....	61
4.2.1	Pragmatism and the doctoral journey: The nature of knowledge .....	62
4.2.2	Pragmatism and the mixed methods approach .....	66
4.3	Pilot study: Design and results .....	69
Strand 1 – Questionnaire .....		70
Strand 2 – Semi-structured interviews .....		71
Strand 3 – Online diary .....		71
4.4	Main study: Research design.....	72
Longitudinal quantitative strand .....		73
4.4.1	Sample .....	73
4.4.2	Sampling strategy and procedure .....	73

4.4.2.1	Russell Group universities .....	73
4.4.3	Instruments .....	74
4.4.4	Retention rate .....	81
Longitudinal qualitative strand.....		82
4.4.5	Participants.....	82
4.4.6	Longitudinal semi-structured interviews.....	83
4.5	Quantitative and qualitative analysis plan.....	86
4.6	Ethics: Reflexivity and positionality .....	89
4.7	Chapter summary .....	92
<b>Chapter Five Quantitative analysis: Individual and contextual factors of adaptation and well-being .....</b>		<b>93</b>
5.1	Chapter overview .....	94
5.2	Descriptive statistics of outcome variables and predictors.....	94
5.3	Statistical analysis plan.....	99
5.3.1	Pearson’s correlation .....	99
5.3.2	Multiple linear regression (MLR).....	100
5.3.3	Linear mixed-effects models (LMEM) .....	101
5.4	Results: Phase One – Predictors of PWB and SCA at Wave One.....	103
5.4.1	Pearson’s correlation .....	103
5.4.2	Regression: Psychological wellbeing .....	104
5.4.3	Regression: Socio-cultural adaptation .....	109
5.5	Results: Phase Two – PWB and SCA over time.....	113
5.5.1	Mixed effect models: Psychological wellbeing .....	113
5.5.2	Mixed effect models: Socio-cultural adaptation .....	118
5.6	Discussion: Individual, ecological, and process levels of PWB and SCA.....	120
5.7	Strengths, limitations, and suggestions for future research.....	122
5.8	Chapter summary .....	123
<b>Chapter Six Thematic analysis: Interacting with new ecologies .....</b>		<b>124</b>
6.1	Chapter overview .....	125
6.2	A hybrid approach to thematic analysis: Template analysis and semantic coding..	126

6.3	The process of Longitudinal Hybrid Thematic Analysis.....	128
6.4	Main thematic findings.....	133
6.5	L1 Interaction with macro-systems.....	134
6.5.1	L2 Ecological adaptation and Environmental mastery.....	135
6.5.2	L2 Academic performance.....	138
6.6	L1 Interaction with exo-systems.....	143
6.6.1	L2 sub-theme: Positive relationships and environmental mastery.....	144
6.6.2	L2 Academic and work performance.....	145
6.7	L1 Interactions with meso-systems.....	149
6.7.1	L2 Positive relationships/Interpersonal communication.....	149
6.8	L1 Interactions with micro-systems.....	151
6.8.1	L2 Professional growth (Academic/work performance).....	152
6.8.2	L2 Personal growth with family and friends.....	166
6.9	L1 The developing person: The individual and their intra-personal changes.....	171
6.9.1	L2 sub-themes: Autonomy.....	171
6.10	Chapter summary.....	181
<b>Chapter Seven Narrative analysis: Stories of learning and thriving.....</b>		<b>182</b>
7.1	Chapter overview.....	184
7.2	Story and progress: Focusing on the particular in narrative analysis.....	184
7.2.1	Story as an analysis unit: Depicting contextual and individual levels.....	186
7.2.2	The analysis process: Structural approach to narrative analysis.....	187
7.3	Findings: Stories of learning to thrive.....	189
7.3.1	Jade: If I were them.....	189
7.3.2	Red: Fighting for my identity.....	202
7.3.3	Purple: Yes, my dance.....	212
7.4	Discussion and chapter summary.....	220
<b>Chapter Eight Overall discussion.....</b>		<b>221</b>
8.1	Chapter overview.....	221
8.2	Empirical contribution.....	222
8.2.1	IDS well-being as a developmental process.....	222

8.2.2	The bi-directional, multi-dimensional, and multi-level experience of IDSs...	225
8.3	Theoretical and methodological contribution.....	227
8.3.1	Ecology, adaptation, and well-being.....	227
8.3.2	Methodological contribution: Longitudinal hybrid thematic analysis.....	233
Chapter Nine	Conclusion.....	235
9.1	Chapter overview.....	235
9.2	Research objectives and main findings.....	236
9.3	Reflections on the research process: Strengths, limitations, and implications for future research	238
9.3.1	Mixed methods research.....	238
9.3.2	Longitudinal research: Qualitative, quantitative, and mixed methods.....	238
9.4	Recommendations: Facilitating well-being and adaptation.....	240
9.4.1	Intercultural doctoral students: Well-being as a developmental process of learning to thrive	241
9.4.2	Supervisors: Expectations and communication strategies.....	243
9.4.3	UK HE institutions: An infrastructure that supports well-being.....	247
9.5	Final remarks.....	249
<b>References</b>	.....	<b>251</b>
<b>Appendices</b>	.....	<b>283</b>
Appendix I.	School of Education Ethics Application.....	284
Appendix II.	Participant information sheet (Online questionnaire).....	287
Appendix III.	Participant information sheet (Interviews).....	290
Appendix IV.	List of contacted Russell Group universities.....	293
Appendix V.	Email to Russel Group school/departments.....	294
Appendix VI.	Questionnaire (Demographic, PWB, SCA).....	295
Appendix VII.	Interview schedule.....	303
Appendix VIII.	Thematic templates.....	305
Appendix IX.	Exemplar: Initial contextual mapping for each participant.....	307
Appendix X.	Exemplar: Action sequence diagrams.....	308





# GLOSSARY

<b>Term/Phrase</b>	<b>Working definition</b>
Bi-directionality	The direction of interaction and change between individuals and their contexts
Contextual level	Contextual level(s) encompasses wider ecologies surrounding the individual, ranging from immediate contact to indirect contact
Individual level	Intra-personal aspects and changes occur at the individual level
Intercultural	The term intercultural in this thesis reflects the exchanging and sharing of knowledge through the different dimensions of being and doing as the individuals crossed cultural contexts.
Multi-dimensionality	These dimensions refer to affective, behavioural, and cognitive aspects
Multi-level	These levels refer to the contextual and individual levels
Psychological well-being	Psychological well-being reflects the body of work by Ryff (1989). It follows a perspective of well-being that looks beyond pleasure seeking and focuses on fulfilling one's potential.
Socio-cultural adaptation	Based on the body of work by Searle, Ward, and Kennedy (1990, 1999), this concept situates acculturative change in the behavioural dimension as a social/culture learning process.

# LIST OF ABBREVIATIONS

EST	Ecological Systems Theory
HE/HEIs	Higher Education/Higher Education Institutions
HTA	Hybrid Thematic Analysis
IDS(s)	Intercultural Doctoral Student(s)
KDE	Knowledge-Driven Economy
LHTA	Longitudinal Hybrid Thematic Analysis
LMEM	Linear Mixed Effects Model
ppct	Person-Process-Context-Time
PWB	Psychological Well-being
PWB-M	Psychological Well-being Model
SCAS	Socio-Cultural Adaptation Scales
SCAS-R	Revised Socio-Cultural Adaptation Scales
SCA-T	Socio-Cultural Adaptation Theory
SNA	Structural Narrative Analysis

# LIST OF FIGURES

Figure I.1.1 Inside out: Non-domestic doctoral students and their contexts.....	8
Figure 1.1 Change at the individual level: Socio-cultural adaptation revised by Wilson (2013) .....	31
Figure 2.1 Change at the individual level: Ryff's model of psychological well-being.....	47
Figure 3.1. Bronfenbrenner's Ecological Systems Theory .....	52
Figure 3.2 Combined theoretical framework.....	56
Figure 4.1 Blobs as interview prompts .....	85
Figure 5.1 Average PWB over Doctoral time by English language .....	96
Figure 5.2 Average SCA over Doctoral time by English language .....	97
Figure 5.3 Average PWB over Doctoral time by Discipline of study.....	98
Figure 5.4 Average SCA over Doctoral time by Discipline of study.....	98
Figure 5.5 Scatterplot of PWB and SCA at Wave One .....	103
Figure 6.1 Hybrid thematic analysis: Five main steps .....	130
Figure 6.2 Main thematic map .....	133
Figure 6.3 IDSs and the macro-systems.....	134
Figure 6.4 IDSs and the exo-systems .....	144
Figure 6.5 IDSs and the meso-systems .....	149
Figure 6.6 IDSs and the micro-systems .....	151
Figure 6.7 IDSs and their intra-personal changes.....	171
Figure 7.1 "I can't decide what's wrong with me" .....	191
Figure 7.2 "People outside of academia don't understand us" .....	193
Figure 7.3 "I did promise them" .....	197
Figure 7.4 "This is what I am" .....	203
Figure 7.5 "A slight issue" .....	206

Figure 7.6 Going part-time..... 208

Figure 7.7 Within the span of two hours ..... 210

Figure 7.8 "It was beyond words" ..... 214

Figure 7.9 "Taking away more of the good than the bad" ..... 216

Figure 7.10 Dance, music, and philosophy..... 218

Figure 8.1 Combined theoretical framework..... 228

# LIST OF TABLES

Table 4.1 Data collection timeline.....	72
Table 4.2 Demographic characteristics at Wave One (N=80).....	73
Table 4.3 Psychometrics and descriptive statistics of PWBS and SCAS-R .....	79
Table 4.4 Research questions and corresponding methods of analysis .....	87
Table 5.1 Outcome variables' descriptive statistics across three waves of data collection .....	94
Table 5.2 Variables' description.....	95
Table 5.3 Statistical analyses and corresponding research questions .....	99
Table 5.4 Estimation results of regression models for PWB.....	104
Table 5.5 Estimation results of regression models for SC .....	109
Table 5.6 Estimation results of mixed models for PWB.....	114
Table 5.7 Estimation results of mixed models for SCA .....	118
Table 6.1 Descriptions of LHTA steps.....	130
Table 9.1 Research objectives and main findings .....	237

I went to bed and woke up thinking about the PhD. Sometimes I feel like I live and breathe the PhD. I feel as if an important part of me would change once this is over.

(Purple, 3, 329-331)

# INTRODUCTION

## Context matters: HE internationalisation and the knowledge-driven economy

The relationship between incoming students and the UK university could be stated baldly as a choice between two positions. One view is that students from other countries come to UK universities in order to avail themselves of a British education with uniquely British features. In this case, it is only necessary to keep doing what we do, whatever that is, and they will come to the UK to study. The contrary view is that both students and faculties in British universities originate in an enormous number of countries from all over the globe, and this international richness inevitably, and rightly, affects the nature of education in these institutions.

(Luxon & Peelo, 2009, pp. 51–52)

This thesis explores the developmental process of non-domestic doctoral students in the UK. Here, I argue for situating socio-cultural and psychological experiences of this student population within an eco-developmental framework, which values both the individual's development and their contexts. Connecting the tenets of pragmatism to this conceptualisation of the doctoral journey, I use a longitudinal mixed method design to address the research aim of exploring the dynamic interplay between the individual, their development process, and their contexts. As a result, this aim emphasises the need to consider the contexts of [higher education](#) and the [knowledge-driven economy](#).

Globally, the last decade of the 20<sup>th</sup> century witnessed a shift from mass production in manufacturing industries to increasing interest in knowledge production and distribution. Arguably, this shift provided a competitive edge to advanced economies and corresponding sectors, and it has been driving the structural changes integral to supporting a knowledge-driven economy (Antonelli & Fassio, 2016), underlining the ways in which knowledge is produced and applied. Alongside the knowledge-driven economy, [internationalisation](#) further characterises the nature of knowledge, driving for a globally accepted standard of knowledge production. This has led to exponential growth in the [higher education \(HE\)](#) sector as institutions have increased international recruitment and students now criss-cross the globe to complete their higher studies. In the UK, the HE sector has been changing rapidly to keep up with the global education context. However, there are different ways to interpret the internationalisation of HE, with diverse practices and applications found throughout the sector, from international partnerships and UK-led academic programmes being taught on international soil, to the addition of international dimensions across the curriculum. New challenges for the HE sector originate from both the wider



context and the local level, which are inevitably interconnected. The concept of internationalisation is complex, and so is its application at different levels (Knight, 2004). Yet, its interpretation has the potential to influence policy and practice at both national/sector and institutional levels.

At a sector level, Knight (2003) offered a definition of internationalisation of HE as “the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education” (Knight, 2003, p. 2). To avoid restricting the definition to the boundaries of education institutions, van der Wende (1997) suggested viewing “any systematic effort aimed at making higher education (more) responsive to the requirements and challenges related to the globalization of societies, economy and labour markets” as an effort towards internationalisation, specifically through “a set of interrelated processes of a cultural, political, economic and technological nature” between individual, systemic and organisational levels (van der Wende, 1997, p. 19). These different interpretations reflect important aspects of internationalisation: it is a *process*, and it is *multi-dimensional* and *multi-level*. As such, internationalisation can occur through shifts in four main dimensions: social/cultural, political, academic, and economic (Knight, 2003), some of which can also be applicable to individuals within organisations undergoing these changes. As British HE institutions (HEIs) are compelled to move forward and evolve as a sector, there is a need for continuing effort to evolve at both the national/sector and institutional levels.

Academic mobility and concerted recruitment efforts to bring in international-fee-paying students in HE have contributed to more diverse and international staff and student bodies at HEIs. Academically, this means that teaching curricula and research agendas need to cater to both local and global demands. At the same time, given the resulting socio-cultural diversity, HEIs are tasked with accommodating their diverse staff and student bodies. While the rhetorical branding of British HEIs emphasise their global prowess, some argue that the sector still has much to achieve towards internationalisation endeavours. Knight (2004) asked, “is internationalisation a vehicle for increased understanding and appreciation of cultural diversity and fusion, or is it an agent of cultural homogenisation?” (p. 29). Surface-level changes to curricula do not address the potential academic culture clash: some propose that certain aspects of Western teaching may not always accommodate important tenets of Confucian heritage cultures, for example (Nguyen et al., 2006). Others have suggested that students go abroad in order to experience something different from their own cultures (Stier, 2003), but are they the only ones experiencing this cultural shift? On the other hand, even if the sector aspires to embrace diversity, internationalisation demands more than the passive assumption that multicultural campuses will automatically cultivate educational practices which facilitate the crossings of cultural and academic boundaries (Lantz-

Deaton, 2017; Teichler, 2004). Indeed, de Wit (2011) points out nine *misconceptions* of internationalisation, emblematic in such ‘surface’ assumptions regarding HEI:

1. Internationalisation is teaching in the English language.
2. Internationalisation is studying abroad.
3. Internationalisation equals an international subject.
4. Internationalisation means having many international students.
5. To have just a few international students in the classroom makes internationalisation a success.
6. Intercultural and international competencies need not be tested specifically.
7. The more partnerships, the more international.
8. Higher education is international by nature.
9. Internationalisation is a goal in itself.

(de Wit, 2011, pp. 1–6)

Many see internationalisation as a two-way street, as the populations of overseas students and the British HEIs are both involved in processes of transformation. Is internationalisation a bi-directional process? Both parties are encouraged to develop their own strategies to accommodate and capitalise upon the tacit ‘international richness’ made available by the diversification of UK campuses (Luxon & Peelo, 2009, p. 52). Not only does this richness inevitably change both parties, but institutions and students alike are actively engaged with each other as each goes through a process of transformation in order to embrace diversity. Linked to the *At Home in the World* initiative of the American Council on Education, the notion of [interculturalism](#) has emerged as a bridging construct to identify common grounds in which shared values and opportunities can be interpreted and reinforced differently within a diverse campus, allowing for the development of both local and global citizenship among learners (Olson & Peacock, 2012):

Interculturalization is the intersection of culture and education. It is that moment when our ability to transcend one cultural system for another weds concerted educative engagement. We cannot begin to discuss interculturalization unless we understand what it means to be cultural agents and the ways in which we learn and pass on the shared knowledge, values, and behaviours that connect us.

(C. A. Hunter et al., 2015, p. 1)

In view of this, use of the term [intercultural](#) in this thesis does not only represent the presence of multiple cultures and the physical crossing of national boundaries, but it also reflects the different dimensions of being and doing, e.g. [socio-cultural](#) and [academic/professional](#) dimensions, and sharing knowledge. Moreover, as Knight pointed out, internationalisation also relates to “the diversity of cultures that exists within countries, communities, and institutions”

(Knight, 2004, p. 11), and interculturalisation as a concept addresses these aspects of internationalisation as they occur within boundaries at the local and institutional levels. Given these contextual changes and demands, what does it mean for doctoral education in general, and doctoral students in particular, whose professional identity and work are being developed in the midst of these constantly evolving landscapes?

### **Crossing boundaries: The experience of intercultural doctoral students**

We all have to cross borders. The ones in our heads may well prove to be the most difficult.

(Teekens, 2000, p. 18)

In line with the HE sector's role in knowledge production, doctoral education plays a key role in training and supporting new generations of researchers. Like many other countries, for most research-based (PhD or DPhil) doctorates in the UK, the examination at the end of the degree is based on both the student's written work (*a thesis*), and their oral defence (*a viva voce*). Both are opportunities to demonstrate their ability to produce an original contribution to knowledge through academic research. More recently, a doctorate in the UK has taken on more diverse forms as some are practice-based and others are awarded by publications. To uphold the quality and refocus the purpose of doctorates, many aspects of traditional practices are undergoing re-examination as doctoral education is being repositioned in the wider, emerging context (Park, 2005).

As drivers of change, two of the more influential aspects of the doctorate are its outcome and its intended purpose. In terms of outcome, submission rate and timely completion play an important role in future funding for the discipline and institutions. Low submission rates have prompted changes to the structure of the doctorate, such as the introduction of mandatory taught units which came into effect in the late 1980s; a tightened timeframe is another recent structural change for British PhDs (Jones, 2013; Pole, 2000). At the same time, clear distinctions between research and taught elements are necessary, as they reinforce the need for thoughtful consideration of the purpose of doctoral programmes. The League of European research universities defines a doctorate as follows:

Research degrees at doctoral level aim to take bright Masters graduates with an excellent academic track record to become creative, critical, autonomous researchers. The evidence of success of the doctorate is a thesis which contains a significant original contribution to knowledge in the chosen field, with the arguments successfully defended by the candidate through questioning by experts. The process of doctoral education develops in the candidate a range of skills to a very advanced level. These

skills relate not only to the research process itself, but also to a broader personal and professional training and development.

(Bogle et al., 2010, pp. 4–5)

The focus on *intellectual competence*, emblematic in competencies and practices such as *creativity*, *original contribution to knowledge*, *research skills* and other *transferable skills*, is echoed by other doctoral programme descriptors. The Committee of Vice-Chancellors and Principals further highlights the *independence* to carry out “a well-conceived plan of research” which would foster “new and significant ideas” and “a positive contribution to knowledge and creativity” as integral aspects of a British PhD (CVCP, 1988, p. 2). To achieve these aims, however, is not a simple task, as many HEIs must balance process and outcome, as well as address wider contextual changes. In many cases, new structures and content are introduced to the doctorate (e.g. ESRC’s 1+3 studentships) as a response to different drivers of change. Often, structural changes to the doctorate programmes are brought about from a place of tension: on one hand, a knowledge-driven economy requires continued production of new knowledge, but on the other hand, doctoral education is criticised for being overly specialised, narrow, and ill-suited to prepare students for non-academic careers (Raddon & Sung, 2009). With Brexit looming on the horizon, future changes to the collaborative, cross-cultural nature of knowledge production in the UK in particular are also unclear (Marginson, 2017). Thus, the wider context not only influences funding mechanisms which support doctoral education but also drives shifts in structure, quality, and standards. In this sense, HEIs often must balance the tension between outcome and quality, as they seek an efficient structure that guarantees quicker completion rates without compromising the quality and scope of doctoral study (Park, 2005).

How do these landscapes translate to the doctoral student experience at an individual level? To doctoral students, the recognition of competence in specialised research and/or practice afforded by the doctorate opens a wide range of careers, including but not limited to academic positions. On an individual level, students experience pressure from funding requirements or institutional standards which require them to finish in three or four years whilst maintaining a high quality for their knowledge contribution. Additionally, they undergo radical personal change to understand and adapt to the standards of their doctoral programmes. Their topics for research are also often subjected to contextual change: throughout the doctorate, the need – and opportunity – for specialisation and deepening subject knowledge defines the nature of their contribution.

Given this, for many students, the doctoral experience is a process of crossing boundaries. In order to produce specialised knowledge, students are required to transcend “conceptual thresholds

resulting in critical, conceptual and creative work, and contribution to knowledge” (Wisker et al., 2017, p. 527). Indeed, a considerable part of the researcher identity is via written representation: they are required to write in an academic manner, i.e. *academic literacy*. A second key aspect is undergoing the transition from a student role to a professional academic role, i.e. *academic expertise*. As part of their academic transition, doctoral students are expected to establish an extended set of skills and develop their own network. These so-called extra-curricular activities are framed by institutional and larger academic frameworks, requiring the participants to adapt to additional sets of cultural practices. These systematic structures possess a “labyrinthine complexity” (Wisker et al., 2017, p. 530) that can lead to confusion and uncertainty among newcomers.

In addition to crossing these intellectual boundaries, there is a subgroup of non-domestic doctoral students in the UK whose border-crossing involves another socio-cultural dimension; this group subsumes both international and EU students. Situated within all these institutional, national (policy), and international contexts (such as KDE), non-domestic doctoral students cope with an additional socio-cultural permutation layered on top of the contextual level which is experienced by the entirety of the doctoral student body. This means that the challenges faced by non-domestic students differ in quantity from those experienced by their domestic peers, but these challenges also differ in quality. They range from cultural and linguistic issues to pedagogical challenges and financial difficulties (Akanwa, 2015). Alongside intellectual competence, the development of *intercultural competence* in students is another integral dimension for their adjustment in the new country (Gregersen-Hermans, 2017; Schartner, 2016). Both of these developmental dimensions can influence the experience of living and studying in the UK.

For many students, statistics also suggest the possibility of dropping out, as the UK PhD completion rates (within seven years) range from 70 to 87% (Fuller, 2015). An earlier statistical analysis of 10-year longitudinal quantitative data by Sowell (2008) reported the rate of completion by doctoral students as 52-70% for international students, though many of these students could potentially be classified as still writing up outside of their funded period. But what accounts for these more drastic drop-out and extended completion rates? Though these statistics represent just one piece from the jigsaw puzzle of doctoral student experience, they are still indicative of the significant pressure and possibility of failure that students face and the potential impact on those their mental health and well-being.

In recent years, reports of suicides and overwhelmed university mental health units have captured national media attention. While much reporting has focused on undergraduate students’ well-being, doctoral mental health statistics specifically have been alarming, with a high percentage

of doctoral students showing symptoms of depression, high levels of stress, self-reported physical and mental health issues, and higher risks of developing psychiatric disorders in comparison with the general population (Levecque et al., 2017). Outside of the PhD, students also report low levels of motivation and life satisfaction and a lack of financial confidence (Hyun et al., 2006; Stecker, 2004; Woolston, 2017). Recognising a crisis of mental well-being among doctoral students, Levecque and colleagues (2017) have emphasised the need for more data on doctoral student well-being, but myriad approaches for collecting this data are possible, as a significant number of elements influence the doctoral experience.

We know that aspects such as opportunities for professional development, social interaction, and supervisory relationship can be related to doctoral well-being (Juniper et al., 2012); these aspects are accompanied by a wide range of suggestions regarding the way forward in addressing poor well-being. However, a recent analysis of the literature on doctoral well-being by Schmidt and Hansson (Schmidt & Hansson, 2018) raised issue with the lack of consensus on the definition and operationalisation of well-being within doctoral well-being literature: the wide and varied components of well-being studied in research on the doctoral experience has resulted in fragmented and incomparable findings across the board. Thus, a first step in addressing this well-being crisis in doctoral education would be attempting to capture the diversity of the experience at an individual level.

This requires first to define the population of interest. This is not an easy task, because whatever definition is used also needs to capture the experience and well-being of this population. For example, the phrase ‘international students’ is used worldwide, partly due to the internationalisation of HE institutions. However, even though student mobility is one of the most visible displays of internationalisation, there are several ways by which the term ‘international students’ can be defined, one of which is *fee status*. Following the internationalisation of HE institutions within the UK as well as across the world, the resulting diversification of the academic communities has set the scene for many studies in cultural adjustment research, with researchers attempting to capture the unique experience of students that arrive from another country. In this research context, the fee status of a student signifies the category they belong to in order to determine the corresponding fee they will pay to UK HE institutions. At the time of writing this thesis (pre-Brexit, if it does indeed happen), UK educational institutions have two fee levels: a lower 'home/EU' fee for domestic and EU students, and a higher 'overseas/international' fee for non-EU students. The categorisation using fee status involves consideration of nationality, domicile, and several other characteristics such as English language ability. Thus, a student’s fee

status implies much more about an individual beyond how much their education will cost, but this classification continues to be used by a number of studies, among other grouping methods.

However, this does not mean that this categorisation is applicable to all research. In the UK context, in particular, both EU and international students come from outside of the UK. Therefore, it is questionable how well the different fee statuses can connect to and fully reflect the student experience, especially in terms of intercultural transitions. In research on intercultural experience, looking at fee status is not strictly relevant, as it is not the fees but the different cultures and their impacts that are the subject of research interest. Morrison and colleagues (2005) argued that only in contexts where fees play a central role would the categorisation of students using fee status make sense. Otherwise, the category of overseas students should also include those coming from the EU (Morrison et al., 2005). Furthermore, if fee status is used as the only sorting and differentiating method, the concept of **culture** in intercultural experience will lose some of its facets. As a result, the current study refers to non-domestic students – international and EU students – as **intercultural students** to reflect the cultural element in their transitional experience and their adaptation within a new environment (Gu et al., 2010), as well as the wider context in which their experience is situated, as previously discussed.

In summary, not only are intercultural doctoral students (**IDSs**) crossing intellectual (internal) boundaries, but they also have to cross contextual (external) boundaries. Research on intercultural doctoral education needs to recognise the need for theoretical and methodological approaches that can capture the multi-dimensional and multi-level process that occurs as IDSs cross these internal and external boundaries (as visualised in Figure I.1.1). Each doctoral student will self-transform both psychologically and behaviourally, as they adapt to and transform their external contexts, thus at the core of the doctoral experience is **a developmental process**.

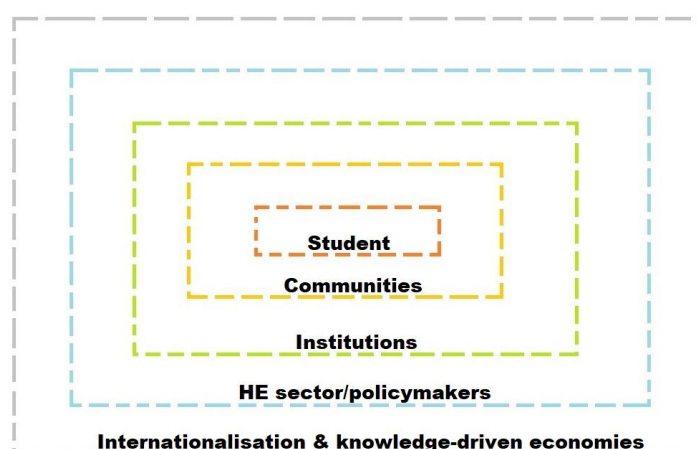


Figure I.1.1 Inside out: Non-domestic doctoral students and their contexts



## Rationale for the study

All international students cross the border to become different, whether through learning, through graduating with a degree, through immersion in the linguistic setting, or simply through growing up. Often there is a kind of person they want to become, though none can fully imagine that person before the transformation. Some respond to change only when they must. Many let it happen. Others run to meet it.

(Marginson, 2014, p.7)

### Theoretical rationale

In both in doctoral student experience and intercultural student experience, there is a need to acknowledge that students endure a taxing journey marked with both struggles and triumphs in the process of obtaining their doctorate, and they do not passively receive these challenges. Rather, they react and respond using whatever resources are available to them, and, in many cases, they reshape their environments. Students acquire new knowledge, apply previous experiences, and find their own way to cope and thrive in the new role.

So, what constitutes a developmental process in an adult? Developmental theorists such as Erikson (1963) stress the importance of life-span development, which moves the interest beyond just childhood years. Developmental psychology as a field has long understood the importance of both the individual and their context. Applied developmental research within a life-span perspective values both ‘contextual embeddedness’ and the role of the ‘individuals as agents in their own development’ (Birkel et al., 1989, p. 425). Influential developmental theories, such as [Ecological System Theory \(EST\)](#) by Bronfenbrenner (1979, 1989, 2005), are examples of empirically developed theories for contextually embedded human development. The contextually embedded dimension of developmental theories takes into account the developing person, their contexts, and the evolving interaction between them. Here, development refers to “a lasting change in the way in which a person perceives and deals with his environment” (Bronfenbrenner, 1979, p. 3). Bronfenbrenner uses the term [ecologies](#) to recognise both social and biological factors contributing to human development, as he specifies the scope of his theory (an in-depth explanation can be found in Chapter Three):

The ecology of human development lies at a point of convergence among the disciplines of the biological, psychological, and social sciences as they bear on the evolution of the individual in society.

(Bronfenbrenner, 1979, p. 13)

In this sense, is the IDS experience a developmental process? In terms of cultural adaptation, Schönflug (1997) replied to John Berry’s (1997) influential paper ‘Immigration, Acculturation,



and Adaptation’ by arguing for the addition of a **developmental component** in the theoretical conceptualisation of acculturation. Schönflug (1997) explained that Berry’s original model of acculturation is based on the stress-coping model, which is developed to capture responses to situational demands, and not long-lasting changes in the individual. In relation to IDSs’ professional trajectories, Stevens-Long and colleagues suggested to situate the conceptualisation of doctoral education in adult development, given the transformative experience of learning that students undergo during their doctorate (Stevens-Long et al., 2012). The approach of adult development, similar to that of acculturation, posits that growth over adulthood encompasses two developmental dimensions which will be explored in Chapter One: affective and behavioural. In light of these perspectives, we could argue that IDSs are going through a process after which they will transform permanently in many aspects, including personally and professionally.

As a result, I argue that self-change as a response to new contexts is a process of development, through which students acquire appropriate new skillsets and apply their previous resources through intra-personal and ecological interactions. Given the complexities of their development, this thesis calls for researchers to step back and re-explore the multi-dimensionality of doctoral education. Through a critical review of the literature, I argue for perspectives that recognise both the individual’s developmental process and the larger contexts that characterise their development. Particularly, in terms of the IDS experience, we need to look at the transition as a process of development. In other words, research in doctoral education should explore how students build their resilience and develop as an academic over time, and how they transform affectively, behaviourally and cognitively as a result.

Essentially, this thesis aims to understand (1) Which factors are important to the IDS experience? (2) In what ways are IDSs influenced by their contexts? And (3) How are they navigating through the challenges related to their doctoral-ness and their intercultural-ness? Given the increasing focus on students’ individual effort (professional and personal development) in the literature, the main aim of this thesis is to address the gap in our conceptual understanding of the doctoral student experience in general, and the IDS experience in particular. This was achieved by the use of theoretical frameworks that take into account the individual (*person*), their development (*process*), and the ecologies (*context*) housing their experience.

### **Personal rationale**

As an international PhD student, my personal motivation to pursue this study is based on my own experience as an international student trying to adapt to new contexts of HE in a different country. In researching the literature, I observed that our current understanding on doctoral student experience or international student experience is often based on *snapshots*, which are valuable for reporting issues for concern, but sometimes fail to recognise students' ability to self-transform and to transform their contexts over time. Many authors – whose work will be explored in the literature review – also identified the complexities of the doctoral journey. Drawing from my psychology background, I wanted to synthesise predominant psychological theories in the fields of development, well-being, and culture learning in order to capture the complexities of the IDS experience.

### **Significance of the study**

Given these contexts, the current study is situated in the intersections between the fields of doctoral experience, intercultural adaptation, and mental health and well-being. This thesis explores students' professional, psychological, and socio-cultural development over time, with a specific focus on the development process of IDSs in the UK. Essentially, the evidence draws from and contributes towards the rapidly growing body of work in the field of doctoral training, and its contributions can be observed from three main angles: (1) the **empirical findings** on the developmental process that IDSs go through during their doctorate, (2) the **theoretical conceptualisation** of the IDS experience using adaptation, well-being, and eco-developmental theories, and (3) the application of **longitudinal mixed methodology** to empirically study ecological and individual levels within the doctoral developmental process.

First, the empirical findings of this thesis provided a more nuanced and clearer picture of the IDS experience. Overall, the most important finding is in the bi-directionality of the process, specifically in how contexts influence the individual's adaptation and well-being, as well as how the individual previous knowledge and experience can enrich their new contexts. Contributing towards our understanding of the complexities as part of a developmental process, the longitudinal mixed method design accommodated evidence that illustrated the multi-dimensional, multi-level, and bi-directional nature of IDSs' development.

Second, in the course of reviewing the literature, I acknowledged the important contribution of many frameworks but also questioned the deficit manner in which doctoral students from other cultures are framed in some parts of the intercultural transition literature. Addressing the need for

both contexts and individuals to be recognised in research, I proposed to explore students' academic and intercultural adaptation through their development in the new ecologies. This requires the conceptualisation of their IDS experience to encompass both their learning process and their strategies for looking after their psychological well-being and fulfilling their individual potential. As a result, the combination of [Socio-Cultural Adaptation Theory \(SCA-T\)](#) and [Psychological Well-Being Model \(PWB-M\)](#) has allowed the current study to address this multi-dimensional experience through recognising the intra-personal, inter-personal, and contextual levels of adaptation and well-being. As I argue that the intercultural doctoral journey is a process of development, this experience is further examined through the lens of a developmental theory. The current study demonstrates how research can apply [Ecological Systems Theory \(EST\)](#), an eco-developmental theory, in order to explore the IDS experience over time. Thus, this contribution can be specifically observed through the careful attention paid to person, process, and context levels in this thesis, as afforded by the theory.

Third, the methodological contribution of the thesis is a [longitudinal mixed methods approach](#), which is strongly linked to the theoretical conceptualisation of IDS experience as a developmental process: Through this approach, the current study provided additional insights about students' development over time in response to their intercultural and doctoral challenges, along with insight into how their well-being might change as a result.

In summary, using empirical evidence, the thesis argues for a theoretical shift towards approaches that recognise the person, their contexts, and the process they go through for their personal and professional development over time. The findings contributed to the argument of a multi-dimensional (affective, behavioural, and cognitive) and multi-level experience, specifically contextual and individual levels that not only exist but also interact with one another in a bi-directional manner.

## Research objectives

In relation to the theoretical shift, the thesis aims to achieve four main objectives:

(1) Through critically reviewing the literature on international and doctoral students' experience, I seek to combine theoretical lenses at both individual and contextual levels to better understand the developmental process of intercultural doctoral students.

(2) Through longitudinal questionnaire data, I seek to explore individual and contextual factors which may be related to well-being and the adaptation of intercultural doctoral students;

and

(3) Through longitudinal interview data, I seek an in-depth understanding of the dynamic interplay between the individual, their development process, and their contexts.

(4) Through reflecting on the research process and findings, I aim to evaluate the relevance of the proposed theoretical framework to describe the experience of intercultural doctoral students.

## Overview of the thesis

In order to demonstrate how this current research has achieved the objectives set out for it, this thesis consists of nine chapters, with the structure as follows.

The first three chapters make up the literature review as well as theoretical framework of the study. Relevant literature from four different fields will be reviewed in the first three chapters of the thesis: [doctoral education](#) and [intercultural adaptation](#) (Chapter One), [well-being](#) (Chapter Two), and [developmental psychology](#) (Chapter Three), with connections being drawn to the IDS experience.

Specifically, **Chapter One (Being intercultural and doctoral)** discusses separately the literature on doctoral student experience and international student experience, and linking them with our current understanding of the intercultural doctoral experience in particular. There, I discuss the complexities of this experience, and how different scholars have dealt with its conceptualisation and theorisation over time. This section argues that researchers need to move beyond the deficit model of adaptation that requires students to fit into the new socio-cultural/academic mould while neglecting to address how their backgrounds as well as intra-personal differences may assist or resist this process. Exploring the affective, behavioural, and cognitive dimensions of acculturation, the [Social-Cultural Adaptation Theory \(SCA-T\)](#) (Searle & Ward, 1990; Ward & Kennedy, 1999) will be introduced in this chapter. Both its strengths and limitations are also closely analysed. As the adaptation paradigm is critiqued, I propose that

affectively, we need to take into account the individual's psychological dimension not only in terms of their psychological adjustment, but also with regards to their effort and struggle against different challenges through self-development.

**Chapter Two (Being well and thriving)** illustrates our current understanding of human development and our capacity to overcome challenges in life. In comparison with other dominant traditions in well-being research and in consideration of the context of doctoral education, **Psychological Well-being Model (PWB-M)** (Ryff, 1989a; Ryff & Keyes, 1995) is presented as a multi-factor theory that will aid understanding of how IDSs are better able to thrive in new contexts. This conceptualisation adheres to the salutogenic and eudemonic perspectives of well-being that highlights aspects that allow the individual to self-actualise and fulfil their potential. Concluding that the intercultural doctoral journey is a developmental process in which students will learn to thrive as an individual, both socio-culturally and academically, this chapter further reiterates the importance of human development at individual and contextual levels. In order to capture the intra-personal elements, the complex experience of IDSs benefits from an ecological conceptualisation of development, in which the individual interacts with their ecologies.

**Chapter Three (Looking through the eco-developmental lens)** will unpack the proposed developmental perspective to explore how the active individual is central to their own academic and socio-cultural development. Through comparing equivalent models, I will describe the relevance of the most recent model of **Ecological Systems Theory (EST)** (Bronfenbrenner, 1979, 1989, 2005) – **Person-Process-Context-Time (ppct)**. This theory acts as a lens through which we can understand a student's active role in their own contextualised development. The **ppct-EST** specifically contributes to the conceptualisation of students' interactions with different levels of ecology, person, and process, and how these interactions can shape their learning and self-development over time. Finally, this discussion will conclude the literature review and arrive at a set of research questions based on the main research objectives.

**Chapter Four (Pragmatism and mixed methodology)** will first explain the philosophical paradigm of **Pragmatism** in relation to the IDS experience, before presenting the rationale for the longitudinal mixed methodology design. Connections are made between the study's research objectives, its philosophical and methodological elements, and the data being collected. This chapter presents the continuity between the IDS experience, pragmatist knowledge, and longitudinal mixed methodology. Data collection and analysis methods for each strand (i.e. quantitative and qualitative) and the ethical demands of the study are discussed in detail. Unlike traditional methodology chapters, in order to maintain the flow of each analytical approach and its

findings, the details of each procedure of analysis will be explained in their respective findings chapter.

**Chapter Five (Quantitative analysis: Individual and contextual factors of adaptation and well-being)** addresses the first three research questions through presenting quantitative strand results from linear regression models and linear mixed-effects models. The findings are discussed in relation to [individual](#) and [contextual](#) levels of IDSs' experiences in relation to [time](#), highlighting how time and ecologies interact with students' well-being and adaptation processes. In this chapter, I comment on the strengths and limitations of the longitudinal quantitative strand in relation to the research contexts of development and well-being, especially in terms of research feasibility and the balance between instrument's psychometric properties and the dropout rates.

**Chapter Six (Hybrid thematic analysis: Adapting to new ecologies)** builds on the argument made in Chapter Three regarding the importance of viewing the IDS journey as a developmental process and the need to capture the individual's dynamic interactions with their surrounding ecologies. As a result, the findings are the outcome of a hybrid approach to thematic analysis, combining deductive template analysis with some inductive elements. Through [Longitudinal Hybrid Thematic Analysis \(LHTA\)](#), Chapter Six will present themes guided by the individual's affective and adaptive reactions to their ecologies. The interpretation of the themes will address the participants' negotiation strategies between their ecological changes and their well-being factors, especially the way students draw support from different ecosystems. These strategies encompass intra-personal and ecological changes contributing to long-term students' development, and they provide evidence for the connection between the [individual](#) (person), their [ecologies](#) (context), and their [development](#) over time through learning and looking after their well-being (process). The themes showed that students utilise available support from their external ecosystems and internal attributes towards their personal and professional development. The nuances of these contextual/individual interactions are explored here.

**Chapter Seven (Structural narrative analysis: Stories of learning and thriving)** discusses the need for an in-depth exploration of individual narratives that showcase the process of how the person and their context both play a role in their process of development over time; subsequent presentation of the procedure used follows this discussion. The narratives of three participants – Jade, Red, and Purple – are presented via [Structural Narrative Analysis \(SNA\)](#). Through the analysis of their event sequences (in relation to time, place, meaning, and resolution), I interpret their reaction to significant events with the help of the proposed theoretical framework. The

analysis focuses on how different identities as well as support systems are formed or transformed as students' response to the new contexts.

**Chapter Eight (Overall Discussion)** reiterates the two main arguments made in the analyses: (1) in order to thrive, the development of IDSs revolves around the overlapping – and at times competing – multi-dimensional processes of *learning* to become an academic and *managing* their well-being. The levels at which interactions occur (*contextual*, *individual*, and *time*) are integral to the individual's strategies towards negotiating between these two processes of learning and managing. Chapter Eight also elaborates on the importance of support systems, the identity of the individual as part of larger communities, and how the individual develops based on their interaction with and utilisation of available sources of support.

**Chapter Nine (Thesis conclusion)** considers the strengths and limitations of the theoretical framework and the methodology of this research. For mixed methodology, the study allows for further reflections on longitudinal data collection using quantitative and qualitative methods, and how they complement and support one another in a mixed methods design. Alongside recommendations for future research, Chapter Nine will further deliberate on the implications for HE stakeholders (for students, supervisors, and institutions), especially on how students can self-transform as well as contribute to structural transformations to support well-being in HE.

Through theoretically rigorous analyses of both quantitative and qualitative data, this thesis presents evidence regarding the importance of interactions at both the individual and contextual levels and their impact upon the IDSs' development. Furthermore, the study suggested that this development is multi-dimensional, multi-level, and bi-directional. When provided with further support from their ecological infrastructures, students can thrive over time through their active self-transformation. This suggests that effective strategies for IDSs' professional and personal development will be those that recognise both the contextualised nature of their learning processes and the importance of individual progress over time.



# Chapter One

## Being intercultural and doctoral

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### 1.1 Chapter overview

The aim of the thesis is to understand the experience of doctoral students coming from countries outside the UK (IDSs). The first chapter will address the complexity of this experience through reviewing the literature on [doctoral education experience](#) and [intercultural student experience](#). The aim of Chapter One is to present what we currently know about their experience, while specifically drawing attention to three aspects in the literature – [context](#), [individual](#), and [progress](#). Chapter One will discuss the contextualised processes of adaptation that IDSs experience and connect it to the importance of individual progress over time. This brings forth two notions for consideration: (1) the interaction between the individual and their contexts, and (2) the individual's progress over time. By reviewing the literature with a specific focus, I highlight the evidence that the IDS experience is individual- and context- specific, and it should not be captured as a snapshot, but as a longitudinal process.

In line with the first notion, it will be observed from the research literature that it is impossible to understand any human experience in isolation and separated from the larger – perhaps less direct but still impactful – contexts. In this sense, it is not enough to consider student experience removed from its context, be it the doctoral or intercultural aspect of that experience. As different parts of the experience can occur across multiple contextual levels, the experience may include the student's interactions with immediate peers, their academic/social communities, their indirect contact with different education policies, and their negotiations with new demands at larger socio-cultural and global levels. Thus, the main questions are, how has research on IDSs captured this complex experience, and what can be done to extend this body of knowledge?

Similarly, the second notion taps into the non-static nature of the experience, and it works to support my argument that it is inadequate to investigate the experiences of interest at only one given point in time. To address this, I will highlight how significant parts of the literature recognise both the individual's effort to adapt to the new environments, and their growth over time as a result. This notion of progress over time is depicted through academic and social/cultural development in both doctoral experience and intercultural experience. In explaining how the



*culture learning framework* contributes to our understanding of the IDS experience – specifically the *socio-cultural adaptation theory (SCA-T)* – I will also critique the assimilationist approach to intercultural experience which at times neglects the individual's contribution to their new contexts.

In short, the aim of Chapter One is to demonstrate through a critical review of the literature the need for a more in-depth conceptualisation of the contextualised adaptation process, one that can capture not only contextualised experience but also individual progress. Significant research literature exists regarding the separate areas of doctoral student experience and international/intercultural student experience. These two aspects come together within IDS identity, though most research has studied them separately, with a few recent exceptions. This literature review will thus reflect current knowledge on the separate experiences of doctoral students and international/intercultural students, alongside review of those examples which engage with the intersection of the two. The approach to this chapter therefore requires synthesising the literature on these experiences in terms of their contextualisation and conceptualisation. This involves looking at the literature not only to examine the different conceptualisations of the two experiences, but also to understand the metrics used for measuring the experience, and the importance of recognising contextualised process and individual progress.

## **1.2 Being doctoral: Context, individual, and process**

The doctoral student experience – like many other aspects of human lives – is complex and often involves the interactions between the student with their many interrelated contexts, the combination of old and new knowledge, and in many cases, the conflicts between the old and the new identities.

While successful adaptation to academia can bring fruitful acquisitions of different knowledge and skill sets, the doctorate itself offers little financial incentive, and in some cases, can further compounding students' financial stress (Bryan & Guccione, 2018). Students' access to research cultures also differs across demographics. International students and part-time students report higher difficulty in accessing host cultures and academic cultures than their home and full-time peers. Within research training and academic cultures, Deem and Brehony (2000) argued that academic cultural capital and understanding of doctoral work is not easily transmitted through supervisors or more immediate academic networks, and the doctoral process does not necessarily equip students for the transition which arrives upon completion of the degree. As such, the mere presence of the scientific community does not automatically ease the shift from 'apprentice' and PhD student to 'colleague' and early career-researcher (Laudel & Gläser, 2008); rather, the process happens through the effort of both the individual and their supporting structures. However, when

translated into research, it is not a simple task to reflect all these dimensions of the doctoral journey. In the simplest approaches, many quantitative studies use attrition rates of PhD students as their main determinant of success, with the implication that being able to *complete* the doctorate programme is an indication of a *successful* doctoral experience. As a result, student dropout rates becomes the focus of many research endeavours (Stubb et al., 2011, 2012). These metrics do indeed provide useful information on aspects of the doctoral experience, but it is difficult to understand the underlying processes that explain these metrics.

When considered separately, these metrics often fail to reflect the contextualised nature of the doctoral experience, and so the limitations of these metrics have detrimental effects on the knowledge claims that can be made. In terms of context, Golde (Golde, 2005) commented that the research literature is often focused on the students (their demographic and psychological characteristics) and not the institutional characteristics that can impact their experience. As a result, there is not enough evidence for effective strategies that the institutions can actively apply to their own system and structure to improve their doctoral education. Since 2005, there have been more studies into doctoral student experience that look at factors beyond the students themselves, but Golde's remarks remain important for two reasons. Firstly, they underscore the different interrelated dimensions of the complex student experience, namely – but not limited to – individual and contextual aspects. Secondly, her remarks portray the link between the conceptual manner in which research defines and situates an experience, and as a result, the limitation in the application of such knowledge to improve student experience at both individual and wider contextual levels.

### **1.2.1 Contextual and individual levels**

The interactions between the individual and external forces are believed to have a significant influence on doctoral students (Haynes et al., 2012; Schmidt & Umans, 2014; Stubb et al., 2011). Contextual and inter-personal factors such as social support are found to play a role in the successful completion of the doctoral degree, especially in terms of relationships with colleagues and supervisors/advisors (Jairam & Kahl, 2012). McAlpine and Akerlind (2010) suggested that it is important to students to have knowledge on what resources are available to them, regarding not only their academic work but also how to manage their personal lives and the work/life balance. Research has also found that doctoral students find it difficult to adapt to the practices embodied within the HE environments, as well as its competitiveness (Nyquist et al., 1999). As a result of all these factors, Schmidt and Umans (Schmidt & Umans, 2014) described doctoral students as being “cramped in the interaction between self and structural forces” (p. 10).

Given the contextualised nature of the doctoral student experience, how can we explore all of these complex dimensions and their interactions with the individual? While it is true that the interactions between the individuals and their surroundings should be the focus of support and further research, we must first acknowledge that these interactions are by nature extremely complex, and they are operationalised by a wide range of variables.

For instance, factors at contextual and individual levels are operationalised differently. At contextual levels, research often looks at how doctoral students are influenced by their relations with domains such as

- family and friends (Martinez et al., 2013),
- supervisors/advisor (Cornér et al., 2017; Green & Bauer, 1995; Juniper et al., 2012),
- surrounding structures (academic, social, and work environments) (K. H. Hunter & Devine, 2016; Juniper et al., 2012; Schmidt & Umans, 2014; Zahniser et al., 2017), or
- the larger scholarly community (Cornér et al., 2017; K. H. Hunter & Devine, 2016; Stubb et al., 2011).

On the other hand, changes at the individual level have been reflected by

- students' intellectual and psychological preparation (Hawley, 2003),
- their demographic characteristics and financial capabilities (Abedi & Benkin, 1987),
- their effort to take initiative in self-care (Kumar & Cavallaro, 2018; Shavers & Moore, 2015; Zahniser et al., 2017) or to seek professional help (Hyun et al., 2006), and
- their process of negotiating through the doctorate (Haynes et al., 2012; Martinez et al., 2013).

These operationalisations all reflect important aspects of the doctoral experience, but it is still a fragmented picture. When both contextual and individual levels are combined, a sizeable part of the literature shares a common theme that connects the contextual experience of individuals with processes of negotiation between intra-personal values and surrounding contexts. For instance, Schmidt and Umans (Schmidt & Umans, 2014) identifies three major qualitative themes in their study of PhD students: *being true to oneself*, *being in the sphere of influence*, and *performing the balancing act*. The first theme refers to the students' ability to 'know themselves', to 'prioritise', and to 'be the chosen one' (i.e. to self-affirm), which belong to the individual level. On the other hand, *being in the sphere of influence* acknowledges the social and cultural contexts that are essential to their well-being during the doctorate, such as their scholarly community, playing by the new 'rules of academia', and being understood by their PhD peers, as well as being mentored by their supervisors and being supported by their family. These factors highlight inter-personal and

professional dimensions. *Performing the balancing act* theme recounts the students' need to balance their PhD work, their expectations, and their well-being, cataloguing further factors such as time, the need for structure and stability within their work, and the negotiation of their different roles within varied contexts. This signifies the interplay between the individual and their multiple contextual levels through active negotiation.

Indeed, “doctoral work is challenging on a variety of levels, stretching often excessively, the minds as well as the emotions, the stamina and the finances of doctoral students” (Hadjiioannou et al., 2007, p. 160). As a result, the PhD requires complex input from the students – one for which they may have to develop a new set of skills. They need to actively invest intention and effort into learning new skills while managing their priorities, and at the same time maintain their well-being by managing stress and creating their personal time. These tasks demand that the students develop at an individual level, while also finding support at different contextual levels (social and institutional). In some cases, the students will have to make trade-offs to maintain the overall balance (Martinez et al., 2013). In order to reach completion of their doctorate, both academic and personal responsibilities need to be successfully negotiated (Brus, 2006; Stimpson & Filer, 2011).

One such example of negotiation is the work-life conflict observed among many doctoral students. Research on work-life balance is often focused on mature doctoral populations such as students who are also mothers (Offerman, 2011); many of the more focused investigations have prioritised looking at women's experience of the doctorate (Brus, 2006; Haynes et al., 2012; Prikhidko & Haynes, 2018; Stimpson & Filer, 2011). This is specifically related to the professional-mother role conflict that more women are facing, often forcing them to make a decision to prioritise one role over the other, resulting in “internal battles” (Haynes et al., 2012). The influence acts in both directions, however, as the doctorate also impacts their personal life decisions in many cases, e.g. postponing having children (Mason et al., 2009). From the students' personal perspectives, remaining flexible and knowing how to “say ‘no’ to things” becomes important in this balancing act (Martinez et al., 2013, p. 46). Similarly, with regard to institutional structures, inflexibility is believed to be of “the least recognised or acknowledged constraints on graduate students”, especially those with dependents (Brus, 2006). In other words, overall balance requires both individual transformation and effective processes of communication and negotiation between the students and their contexts.

As we observe the ways in which contextual and individual levels are reflected in the literature on doctoral experience, we gradually see how inseparable these aspects are. In other words, the individual is actively participating in contextualised self-development, and their self-development

is necessarily situated in their surrounding contexts. Thus, within the research, the more complex conceptualisations of doctoral training also capture the social/contextual side of the experience, while maintaining a focus on individual agency. For instance, in their theoretical work on the doctoral experience, Pychyl and Little (1998) eloquently demonstrated the negotiation that occurs between the student and the contextual forces, and how those contextual elements are operationalised. They use a social ecological model to understand doctoral students' experience, which allows for the consideration of two important aspects of the doctorate. Firstly, they elaborated on 'goals' which are defined, achievable, specific to and operationalised through the doctoral context: writing a literature review, for example, or being able to deliver an academic-calibre presentation. Secondly, they touched upon the representation of higher-order meanings, such as those dictated by bigger cultural and social ecologies or those emanating from small, more intra-personal levels. The balance between doing something personally 'meaningful' and ensuring that it is an 'achievable' task even with one's contextual constraints is foregrounded, and the individual's process of negotiation is situated within this contextualised balance. Highlighting the idea of balance not only reinforces the personal tasks of being aware of one's own well-being, but it also depicts the individual's constant negotiating in upholding this individual/contextual balance. Their conceptualisation echoes my argument for the doctoral experience, as their focus on the 'doing' instead of the 'having' side of personality (Cantor, 1990) allows the investigation of an individual's experience to move beyond asking 'what does an individual have?', and towards examining that individual's process of negotiating.

In this light, the doctorate is framed by contextual needs in the person's life and work, and we see how an individual's progress is contextualised and actively negotiated by the individual themselves. Similar to Schmidt and Umans (Schmidt & Umans, 2014), Pychyl and Little's (1998) results also indicated some form of interacting mechanisms between the individual and the contextualised process. What this implies is that both the individual psychological structure and context processes interact, and this underscores the importance of conceptualisations that consider both individually and contextually sensitive levels. However, in acknowledging the weakness of their study, they further suggest that researchers who wish to investigate context-specific components may benefit from having "direct contact with the individuals who are at the centre of the investigation", which potentially supports the case for mixed methodology (Pychyl & Little, 1998, p. 456).

In summary, we see that students' experience is influenced both by their individual characteristics and the wider contexts. At the same time, students' active role in their own development is highlighted in the literature, largely through their processes of learning new skills,

as well as balancing between internal and external forces. These findings hone in on the intra-personal, exploring the different manners in which students can take control of their own experience and progress, thus highlighting an individual level to their experience. Furthermore, the notions of professional identity and roles are emphasised. But more importantly, individuals hold the power to perceive and interpret their own identity, and once again, the individuals themselves are taking initiatives in their own development. In other words, students transform over time as they fulfil the requirements of their doctorate, both personally and professionally.

### **1.2.2 Processes over time: academic and social development**

In the literature, students' experience over time can be observed through two main types of development: [academic process](#) and [social process](#). It is through academic and social development processes that the interactions between individual and contexts are most prominent. The culture of academia dictates what are acceptable behaviours and defines what is considered as success or failure in the research enterprise. This means that learning new academic skills as well as adapting to new practices are important tasks for doctoral students. Within the knowledge-driven economy paradigm, doctoral students undergo a process of learning how to produce, share, and apply specialised knowledge. The knowledge-driven economy foregrounds the importance of HEIs as one of the main sites for knowledge production (Bryan & Guccione, 2018), and as a training body in preparation for their career progression in or beyond academia. With this context in mind, the doctoral experience is not only dictated by their task to pursue further knowledge, but it is also influenced by the culture and practices of academia. Indeed, from the students' perspective, the doctoral experience goes beyond knowledge production and dissemination. Besides knowledge-based capital, doctoral students are also gaining professional skills as well as forms of social capital (professional and social networks) and developing as an individual and professional (contribution to identity, strategies for resilience, etc.). In this sense, the knowledge-driven economy frames the students' pursuit of knowledge and skills.

Academic development in doctoral students is framed by the specialised nature of the doctorate, and can be observed in the crossing of [conceptual thresholds](#) (Kiley & Wisker, 2009). During the PhD, students experience critical moments that push them to learn, and this learning is embedded in changes to their conceptual understanding. Several components borrowed from Meyer and Land's (2003, cited in Wisker et al., 2010) notion of conceptual threshold in undergraduate student experience are applicable to the doctoral student experience, namely new perspectives and shifts in conceptual paradigms. Wisker and colleagues put forward two

conceptual shifts that doctoral students undergo: *ontological* and *epistemological*.<sup>1</sup> While ontological shifts refer to moments when the student's identities are questioned, epistemological shifts signal the instances where their existing knowledge is challenged and thus grows. More specifically, the nature of their growth may be related to aspects of the doctorate, such as argument, theory, and analysis (Kiley & Wisker, 2009; Wisker et al., 2010). Therefore, the process of academic development reflects the context of academia and its demands for specialisation and knowledge creation.

To address social development at the individual level, Golde (1998) specified that a doctoral student's socialisation process is manifold, as they are required to enter the new environment and familiarise themselves with both the role of a student and their professional role as an academic. Many studies borrow from frameworks of socialisation and identity, e.g. fitting the mould (Gardner, 2008a) and doctoral student and professional identity formation as a part of their communities (Antony, 2002; Austin, 2002; Ellis, 2001; Gardner, 2007; Gonzalez, 2006; Weidman et al., 2001). Connecting the cultural practices of academia and the doctoral experience, Gardner (2010) explained socialisation as the process of adapting through acquiring new knowledge and practices that is unique to the new organisation's membership. Notably, this conceptualisation also mirrors the integral aspect of culture learning in intercultural adaptation, which will be discussed later on in Section 1.3.

Socialisation processes of doctoral students can also be divided into developmental stages, often progressing between different stages (Antony, 2002; Baird, 1993; Gardner, 2007, 2008a; Weidman et al., 2001). For instance, Weidman and colleagues (2001) applied Thornton and Nardi's (1975) work on role acquisition to the socialisation of doctoral students, which foregrounds two important arguments: (a) socialisation is a developmental process, and (b) the knowledge and skills acquired during this development revolve around role identity and role commitments (Weidman et al., 2001). This process consists of a sequence of developmental stages that vary depending on individual and institutional characteristics, in which socialisation helps students achieve necessary skillsets that will benefit the professional careers which follow their doctoral education (Weidman et al., 2001). This conceptualisation of the process accommodates enquiries at both individual and contextual levels, while depicting the importance of individual progress. This is achieved by recognition of aspects such as role acquisition by interacting with and learning from the new environments, as "individuals and social roles, personalities and social structures become fused"

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<sup>1</sup> I would like to thank my colleague, **Leanne Cameron**, for the amazing explanation of her own thesis on Rwandan teachers, which inadvertently helped me to understand these concepts.

(Thornton & Nardi, 1975, p. 880). Through more observation and participation, the students learn to navigate the professional requirements of an academic role. Taking into account both context and individual progress, this further indicates the importance of contexts in doctoral students' development.

At the same time, research must adequately address the difference among institutional and disciplinary practices (Griffin et al., 2016; McGaskey, 2011; Mendoza et al., 2014; Sallee & Harris, 2011; Winkle-Wagner & McCoy, 2016). Twale, Bethea and Weidman (2016) argued that in order to accommodate more specific populations of students (e.g. ethnic minorities and international students) – which relates closely to the aim of the current thesis – institution- and culture- specific elements will take into account further role conflicts. This captures the processes of engaging with the new contexts and making decisions to embrace, disregard, or adapt particular practices. Indeed, given the complexity of the doctoral community, one noteworthy remark by Antony (2002) criticised how these socialisation processes are often assumed to occur uniformly, signifying only the assimilation of the individuals into their organisation, and thus there is little space in stage-models to capture the individual differences and the developmental transformations within the individuals themselves.

Individual differences can at times hinder this process, especially when these differences do not “fit the mould” (Gardner, 2008a, p. 127), particularly for those belonging to a minority in academia (van Maanen & Schein, 1979). Identities of the individual matter in this understanding of the doctoral experience. Gardner (2008a) identified five groups who perceive their experiences and identity as being different from their traditional peers: women, students of colour, older students, students with children, and part-time students. Gardner (2010) further identified the role of disciplinary boundaries to the doctoral socialisation process. In this case, a student's disciplines could be both indicative of their individual differences (their personal reasons for picking a certain discipline) and the cultural practices of the larger structures surrounding them and their research. Indeed, both departmental and programme practices have been found to influence the duration (Baird, 1993), attrition (Gardner, 2008a; Golde, 2005; Jiranek, 2010; Lovitts & Nelson, 2000) and personal experience and well-being (Golde & Dore, 2001; Stubb et al., 2011, 2012) during doctoral studies. Having said that, Gardner (2010) demonstrated that students across disciplines do share similar themes in their socialisation experience, e.g. support, self-direction, ambiguity, and transition. We can see here that the students' discussion of their experience often includes both personal and interpersonal experiences; this is clearly seen in their reference to support, which implies that in their awareness of the tasks, students gradually become more independent and self-directed, able to gain knowledge of surrounding contexts and expectations to avoid ambiguity.



Moreover, Gardner drew attention to identity transitions as an inherent and integral part of socialisation in doctoral studies.

Not surprisingly, the idea of transition between roles (students to professionals) has been mentioned in other doctoral experience studies (Laudel & Gläser, 2008; Lovitts, 2005, 2008). Within the framework of adult development, the concept of transition in these studies is often associated with the individual's transformation into an independent academic; challenges experienced during this period include decision-making, negotiation, and dealing with uncertainties (Schmidt & Umans, 2014; Stubb et al., 2011). This transformation is a complex process and can happen during socialisation with interpersonal structures and also as a process of personal development within the individual. As described by Ziman (1993), "the heart of the PhD experience is the psychological transition from a state of being instructed on what is already known to a state of personally discovering things that were not previously known" (Ziman, 1993, p. 16). Ziman's portrayal fits well within the larger knowledge-driven economy and articulates the doctoral student's task to learn and develop as an academic required to apply knowledge to larger contexts.

In considering transition and transformation, research has also taken a cultural lens in researching the doctoral experience. IDSs are described to have a further "magnified" experience of change (Gardner, 2010, p. 74) as they have to adjust at more contextual levels than their host-national peers. This chapter continues exploration with the experience of intercultural students, which, as with doctoral students writ large, proves to be a complex picture.

### **1.3 Being intercultural: More than an object transitioning between cultures**

As discussed above, non-domestic doctoral students have a culturally specific layer that further characterises their experience in the new contexts. While many authors have referred to students as being overseas or international, in the current thesis, they are referred to as being *intercultural*. As previously introduced, intercultural practices were first introduced within educational policies as "the intersection of culture and education" (C. A. Hunter et al., 2015, p. 1), a bridging construct to identify common grounds in which shared values and opportunities can be interpreted and reinforced differently within a diverse campus, allowing for the development of both local and global citizenship among learners (Olson & Peacock, 2012). In other words, interculturalism starts with the recognition of the culturally boundedness of values, practices, and knowledge brought by each individual. In an educational context, this can be translated through a focus on *goals* that unite commonalities between cultures (Brasher, 2004). Here, educators and learners would seek to identify common goals between multiple cultural groups, after which each cultural group can "articulate the value of the goal within its own tradition" (Brasher, 2004, p.100).

More relevant to the doctoral context, in explaining intercultural education and communication, Hobel (2013) remarks that "the knowledge construction process is always culturally situated and discursively mediated" (p.229). Translating this notion in relation to intercultural doctoral students, we must recognise that not only are they tasked with crossing their own ontological and epistemological thresholds through their work (Kiley & Wisker, 2009), but they are also required to learn the language and practices within the new culture necessary for their knowledge construction and their boundary-crossing. In my application of *interculturalism* to the context of this research, I call for the recognition of how different cultural ways of being and doing need to come together as the IDS goes through their doctorate. Thus, instead of referring to them as international or EU students, I refer to them as intercultural students, for this recognises their effort to negotiate between different ways of being and doing as they enter a new culture. It is within this light that the current section on *being intercultural* will continue to address the complexities of the IDS experience. First, I consider the prominent psychological theories and research on acculturation with regard to international students; and second, alongside the complexity we have explained above regarding *being doctoral*, I make the argument to bring forward the culturally situated agency that each individual brings to their doctoral journey.

Research showed that non-domestic doctoral students endure feelings of isolation from peers and faculty and experience financial issues, miscommunications within supervisory relationships, and language barriers (Le & Gardner, 2010). In terms of specific factors, acculturation research literature on student experience tends to agree that there are a range of challenges that international students have to face. Several studies have considered the impacts that the environment and individual differences can have on students and their coping strategies, in terms of psychological adjustment.

In general, studies show that geographic relocation has significant impact on the social and psychological well-being of international students. Key contextual factors, such as country of origin, host country, social interaction, cultural gaps, and perceived discrimination from host nationals, have identified as influential for international students' psychological adjustment (Hanassab, 2006; Piontkowski et al., 2000; Zhang & Goodson, 2011). Individual (intra-personal) difference factors, including the student's second language efficacy, personality, intelligence, and ability to cope with change, can also contribute to their well-being and in particular link to the likelihood for depression (E. Jung et al., 2007; Zhang & Goodson, 2011). For international students, the language barrier has been shown to be the most significant problem, as it does not only have a negative impact on their academic performance, but it also poses many difficulties in establishing social relationships (Mori, 2000). At the same time, many studies have also found

several coping strategies at both individual and contextual levels which can positively contribute towards the experience. Both levels of social support (Mori, 2000; Nebedum-Ezeh, 1997; Yeh & Inose, 2003) and the student's social and cultural knowledge of the host environment (Li & Gasser, 2005) have been found to be predictors of acculturative stress.

In this sense, we see that these factors are made up of different dimensions (social, cultural, psychological) as well as levels (individual and contextual). In the next part, I will discuss this multi-dimensional and multi-level nature as currently explored in the literature on acculturation and international student experience.

### 1.3.1 Culture learning frameworks and socio-cultural adaptation theory

What happens to individuals, who have developed in one cultural context, when they attempt to live in a new cultural context? If culture is such a powerful shaper of behaviour, do individuals continue to act in the new setting as they did in the previous one, do they change their behavioural repertoire to be more appropriate in the new setting, or is there some complex pattern of continuity and change in how people go about their lives in the new society? The answer provided by intercultural psychology is very clearly supportive of the last of these three alternatives.

(Berry, 1997, p. 6)

The literature surveyed for this thesis includes diverse and at times opposing perspectives. Well-established literature on intercultural sojourns embeds the field's most fundamental concepts in a medical and objective approach. However, recent developments have opened space for more dynamic and constructive conceptualisations. As a result of the historical development in the field, the majority of contemporary theories on intercultural transitions consist of different dimensions of change (Zhou et al., 2008). To help understand the dimensions of acculturation, we need to first look at the *ABC model of cultural contact*. The ABC (*Affective*, *Behavioural*, and *Cognitive*) model focuses on these three types of changes (Wilson, 2013).

The *affective* dimension refers to stress and coping approach to acculturation, which posits that acculturation encompasses events that can potentially induce stress in an individual, and thus they must build coping strategies to deal with the stress. More specifically, *affective* dimension is based primarily on psychological models of adjustment, as they seek to understand responses to stress and culture shock. In this sense, adjustment is defined as “an active process of managing stress at different systemic levels – both individual and situational” (Zhou et al., 2008, p. 65).

*Behavioural* dimension refers to learning appropriate skills to facilitate intercultural contact, drawing attention to the competence aspect of social interaction (Argyle, 1969). The *behavioural*

dimension addresses acculturation as a process of learning, which requires the individual to acquire culturally specific skills in order to adapt to the new culture.

Similarly, *cognitive* dimension draws from social aspects, but zooms in on changes to the individual's identity. This dimension focuses on how the individual's identification with in-group/out-group transforms as they move between larger contexts (Berry, 1997). The *cognitive* dimension borrows from social identity theories, recognising that acculturation requires the individual to experience a process of developing, changing, and negotiating their group identity through cognitive perceptions.

In the early clinical-based *affective* approach, there are two traditional perspectives that were used to explain the issues encountered during intercultural sojourns. The first perspective postulates that the individual has predisposing factors and characteristics that could influence their experience (e.g. selective migration as a result of life events). The second perspective focuses more on the psychological consequences of migration (e.g. negative psychological symptoms following culture shock). In looking at intercultural experience, the early theories were drawn from medical models of adjustment and adaptation, and their approach was more clinically oriented (Ward et al., 2001). These traditional views often present intercultural transition as a trying experience and a medical nuisance. For instance, culture shock is described as an “occupational disease of people who have been suddenly transplanted abroad” (Oberg, 1960, p. 177). These earlier models of stress–coping–adjustment have given form to many acculturation theories, whose focus is on stress (or ‘culture shock’) as a result of the intercultural experience, and thus ‘adjustment’ is introduced as a response to ‘cope’ with the induced stress (Zhou et al., 2008).

In this light, *acculturation* is depicted in its early days through situating the individual in a larger context, foregrounding the phenomena that occurs when groups of individuals having different cultures come into contact with each other, often resulting in changes to the ‘original culture patterns’ of either or both groups (Redfield et al., 1936, p. 149). Berry (1997) suggested four strategies for acculturation based on the stress and coping framework: (1) integration (where the individual participates in both cultures); (2) assimilation (where the participation only takes place in host culture and not the individual's own culture); (3) separation (the individual maintains their own culture and does not participate in host culture); (4) marginalisation (there is no participation in either own or host culture). These come as a result of combining two fundamental goals of acculturation: maintenance of culture and maintenance of relationship with the larger society.

Beyond the medical/deficit models, the more contemporary approaches start to recognise the individual, and question if the transition could instead be seen as *a learning process*, rather than a

distressing experience that requires clinical intervention (Argyle, 1969; Bochner, 1986; Furnham & Bochner, 1986; Zhou et al., 2008). Cultural learning takes place in the dimension of behavioural acculturative change (J. Wilson, 2013). This form of learning can be defined as “the process whereby sojourners acquire culturally relevant social knowledge and skills in order to survive and thrive in their new society” (Ward et al., 2001, p. 51). Furnham and Bochner (1986) argued that during cultural learning, social communications happens in an intercultural (rather than intracultural) context. Gudykunst (1983) described instances of intracultural contact, in which strangers from the same culture meet; he demonstrates that in these interactions, more assumptions are made about the other person than when contact is made between strangers from different cultures (intercultural communication). What this implies for the current research is that culture learning takes place during intercultural experiences, and that one of the definitive elements of culture is the difference in intercultural communication. In other words, different cultures can be defined and distinguished by the disparities between their social interaction patterns (J. Wilson, 2013). Through this social learning process, we can gain more understanding of how each individual’s intercultural transition takes place.

This socio-cultural learning viewpoint encourages more research to explore culture-specific factors that could impede or facilitate intercultural interactions. It further focuses on how they could be turned into positive action in the form of preparation and appropriate skill acquisition. In this light, ‘[culture shock](#)’ is seen as a more positive stimulus for cultural learning, thus influencing the individual’s behaviour. Ward and Kennedy (1992) pointed out that there are culture-specific relationships with psychological and socio-cultural adaptation, as demonstrated by the benefits of cultural learning, where significantly fewer academic problems (Pruitt, 1978) and fewer social difficulties (Ward & Kennedy, 1992) are associated with international students’ increased interaction with host nationals. Increased interaction with home students is also associated with the students experiencing fewer problems in intercultural adaptation in general and with improved competency in communication in particular (Zimmerman, 1995).

Within this culture learning viewpoint, the [Socio-cultural adaptation theory \(SCA-T\)](#) (Searle & Ward, 1990; Ward & Kennedy, 1999) posits that there are behavioural skills that must be learned in order for intercultural adjustments to occur (J. Wilson, 2013). Through empirical research, Searle and Ward (1990) studied the international student experience and thus develop a theoretical framework which allow predictions regarding the transition that students undergo. They found that adaptation consists of two distinctive yet related dimensions. The first, [psychological adjustments](#), is best explored from a clinical perspective, focusing on emotional and affective aspects such as the management of stress and depressive symptoms. The second, [sociocultural](#)

**adjustments**, is more suited to study via a social learning and behavioural/cognitive approach, e.g. in terms of cultural distance, expectations, or social skills acquisition. A revised version of the theory through empirical research of international students (J. Wilson, 2013) presented five main factors crucial for adaptation: (1) **Interpersonal Communication**; (2) **Academic/Work Performance**; (3) **Personal Interests & Community Involvement**; (4) **Ecological Adaptation**; and (5) **Language Proficiency**, as visualised in Figure 1.1. Here, **socio-cultural adaptation (SCA)** is conceptualised through different factors at the individual level, but we can see that they cannot be entirely separated from the social and contextual levels. In other words, SCA-T highlights that at the individual level, behaviour changes through learning occur, but the resulting knowledge and skills are also framed by the contexts. This behavioural theory is the first of the two lenses through which research can capture the changes within the individual, in this case their intercultural aspect. An adapted questionnaire based on SCA-T has previously been applied to studying international graduate students in the US, which identifies multiple significant factors related to IDS's SCA, namely gender, age, country of origin, English language ability, and having family and friends in the US (G. P. Wilson, 2011).



*Figure 1.1 Change at the individual level: Socio-cultural adaptation revised by Wilson (2013)*

However, many writers on the overseas student experience have criticised the SCA-T and other equivalent theories of acculturation for their hidden assumptions based on Western political and epistemological biases, which still adhere to a deficit view of the sojourner (Marginson, 2014; Montgomery & McDowell, 2009; Tran, 2008, 2011). While this framework recognises individual progress through acquisition of new skillsets, it neglects the students' agency to make decisions based on their own old and new resources. Indeed, acculturation theories can hold implicit assumptions that students are static, deficit, and marginalised, homogeneous groups that lack agency and so such theories can also assume that international students' purpose is to fit the new cultural moulds.

Within the literature on international students' adaptation, some fail to separate the existence of knowledge and its forms of expression. As an example, one prominent argument is that critical thinking is culturally specific to the West and it may not be appropriate to be taught in Asian cultures (D. Atkinson, 1997). This assumption, however, either implies that critical thinking is non-existent in these cultures, or that it is expressed worldwide in exactly the same manner as it is in the West. Both are flawed: the use of Eurocentric approaches to assess critical thinking skills, arguably justified in British HE context, does not provide evidence for the claim that overseas students lack criticality – it can only imply that students are required to learn about Western educational values and a new manner of expressing criticality. If HE accepts that their training and assessment involve students fitting a specific Western mould, then they must also understand that overseas students do not come as deficit individuals – they bring their own educational values and expression of knowledge with them.<sup>2</sup>

One approach to challenge a deficit perspective is to acknowledge the cultural differences and similarities within different academic traditions, while being explicit about each institutions' academic expectations and epistemic cultures (Egege & Kutieleh, 2004). Vandermensbrughe (2004) asserts that institutions should see critical thinking as “socially constructed practices, and not superior practices or a superior form of thinking that is only accessible to the best” (p.421). In other words, what is important to intercultural experiences is the recognition of this dynamic, which involves both the individual's transformation alongside their contribution to the new contexts.

### **1.3.2 What the individual brings to the intercultural experience**

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<sup>2</sup> I would like to thank my colleague, **Tanyapon Phongphio**, for her constructive advice and expertise on critical thinking in Asian countries.

The dominant approach of the literature that sees international students as the problem or simply objects in the transition to another higher education system fails to acknowledge the complexities of student development associated with cross-border mobility and their potential to transform. An emerging stream of literature thus [...] constructs international students as active self-forming agents, who are unlikely to passively accept the inequalities, challenges and discriminations inscribed on them, and who can enact self-change.

(Tran & Vu, 2018, p. 170)

As previously argued, there exists a deficit approach to conceptualisations of international students in research literature (Tran & Vu, 2018). This approach focuses on the identification of difficulties and struggles and subsequent correction to align them with the ‘norm’. This limiting view is “antithetical to supporting the development of the independent and self-directing learner that higher education arguably aims to promote” (Bartram, 2006, p. 1). Being in transnational educational and social spaces (Gargano, 2009) as well as having to form transnational relationships (Fouron & Schiller, 2001; Gargano, 2009) results in a unique experience of transformation for international students, as they have to redefine who they are in the new context, and in many cases, negotiate between the old and the new environments. This requires both their imagined and lived experiences, enacting different forms of agency and self-transforming in the process. However, if independence and self-improvement is the desired result, I argue that intercultural PhD students should not be viewed as a marginalised and disadvantaged group compared to their host national peers. At the same time, we must understand the way in which their individual needs and aspirations change due to the new environment, and how they make use of their knowledge and resources to negotiate and adapt in their own way. This highlights the need for more research focusing on the different ways in which students mediate and enact their agency, and how they reposition themselves in the new contexts, as opposed to focusing on what kind of difficulties they have encountered. This places the emphasis on understanding the students’ perception of how the new contexts and experiences can be related to their well-being, and how the students themselves have chosen to respond and transform as a result.

As students learn how to respond to emerging challenges and needs, they transform themselves during that process. Tran and Vu (2018) emphasised the importance of lived experiences to international students’ ability to exercise agency. Agency is not only important to negotiating short-term immediate needs, but it also plays an important role in creating a space in which transformation can happen both internally and externally. Moreover, the enactment of agency is a response to environmental changes and a negotiation between the individual’s internal values and external environmental demands. The individual progress is thus demonstrated at the intra-



personal level through their capacity to influence on their own thinking and practices in external settings.

In the current thesis, the foci are on understanding (1) how students interact with their contexts and (2) how the individual transforms as a result of this process. These foci allow for multiple advantages when combined with SCA-T, as demonstrated with empirical evidence which tells stories of international students transforming themselves as well as their surrounding environment(s) through their intentions and expectations, such as their preconceptions and perceptions of the new experience (Bandura, 2006; Emirbayer & Mische, 1998; Tran & Vu, 2018). Viewing the transition as a process of learning and negotiation between internal and external forces highlights the importance of conceptualising students' roles as fluid instead of fixed. This perspective has been highlighted in social theories – such as positioning theory – drawing the focus on the internal/external conflicts, and the role of the individual in taking actions and any self-transformation (Winslade, 2003). As the individual undergoes internal/external conflicts, their well-being plays an important role in their development, not only in how well they feel psychologically, but also how they develop as a person to deal with new challenges. This notion of well-being will be discussed in the next chapter.

#### **1.4 Chapter summary**

Contextual, individual, and processual are the main IDS levels that have been demonstrated in Chapter One. As such, I presented how dominant approaches in the literature already captured parts of the complex IDS experience, which paved the way for further investigations. However, there is clearly a gap in both our understanding of these complexities, and in our way to conceptualise them. Further research thus needs to capture the individual and their process of self-transformation to thrive in the new contexts, both in terms of being doctoral and being intercultural.

Alongside this gap, I have also discussed the strengths and limitations of acculturation theories and particularly the SCA-T. While this is a valuable perspective to capture the act of transitioning from one culture to another (*transitioning* is itself a contested concept), this perspective tends to neglect who the individual is (their ontological self), and the knowledge that they bring, obtain, and transform (their epistemological resources). These elements are both important as they assist the individual in the new contexts.

With my application of the concept of interculturalism (discussed in section 1.3), chapter One has demonstrated the importance of recognising sojourners' own culturally bounded values,

knowledge, and practices. Their experience gains a further level of complexities, as they will encounter new values, knowledge, and practices throughout their intercultural doctoral journey. The next chapter – [Chapter Two \(Being well and thriving\)](#) – will address the implications of what these complexities mean for the well-being of IDSs.

# Chapter Two

## Being well and thriving

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Many scientific investigators have thought about the psychological content of positive mental health. A review of their contributions reveals six major approaches to the subject.

- a. Attitudes of the individual toward himself.
- b. Degree to which person realises his potentialities through action.
- c. Unification of function in the individual's personality.
- d. Individual's degree of independence of social influences.
- e. How the individual sees the world around him.
- f. Ability to take life as it comes and master it.

(Jahoda, 1958)

### 2.1 Chapter overview

Chapter One has synthesised the empirical evidence for the adaptation process experienced by IDSs, drawing out the importance of context to the individual's development. However, as much as adaptation theories provide us with necessary scaffolding for understanding the role of contexts, they fall short in capturing development at the individual level. As a result, I raised the need to address this limitation by zooming in to the individual aspects of being. Building on from the behavioural adjustments in the SCA-T, I argued that it is not only psychological adjustments but also the well-being of the individual's psyche that affect their adaptation. The aim of Chapter Two is to address this gap and highlight the importance of individual growth through IDSs' efforts to maintain well-being.

This chapter will achieve this aim by first explaining relevant dichotomies in theoretical and empirical approaches to well-being: **(1) medical vs. non-medical**, and **(2) hedonic vs. eudaimonic**. These dichotomies are matters of ongoing discussion in the field of mental health and well-being. In this thesis, they play a more specific role in supporting the theoretical position regarding IDSs' experience. Following this review of the well-being literature, I will apply this knowledge specifically to understand the well-being dimension in the literature on intercultural and doctoral experience, especially the dichotomy between ill and positive mental health in intercultural and doctoral experience literature. Through critically reviewing the strengths and gaps

in our knowledge, I will justify my use of the [psychological well-being model \(PWB-M\)](#) (Ryff, 1989a) to understand the psychological aspects of IDS's experience.

Finally, through careful analysis of empirical literature, this chapter further provides evidence for the developmental dimension of the IDS experience. As Chapter One presented the developmental dimension in the adaptation aspect of the experience, Chapter Two will demonstrate that IDSs' psychological well-being is a process of self-development in itself.

## 2.2 Why does well-being matter to IDSs?

We need more elaborate language and subtle concepts for grasping students' experience of failure and letdown, when struggling with and withdrawing from difficult courses never completed; for half-formed ideas and crippled thoughts, full of passion and heart, but unfit for the academic genre of writing; and for interior imaginative wanderings that seldom see the light of day.

(Bengtson & Barnett, 2017, p. 115)

The doctorate, as a positive experience, contributes towards the students' intellectual and personal growth (Golde & Dore, 2001), but as a negative experience, it can result in a multitude of well-being and health problems (Pyhältö et al., 2012; Stubb et al., 2012). Statistically, research demonstrates that a large percentage of doctoral students experience high levels of stress and self-report physical and mental health issues, as well as low levels of motivation, financial confidence, and life satisfaction (Hyun et al., 2006; Stecker, 2004; The Graduate Assembly, 2014). A reported 13% of graduate students exhibit depressive or anxiety disorders (Eisenberg et al., 2007), and burn-out is aggravated by emotional exhaustion, cynicism, and a reduced sense of efficacy (Maslach & Goldberg, 1998). Research indicates that doctoral students often identify concerns specific to work-life balance, career paths, finances, impostor syndrome, and relationship with their advisors/supervisors (Spaulding & Rockinson-Szapkiw, 2012; Woolston, 2017). The findings are constituted by factors at different structural and agency levels, reflecting the complexity of the doctoral student experience.

In investigating doctoral students' experience of stress, Stecker (2004) divided [stress](#) into four different types: academic, health, psychosocial, and external stress. In the research, group intervention was proposed as a plausible intervention, specifically creating a space in which the student can reassess their efficacy against their peers. Notably, however, some participants also reportedly expressed fear of faculty or peer awareness of a psychiatric diagnosis. While highlighting the importance of a social support system, these findings also underline the complexity inherent

to that system, where we can see the potentially contradictory balance between having support systems and the urge to hide mental health issues from academic bodies.

At an immediate level of interaction, the student's working relationship with their supervisor (advisor) is among the most significant factors affecting doctoral students' experience. 50% of graduate students who reported experiencing anxiety and/or depression did not see their supervisors as someone who provided an adequate amount of mentorship. They also did not think that their supervisors had a positive impact on their well-being, nor did they report feeling valued by their supervisors (T. M. Evans et al., 2018).

While it is often agreed by both supervisors and students that the quality and characteristics of their relationship play a vital role, different expectations can bring challenges to the relationship (Moxham et al., 2013). The supervisor/supervisee relationship is both "intellectually and emotionally demanding" (Thompson et al., 2005, p. 283). Exploration of the supervisor/student fit would thus require early communication and articulation of expectations so both parties are aware and can achieve good alignment of their expectations. The relationship also develops over time with varying degrees, depending on the quality of reciprocation and emotional support (Sparrowe & Liden, 1997). Supervisory problems have been observed in parallel with higher anxiety and emotional exhaustion in doctorate students (Pyhältö et al., 2012), while a supportive supervisory experience, coupled with higher frequency and quality of meetings (Stubb et al., 2011), can reduce students' ambiguity and uncertainty, and thus their emotional exhaustion (K. H. Hunter & Devine, 2016; Rigg et al., 2013).

Again, like in other aspects of the doctorate, in supervisory relationship, we can see that the processes of role perception and negotiation are vital to a positive experience. Hunter and Devine (2016) posited that emotional exhaustion is one of the mediators through which departmental and supervisory support can either support or impede the doctorate experience. As a result, it is vital to be in a supportive environment combined with a supervisory team who are both "willing to" and "able to" support a high-quality exchange relationship with students (K. H. Hunter & Devine, 2016, p. 53). These components require changes at least at a departmental or institutional level, where more training and reward should be provided for a higher quality of supervision. But while quality service provision is vital performance indicator for universities (Manathunga, 2005), the current global situation and practices in academia do not allow much positive reinforcement for high quality supervision. The considerable workload that academics are expected to fulfil, coupled with staff shortages and inexperienced faculty (Minnick et al., 2010) mean that academics' active participation and investment in the doctoral relationship are often limited.

McAlpine and Amundsen (2012) found that students access support from many different sources beyond their supervisors. While it is up to the students themselves to take initiative for their own well-being, Hyun, Quinn, Madon, and Lustig (2006) reported that for doctoral students who have mental health needs, their actual use of counselling services was strongly related to having a more functional relationship with their supervisors. This further indicates the importance of support systems, particularly the relationship with the supervisors. The functionality of this relationship is assessed via looking at the students' perception of their supervisors' satisfaction with their performance; the discussion of the strengths and weaknesses of the student's research/coursework; encouragement of intellectual self-confidence; facilitation of collaborations with other faculty members, post-docs, and other researchers; consideration of the student's personal problems; and directing the student to funding sources and current job opportunities.

At the immediate levels of interaction, McCallin and Nayar (2012) foregrounded the development of independence in doctoral students. At the beginning of the interaction, the supervisors tend to assume the role of experts, and the students assume that of a learner. Independence development therefore happens over time and can also be supported by other social sources such as the doctoral community. Deuchar (2008) underscored student's status (dependence to independence) and supervisor's working style (hands-on to hands-off) as two aspects in which negotiation happens over time. Students' needs undergo incremental change, depending on where they are in their progress (McAlpine & McKinnon, 2013). Heath (2002) observed a shift in frequency of supervision meetings, with higher frequency at the beginning, the lowest frequency towards the middle of the doctorate, and another high frequency of meetings closer to the end. Quality of supervision, on the other hand, relies on the two aspects of supervision, highlighting individual variations both in relation to supervisors and supervisees. As both the supervisors and supervisees bring to the relationship their own backgrounds, past experiences, and motivation (McAlpine et al., 2010), the relationship is complex, drawing on the broader contexts in each of their lives (McAlpine & McKinnon, 2013).

In their attempt to juggle different priorities, aspects of their well-being can sometimes be affected (Haynes et al., 2012), thus doctoral students must form their own strategies to negotiate their responsibilities while maintaining their well-being. Similarly, for international students, possible culture shocks during their academic and social integration can also induce stress (Barrie, 2007; Ward et al., 2004). Their sojourn leads to students' repositioning themselves in the new contexts, which means they will go through a process of shifting their understandings of both cultural and academic practices (Arkoudis & Tran, 2007). This repositioning takes into account both students' agentic action and the institutional structures with which they are engaging, and

requires students to intentionally position themselves in accordance to the new expectations (Harré & van Langenhove, 1999). Similar to adaptation strategies, conceptualising negotiation strategies of non-domestic PhD students based on these perspectives can give prominence to students' agency.

Alongside formal supervision, students also seek different kinds of support from peers, friends, and family (McAlpine & McKinnon, 2013). The doctoral community provides informal peer support, opportunities for collective learning and working, as well as social interaction for further emotional support (Aitchison & Lee, 2010; Austin, 2002; Parker, 2009). Scholarly communities of practices are indeed an important resource for doctoral students (Pyhältö et al., 2009). Feelings of meaningfulness, worthiness, the solidification of researcher identity, and adequate support and a sense of belonging are promoting factors contributing towards their positive experience that occur when students feel valued by their community. However, some scholarly communities can also be viewed as a source of burden. Particularly, many students reportedly fail to perceive their own value towards the communities (Stubb et al., 2011), creating a sense of exclusion and outsider status.

In line with the focus on the contextualised experience, Levecque et al (2017) instead studied PhD students' experience in relation to research policy. They explored mental health prevalence among PhD students, while also focusing on the doctoral students' perception of their academic environment. As doctoral students' tasks and conditions differ greatly from other groups in the university, there is also the need to study them as a separate sample. Drawing from the field of organisational health, Levecque and colleagues posited a link between work organisation and the employee's health. As they used occupational health psychology concepts such as job demand and job control, and social support, we can also see traces of the interplay between different contextual levels, essentially how work and home can interact to influence the students' experience. For example, work-family conflict is the most important predictor of both psychological distress and the risk of a common psychiatric disorder in doctoral students, followed by job demand. According to Levecque and colleagues, an effective intervention strategy addressing their findings would involve institutional and systematic mapping of the stressors and stress outcomes, resulting in a university-specific risk-management approach. Here we see again how the experience is conceptualised to include both individual and organisational (contextual) factors.

Evans and colleagues (2018) also highlighted careers development guidance and opportunities, positing that the anxiety towards future outcomes after the doctorate programme is also an important factor in the doctoral experience. In line with this focus, other studies further suggested

that strategies involving changes at institutional levels may be beneficial for doctoral students. Some of these include changes to policies that address the academic climate (Schmidt & Umans, 2014; Shavers & Moore, 2015), emphasising peer groups and communities (Schmidt & Umans, 2014; Shavers & Moore, 2015); emphasising peer groups and communities (Stubb et al., 2011), skills training for topics such as time management, along with health and wellness maintenance, sports groups, and fitness classes (Haynes et al., 2012). Suggestions have also been made regarding further training for supervisors and a more systematic and structured approach to help them provide feedback to students (K. H. Hunter & Devine, 2016). Overall, strategies often consist of support systems at different levels, whether they are small changes made within each individual's immediate environment, or the big-scale changes at the faculty or academic cultural levels.

Leaning more towards a deficit model of well-being, Evans et al. (2018) investigated the prevalence of anxiety and depression among doctoral students in 26 countries using clinically validated scales (GAD07 and PHQ09). The use of clinical scales in these studies indicates a medical viewpoint of the problems and a specific focus on students who have developed symptoms of poor mental health. Associations are observed between the prevalence of mental distress and other factors such as perceived work-life balance and supervisory relationship. This also underscores different intervention strategies, both in terms of (a) improving access to mental health support, as well as (b) addressing the academic culture in which their experience resided, starting with training supervisors and highlighting self-care within academia. While it is indeed essential for supervisors and other faculty members to receive adequate training in supporting their students, what will be the nature and level of this support, beyond its expected academic and professional nature? If the doctorate is to be viewed as a developmental period for students, these challenges can be viewed instead as part of the role conflicts that need to be resolved by the individual's process of negotiating and adapting to the doctorate and eventually academia. This means that further support should focus on helping the students to develop their own personal strategies, and to navigate adversities, or in necessary cases, to feel encouraged enough to take initiative and seek professional help. In terms of self-care, if the supervisors themselves also encounter problems with work-life balance, it can be unrealistic to only depend on external resources to determine one's own well-being. As both internal and external resources are important, the individual often has to focus on intra-personal changes to develop their coping strategies.

Indeed, at the individual level, research shows that some amount of progress and well-being can be achieved through the individual's self-development. The development can happen through individual processes (Haynes et al., 2012), such as creating time for self-care through preserving the private self and protection of self (Kumar & Cavallaro, 2018; Martinez et al., 2013; Shavers &



Moore, 2015; Zahniser et al., 2017), and through internal reflection focusing on the self (Haynes et al., 2012). Training on daily self-affirmation and positive thinking patterns has also been suggested (Shavers & Moore, 2015). While some strategies involve external forces, students themselves are actively engaging in shaping their own experience, maintaining the front seat in overcoming their complex challenges, and preserving their well-being (Elliot et al., 2016). As Little (2012) has explained, the individual strategically enacts external, sociogenic norm scripts in order to advance their own, idiogenic valued concerns and goals. It is through the negotiation between sociogenic practices and idiogenic values that life quality can change for better or for worse. As this strategy at times requires acting out of character, or shifting between different selves as a survival-oriented coping mechanism (Shavers & Moore, 2015), this is related to the process of identity formation previously discussed in Chapter One, further addressing the link between context, self-transformation, and well-being.

Overall, while the diversity in theoretical frameworks that have been used to explore doctoral and/or intercultural experiences makes it difficult to paint a complete picture, we can still see the two levels of contextualised social processes and individual well-being. Similarly, the literature on intercultural student experience has demonstrated both socio-cultural and psychological dimensions. The psychological dimension in the IDS experience should go beyond the individual merely ‘adjusting’ and instead focus on personal and professional growth as part of well-being. This task presents some challenges, as well-being is a complex concept in itself.

### **2.3 Being ill or being well: The presence of wellness**

No completely acceptable, all-inclusive concept exists for physical health or physical illness, and, likewise, none exists for mental health or mental illness. A national program against mental illness and for mental health does not depend on acceptance of a single definition and need not await it.

(Jahoda, 1958)

While a definition is important to empirical research, those familiar with the field of mental health know that disagreements surround the definition of well-being. To explore the literature on well-being is an extremely ambitious task, as not only is the concept multifaceted, but there is also a lack of consensus on how it should be defined, constructed, and thus ‘measured’ (Deci & Ryan, 2008). Instead of assessing which theory of well-being is the most accurate, my task is to draw out which part of our current understanding can be applied to the IDS experience. In addition, there are many different disciplines and perspectives within which mental health and well-being is

addressed. In order to fully understand the conceptualisation of well-being, we need to briefly consider the existing approaches in the field of well-being.

There are two relevant dichotomies of well-being that are relevant to the IDS experience: (1) *pathogenic vs. salutogenic*, and (2) *hedonic vs. eudaimonic*. The first distinction introduces the difference between the medical/biological, psychological, and social conceptualisations of well-being. The second distinction underlines the different approaches that research has employed to conceptualise and measure well-being. They both play a role in the ways well-being is defined – and thus measured – i.e. the nature of reality and our approach to achieving knowledge on well-being.

### 2.3.1 A paradigm shift: Pathogenic vs. salutogenic

Breakdown is a result of unresolved disturbance of homeostasis. It is not, then, the imbalance which is pathogenic. It is, rather, the prolonged failure to restore equilibrium which leads to breakdown. When resistance resources are inadequate to meet the demand, to resolve the problem which has been posed, the organism breaks down.

(Antonovsky, 1972, p. 541)

Salutogenesis [...] leads us to focus on the overall problem of active adaptation to an inevitably stressor-rich environment.

(Antonovsky, 1987, p. 9)

In 1948, the World Health Organisation defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1948, p. 459). This focus on a wholesome state of well-being was one among many signals of a paradigm shift in our conceptualisation of public health. Up until this era, the medical models of health dominated research into well-being, which followed a *pathogenic* orientation. Pathogenesis played an important role in shaping early conceptualisations of general health as well as mental health.

Originating in the discipline of psychiatry (Ludwig, 1975), the medical perspective of mental health dichotomises health and disease – particularly viewing health as the lack of disease (Huppert & Whittington, 2003). As a result, this orientation limits the focus of psychiatry to observable somatic and behavioural disorders. The difference between the medical model and its non-medical counterparts revolves around three main assumptions, specifically “that sufficient deviation from normal represents disease; that disease is due to known or unknown natural causes; and that elimination of these causes will result in cure or improvement in individual patients” (Ludwig,

1975, p. 603). Given the assumption of well-being upon the lack of illness – and thus the removal of its *cause* – the prevalent nature of this medical approach to health has shaped the research focus towards factors that are significantly related to the presence of symptoms. This is believed to have influenced interventions in their earlier emphasis on negative aspects of mental (ill)health (Conway & MacLeod, 2002).

However, for well-being to only be defined by the absence of mental illnesses means that other positive outcomes and individual qualities may be overlooked; as a result, more complete state paradigms have been proposed. The *salutogenic* paradigm was introduced by Antonovsky (1972, 1987) as an alternative to pathogenesis. The salutogenic approach focuses on three components of well-being: (1) *comprehensibility* (a fairly predictable or comprehensible future), (2) *manageability* (one's coping capacity based on available resources), and (3) *meaningfulness* (the ability to seek meaning in challenges). In order to maintain their well-being, these components act as the individual's resources when coping with negative life experiences (Antonovsky, 1987). As opposed to their medical counterparts, non-medical approaches emphasize well-being promotion strategies (Conway & MacLeod, 2002). This paradigm shift away from the medical models of well-being has several implications for research, the one most relevant to this thesis being the focus on the individual's approach to aspects of their own well-being. This also signifies the effort needed to balance between the two dimensions of positive and negative affects (Snyder & Lopez, 2002), bringing the individual to the forefront of their own experience.

The concept of well-being is often associated with the field of positive psychology, whose primary focus goes beyond medical treatment and correcting deficiencies, and further aims to support adaptation and personal growth in order to improve quality of life. Historically, this aim has not always been as important. This can be observed in the ways well-being is measured. More objective well-being scales reflect an 'absence' viewpoint: due to the assumption that people would not answer questions honestly nor would they know what is absent, these measurements mainly focused on recording the individual's observable symptoms. This approach was partly problematic given the nature of observable symptoms being either somatic or behavioural, thus causing some confusion between physical and actual psychological symptoms (McDowell, 2010). On the other hand, self-report measures – though not without their own limitations – value the individual's perception. This way of studying well-being embodies (1) the shift towards a more individual-driven and subjective definition of well-being, and (2) the epistemological position that informs empirical research on well-being. In line with the more subjective stance, the next step is to address the two core perspectives that engage with the concept of human fulfilment.

### 2.3.2 Happiness through growth: Hedonic and eudaimonic perspectives

If happiness is activity in accordance with virtue, it is reasonable that it should be in accordance with the highest virtue; and this will be that of the best thing in us.

(Aristotle et al., 1925, p. 263)

The subjective component of well-being has been conceptualised in many different forms, and one of the most prominent conceptualisations is the balance between the two dimensions: affective and cognitive (Nieboer et al., 2005). While the former refers to both positive and negative affects experienced by the individual (Snyder & Lopez, 2002), the latter focuses on people's own evaluation of their life (Linton et al., 2016). Many subjective measures of well-being refer to how much people believe that their life is going well (Lucas & Donnellan, 2007). The complexity of well-being can be seen in the different definitions and assumptions underlying its conceptualisations. Well-being theorists and researchers have drawn from different philosophical approaches in attempts to define well-being. There are two main manners in which a person's well-being have been studied in relation to happiness: **hedonic** and **eudaimonic**. The two perspectives do overlap, as they both go back to Aristotle's pondering of what a well-lived life entails, yet they differ in the weight of the different components being used to define well-being (Lundqvist, 2011).

While **hedonic well-being** views subjective happiness, pleasure, and satisfaction as the basis and goal of human life (Diener et al., 2018), **eudaimonic well-being** argues for the realisation of the individual's true potential that can at times go beyond their feelings of happiness and satisfaction (Ryff & Singer, 2008). The hedonic approach to well-being takes on a slightly more subjective viewpoint than its counterpart, as the individual's perceived presence of positive feelings and absence of negative feelings can be said to have more significance than the structures in a person's life that are responsible for those feelings (Waterman, 1993). Happiness, or wellness, in this case, is defined by the pleasure that accompanies the satisfaction of needs, which focuses on the maximisation of positive affect and the minimisation of negative affect. The empirical measurement of hedonic well-being thus tends to examine how much people believe that their life is going well (Lucas & Donnellan, 2007). Hedonic well-being itself is proposed to be a multi-dimensional construct, encompassing both cognitive and affective measures (Diener et al., 1997). According to Singh and Jha (2008), this is a concept that can be traced back to Aristotle's concept of **eudaimonia** in his *Nicomachean Ethics* (classically demonstrated in such work as Bradburn, 1969). *Eudaimonia* is defined as "the feelings accompanying behaviour in the direction of, and consistent with, one's true potential" (Waterman, 1984, p. 16).

However, the definition of eudaimonia in well-being research is where the hedonic and eudaimonic perspectives differ. As a response to this dominant hedonic view of subjective well-being at the time, Ryff (1989a) argued that Aristotle's use of the term 'eudaimonia' as "the highest of all goods achievable by human action" (Aristotle, as cited by Ryff & Singer, 2008, p. 14) could actually be interpreted differently. First of all, Aristotle's aim for *Nicomachean Ethics* was not to contemplate well-being, but to ponder questions about a well-lived life. Aristotle's answer – which emphasised the "highest virtue" (Aristotle et al., 1925, p. 263)– led Ryff to argue that it is the achievement or the *process* of self-realisation to become "the best that is within us" (Ryff & Singer, 2008, p. 17) – that underlies human fulfilment and thus defines the presence of well-being. Hence, the eudaimonic approach values being able to realise one's full potentials and thrive as a result of this process (Ryff, 1989a).

According to the [eudaimonic perspective](#) to well-being, the problem with hedonic happiness is that even when the individual's needs are satisfied (and thus pleasure is felt), the result is not always true wellness. By assuming that we can measure an individual's well-being by empirically assessing only the extent to which they are feeling satisfied with their life, we are missing other potential spaces for growth that would reach beyond the individual's satisfaction. This is the philosophical argument made by those supporting the eudaimonic perspective on well-being. Among the popular conceptualisations of well-being, many follow this eudaimonic philosophy, namely, the formulation of individuation (C. G. Jung, 1933), the characteristics of a fully functioning person (Rogers, 1961), the conception of maturity (Allport, 1961), and the conception of self-actualisation (Maslow, 1968). As this concept of well-being focuses on more than just positive feeling states, the eudaimonic approach often results in a list or a model comprising different factors that make up well-being (MacLeod & Luzon, 2012). Compared to hedonic models of well-being, eudaimonic models explore the contextual structures that allow feelings of happiness and satisfaction to flourish. As a result, research using the eudaimonic approach to well-being tends to go beyond how one is feeling at a given time, as it captures the structures present within an individual's environment in order to contextualise these feelings. This is not to disregard the individual's perception, but rather, allows theorists to contextualise the aspects studied in relation to wellness.

In connection to the previous discussion on the intercultural and doctoral experience (Chapter One), a eudaimonic perspective implies two core consequences for this thesis. First, at the individual level of the IDS experience, the empirical investigation should focus not only on feelings of satisfaction, but also on other aspects of personal growth. Second, as the eudaimonic perspective spotlights the *process* of self-realisation, such research would benefit from longitudinal

designs. With these implications in mind, the next section discusses a dominant model of well-being that follows a eudaimonic perspective.

## 2.4 Psychological well-being: A salutogenic and eudaimonic approach for IDs

In response to the philosophical debate on the conceptualisation of well-being (Section 2.3), Ryff (1989a) criticised previous conceptualisations which, despite their influence, lack credible assessment procedures and thus cannot be approached in an empirical manner. In addressing this, Ryff proposed the PWB model (PWB-M) to conceptualise *thriving* in an individual (Figure 2.1). Ryff suggests that there are six facets of an individual's PWB: (1) *self-acceptance*, (2) *a sense of purpose in life*, (3) *environmental mastery*, (4) *opportunities for personal growth*, (5) *a sense of autonomy in thought and action*, and (6) *positive relations with others*. Each of these facets represents a category that explores whether the individual has mastered that area of their life.

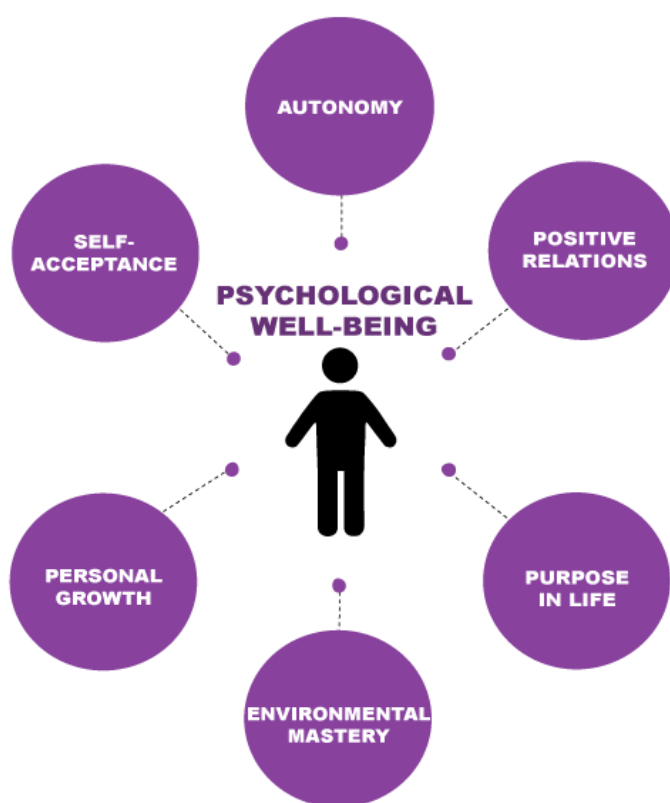


Figure 2.1 Change at the individual level: Ryff's (1989) model of psychological well-being

*Self-acceptance* comes from the importance of positive self-regard, but it further draws upon the formulation of ego integrity and individuation process, which also promotes self-awareness. Going beyond the notions of self-esteems, there is a need for awareness and acceptance of both the individual's strengths and weaknesses. Having a *purpose in life* is an important aspect of the

theoretical foundations upon which Ryff built her model. Creating meanings and having directions in life are integral in moments of suffering (Frankl & Lasch, 1992; Sartre, 1956) and in the search for a more reflective stance towards life (Allport, 1961; Jahoda, 1958). Achieving **environmental mastery** requires the individual to reach out beyond the self and making an impact on his environment. Environmental mastery is distinguished by the search or creation of an environment in accordance with one's own psychological capacity and demands. Similar to Maslow's self-actualisation, **personal growth** involves the ongoing process of reaching one's full potential, with a sense of flexibility; this is defined by Rogers (1962) as an 'openness to experience' that will allow development, as opposed to a linear and fixed process. **Autonomy** represents a sense of independence (similar to autonomous functioning by Maslow, 1968) and personal standards – as demonstrated in the internal locus of evaluation, both in thought and actions, as proposed by Rogers (1962). Autonomy refers to a departure from social norms, or the process of turning inward in the later years of life. The promotion of **positive relationships** is important to well-being, according to Ryff (1989a), as it utilises the individual's capacity for interpersonal characteristics such as empathy and affection.

When applied to the IDS experience, PWB dimensions need to be further interpreted. There is evidence showing how the six factors are related to both intercultural-ness and doctoral-ness. For example, there is a relationship between the international students' transition and social support (Mallinckrodt & Leong, 1992; Mori, 2000; Yeh & Inose, 2003), as well as relationships with supervisor and peers (McAlpine & McKinnon, 2013; Thompson et al., 2005), which can be related to PWB factors such as **positive relationships**. Though different in nature, knowledge of the wider cultures plays a significant part for both international students (Kurman & Ronen-Eilon, 2004) and doctoral students (K. H. Hunter & Devine, 2016), and can contribute towards **personal growth** as well as **environmental mastery**, showing compatibility between SCA-T and PWB-M. As part of the two theories in this thesis to conceptualise the experience at the individual level, SCA-T highlights the experience of socio-cultural and academic learning, while PWB forefronts the individual's growth in seeking meaning and self-actualisation. The SCA and PWB factors are not entirely exclusive, with SCA concepts such as **interpersonal communication** and **ecological adaptation** exhibiting overlapping components with PWB factors. However, conceptually, SCA factors situate the tested skills in specific socio-cultural scenarios, such as 'Interacting at social events', or 'Adapting to the noise level in my neighbourhood' (J. Wilson, 2013). In this sense, many PWB factors are more concerned with affects, such as 'I know that I can trust my friends, and they know they can trust me', or 'I have difficulty arranging my life in a way that is satisfying to me'.

Furthermore, much like SCA-T, PWB dimensions are not entirely separated from the social and contextual levels. As a result, both socio-cultural and psychological dimensions are also framed by the environment. This well-being theory is the second of the two lenses through which research can capture the changes within the individual, in this case their well-being aspect. The decision to utilize Ryff's PWB has both strengths and limitations. The multi-dimensional model of psychological well-being allows the current study to work from a conceptualisation of well-being that identify effort to overcome challenges as an important part of the doctoral journey. However, van Dierendonck (2004) questioned the six-factor structure for well-being on the basis of low comparable fit indices, i.e. its construct validity. Despite this criticism, the six-factor model has been shown to work better in comparison to other alternative models of well-being (Ryff, 2013; Springer & Hauser, 2006)

In relation to the current thesis, an important aspect of the IDS experience that is not explicitly captured in Ryff's PWB-M is intercultural adaptation. The particular aspect of moving between cultures, and of learning as a coping strategy, is more explicitly captured by the SCA-T, which belongs to the cognitive and behavioral domains (Ward & Kennedy, 1999). As a result, the combination of these two theories to conceptualise the IDS experience at the individual level completes the affectual, behavioural, and cognitive domains of change.

## 2.5 Chapter summary

Chapter Two has provided a discussion on the dichotomies in the field of health and well-being and argued for a salutogenic and eudaimonic conceptualisation as relevant to the IDS experience. To address the changes in IDSs which occur at the individual level, the combination of the SCA-T and the PWB-M offers a significant contribution towards empirical investigation of this complex experience. The core argument of this literature review, however, remains that both individual and contextual levels play a role in the IDS's developmental process, thus highlighting the need for a better understanding of how an individual's development can be situated in larger contexts.<sup>3</sup>

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<sup>3</sup> I would like to thank my colleague, **Zibah Nwako**, whose work on the subjective *wellbeing* (spelt here as she would have preferred) of female students in Nigerian universities has lead us to share countless intellectual discussions.



# Chapter Three

## Looking through the eco-developmental lens

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Irrational! we are told. How can new being come in local spots and patches which add themselves or stay away at random, independently of the rest? There must be a reason for our acts, and where in the last resort can any reason be looked for save in the material pressure or the logical compulsion of the total nature of the world? There can be but one real agent of growth, or seeming growth, anywhere, and that agent is the integral world itself. It may grow all-over, if growth there be, but that single parts should grow per se is irrational.

(James, 1995, Lecture VIII)

### 3.1 Chapter overview

Chapters One and Two have explained that both contexts and individual development are integral to the IDS experience. They demonstrated the importance of a conceptualisation that takes into account both academic and cultural adaptation, as well as the individual's thriving and well-being. As students enter the new environment, they actively evaluate changes at different levels and respond accordingly. Empirical literature shows that to face these challenges, students draw from a wide range of resources available both at individual and contextual levels. This helps them to develop as individuals and better equip themselves with new skills and knowledge.

In this light, the first part of the literature review (Chapter One) identified the relevance of the culture learning approach to IDS's adaptation. The second part of the literature review (Chapter Two) has argued for the individual's progress to fulfil their potential and thrive as an integral part of the IDS's psychological dimension, thus presenting a case for the role of (eudaimonic) PWB. To address the contextualised dimension of these elements, Chapter Three is structured to cover two main aims. The first aim is to provide an overview of the central concepts in the [Ecological Systems Theory](#) – specifically its [Person-Process-Context-Time](#) version – by Bronfenbrenner (1979, 1993, 1995). The remainder of the chapter brings together SCA-T, PWB-M, and EST to support a richer conceptualisation of the IDS experience: the second aim. This chapter will put forward the full theoretical conceptualisation underlying my thesis, as I argue that research should acknowledge the doctoral journey of intercultural students as a human developmental process.

### 3.2 Adult development: The developing person and their ecologies

The person, and not the environment, is the center of later iterations of Bronfenbrenner's bio-ecological model of development. To some extent this reflects acceptance by mainstream researchers of many of Bronfenbrenner's critiques of the decontextualized study of development and the plethora of ecologically sensitive and contextually grounded studies instigated in response to Bronfenbrenner's (1979) work. Bronfenbrenner's concerns for the field of development had moved on. Bronfenbrenner was now worried that researchers had lost the developing person in their study of context.

(Darling, 2007, pp. 207–208)

For an IDS, new environments can result in changes to aspects of health, as well as changes in their capacity to balance both negative and positive experiences. As we have discussed, the individual, contextual, and process levels are all essential to the IDS development. Kaczan (2015) found that an ecological approach that situates PhD students in larger contexts will capture the complexities of the doctoral journey. Specifically, for both personal and professional growth, Kaczan suggested looking at intra-personal (within- and between- individuals), interpersonal, institutional as well as wider contexts (Kaczan, 2015). In contrast to stage theories, the eco-developmental lens conceptualises human development as a social affair. Epistemologically, this position could potentially align with the conceptualisations of doctoral-ness and international-ness of the IDS experience as social processes of learning.

### 3.3 Person, process, context, and time: Bronfenbrenner's ecological systems theory

The ecology of human development is the scientific study of the progressive, mutual accommodation throughout the life course between an active, growing human being and the changing properties of the immediate settings in which the developing person lives. [This] process is affected by the relations between these settings and by the larger contexts in which the settings are embedded.

(Bronfenbrenner, 1986, p. 188)

Bronfenbrenner's [Ecological Systems Theory \(EST\)](#) (Bronfenbrenner, 1979, 1993, 1994, 1995; Bronfenbrenner & Morris, 1998, 2006) is a well-known body of work in the field of developmental psychology, which was still developing upon his passing in 2005 (Tudge et al., 2009). Bronfenbrenner's body of work truly reflects his self-reflective approach as a developmental theorist, as he himself explains, "I have been pursuing a hidden agenda: that of re-assessing, revising, and extending—as well as regretting and even renouncing—some of the conceptions set

forth in my 1979 monograph” (Bronfenbrenner, 1989, p. 187). This reflexivity means that there had been many changes to his original theory up until 2005.

Tudge and colleagues (2009) note the attention on *contexts* in Bronfenbrenner’s early theory (depicted by the systems), as well as the shift of focus to include the role of *the developing person* in his later self-criticism (Bronfenbrenner, 1989). What remains at the heart of his work is the attention to contextual factors, which in later versions play an important role in the *person-context interrelatedness*. In other words, both contexts and the individual are important to development, as depicted in the interactions between aspects of the developing person and aspects of their contexts. This interrelatedness also shifts the spotlight towards the concept of *proximal processes*, in which these aspects are said to intertwine (Bronfenbrenner, 1994, 1995, 1999; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Morris, 1998). As a result, in order to understand the different versions of EST, and why I only borrow specific aspects of the earlier theory in this study as opposed to the latest version, we need to first consider the important concepts of (1) [the context \(systems\)](#), (2) [the developing person](#), and (3) [the proximal processes](#).

First, the EST consists of five different systems that represent [context](#) (See Figure 3.1) (1) [Microsystems](#), (2) [Mesosystems](#), (3) [Exosystems](#), (4) [Macrosystems](#), and (5) [Chronosystems](#).

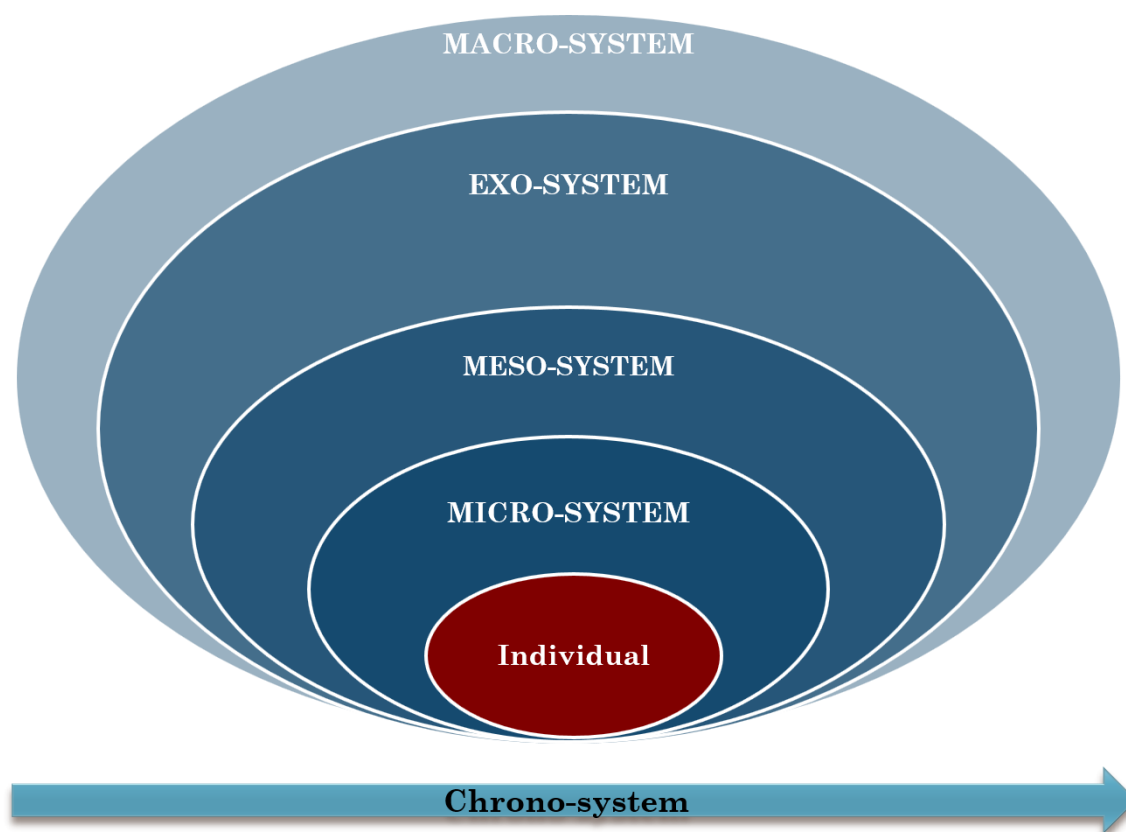


Figure 3.1. Bronfenbrenner's Ecological Systems Theory

In Bronfenbrenner's own words, "the ecological environment is conceived as a set of nested structures, each inside the other like a set of Russian dolls" (Bronfenbrenner, 1994, p. 39). The **microsystems** consist of immediate settings containing the developing person. This is where proximal processes happen to produce development (e.g. PhD community, supervisory relations, family). The **mesosystems** are where the linkages between two or more microsystems happen (e.g. interactions between PhD community and family members). The **exosystems** take the processes another step broader, acknowledging the interactions between two or more settings, at least one of which does not immediately contain the developing person (e.g. their children's school, their partner's workplace, etc.) but still has indirect knock-on effects on the person through other people within their microsystems. The **macrosystems** indicate the patterns inherent within the other four systems, but we are specifically concerned with patterns guided by cultural belief systems or larger bodies of knowledge (e.g. academia or host country). In his later work, Bronfenbrenner included a fifth system, the **chronosystem**, accounting for the attribute of both the developing person and the changing environments over time. This final system is more complex than just indicating the growth of the individual, as it takes into accounts the way growth between two individuals can differ greatly depending on the ever-changing socio-historical context in which it is happening (e.g. a divorce or an illness). It is important to note that even though the Chronosystem is important to development, it is not part of the current thesis due to my focus on the individual's perception of their own growth during the PhD, rather than explicitly investigating significant events in their life.

Second, it is noted that throughout the self-critique and development of his theory, Bronfenbrenner recognises the importance of the active role the developing person plays in changing their context. This is done through three different types of characteristics that the individual possesses: (1) **demand** (e.g. age, gender, physical appearance), (2) **resource** (e.g. mental, emotional, social, and material resources available), and (3) **force** (e.g. drive, motivation, persistence). In a passive manner, the individual can change their context simply by being in it, and proximal processes will rely on their *demand* characteristics. In a more active manner, the individual can change their surroundings through their use of available resources (*resource* characteristics), and/or their motivation to make those changes (*force* characteristics) (Tudge et al., 2009). For example, instead of being a passive participant in their new environment, the developing person (here, a doctoral student) can take actions to change their communities, inter-personal relations, and family practices through a desire to self-develop and thus he or she is able to acquire new resources.

Third, the EST focuses on the progressively complex interactions – which Bronfenbrenner referred to as **proximal processes** – between the “active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate environment surrounding the child and impacting its development process” (Bronfenbrenner, 1994, p. 38). Right from the beginning, Bronfenbrenner developed his theory partly based on Kurt Lewin’s (1935) classical field theory behaviour formula,  $B=f(PE)$ , where behaviour (B) is the result (f) of interaction between person (P) and environment (E). In EST, (E) is depicted as **context** through the nesting systems. In terms of processes, we often find his theory depicted in a set of circles and arrows that represent the interaction (processes) between the individual in the centre and their surrounding contexts.

In order to achieve a conceptualisation that fully encompasses person-context interrelatedness over time, the later version of EST, named the **Process-Person-Context-Time model (ppct-EST)** (Bronfenbrenner & Morris, 1998, 2006) is introduced. This version of the EST takes into account these four named elements of the individual’s development (Tudge et al., 2009). The developing **person** element of the model remains linked to the three main types of characteristics (*demand*, *resource*, and *force* – as described above). The **context** element refers to the five ecosystems. In the ppct version, **time** encompasses temporal changes in the person’s contexts. However, **time** is expanded into its own dimension, with micro-time, meso-time, macro-time (previously called chrono-system) (Bronfenbrenner & Morris, 1998). In this manner, **time** is an integral dimension to development also because it reflects consistency and/or change across systems. Additionally, in the ppct-EST, the concept of **process** is conceptualised as proximal processes, which refer to the interactions with either other people or inanimate objects that stimulate learning and thus result in cognitive and social changes.

While EST sheds light on personal development within social contexts, specifically in the role of larger and interrelated structures in shaping human development, the theory is not without limitations (Houston, 2017). Though a well-known developmental theory, the EST remains a complex theoretical approach, and it is a simple task to fully apply the full theory to a single research alone. The strength of the theory is its ability to capture the complexities of human development as a social affair, but this also means that empirical research is limited in correctly implementing all of EST’s central concepts through data collection and analysis, as Bronfenbrenner did not specify any methodological guidelines in relation to his theory (Tudge et al., 2016).

While the current study is not using the complete and complex version of ppct-EST as a guide for data collection (which is often recommended for developmental research), I borrow heavily from this developmental framework in the analysis to draw out the individual level (e.g. looking at age and gender in quantitative strand) and contextual levels of the IDS experience (e.g. exploring changes and interactions with eco-systems in qualitative strand)—specifically the nested ecosystems and the emphasis on the developing individual. As Tudge and colleagues (2009) argue, “Thus, in order to implement a study that is guided by bioecological theory, all four elements of the model should be present” (p. 200), and “partial tests are, of course, possible, but should be identified as such as it is impossible to treat a study as being based on the mature version if its design does not involve a focus on the critical element of proximal process” (p. 201).

In this thesis, given the complexities of this dimension in ppct-EST, it is important to note two main points: First, that Bronfenbrenner’s EST, the third and final theory in the theoretical framework, was incorporated after the data collection, with the purpose to address the complexity of the contextual elements in the data; Second, that not all four elements of the ppct-EST are included in this study, so this thesis does not claim to use the full nor latest version of the bioecological system theory. In this sense, *time* is only partially reflected through the longitudinal design that captures (a) specific changes within the person through questionnaires and (b) perceived changes in larger systems through interviews. At the same time, *proximal processes* do not feature in the data collected in this study, and the characteristics of the *developing person* are dictated by two previous theories of SCA and PWB as described in Chapter One and Chapter Two, respectively. The *contexts*, or ecological systems, are what being incorporated into the final theoretical framework to approach the data and address the complexity of the IDS experience.

### **3.4 Final theoretical framework and research questions**

The core argument of the literature review rests upon the gap identified within the research: namely, understanding IDS developmental process. At the heart of this research problem is the need to conceptually and methodologically capture the individual and contextual levels of this process. As I have proposed, for development at the individual level, SCA-T and PWB-M can be combined to capture changes of affect, behaviour, and cognitive dimensions. To situate the IDSs’ development in the larger contexts, EST is relevant in that it encapsulates the contextualised nature of the doctoral journey as both a developmental and social process. As described, the interrelatedness of the eco-systems and their interaction with the developing person applies to the IDS experience in a dynamic manner, especially as I previously argued that students arrive with

previous knowledge and skills as part of their resources. The final theoretical framework is visualised in Figure 3.2.

This framework allows research to address more specific elements of the IDS experience.

**RQ 1.**

Is PWB associated with SCA in IDS experience?

**RQs 2-3.**

How are different ecological and individual factors associated

(2) with PWB?

and

(3) with SCA?

**RQs 4-5.**

How does the effect of time in the PhD (*Doctoral time*) on

(4) on PWB vary by individual and ecological factors?

and

(5) on SCA vary by individual and ecological factors?

**RQ 6.**

In terms of PWB and SCA aspects, what are the ways in which IDSs interact with their ecologies?

**RQ 7.**

Personally and professionally, how do IDSs develop as an individual through these interactions?

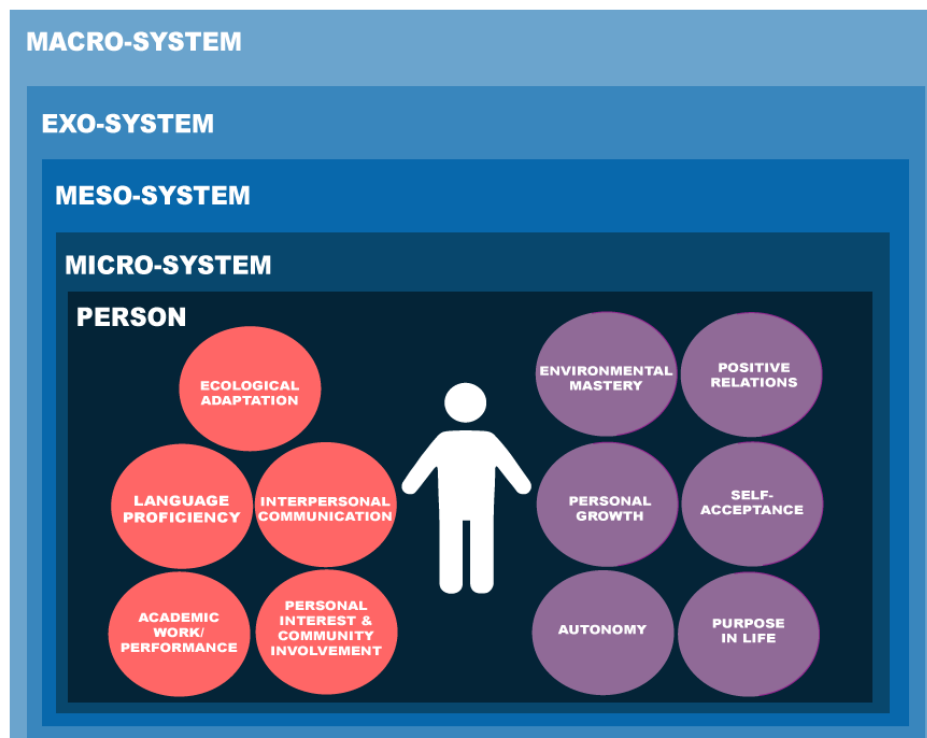


Figure 3.2 Combined theoretical framework

As the fourth research objective, this thesis also aims to evaluate the fit of this theoretical framework to capture the IDS experience throughout the research process and the findings. At this stage, a point to consider is the epistemological position of each theory/model. More specifically, we must consider that EST, SCA-T, and PWB-M have been developed to understand different phenomena. EST, for example, places importance on a biological element that is inseparable from human development, yet this thesis does not focus on this aspect. Instead, to replace the biological intra-personal changes, SCA-T and PWB-M are used to depict affective, behavioural, and cognitive dimensions. What aligns these theoretical bodies of work together is their common epistemological stance at a more macro level: these phenomena are embedded in social interactions between the individual and their contexts. Not only should the combined theoretical framework be evaluated in terms of its fit for the phenomena, but also for the population of interest and the proposed research methodology.

An essential aspect of this thesis is my position with regards to how these questions are addressed using a combination of mainly Eurocentric theories to explore the experience of participants coming from all over the world. Historically, mainstream psychological theories and practice have been criticised for having been “developed by and for the White, middle class” (D. R. Atkinson et al., 1979, p. 13). As a result, this monocultural perspective leads to a potential lack of intercultural relevance (Sue, 1981). There is indeed a dearth of well-established theoretical models that would represent a different set of values.

I argue, however, that while research methodology is embedded in philosophy, the theoretical lens must also connect to philosophical underpinnings. For instance, I have explored the theoretical and philosophical debate between the different manners in which research has conceptualised well-being and well-ness, which resulted in the decision to use Ryff’s model of PWB. Furthermore, regardless of the origin of a theory, it is still important to be aware of the assumptions held by one’s chosen theoretical frameworks, in order to understand how they came to be, and how they may influence our perception of the world and the way we approach it with research. This is the practice of questioning taken-for-granted knowledge, and this should be done throughout any research project and for any given theory. For instance, the practice of operationalising human behaviour, affect, and well-being using quantifiable measurements is the result of Eurocentric psychology’s identification with the natural sciences (Bulhan, 1985), as well as its approach to see individuals as subjects of experiment. These points of view are often taken for granted as being scientific and quantifiable, and they rest on the bedrock of Western ontological



and epistemological fundamentals. Every research approach, and every theoretical framework has its own limitations. The important task as a researcher is to be aware of these limitations, specifically in applying them to different contexts.

As my participants are students from many different countries, it is not surprising for each individual to adhere to different ways of life, and, thus, they may have different goals and adaptation strategies. The limited assumption of some adaptation theories, as clearly stated in the previous section, is that complete assimilation is often assumed as the final goal of a sojourner. The push to move away from that simplistic view is not only evident in the literature I have synthesised, but also my own approach to capturing adaptation *not* by focusing on the ‘fit’ between the student and their host culture but on their strategies to negotiate between internal and external/ecological forces while maintaining their PWB.

This is further embedded in my decision to move away from the assumption that IDSs are automatically facing ‘challenges’ in host countries, due to their unique circumstances. As I have argued, their challenges are not unique in their existence, but are unique by their nature, which could be said about any challenge by any group of people: every individual faces negotiation between who they are and the environments in which they live, and the nature of their challenges, if any, depends on a complex array of individual make-up. At the same time, I have argued that while many may share the same factors that facilitate or hinder their growth, every individual has their own perception of their personal development. With the help of the theoretical framework, the current study further supports this argument through the longitudinal mixed methods methodology (see Chapter Four).

### **3.5 Summary of literature review**

Firstly, the first three chapters have analysed the relevant literature in four different fields in order to address the complexities of the IDS experience: doctoral education, intercultural adaptation, well-being, and developmental psychology.

Secondly, the literature review has laid the theoretical groundwork that underlines the current study. The core argument is built upon previous research, drawing out the multi-dimensional and multi-level natures of the IDS experience. Among its various dimensions, affect (psychological), behavioural and cognitive (socio-cultural) stand out as most relevant to an IDS. At the same time, research evidence and the vast amount of previous conceptualisations show that both individual and contextual levels play important roles to both the doctoral-ness and international-ness of the experience.

Thirdly, Bronfenbrenner's portrayal of the complex picture of human development allows us to take a step closer to a conceptualisation that can support the enquiry into the IDS experience. EST recognises the importance of both the individual and their contexts in the developmental process, as well as their interactions, and this conceptualisation can re-shape the focus of the enquiry to converge around the research questions. Having arrived at the research focus through reviewing the literature, the next part of the thesis draws out the similarities between pragmatism as a philosophical stance and the IDS experience.

# Chapter Four

## Pragmatism

### and mixed methodology

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What we say about reality thus depends on the perspective into which we throw it. A sensation is rather like a client who has given his case to a lawyer and then has passively to listen in the courtroom to whatever account of his affairs, pleasant or unpleasant, the lawyer finds it most expedient to give.

Hence, even in the field of sensation, our minds exert a certain arbitrary choice. We receive in short the block of marble, but we carve the statue ourselves.

(James, 1907)

#### 4.1 Chapter overview

Every human being carries assumptions about the world they live in. It is unrealistic to assume and demand that any human researcher can maintain an absolutely objective – or value-free – stance towards any phenomenon. The way we choose to approach and study a knowledge phenomenon, as well as how we carry out the investigation, may influence the outcome through our inherent individual differences, and our culture and beliefs. This is the reason why coherent philosophical underpinnings are essential to guiding scientific endeavours.

Chapters One, Two and Three have explored the IDS experience as the focus of my research, focusing particularly on the contextual and individual levels. I then presented the research questions that this thesis aims to address. Chapter Four will define my philosophical stance, which informs the methodology and how it interacts with the research focus. The current chapter will analyse the philosophical tenets of [pragmatism](#). As I discuss the integral roles of [knowledge](#), [continuity](#), [change](#), and [experience](#) in pragmatism, I will argue that these concepts are central elements to an individual's psychological development. Moreover, they also underline my longitudinal mixed methods research design.

Following the philosophical and methodological discussion, this chapter will provide a detailed description of the procedures of the pilot and its contribution to both the quantitative and qualitative strands. In discussing the main study's data collection strands, with their individual strengths and weaknesses, I also discuss the main ethical concerns and how they have been addressed during the study.

## 4.2 The philosophy of pragmatism: More than just being pragmatic

A belief was not a mental entity which somehow mysteriously corresponded to an external reality if the belief were true. Beliefs were ways of acting with reference to a precarious environment, and to say they were true was to say they were efficacious in this environment. In this sense the pragmatic theory of truth applied Darwinian ideas in philosophy; it made survival the test of intellectual as well as biological fitness.

(Kuklick, 1981, p. xiv)

A few years ago, during a training workshop for academic staff, I had the opportunity to talk to a much more senior member of the university. Upon learning the crux of my research, the professor made friendly conversations by sharing that their department had experienced retention issues in one of their doctorate programmes. Specifically, they believed it was related to aspects of their students' mental health. Listening with great interest as he reported their observations, I learned that their student mental health had experienced decline in recent years, and the department had made many attempts to address this issue, with unsatisfying results. At the end of the story, the professor expressed their frustration with a shrug, "I know I should not be saying this, but sometimes we think that it's a millennial thing." I wish I could say now that I had suggested any useful or intellectual response to their issue. Instead, I could only offer, "I'm not sure if it matters whether it's a millennial thing or not, because even if it is, there's probably not much the department can do about that." The conversation ended with polite shrugs, perhaps for the better, but it stayed with me for a long time. This brief conversation has allowed me to re-confirm where my personal beliefs and my positionality as a research stand in this entanglement between reality and knowledge.

*Was the decline in their students' mental health a millennial problem?* – A question of reality.

*How do we find out if it was a millennial problem or not?* – A question of knowledge and method.

*If it was a millennial problem, how would this knowledge be used?* – A question of pragmatism.

While the function of a belief is an integral part of [pragmatism](#), it is not the only principle in pragmatism's approach to knowledge. To fully understand the pragmatic approach to the knowledge/epistemological problem, we must explore its central concepts. In the next two sections, I will,

- (1) Explain how some of the main concepts in pragmatism – knowledge, continuity, change, and experience – are related to the doctoral journey;
- (2) Connect pragmatism and mixed methodology and lay out the arguments for the mixed methods approach.

#### 4.2.1 Pragmatism and the doctoral journey: The nature of knowledge

At the core of every scientific enquiry, the scientist is required to ask themselves a series of questions related to the work they are going to produce. The questions may vary across different projects and disciplines, but the spirit should remain. What am I researching? Why am I researching this? How am I going to research this? Essentially, it boils down to the researcher's awareness of their theoretical and philosophical assumptions (Remenyi et al., 1998). Underlying and guiding these questions in research are the debates around the philosophical beliefs about **being** (ontology) and **knowing** (epistemology). Historically, early pragmatists like William James were dealing with two major philosophical positions of their time that required mediating: **realism** and **relativism**.

Ontologically, realists believe that reality is external. Realists, such as positivists, identify meaning as something inherent within external objects, whose existence is outside of and independent of the knower (Cohen et al., 2012). In contrast to this stance, relativists argue that reality is different from one person to the next, as it is constructed through consciousness; meaning is constructed through the interaction between consciousness and the world (Guba & Lincoln, 1994). Given these opposing positions regarding reality, one of the most important aspects of research is the extent to which one can accept and navigate among the different conceptions of **truth**: universal truth and relative truth.

Epistemological positions that result from realist ontologies such as **objectivism** see the nature of knowledge as being closely aligned with experiment, accuracy, and truth. It dictates that no scientific knowledge should be excused from a rigorous and scientific investigation. Its epistemology (how we know what we know), therefore, represents a strong belief that knowledge and/or meaning is to be discovered using strict scientific methods, and not to be constructed. As Crotty claims, objectivists believe “objects in the world have meaning prior to, and independently of, any consciousness of them” (Crotty, 1998, p. 27).

This point of view does not necessarily deny the constructed knowledge and personal opinions which are characteristic of human beings, but rather claims that these constructs should not be confused with scientifically established facts. The objectivist approach is key to the dominant paradigm of **positivism**, in which a positivist researcher is required to keep in mind the distinction between the two types of knowledge, objective and subjective, and to strive towards the former (Crotty, 1998). While remaining a dominant paradigm in research, positivism is often criticised for being indifferent towards individual subjectivity and also towards the role that consciousness plays in constructing the social world (Jupp, 2006).

With caution, William James – a prominent psychologist and pragmatist philosopher – offered these remarks on the two philosophical “contrasted mixtures”.

***The tender-minded***

Rationalistic (going by 'principles'), Intellectualistic, Idealistic, Optimistic, Religious, Free-willist, Monistic, Dogmatical.

***The tough-minded***

Empiricist (going by 'facts'), Sensationalistic, Materialistic, Pessimistic, Irreligious, Fatalistic, Pluralistic, Sceptical.

[...] They have a low opinion of each other. Their antagonism, whenever as individuals their temperaments have been intense, has formed in all ages a part of the philosophic atmosphere of the time. It forms a part of the philosophic atmosphere to-day. The tough think of the tender as sentimentalists and soft-heads. The tender feel the tough to be unrefined, callous, or brutal.

(James, 1907)

Indeed, for many thinkers, the ongoing debates between the two sides can be ‘interminable’, and some believe that the solution to epistemological debates would be to test the truth of an idea in practice – in other words, through [experience](#) (Kloppenber, 1996, p. 101). In this regard, to address the epistemological problem of truth (How do we know a belief is true?), early pragmatists embedded truth and knowledge in inquiry and practice. Charles Sanders Peirce – a scientist often credited as one of the founders of pragmatism – believed that in the long term, the truth should be agreed upon by those who investigate it scientifically, as truth is a result of inquiries (1878). At the same time, Peirce’s emphasis was on the effects of knowledge on scientific practice:

The real, then, is that which, sooner or later, information and reasoning would finally result in, and which is therefore independent of the vagaries of me and you. Thus, the very origin of the conception of reality shows that this conception essentially involves the notion of a *community*, without definite limits, and capable of a definite increase of knowledge.

(Peirce, 1868, p. CP 5.311)

Situating [knowledge](#) in scientific practice and communities, Pierce highlighted the nature of scientific knowledge as constantly evolving through inquiry and new evidence, thus signifying the concepts of [continuity](#) and [change](#). Shusterman (2010) eloquently connected aspects of change, continuity, and experience together, explaining that “the idea of a changing world also implies the important pragmatist idea of fallibilism: that our currently warranted beliefs or established knowledge are always subject to improvement or revision in light of future experience” (p.60).

At the core of pragmatism is the grapple with truth and knowledge, much like its philosophical counterparts. However, we can see similarities between the pragmatist approach to knowledge and the nature of knowledge in doctoral education. As previously discussed, as the individual crosses

ontological and epistemological thresholds, *continuity* and *change* reflects doctoral pursuit of knowledge. Furthermore, doctoral training and the individual's ontological as well as epistemological positions are further reflected in the concept of *experience*, conceived as "the intersection of the conscious self with the world" (Kloppenber, 1996, p. 104). Much like the active role of the doctoral student in the pursuit of knowledge, *knowledge*, as viewed by Dewey, is the result of the individuals actively adapting to their environment (Pernecky, 2016). In contrast to interpretivism's need for understanding the subjective meanings of individuals within the studied contexts (Weber, 1978) and its dependence on the constructivist ontology (Orlikowski & Baroudi, 1991), pragmatism highlights the importance of the individual taking action as a way to change existence, guided by individual purposes and knowledge (Dewey, 1931). In other words, the individual changes existence – both themselves, and their contexts – through taking actions and seeking knowledge. This mirrors the conceptual argument presented by the thesis' theoretical framework, as we put the developmental process at the heart of the IDS experience. As a result of this difference, instead of knowledge being an accurate 'copy' of reality, pragmatist approach to research views inquiry as 'a natural part of life aimed at improving our condition by adaptation and accommodations in the world' (Cronen, 2001, p. 20). Thus, we create knowledge for the sake of change and improvement, as knowledge will allow for an advancement in practice. I argue that the pragmatic central concepts reserve both the nature of contextual and individual dimensions of development. Pragmatism, therefore, allows for a strand of research that not only captures the individual's effort to change and adapt, but also their progress and growth as a result.

They [pragmatists] conceived of individuals as always enmeshed in social conditions, yet selecting what to attend to from the multiplicity of conscious experience, and making history by making choices. They conceived of experience as intrinsically and irreducibly meaningful, and they insisted that its meanings were not predetermined or deducible from any all-encompassing pattern. They argued that meanings emerge as cultures test their values in practice.

(Kloppenber, 1996, p. 104)

The pragmatic approach is inherent in everyday life. Like positivists, pragmatists have the curious drive to learn about reality. At the same time, pragmatists are strongly aware of the nature of scientific knowledge. Emerging from inquiries, it is constantly challenged, thus changes and evolves with every (1) new evidence, and (2) new problems for which we need new solutions. Knowledge serves a purpose, and it is important for researchers to recognise that the reality of human phenomena is complex, and our methods need constant advancement.

James further refined **knowledge** and **experience** using the idea of **utility** – or applicative success in life. To a pragmatist, a hypothesis should not be rejected if it is useful in practice. When we pay further attention, we see that underlying this approach is the understanding that scientific knowledge evolves with new evidence that is embedded in practice (**continuity** and **experience**), and they serve other purposes alongside representing ‘reality’.

I had opposed tough-mindedness to tender-mindedness and recommended pragmatism as their mediator. [...] On pragmatic principles we cannot reject any hypothesis if consequences useful to life flow from it. Universal conceptions, as things to take account of, may be as real for pragmatism as particular sensations are. They have indeed no meaning and no reality if they have no use. But if they have any use, they have that amount of meaning. And the meaning will be true if the use squares well with life's other uses.

(James, 1907)

Pragmatism's focus on practical success does raise an array of questions regarding what is considered as ‘truth’ by a pragmatist. Philosophical questions in relation to the nature of truth, or the approach to and pursuit of knowledge, are answered in pragmatism with regards to the practice and application of knowledge in real life, thus situating these philosophical questions in the “realm of experience” (Bacon, 2012, p. 4). Dewey's (Dewey, 1931) emphasis on the individual's experience and thus the process of **continuity** and **change** – as opposed to “static and absolute states of being” (Hein, 2006, p. 187) – foregrounds the individual agency and their interactions with structural forces, as his system of philosophy is “wholly in process, movement, and change—as nature itself is—and that grows, emerges, and evolves” (Sleeper, 1988, p. x). Pragmatism, therefore, accommodates my approach to scientific inquiries into the IDS experience as a process of human development, specifically since the process during which IDSs interact with their ecologies, and both they and their environment(s) can potentially change as a result.

In summary, pragmatists do not cherry pick philosophical tenets, nor do they take reality and knowledge production lightly. Pragmatism, at its core, values the fundamental purposes of knowledge: to reflect reality and to serve its function in the world. Towards the former, pragmatists hold accountable knowledge claims, as all knowledge is only as capable of reflecting reality as its empirical instrument allows. Towards the latter, pragmatists identify experience, utility, and the changing world as important to pursuits of knowledge. In connection to doctoral education, pragmatism's central concepts of knowledge, continuity, change and experience can support the crossings of epistemological thresholds that each individual will experience.



#### 4.2.2 Pragmatism and the mixed methods approach

Pragmatism's frontrunners like Pierce and James received backlash from their philosophical counterparts, sometimes due to misunderstanding the concepts they supported. James expressed his frustration regarding critics who misunderstood (and, indeed, continue to misunderstand) pragmatism.

These pragmatists destroy all objective standards, critics say, and put foolishness and wisdom on one level. A favourite formula for describing Mr. Schiller's doctrines and mine is that we are persons who think that by saying whatever you find it pleasant to say and calling it truth you fulfil every pragmatistic requirement.

(James, 1907)

Pragmatism is misunderstood in more than one way. Studying the historical development of pragmatism, Rescher (2012) commented that there is an increasing tendency for pragmatism to be used as a pathway for subjectivism to build towards a more subjectivist position on assessing and validating. That is not the pragmatist approach to inquiry. Even though sceptical pragmatists such as Richard Rorty do completely deconstruct global and normative concepts like truth and validity, which may resemble more postmodern approaches, pragmatism does not disregard these concepts. As James argued against his critics, "the pragmatist more than anyone else sees himself to be, between the whole body of funded truths squeezed from the past and the coercions of the world of sense about him, who so well as he feels the immense pressure of objective control under which our minds perform their operations?" (James, 1907). In other words, stuck between the truths constructed through the accumulation of knowledge, pragmatists are the ones who remain critical and systematic about truth and the scientific inquiry. Not only do they critically re-evaluate these fundamental concepts, but they also propose the pragmatic conditions necessary for verifying hypotheses<sup>4</sup>.

Cornish and Gillespie (2009) argued that the pragmatist approach allows research to be situated beyond the realism-constructionism divide, by acknowledging the plurality of knowledge and simultaneously focusing on the individual's application and consequences of knowledge. The aim of the current research is not only to focus on the nature of IDSs' transition from one culture to another, but also to explore its relations, whether positive or negative, to aspects of their well-being. I find that it is difficult to reconcile the different ways health and well-being, in general, are perceived. For instance, statistics often finds individual and contextual variations, which implies that the experience may affect the individuals differently, across different time and contexts, and

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<sup>4</sup> I would like to thank my colleagues, **Leanne Cameron** and **Anisha Shanmugam**, for many thoughtful philosophical discussions.

depend on their gender, culture, or other individual characteristics. In such cases, claims that there is only one truth become less convincing, or perhaps the positivist researcher would argue that this one truth is more complex and cannot be captured all at once. If the latter is the case, then should there be any objection to qualitative explorations of individual stories which will allow for deeper understanding of the phenomenon?

We can further see where pragmatism stands among its philosophical counterparts, as Goldkuhl (2012) remarked on its epistemological approach.

The knowledge character within pragmatism is thus not restricted to explanations (key form of positivism) and understanding (key form of interpretivism). Other knowledge forms such as prescriptive (giving guidelines), normative (exhibiting values) and prospective (suggesting possibilities) are essential in pragmatism.

(Goldkuhl, 2012, p. 140)

Pragmatism's appreciation of other knowledge forms reflects and caters for the nature of mixed methods research. Though equally important, research is not only serving human curiosity about the world and reality, but it is also done for the sake of solving specific problems and expanding our practice with new possibilities. If anything, pragmatism does not ignore the importance of reality, truth(s), and knowledge, but further appreciates their value to human life.

In viewing the IDS experience as a process of human development, the investigation cannot ignore the structures that may influence intrapersonal changes during the PhD. Thus, there is a need to statistically examine the patterns that may not entirely be obvious regarding the population of interest. At the same time, as discussed in the previous chapters, it is equally important to pay attention an individual's account and interpretation of their own intercultural transition, and thus this requires having a range of research methods in my design to accommodate both perspectives of inquiry. Through this approach, I hope to understand not only how the changes happen via statistical and story-telling approaches, but also what strategies are successfully used to allow positive development and negotiation during the PhD transition, while maintaining the students' sense of agency. As a result, a mixed methods approach is proposed in line with the discussed research aims and pragmatist paradigm.

Furthermore, in line with a qualitative approach, [communication](#) and [language](#) are among the integral parts of the pragmatic argument. How do we know that our language and set of concepts used to describe the phenomenon in question are adequate and accurate, as well as relevant? [Language](#), according to Dewey and James, both allows and restrains access to knowledge. Language is a proxy through which we can access – though indirectly – ‘truth’, as “all human thinking gets discursified; we exchange ideas; we lend and borrow verifications, get them from one

another by means of social intercourse. All truth thus gets verbally built out, stored up, and made available for everyone. Hence, we must *talk* consistently just as we must *think* consistently” (James, 1907).

As such, for this thesis, my identification with pragmatism serves two main aims. Firstly, it highlights the nature of knowledge as continuous and ever-changing in relation to experience. These concepts also reflect the IDSs’ longitudinal development, rejecting notions of a standstill individual, especially when the pursuit of knowledge and skills is so central to their journey. Secondly, to say that research must merely observe the world and the research object, and nothing more or nothing beyond, is to naively ignore the agency of individuals in applying their knowledge to cope with and to influence the world around them.

As I have presented pragmatism’s critical approach to ontology and epistemology of research, I will now consider how pragmatism guided my mixed methods design in light of my research purpose and questions. My main approach, accordingly, is to utilise the most relevant and feasible ways to answer the research questions, or rather, to fulfil the research aim: to understand the multi-dimensionality of the development of IDSs during their doctorate. This addressed the gap which indicates the need for strong evidence to establish the finding: the difference in the methods of collection and analysis could lead to knowledge claims of different natures – i.e. global patterns and individual perception.

In this sense, I believe that pragmatism embraces and accommodates this notion of relative knowledge and uncertainty. This is done via embracing the idea that both numerical measurements, as well as the individual’s account of their own experience, are equally important, for they provide different aspects of reality – as observed and measured through valid and reliable psychological instruments, and as felt and perceived through the senses of the individual. Therefore, pragmatism is a paradigm that serves as a guide to studying eco-developmental processes through exploring both group similarities and individual variations.

As a result, the mixed methods design addressed the research questions by integrating two methods with the help of the theoretical framework:

- a quantitative strand using PWB and SCA questionnaires and statistical methods to explore their association with one another at individual and ecological levels
- a qualitative strand through interview data from the qualitative strand, in which I looked deeper at their experience through common themes and narratives that demonstrated individual progress through time

### 4.3 Pilot study: Design and results

Prior to the doctoral progression stage, a pilot study was conducted to examine the use of the research methods and tools. The pilot specifically tested the use of the two questionnaires to collect quantitative data, and the use of interviews and online journals for qualitative data.

Quantitatively, I wanted to test whether the two questionnaires (SCAS-R and PWBS) (Appendix VI), the drafted interview schedule (Appendix VII), and the use of an online platform could potentially help to reduce response time, lower the travelling cost, allow for participants to answer in their own time, and for the study to reach a wide range of responders across the UK (Granello & Wheaton, 2004). In the same manner, the pilot sought to explore whether these research tools could be used for the intended sample of doctoral students (e.g. the relevance of the survey items to their experience). The sample for the pilot study was EU and international doctoral students at University of Bristol. Five doctoral researchers filled in the questionnaire; Similar to the main study, in the pilot study I was aiming for an unrestricted age range, as well as participants from different disciplines. The five participants that completed the questionnaire all belonged to the age group 21-30. One participant was in their first year of study, two in their second year, and two in their third year. As previously mentioned, the sample size was not intended for complex statistical analysis work, but mainly for receiving participants' feedback on the research instruments. From this group, one agreed to do an interview and keep a journal for one month, and another agreed to do the interview only.

Qualitatively, interview questions as well as test the platforms for a proposed multimedia journal. With the knowledge that the main study would have a longitudinal design, the pilot tested the use of semi-structured interviews to explore the extent of participants answers to the prompts built upon the SCA-T and PWB-M factors. Semi-structured interviews were also chosen as a method for several benefits. First, acknowledging my own potential positionality partly as an 'insider-researcher' (Smyth and Holian, 1999), I found that having a guiding structure for the interviews could focus all the conversations on similar elements of adaptation and well-being in particular, while allowing for flexibility so each participant to apply these theoretical elements to aspects of their own IDS journey. Second, I was strongly aware of the sensitive nature of the interview on well-being, and of the potential discussion on aspects of life that take the individual away from their original context and put them in a completely new country and new culture. The need consider the participants' feelings and to put them at ease meant I needed to have as much space as possible to allow for building rapport with the participants in the interview, which could be afforded by the semi-structured schedule (Leech, 2002). Finally, as argued in the philosophical

discussion, the knowledge I was seeking in this research is embedded in the experience of the participants. While the theoretical framework provided a structure for me to understand the concepts of adaptation and well-being, the structure of the data, i.e. knowledge on the IDS process, should come from the actual experience of my participants. Thus, semi-structured interviews as a method of data collection allowed for these two structures to come together.

The use of online journal was also built in as part of the reasoning for individual experiences. Theoretically, time, contextual and individual elements were all necessary in understanding the IDS experience of adaptation and well-being. Philosophically, the application of knowledge in everyday life situations and in the new culture was the focus of how pragmatism was applied in this study. More widely used in clinical studies, online journal as a method of data collection could allow for meaningful daily events to be included as part of the data, and for them to be mapped together with adaptation and well-being elements in the data (Le, Shafer, Bartfeld, & Fisher, 2011; Yang & Diefendorff, 2009). This is something semi-structured interviews might not be able to do as they would have been dependent on the timing of the interviews.

The pilot resulted in (1) the decision to go for the second longest version of the PWB instead of the longest one, (2) the shift towards a less structured interview schedule, and the introduction of visual prompts for the first round of interviews (to be described in section 4.4.6), and finally (3) the removal of the third strand (online journal) due to its complexity and the pressure in time for the participant. Ethically, the pilot also highlighted that asking doctoral students to write in an online diary meant adding to their writing responsibilities, resulting in low motivation and a sense of extra pressure on them.

### **Strand 1 – Questionnaire**

The participants completed both Ryff's scale of PWB and SCAS-R through an online system (Bristol Online Survey). The pilot aimed to explore the application of these two questionnaires in the intended sample, along with the participant's feedback. After each section of questionnaire, participants were presented with the opportunity to comment the relevance of the questions and offer possible improvements for the instrument. Their feedback led to the decision to use the second longest version of PWB (14 items per factor - 84 items in total) instead of the main version (20 items per factor). Other information such as disciplines of study, country of origin, and length of PhD study in the UK were not included in the pilot questionnaire. These were, however, included in the main study.

## **Strand 2 – Semi-structured interviews**

Upon the first completion of the surveys, two participants were asked to join an interview with the researcher within a week. The questions used as prompts for the interviews were based on the contents of the questionnaires. The main study used a shorter and less structured version of the interview schedule (see Section 4.4.6), with the additional use of prompt pictures to stimulate further discussion.

## **Strand 3 – Online diary**

One participant agreed to keep a journal on Wordpress.com for a period of four weeks. They were provided with a list of prompts and were asked to update at least 4 entries within the period, using any form of media allowed on the platform that would represent their intercultural experience. However, my aim for the main study was to focus on written text; therefore they were asked to elaborate on any visual or non-written text data that they decided to post. The participant was given a selection of topics/keywords, and they were encouraged to reach a minimum of two entries per month, but they could produce as many as they would like. After discussion with the participant, the online diary strand was removed from the main study, as the participant found it difficult to regularly post relevant themes and emotionally challenging to talk about their mental health in a written format.

Overall, the pilot allowed for reflection of both the research design and instruments. Specifically, while the piloting phase could have done more in exploring the response rate, it supported further thinking with regard to demographic information, semi-structure approach to interviewing, and ethics issues surrounding the demand for time and regular writing from participants whose work already involves an enormous amount of writing. As such, the main study only included longitudinal quantitative questionnaires and longitudinal semi-structured interviews.

4.4 Main study: Research design

Table 4.1 shows the timeline for both strands of data collection over approximately 15 months (April 2017 – June 2018). Each strand spans over 12 months, allowing for adequate time to adjust to participants’ busy schedules.

Table 4.1 Data collection timeline

		Year 2017						Year 2018								
		04	05	06	07	08	09	10	11	12	01	02	03	04	05	06
	Contact gatekeepers	**														
Wave One	Questionnaires	**														
	Interviews			**												
Wave Two	Questionnaires							**								
	Interviews															
Wave Three	Questionnaires								**				**			
	Interviews													**		

## Longitudinal quantitative strand

### 4.4.1 Sample

The questionnaire included requests for demographic information and email contact details. Three months after Wave One (questionnaire) ended, all first-round participants were contacted using their provided email address. Initial response rate was low, with only 25 participants completing Wave Two in the first two weeks. Over the following two months, two further reminder emails were sent. At the end of Wave Two, the dropout rate was 21% as the sample size dropped from 80 (Wave One) to 63 participants. In Wave Three (final wave), two reminder emails were sent, and the deadline for completion was also extended for one extra week. There were 51 participants in the third wave (25% dropout rate).

As the main variables included in the models are English language, Doctoral time, Age, Gender, and Discipline, Table 4.2 introduces these demographic characteristics of participants at Wave 1. These variables will be discussed in more detail in Chapter Five.

Table 4.2 Demographic characteristics at Wave One (N=80)

		<i>M</i>	<i>S.D.</i>	
<b>Continuous predictors</b>	Doctoral time (months)	17.34	10.39	
	Age (years)	30.75	7.15	
		%	%	%
<b>Nominal predictors</b>	English language	38.8	61.2	
		(First)	(Additional)	
	Gender	79.7	20.3	
		(Female)	(Male)	
	Discipline	35.5	46.8	17.7
		(Sciences)	(Social Sciences)	(Arts & Humanities)

### 4.4.2 Sampling strategy and procedure

#### 4.4.2.1 Russell Group universities

The current study used criterion purposeful sampling suggested by Palinkas et al. (2015) to achieve the sample of doctoral EU/International students studying at Russell Group (RG) universities in the UK (Appendix IV). RG universities are research-intensive institutions in the UK, and thus there is a chance that their doctoral environment will be different from the rest of the universities in the UK. Ideally, a random sample of universities should be chosen for the results to be generalisable. However, I was faced with practical challenges: if I aimed to include universities with various levels of research intensity, there would be many factors influencing the analysis, such



as the difference between research environments and strategies at RG universities and other universities, which falls beyond the scope of this thesis.

Additionally, while acknowledging the research-intensive nature of the 24 universities within RG, it is also important to note that research intensity may not be the only difference between RG and non-RG universities. Understanding exactly which university characteristics may influence student experience is challenging. Even within the RG, universities differ in a wide range of factors related to well-being and adaptation, such as diversity in each department. Despite the relevance of context in this thesis, there is not a strong empirical understanding of these aspects in the sector. It is appropriate, then, to focus on one group of universities in this enquiry to try to avoid some of the confounding factors. As a trade-off between internal and external validity, this choice allowed for more consistency within the universities in the dataset, but it limited the extent to which the findings would be generalisable. Regardless, careful consideration is recommended when interpreting the results.

### **Approaching universities**

In the beginning of April 2017, student unions, international offices, and all departmental offices whose contact details could be found from all 24 RG universities were contacted. The email contained the link to the first wave of questionnaire (Appendix V). The aim was to introduce the study to the gatekeepers, so that the questionnaire could be distributed with their help.

Both the gatekeepers and the potential respondents were informed of the different benefits in participating in the research, namely the opportunity to keep track of one's own development in psychological well-being and cultural adaptation over a period of time during the doctorate, as well as the contributions that the research could make to both higher education and its IDS community. Anonymised feedback was also offered in the email to gatekeepers. One student union asked to be informed of the research outcome. Individual incentives were not provided due to a lack of funding.

### **4.4.3 Instruments**

#### **4.4.3.1 Ryff's Psychological Well-being Scales (PWBS)**

As one of the central theories in this thesis, the multi-dimensional model of PWB provides a statistically tested structure with which psychological wellbeing can be quantitatively measured. The six components of PWB follows the corresponding theoretical model previously explained in Chapter Two. As the scale was built upon the theoretical groundwork of PWB, each construct and their psychometric properties have been explored in different populations and contexts (Ryff &

Keyes, 1995; van Dierendonck et al., 2005). There are both strengths and limitations to applying this scale in the current study.

As the six dimensions were theoretically defined by Ryff based on her work on happiness (e.g. Ryff, 1989) and psychological development in adulthood and aging (e.g. Ryff 1995, Ryff & Essex, 1991), 80 items were generated per dimension. These items were then examined based on criteria such as ambiguity and fit with the scale definition, resulting in the original scale of 20 items per dimension with **120 items** in total (Cronbach's  $\alpha$  ranging from .86 to .93, with six-week test-retest reliability .81 to .88).

In the current study, Ryff & Essex's (1992) shortened version with 14 items per dimension was used (a total of **84 items** for PWB score). This shorter version has previously been tested by Ryff and Essex, and all 14-item dimensions were observed to have good reliabilities (Cronbach's  $\alpha$  ranging from .83 to .91) (Ryff & Essex, 1992). The second longest version of the scale was used even though it could result in a higher drop-out rate (given the study's longitudinal nature) due to its length. However, while the internal consistency of the 84-item version remains in a good range, other shorter versions have been shown to have much lower reliabilities: In the current study, Ryff & Essex's (1992) shortened version with 14 items per dimension was used (a total of **84 items** for PWB score). This shorter version has previously been tested by Ryff and Essex, and all 14-item dimensions were observed to have good reliabilities (Cronbach's  $\alpha$  ranging from .83 to .91) (Ryff & Essex, 1992). However, while the internal consistency of the 84-item version remains in a good range, other shorter versions have been shown to have much lower reliabilities:

- **42 items**: .38 to .88 (Abbott et al., 2006)
- **39 items**: .68 to .82 (van Dierendonck et al., 2005)
- **18 items**: .33 to .56 (Ryff & Keyes, 1995)

As we decrease in the number of items per dimension, each item has to represent increasingly more breadth. Abbott and colleagues recommended against shortening the PWBS, as the item reliabilities for the third longest version (42 items) were already too low for reliable estimations (Abbott et al., 2006).

In this light, the current study employed Ryff's scales to provide a more structured and complete understanding, as well as a measurement of PWB with moderate to high psychometric properties in the survey strand.

### Application and criticisms of the PWBS

In terms of application, PWBS has been used with college students, adulthood and aging populations, as well as those from diverse income backgrounds in America, Spain, Colombia, and Japan (Curhan et al., 2014; Ryff & Keyes, 1995; van Dierendonck et al., 2005). The scales, however, have several limitations. Some of the internal consistencies listed above are also rather low, and thus care must be taken if the scales are to be used in correlational analyses. Other studies also suggest further theoretical work is required in terms of the number of the constructs measured by the items (Abbott et al., 2006).

Furthermore, the use of Likert scales as interval or ordinal data for descriptive and inferential statistical treatments has also been a subject for debate (Jamieson, 2004). Some argue that if the responses are normally distributed, it should be treated as interval data (Borgatta & Bohrnstedt, 1980), while others remain conservative (Thomas, 1982). Concepts such as ‘meaningful’ are also considered in the formation of scales (Lord, 1953), though what constitutes meaning is still unclear. More recent studies demonstrate that more scale points (e.g. 1 to 11) are better for generalisability and for a better approximation of interval scales (Wu & Leung, 2017). This places the PWBS in a lower range, with responses ranging from 1 to 6. In addressing this debate, transparency is important, and as much information as possible should be provided about the scales (Knapp, 1993).

#### 4.4.3.2 The Revised Socio-Cultural Adaptation Scales (SCAS-R)

The conceptualisation and measurement of intercultural adjustment remains one of the most difficult tasks in intercultural research (J. Wilson, 2013). Adaptation has been shown to be related to a range of factors, which could be categorised as below:

- **Intra-personal:** inherent attributes such as personality and coping style (Simic-Yamashita & Tanaka, 2010).
- **Inter-personal:** (sometimes called *relational factors*) such as language proficiency and intercultural communication (Yu & Shen, 2012)), or acquisition of culturally appropriate skills (Furnham & Bochner, 1986).
- **Contextual/ecological:** such as host nations and co-national identification (Ward & Rana-Deuba, 1999).

In this manner, empirical evidence gives rise to a range of variables that have since then been investigated and used to predict the outcome of international student experience. Ward and Kennedy (1999), however, recognised that these factors have been investigated in a “piecemeal

fashion” (p. 660), thus there is always a need for researchers to have a more systematic approach to measuring and understanding adaptation. These predictor variables can range from relationships and social situations of the student to their academic and language ability or ability to adjust to physical environment (Ward & Kennedy, 1996). Ward and Kennedy (1999) further expanded the SCAS to include both psychological properties and behavioural variables.

Embedded in the [Culture learning framework](#), the first version of SCAS is based partly on the Social Situation Competence Scale (Bryant & Trower, 1974), which sees socio-cultural adaptation as a skill learning process occurring during different social situations. The SCAS therefore refers to a set of behavioural skills that are obtained in order to help the individual survive and negotiate successfully in a new culture (Searle & Ward, 1990). The scale asks the individual to self-report the amount of difficulty that they experienced both in terms of interpersonal and daily life situations. It is important to note that by measuring behavioural competency, the scale aims to elicit behavioural learning.

### **Application and criticisms of the SCAS**

Ward and Kennedy (1999) described the SCAS as “a flexible instrument that can be modified according to the characteristics of the sojourning sample” (p. 662). According to Gudykunst (1999), the SCAS as an instrument for measuring intercultural adaptation has “the most empirical foundation of any measure used in the study of intercultural relation”, and it is “a highly reliable, valid, and versatile measure of behavioural adaptability” (Gudykunst, 1999, p. 553).

Wilson (2013) commented that even though socio-cultural adjustment and psychological adjustment may be related to one another, they are built upon two distinguishable backgrounds, culture learning perspective and stress and coping (clinical) perspective, respectively (see Chapter One). Thus, as predictive frameworks, there are two distinctive concepts contributing towards intercultural adaptation. Research evidence also shows that they are experienced differently across time. On one hand, SCA has been shown to change over time, in most cases gradually more positively as time increased (Ward, Okura, Kennedy, & Kojima, 1998). On the other hand, PWB is believed to go through a pattern where the individual’s mental health experiences a positive shift following a period of time after arrival, and yet this is often followed by a drop in wellbeing as the individual faces new challenges (Ward & Kennedy, 1996). This stability of socio-cultural adjustment and irregularity of psychological adjustment both contribute towards the difference in how the two constructs are measured in SCAS.

However, in an effort to revise the SCAS, Wilson (2013) argued that there are overlapping components in terms of conceptual and operational measures between the socio-cultural and

psychological adjustment. According to Zhang and Goodson (2011), the two constructs measured using the SCAS are both predicted to similar degrees by factors such as English language proficiency, length of residence, and acculturation preferences. In terms of application, another problem that has been reported is the number of small domains within the SCA. Ward and Kennedy (1999) ran a factor analysis and found evidence for two domains: (1) cognition and communication, and (2) management of interactions and behaviour. However, other studies have also shown that there is a possibility for a larger number of domains within SCA depending on the population and research samples (Chen & Choi, 2006; Simic-Yamashita & Tanaka, 2010).

With consideration of these limitations, as well as the psychological dimension included in the PWB-M, the current study employed Wilson's (2013) revised version, the 21-item SCAS-R, for data collection in the Quantitative strand. The aims of the revised SCAS are to decrease the conceptual overlap between socio-cultural and psychological adjustments, and thus to position the SCAS-R deeper within the culture learning dimension. This scale highlights behavioural adjustment, as opposed to the SCAS's previous emphasis on adaptation difficulty or maladjustment to a new culture. As previously introduced, Wilson (2013) presented five factors in the SCAS-R: (1) *Interpersonal Communication*; (2) *Academic/Work Performance*; (3) *Personal Interests & Community Involvement*; (4) *Ecological Adaptation*; and (5) *Language Proficiency*. These are measured by self-reported behavioural proficiency, and the average of the items will result in behavioural competency. Wilson examined the correlative relationships between the original SCAS and the revised version and found similar patterns between the two. Correlations between the SCAS-R and behavioural and social skill measures were greater than associations found between the original SC-AS and those measures.

Another reason for the SCAS-R to be selected for the current study is that the revised Scales has been piloted by Wilson (2013) with 316 respondents, 144 of whom were international students. Furthermore, the item pool of 54 items was initially discussed with postgraduate students for the content as well as face validity, and thus it would be appropriate to adapt Wilson's SCAS-R to the intended sample of IDSs.

Table 4.3 describes the psychometrics and descriptive statistics of the two scales in this study.

Table 4.3 Psychometrics and descriptive statistics of PWBS and SCAS-R

Scales	Cronbach's $\alpha$	Mean (SD)			Min/Max
		Wave One N=80	Wave Two N=63	Wave Three N=51	
PWBS	.56	349.60 (56.6)	373.8 (50.0)	371.8 (50.7)	1 / 6
SCAS-R	.87	78.9 (10.4)	80.7 (13.6)	81.8 (11.6)	1 / 5

The internal consistency in this thesis was also quite low for PWBS (0.56 overall, and ranging from .04 to .57 for each dimension). One possible explanation is the culturally diverse sample. Diverse sample (age, backgrounds) may mean that respondents might have interpreted the questionnaire differently (especially words like *difficult*, *happy* etc.). Secondly, the fact that sensitive information was being collected in the wellbeing questionnaire PWBS might have led to reluctance to answer truthfully (as the respondents also provided their email for contact in the next waves, making their response potentially identifiable to them). Finally, **PWB** in itself, as discussed in Chapter Three, may be a less generalisable and measurable concept than **SCA**.

#### 4.4.3.3 Factors of individual, ecological, and process

Aside from the two outcomes of **SCA** and **PWB**, data on individual and ecological aspects that were relevant to the doctorate and the IDS experience were also collected. These included relevant factors that are either individual attributes, or aspects of the IDSs' contexts, and time, as listed below together with predictions for their relationships with **SCA** and **PWB**.

##### Factors at individual level

- **English language** (*first / additional*): This nominal factor was included as previous literature highlighted the importance of English language proficiency to adaptation, and communication in interpersonal relationship is integral to well-being. However, the decision not to collect TOEFL or IELTS scores was due to the fact that international students from English-speaking countries are exempted from taking the test. Instead, the English language reflects whether English was their first or additional language. A point for caution is that this was how participants perceived their English language, as

data inspection showed that some students from countries that may not have English as their first language still picked the first option, perhaps due to them having attended international schools, etc. The prediction for this factor is that having English as a first language would have a positive relationship with both PWB and SCA.

- **Age:** This continuous factor was collected for two reasons, the literature and the theoretical perspective of this thesis. The literature has shown that age and gender were found to be significant to well-being in general (Ryff & Keyes, 1995).
- **Gender** (*Female/Male/Others/Prefer not to say*): As mentioned above, the literature on well-being and adaptation highlighted gender as a significant factor.

### Factors indicating ecology

- **Country of origin:** Research has shown that among international students, different dimensions of well-being differ significantly by country of origin (Sam, 2001). This factor was collected to account for their home context. However, in the analysis, the sample size did not satisfy the amount of variables added, even when countries were categorised to continents. Further reflection on using *continent of origin* as a predictor led to the decision to exclude this factor from the analysis, as there were too many possible underlying factors under continents.
- **Discipline of study:** According to doctoral education literature, students' experience and well-being seems to vary by discipline (Schmidt & Hansson, 2018; Stubb et al., 2012). After data collection, the disciplines of study were categorised into three main areas: *Sciences*, *Social Sciences*, and *Arts & Humanities*. It was predicted that discipline would be significantly associated with PWB and SCA.

### Factors indicating time

- **Doctoral time** (time spent registered as a student on the doctorate): The doctorate start date was collected, and each wave was dated so that doctoral time could be calculated. This continuous factor reflected more of a developmental side of the IDS experience, allowing for further exploration of the effect doctoral time had on PWB and SCA. At Wave One, it was predicted that PWB/SCA would be positively associated with doctoral time. Across three waves, the effect of doctoral time on PWB/SCA would significantly vary by individual factor (*English language*) and ecological factor (*discipline of study*).

#### 4.4.4 Retention rate

Repeated measurements of quantitative variables allow for comparison between different stages during a process of the same individuals, as opposed to cross-sectional comparison of different individuals. This design accounts for individual differences that may not be considered when comparing different groups of individuals. However, one of the well-documented difficulties of longitudinal quantitative research is the [attrition rate](#). Different from many studies that span across years or decades, the current study focused on changes within approximately one year of the PhD, specifically from April 2017 to April 2018. This timing was due to a delay in the proposal stage of my PhD, and there are both strengths and limitations based on this timeframe.

First of all, longitudinal research designs are often subjected to higher drop-out rates, which raises questions about the characteristics of participants who drop out and those who remain with the study. As a result, the quantitative analysis (Chapter Five) also includes descriptions of characteristics that may be relevant to explain the drop-out rate. To reduce the drop-out rate, multiple retention strategies were used. These were based on longitudinal research literature, and included sending reminders and describing non-monetary benefits to taking part (Abshire et al., 2017). Many other strategies such as sending regular updates, however, were not feasible. Ethically, there are several issues with the practice of sending reminders to encourage participants to complete the questionnaire, as it could introduce pressure on the participants and potentially rush them. Given the hectic schedule of the PhD training programmes, and the lack of monetary incentives, there was a need to balance reminding the participants and respecting their decision to drop out from completing the questionnaire.

Secondly, repeated measurements are often associated with a time point that is meaningful (e.g. pre-, during-, and post-intervention), or are associated with specific cohorts that will be more likely to share similar milestones. In the current study, due to the anticipated low number of participants (given the length of the study, limited access to the target population, and required minimum sample size), restrictions to only first year PhD students were not applied, and PhD students at all stages were invited to complete the questionnaire. This decision allowed for more participants, but also means that the time points themselves do represent a specific point in the PhD process. As a result, [Doctoral time](#) (measured in months since starting the doctorate) was used as a metric for time. This means that this is not a longitudinal cohort design, but a longitudinal panel design. Further discussion of the quantitative strand in relation to the statistical findings can be found in Chapter Five (Quantitative analysis and discussion), and Chapter Nine (Conclusion), where implications for future longitudinal research on IDS experience are also discussed.



## Longitudinal qualitative strand

### 4.4.5 Participants

Among the 23 participants volunteering in the questionnaire stage, 10 PhD students from different departments in the University of Bristol were invited to take part in the longitudinal interviewing process. The selection criteria were their country of origin (one participant from each country), their gender (all volunteers were female except for only one male student and one transgendered female student), their age groups, as well as their faculty. One participant dropped out after the first interview due to psychological health. At the end of their final interview, another student dropped out and withdrew all their data due to undisclosed reasons, leaving eight sets of three interviews for the analysis (24 interviews).

Of the eight remaining participants, three belonged to scientific disciplines, and five classified their field as social sciences (these were not included in each profile to prevent identification). The analysis in Chapters Six and Seven clarifies discipline only when this aspect plays a role in interpreting the data. A brief profile of participants is provided below, omitting information where necessary to protect their identity. The names were based on colours to avoid giving participants unfamiliar Western names as well as identifiable names based on their own culture. Six participants picked their own colour.

**Jade** was a full-time PhD student who had not studied abroad prior to the PhD. They often cited English and academic writing as a challenge, when trying to express themselves as an expert in front of their supervisors. As a highly reflexive individual, compared to other participants, they were quite critical of their own research, and their main struggle was coming to terms with their supervisors' criticisms.

**Orange** was a full-time PhD student who also had not studied abroad before the start of their PhD. They are obliged to return to their country following the PhD, due to the terms of their scholarship. Their research and data collection were based in their own country, and their experience revolved around the back-and-forth transitions between the two countries. Their conservative viewpoint was challenged as a result of living in the UK, which formed an integral part of their self-transformation.

**Red** was a full-time PhD student who decided to go part-time. They were also doing research based in their own country. As a mature student who had lived a relatively long time in the UK compared to the other participants, they expressed that they still identified strongly with their original country and culture. As both a mature student and a parent, they experienced difficulties regarding supervisory relations and role conflicts.

**Blue** was a full-time PhD student that held a university scholarship, which means they had fewer obligations to return home on completion of their PhD. Of all the participants, they had the most positive outlook at their own PhD experience and intercultural transition in the UK. They often cited their supervisors as the reason for this positive outlook.

**Pink** was a full-time PhD student who held a government scholarship. She requested to be identified as a transgender woman. Her challenges were related to both the academic dimension of the PhD, as well as the emotional difficulties regarding her gender identity while moving back and forth between the two cultures.

**Purple** was a full-time PhD student who had completed their Masters studies in the same university, having followed the same supervisor onto the PhD. Their strong relation with their supervisor caused a high amount of distress due to unexpected changes to supervisory teams – and thus research topics. Their challenges were also revolving around a number of clinical procedures and family tragedies during the first half of their PhD.

**Cyan** was a self-funded full-time PhD student who had previously studied in another English-speaking country. As a parent, they moved to the UK with their family, and they often compared experiences with racism between that country and the UK. Their experience of the institution and supervisors was complex due to the nature of their research, making them part of two different schools.

**Lime** was a full-time PhD student, who had completed their bachelor's degree in another English-speaking country prior to their professional career at home. As they moved with their family to the UK after an established career, the experience of child-rearing while transitioning back into education presented them with many challenges.

#### **4.4.6 Longitudinal semi-structured interviews**

The ideal method for monitoring an individual's experience of change across time would be a proper longitudinal study where the person is followed across a lengthy span of time—years or decades. Practical difficulties however mean that longitudinal studies will always be rare.

(Miller, 1999, pp. 108–109)

The longitudinal approach of qualitative interviews can provide many potential insights into a human experience. Re-interviewing the participants allows for tracing changes and understanding temporal process of change over time (McLeod & Thomson, 2009; Thomson & Holland, 2003). In the current study on IDSs, not only are the research questions concerned with changes over

time, they also focus on understanding strategies that are developed to enact and preserve the individual's agency. This requires data that spans beyond one time point. Moreover, in reference to recall bias (Ruspini, 2000), there are changes in event interpretation using the retrospective approach, and it is essential that accounts and reflections on different experiences are collected as close to any critical event as possible. When translated to actual settings, this may pose difficulties due to the busy doctoral timeline. To address this issue, the longitudinal design helps to capture potential changes in perception and individual development.

In terms of data collection, a more prolonged process of interviewing also means a continuous and growing rapport between the researcher and participants, while reducing the emotional and physical strain that a longer single interview may have on both parties (Earthy & Cronin, 2008). However, this approach is not without challenges, as stated above by Miller (1999). Though a common approach in quantitative research, it is often more difficult to retain participants for more in-depth qualitative enquiries due to issues with practicality, highlighting the importance of building rapport with the participants.

Longitudinal studies on the PhD transition process may be best applied to the entire length of the PhD, as well as pre-entry and post-graduation periods. Given that the current work is PhD research itself, the personnel, time, and financial constraints only allowed for re-interviewing in a period of 12 months, limiting the number of participants to less than ten, and geographical location within one university. Having considered online interviews for this study, I rejected the idea due to the sensitive topic of psychological well-being. Moreover, building rapport with the participants in order to create a safe and anonymous space for sharing was one of the most important tasks that I prioritised in the proposal.

In the current research, each participant took part in three face-to-face interviews over a period of one year (June 2017 – June 2018). The interviews were designed to be semi-structured, with the first wave of interviews following a more detailed interview schedule than the rest (See Appendix VII). As discussed earlier in this chapter, the original interview schedule adapted several points from the pilot study, questions mostly based on the dimensions in PWB model and SCAS. However, similar to the pilot interview, the participants provided mostly short and closed answers to these specific questions, and most data collected were based on their elaboration or divergence to individually relevant topics (e.g. children, supervisors, religions). Keeping in mind the previous discussion on the implications of agency enactment in student experience research, I observed that most answers to questions regarding experiences of certain challenges and difficulties (following the discussed 'deficit' model) often took the form of vague recognition of such difficulties, but

immediately followed by a statement that dismissed such issue as being paramount to their overall struggle as an international PhD student. Questions about the PhD itself, such as “what is your research about?” or “how is your research going?” – questions often rumoured to be taboo in academia – tended to yield more elaborative answers with components of the student’s PWB and SCA presented and reflected upon by the participants. Visual prompts (blobs) (Figure 4.1) were used near the end in all three waves to encourage further, unelaborated thoughts by asking the participants to identify with a presented figure, and indicate why they identified with it. Blob trees were useful for the first round of interviews, but they became less applicable in the following two rounds, as the participants were more aware of what they would like to discuss.

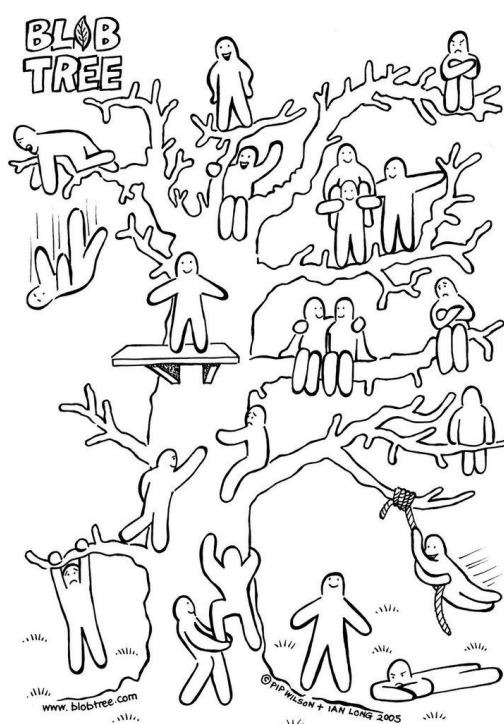


Figure 4.1 Blobs as interview prompts

In the second wave of interviews, the conversations mostly built around the personalised topics as raised by the participants in the first interviews. The second wave interviews did make attempts to bring the discussions back to some PWB and SCA dimensions at several points, but the participants mostly directed the discussions. This wave of interviews showed changes in some participants given the timing for some (e.g. pre- and post- upgrade). For the rest of the participants, three-four months did not necessarily bring about as much change as their peers, but many participants reflected on the previous interview as well as the quantitative questionnaires. Some participants mentioned specific items on the quantitative questionnaires as a point of discussion, having reflected and completed it twice by the time of their second interview. Others wanted to

re-discuss topics that were covered in the first interview, especially those to which they could not fully respond on the spot. The space to reflect in between interviews is also one of the advantages of the longitudinal qualitative approach (Earthy & Cronin, 2008).

The third wave resembled a more unstructured, conversational interview. This was partly because of the rapport built over time, and partly because the participants were more aware of my research focus from previous interviews. Even though I maintained the focus in my questions, the conversations were more led by the participants and what they wanted to convey. Sometimes, the flow of the discussion was directed by my reflection on how the participants have remained the same or changed since our previous discussions. Given the growing rapport between the researcher and participants, most interviews during this wave started with simple questions such as “how are you?” or “what has happened since our last interview?”, and the discussion would follow the participant’s own direction. This means that the majority of the interviews consisted of the participants’ account, with me occasionally paraphrasing and asking for further elaborations. One interesting detail that arose in the third wave was the interviewer’s role in pointing out the differences between current and previous interviews. In line with the pragmatist researcher’s engagement with change (Goldkuhl, 2012), and in comparison to the researcher’s fixation on knowledge and interpretation of knowledge, the longitudinal qualitative interviews have allowed me as the researcher to be part of the awareness of change – and individual progress – during the participants’ development.

The third wave of interviews showed the most drastic changes in many participants, both in terms of their adaptation strategies and their management of PWB. The topics that were covered in this wave of interviews were also the most elaborate and detailed for some participants, as will be discussed in Chapters Six and Seven (qualitative analyses and findings).

#### **4.5 Quantitative and qualitative analysis plan**

As each findings chapter will start with a more explicit discussion of the relevant analysis, the purpose of the current section is to explain the overall analysis plan in this thesis. Table 4.4 presents the research questions and corresponding methods of analysis, demonstrating the move from statistical analyses to more qualitative approaches.

Table 4.4 Research questions and corresponding methods of analysis

Research questions	Method of analysis
1 Is PWB associated with SCA in IDS experience?	Correlation
2 How are different ecological and individual factors associated with PWB?	Regression
3 How are different ecological and individual factors associated with SCA?	Regression
4 How does the effect of time in the PhD on PWB vary by individual and ecological factors?	Mixed effect models
5 How does the effect of time in the PhD on SCA vary by individual and ecological factors?	Mixed effect models
6 In terms of PWB and SCA aspects, what are the ways in which IDSs interact with their ecologies?	Hybrid thematic analysis
7 Personally and professionally, how do IDSs develop as an individual through these interactions?	Structural narrative analysis

Following quantitative analysis, a predominantly deductive version of hybrid thematic analysis that makes use of template analysis is adapted in order to preserve the eco-developmental perspective from the theoretical framework. A step-by-step description is provided in Chapter Six.

The following discussion will briefly discuss why different methods of qualitative analysis are applicable to the telling of intercultural doctoral stories. Pinnegar and Daynes (2007) used Michel Foucault's metaphor of *water* (originally used to discuss negotiations of power) to illustrate the move towards a more narrative approach by different researchers: following the path across different landscapes, seasons, obstacles, water changes its flow accordingly. As researchers take a turn away from the general, objective knowledge about the population toward the more particular narratives of the individuals, each researcher had a different starting point. In my case, given the different methods of analysis – flowing from Chapter Five (which aims to capture generalisable knowledge about the psychological well-being and adaptation of non-domestic PhD students) to Chapter Six (which uses the data to enrich a set of theoretically determined themes and sub-themes from the experience of eight students), to end at Chapter Seven – it is important to recognise the demand to tell stories, especially in terms of philosophical underpinnings. Furthermore, my participants were telling their stories in English, which is not their first language. These stories were further filtered and represented through my own perspective and interpretation, which reflect both my personal and theoretical influence. This means my account will only introduce a partial view of what the participants' experience was, and my interpretation through theory as to why they had made their unique decisions (Baynham & De Fina, 2017). Thus, as a researcher, I am required to engage with the philosophical and theoretical underpinnings of interviewing – not only as a research instrument but also as a form of human interaction – particularly through concepts of knowledge and language (Talmy & Richards, 2011).

Similar to how the need for generalisable and quantifiable knowledge rests firmly on the complexity of the individual's experience, the importance of narratives in the current thesis was necessary for several reasons. Both the universal and the particular are important and are both appropriate responses to pragmatism as a philosophical perspective. As discussed earlier, pragmatism recognises the nature of continuity and change in terms of reality and knowledge, as well as the importance of language to understanding human experience. Taking into account this recognition – which opens up research to different ways of knowing – the researcher should recognise both objective knowledge (positivistic approach) and subjective knowledge (the interpretation of constructed meaning). Epistemologically, pragmatism asks different fundamental questions in comparison to its philosophical counterparts. While positivism may ask “Does this knowledge accurately reflect the underlying reality?”, pragmatism instead asks, “Does this knowledge serve our purposes?” (Rorty, 1999, p. 802).

The shift from a positivistic researcher – whose goal is to distance themselves from the research – brings to the foreground the recognition of the relationship between the researcher and the researched in narrative inquiry. This recognition of the researcher's extensive involvement in the research, coupled with the focus on narratives, requires a deep reflection on the role of the researcher, their positionality, and how not only will the participants change due to the research process, but the researchers themselves will also change (O'Reilly, 2012). The implication of the last point for reflection stresses the interactions between the researcher's knowledge and the participant's knowledge. This underlines a move away from an atemporal and static form of knowledge that is more dominant in a positivist approach (a truth that is true across time and contexts) toward a more dynamic form of pragmatist knowledge constructed through human interactions (Pinnegar & Daynes, 2007). Thus, researchers are obliged to provide a rich and accurate description of the circumstances within which this knowledge is constructed between the researcher and the researched – i.e. the relational nature of researcher-researched interactions.

Furthermore, the questions that different methods of analysis can answer are different. The LHTA of all the interviews (Chapter Six) allows me to illustrate a number of theoretically driven themes through the data. However, this thematic approach did not allow me to fully address other questions such as ‘How do these events affect their development?’, and ‘How do students reposition themselves through the structuring of their story over time?’. In order to unpick these questions, I also needed to understand how these elements belong together, which required me as a researcher to focus more closely on specific cases – who were the participants? – as well as consider the contexts and the manners in which the narratives were produced in the interviews (Riessman, 2008).

Overall, the longitudinal mixed methods research design employed in this thesis requires a careful construction of the analysis plan, through which the threads of the philosophical tenets of pragmatism and the theoretical lens of eco-developmental must run coherently. This complex approach to analysis thus demands that, as the researcher, I think about my positionality and reflexivity throughout this process.

#### **4.6 Ethics: Reflexivity and positionality**

A researcher's background and position will affect what they choose to investigate, the angle of investigation, the methods judged most adequate for this purpose, the findings considered most appropriate, and the framing and communication of conclusions.

(Malterud, 2001, pp. 483–484)

During data collection, I was often asked by my participants, ‘why are you researching this topic?’ To each participant, I realised I gave a slightly different version of the same answer, depending on how much I believed I should share with my participants, and which aspect of the answer was most applicable to the individual. Considering how much they have shared their stories and struggles with me, where do I draw the line of reciprocity and researcher’s role in my answer?

To those who asked, it was because I had observed a lot of struggles among my colleagues during my first year of the PhD, and to a few of them, I disclosed that it was also because I myself went through a difficult period during that year. Did my answer matter, and if it did, how, and to what degree? These are among many of the ethical questions I asked myself during the research.

Ethical consideration is a contextually situated process, that is, each decision is embedded in the context(s) in which they are required to be made. This required me to make sure I attempted – to the best of my ability – to react to different circumstances that happened during the research, taking into account as much contextual information as I could about the situation and the participants.

In the proposal and based on the pilot study, anticipated ethical issues arose, such as power dynamics, unexpected perceptions of researcher’s role, researcher’s influence on the research process, researcher’s as an insider/outsider, and emotional safety of participants. In reality, there were some ethical elements that strongly stood out over other anticipated issues, namely the way some participants perceived my role, my positioning as an insider, and my influence on the research process (data collection and data analysis).



I also paid close attention to the power dynamics between me – as a researcher in most cases, but also as a friend outside of the research in some cases – and the participants (Razon & Ross, 2012), particularly how the participants might have perceived me differently, and how I perceived as well as presented myself to the participants. With the paradigm of pragmatism, it is also important to recognise instances in which the researcher is engaged with change in the participant's world, and in the current study, this engagement is most clearly reflected in my constant analysis of the participants' own stories within the interviews. Through this process of analysis, I was in a unique position to observe the changes within their thinking and adaptation over a period of one year and to actively prompt their reflection on their own development. My influence on the narratives as an interviewer is closely explored in Chapter Seven, in which I present the stories of three participants via Structural Narrative Analysis.

My impact on the process of longitudinal data collection and analysis was undeniable, especially in the interviews (De Fina, 2009). As I listened to the participants, there were moments in which I agreed, disagreed, empathised, or distanced myself from the discussion. The interviews are an undeniably valuable experience both professionally and personally. Some of the interviews, however, were more difficult than others, not because of the participants, but because of the emotional work that was required. Ethically, my role was not that of a counsellor, and in theory, there should not be any comments from me that could have any impact on the participants. However, sitting down with PhD students – might it be those in the middle of their frustrating period of data collection, those who were awaiting their upgrade/progression panel, or those who had just walked out from a supervisory meeting that negatively affected their mood – was sometimes a heavy task. What do I tell them? Who am I when I am in this room, with the voice recorder on?

Moreover, regarding my relationship with the participants, I needed to be particularly aware of how the participants see me, as well as how and where I see myself in this research (King et al., 2018). Besides having discussed the reasons I am researching the particular topic of PWB within the contexts of intercultural as well as doctoral experience, in the qualitative analysis chapters (Chapters Six-Seven), I maintained a reflection journal for the experience and assumptions I brought with me, how they changed throughout the research process, and how they might have impacted on the reported findings.

Relating back to the question 'why are you researching this topic?', it became clear to me that the answer to this question goes beyond what I could briefly describe to my participants. It required the identification of "hidden agendas" (Gough, 2003, p. 25) during the process of reflexivity as

well as an exploration of one own's epistemological beliefs (Wilig, 2001), which have driven the research process from start to finish. As demonstrated throughout this thesis where necessary, I have also demonstrated personal beliefs through the choice of theoretical framework and through my critique of the literature.

With regard to the data collection process, one of the most difficult topics which I have reflected on for approach during interviews was the aspect of adversity. These especially included those experiences that might have as much of a grip on me as they did on the participants in this study. Was I an 'insider', in that sense? Could I claim to understand what the participants have said with more clarity and empathy, as I was and am experiencing what they were describing, to a certain extent? According to Bonner and Tolhurst (2002), there are three advantages of taking on an insider role: (1) having a greater understanding of the culture being studied; (2) not altering the flow of social interaction unnaturally; and (3) having an established intimacy which promotes both the telling and the judging of truth. Further, an insider is believed to have more knowledge of the context, which would have taken much longer for an outsider to acquire (Smyth & Holian, 2008). In considering these descriptions, I do believe parts of my experience gave me an insider's knowledge, and yet the danger of such assumptions was that I would lose my objectivity as well as critical curiosity in relying on my own similar experience. Hewitt-Taylor (2002) saw this assumption of prior knowledge as an issue of bias rather than an advantage. This is was evident in my planning of the pilot interviews, where I believed that there would always be problems to talk about, when this was not always the case. Also, I noticed in my interview reflections that I would say yes halfway through a participant's explanation because I'd had a similar experience, causing me to miss out on their elaborations and conclude the interview without the participant's own account of this particular experience in the data. In a similar way, a researcher who considers themselves an insider may get confused at times, because the point of view of an insider does not always align with that of a researcher (DeLyser, 2001). Being aware of my own role as well as where I am at any point in time in terms of my beliefs and my thinking helped to identify and reduce this level of bias.

In the analysis of qualitative data, this reflection plays a key role in producing strong analysis. Hirsch (1965) distinguishes between the author's original meaning that they want to convey through the text, and the significance of the text to its readers. Here, knowledge is co-constructed through the process of data collection and analysis. This requires that as a research, it is my responsibility to provide a transparent explanation for my part in this co-construction process, and my methodological as well as ethical decisions. Furthermore, while the author's original meaning does not take too many different forms, the text's significance to its readers may change from one

reader to the next, and it may be further influenced by the context. There are different ways to approach the two sides of the text. One way is to believe that the purpose of the interpretation should be to focus on the original intention, but we are not also supposed to ignore our contribution to the interpretation (Skinner, 1986, as cited by Alvesson & Skoldburg, 2000). Another approach is to see both sides as complementary to each other (Palmer, 1969). According to Alvesson and Skoldburg (2000), a text (be it in literal or figurative forms) should not be analysed in a *monological* manner (as would be by a positivist), nor should the researcher necessarily take a passive stance in analysing it, only passively receiving what the text gives her/him (as one would in grounded theory). Instead, it should be a conversation, a dialogue, “asking questions to the text and listening to it”, and “a humble yet at the same time active attitude is thus recommended” (Alvesson & Skoldburg, 2000, p. 101).

Finally, given the nature of mixed method studies, the pragmatist researcher has accountability to their knowledge claim, as they must acknowledge any commonalities or discrepancies between the quantitative and qualitative findings, following questions while interpreting the findings (Teddlie & Tashakkori, 2009). As a result, my discussions of the quantitative and qualitative findings do not stand alone, and my reporting in each findings chapter, as well as Chapter Nine (Conclusion), reflects on the knowledge produced by a longitudinal mixed methods design.

#### **4.7 Chapter summary**

In summary, Chapter Four presented the tenets of pragmatism in relation to the IDS experience as well as the longitudinal mixed methods design in the current thesis. A detailed description of the pilot and the main research design was provided. The quantitative and qualitative analysis plan was discussed in line with philosophical and theoretical underpinnings, as well as the research objectives and questions. The next three chapters explain the justifications for each type of analysis in relation to its corresponding research question, elaborate upon the step-by-step approaches, and present the empirical findings of the two different strands of research.

# Chapter Five

## Quantitative analysis: Individual and contextual factors of adaptation and well-being

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### **RQ 1**

Is PWB associated with SCA in IDS experience?

### **RQ 2-3**

How are different individual and ecological factors associated with PWB/SCA?

### **RQ 4-5**

How does the effect of Doctoral time on PWB/SCA vary by individual and ecological factors?  
(i.e. English language and discipline of study)

## 5.1 Chapter overview

Having laid out the contextual, theoretical, philosophical and methodological groundwork for the study in the four previous chapters, I will now present the statistical analysis and findings from the three-wave quantitative strand. Chapter Five presents the statistical analysis phases that address these RQs and provides detailed descriptions of the study's variables and their relation to the scope of the study. In particular, in phase 1, the statistical analysis focused on data at Wave One. In phase 2, all data points across the three waves were included in the analysis.

Overall, this chapter details the following aspects of the longitudinal quantitative strand:

(1) The statistical analysis plan, with justification for the use of correlation, multiple linear regression (MLR), and linear mixed-effects models (LMEM);

(2) Descriptive statistics of the dataset and an outlining of the outcome variables/covariates for all analysis phases; and

(3) The estimation results of statistical models, with further discussion in light of the literature. The chapter will conclude with the discussion of strengths and limitations of the quantitative strand, as well as a look at future directions in longitudinal quantitative research in student experience and wellbeing.

## 5.2 Descriptive statistics of outcome variables and predictors

In this part of the analysis, PWB and SCA are the outcome variables in two separate sets of models. Table 5.1 provides descriptive statistics on PWB and SCA across the three waves of data collection.

*Table 5.1 Outcome variables' descriptive statistics across three waves of data collection*

		Wave One	Wave Two	Wave Three
<b>PWB</b>	Sample size	80	63	51
	<i>M</i>	349.6	373.8	371.8
	<i>SD</i>	56.6	50.0	50.7
<b>SCA</b>	<i>M</i>	78.9	80.7	81.8
	<i>SD</i>	10.4	13.6	11.6

Data inspection of the two outcome variables at Wave One demonstrated that there is no missing value for both PWB and SCA. There is no apparent skewness in the two variables, and

Kolmogorov-Smirnov tests indicated that the data was normally distributed for both PWB scores ( $D(80) = .098, p > .05$ ) and SCA scores ( $D(80) = .048, p > .05$ ).

Five predictors and their description can be seen in Table 5.2.

Table 5.2 Variables' description

	Variables	Description
<b>Outcome</b>	<b>PWB</b>	SPWB total score
	<b>SCA</b>	SCAS-R total score
<b>Predictors</b>	<b>English language</b>	Having English as a language – First/Additional
	<b>Doctoral time</b>	Time since the doctorate starts (months)
	<b>Age</b>	Age of respondent (years)
	<b>Gender</b>	Gender role – Male/Female/Other
	<b>Discipline</b>	Discipline of study – Sciences/Social Sciences/Arts & Humanities

As metrics of time, both **Age** (years) and **PhD time** (months since starting the PhD) at each relevant wave were included in the candidate pool. Conceptually, **PWB** covers intrapersonal aspects of the individual, so **Age** was important both as a natural time metric and an individual attribute, given that we were looking at **PWB** from a developmental perspective. Respondents' **Age** at Wave One ( $M = 30.75, SD = 7.15$ ) followed a positively skewed distribution.

Compared to **Wave** (one, two, or three), **Doctoral time** (in months) was a more meaningful metric for measurement occasion, because it was intrinsic to each individual as well as reflective of the doctorate, and it was better at capturing individual variation than **Wave** would (as **Wave** would instead allocate the respondents in time blocks). **Doctoral time** also captured time from the start of the PhD, which is a meaningful event in a doctorate. **Doctoral time** at Wave One ( $M = 17.34, SD = 10.39$ ) shows a positively skewed distribution, where most of the respondents fall within having less than 24 months since the start of their PhD. This could be due to the questionnaire targeting progress and changes over time, thus attracting more new students than those who have spent more than two years in the PhD. Despite this, cohort study (focusing only on first year students) was not feasible due to the low sample size and response rate of the current study.

Predictors reflecting individual differences included **English language** (having English as a first or additional language), and **Gender** (Male/Female/Other). **English language** (**First** = 31, **Additional** = 49) was included as an indicator for the individual's familiarity with using English in an English-speaking environment. There was extreme imbalance in the variable of **Gender** (**Female**

= 63, Male = 16), as well as one missing value, which needs to be taken into account when reading the results.

The predictor potentially reflecting the respondent’s context was their study’s **Discipline** (at Wave One: **Sciences** = 28, **Social Sciences** = 37, **Arts & Humanities** = 14). This predictor also had a missing value. It is important to note that this predictor might also reflect individual differences in their choice of discipline that might be related to **PWB** and **SCA**, such as their upbringing or their national economy (which may favour certain professions).

Moreover, in exploring the relationship between different variables visually, some associations and interactions might be of interest, specifically how the effect of **Doctoral time** on **PWB** and **SCA** might vary with **English language** and **Discipline**.

Figure 5.1 shows that **PWB** according to **time** in the doctorate seemed to vary differently for **English-first** and **English-additional** students, with the former having better **PWB** over time. It is worth noticing that beyond the four year mark, both groups seem to experience a decline in their **PWB**, which may reflect the PhD going beyond the intended timeframe. However, as there are a limited number of data points for that period, further interpretation is not recommended.

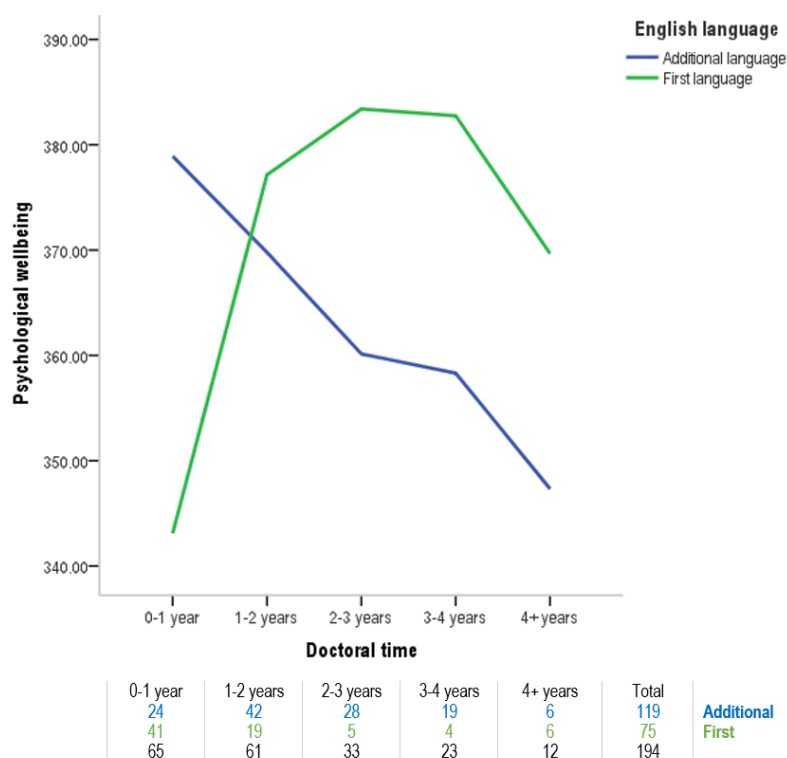


Figure 5.1 Average PWB over Doctoral time by English language

Similarly, in Figure 5.2, English-first and English-additional students seemed to have different SCA trajectories, with visible jumps for English-first but mainly dips for English-additional.

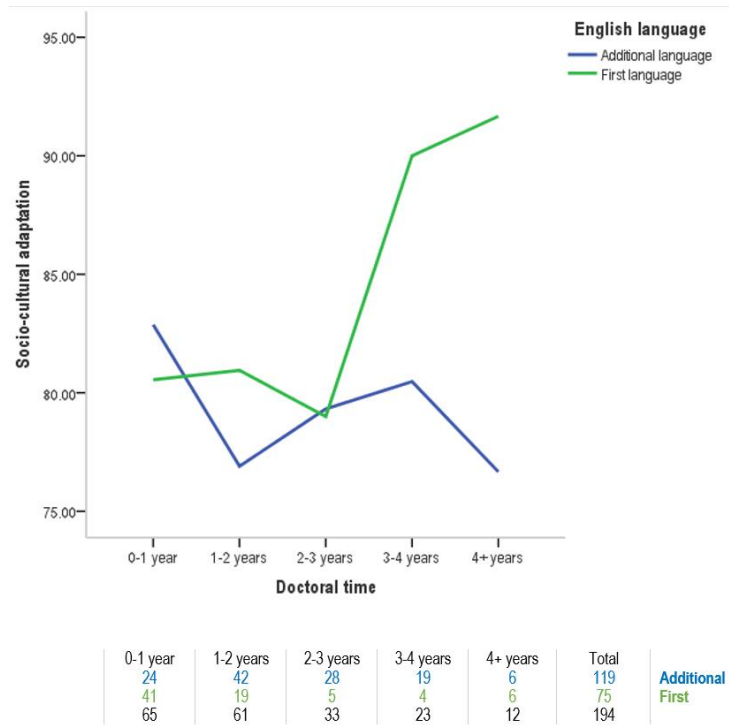


Figure 5.2 Average SCA over Doctoral time by English language

Figure 5.3 and Figure 5.4 also showed that both PWB and SCA according to Doctoral time seemed to vary for students in the three discipline categories.



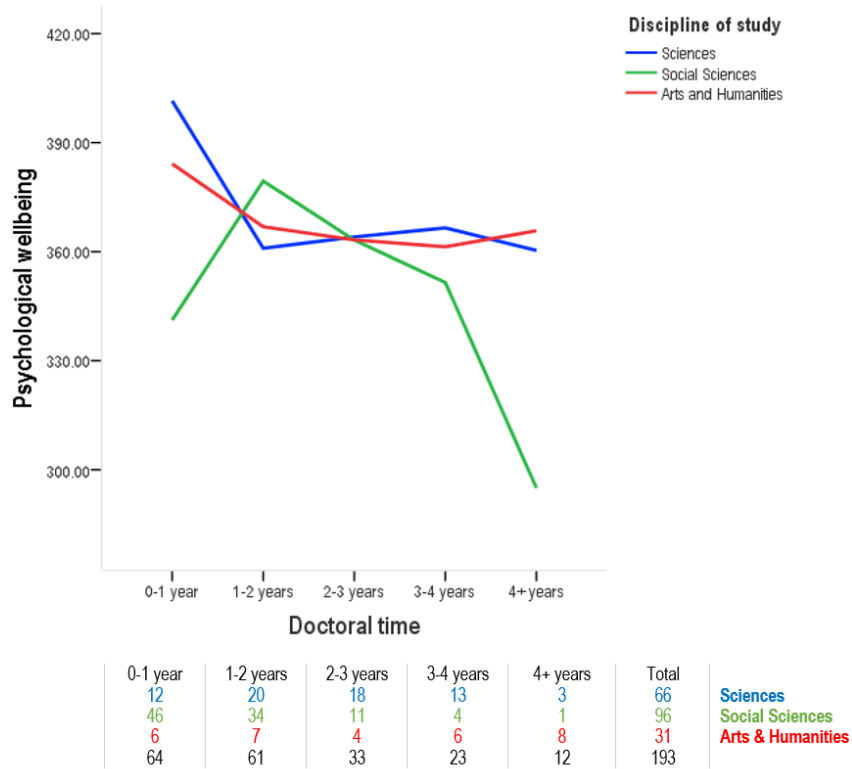


Figure 5.3 Average PWB over Doctoral time by Discipline of study

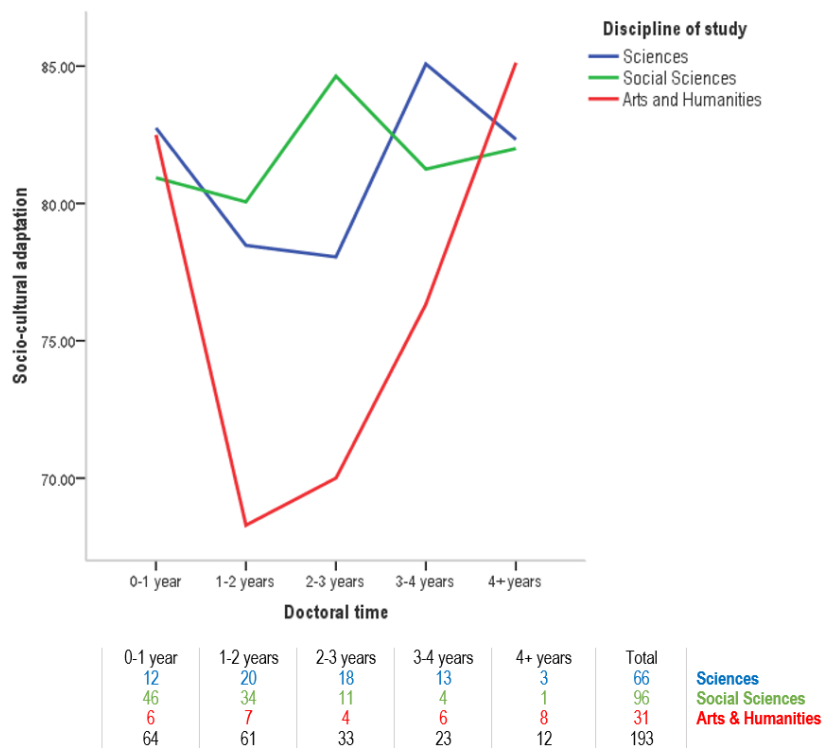


Figure 5.4 Average SCA over Doctoral time by Discipline of study

### 5.3 Statistical analysis plan

Table 5.3 presents the statistical analyses and corresponding research questions. Phase 1 addressed the first two RQs using MLR on Wave One, first looking at the association between **PWB** and **SCA**, and then exploring each outcome variable separately by looking at their association with our individual, ecological, and time factors. Phase 2 used LMEM and all available data points from the three waves so we could explore interaction terms while accounting for random effects in the longitudinal data. This phase focused only on the effect of **Doctoral time** on **PWB** and **SCA**, and how it varied by **English language** and **Discipline** (cross-level interaction).

Table 5.3 Statistical analyses and corresponding research questions

	Research question	Outcome	Covariates	Analysis
Phase 1	Is PWB significantly associated with SCA?		<b>PWB</b> and <b>SCA</b>	Pearson's correlation
At Wave One	How are different ecological and individual factors associated with PWB/SCA?	<b>PWB</b> or <b>SCA</b>	<b>English language</b> <b>Doctoral time</b> <b>Age</b> <b>Gender</b> <b>Discipline</b>	MLR
Phase 2	How does the effect of doctoral time on PWB/SCA vary by English language and discipline of study?	<b>PWB</b> or <b>SCA</b>	<b>Doctoral time</b> <b>English language</b> <b>Discipline</b> <b>English language x Doctoral time</b> <b>Discipline x Doctoral time</b>	LMEM
All three waves				

#### 5.3.1 Pearson's correlation

**Phase 1** of the analysis starts with a correlation between **SCA** and **PWB**, as RQ1 seeks to explore whether **PWB** and **SCA** are related to one another. As both variables meet parametric assumptions, **Pearson's correlation** is appropriate to explore how **PWB** and **SCA** vary together, and to examine the statistical significance of this relationship. In comparison to using linear regressions, which does have similarities with correlations, a correlation does not estimate an outcome value from a predictor value, but it does provide us with the strength of the relationship between two variables (Schober et al., 2018). This measure of the strength of the relationship provides a direct answer to RQ1.

### 5.3.2 Multiple linear regression (MLR)

#### 5.3.2.1 Rationale

The next step of phase 1 used MLR to address RQs 3 and 4, in which PWB and SCA were the two outcome variables of interest. Wave One's data were used for MLRs due to the sample size at this wave. At least five observations are often recommended for each variable (NCSS, 2019). Roscoe (1975) is stricter with his criterion, as he recommended a sample size several times (at least 10 times) as large as the number of variables to avoid inherent limitations in datasets and maintain the theoretical value of the models. Following these rules, given the two outcome and six predicting variables (two dummy variables for the predictor of Discipline) in the current study, a sample size of 80 is adequate for multivariate analysis approaches such as MLR, and any smaller sample may be problematic for the procedure (e.g. Waves Two and Three).

#### 5.3.2.2 Approach

As discussed above, the purpose of the statistical analysis phase was to understand the relationship between the proposed factors and the outcome variables, in line with the research aims. This means that I am interested in looking at their relationship regardless of whether they were statistically significant. However, due to the small sample size, and for readers with particular interest, p-values were also reported. Predictors were considered statistically significant at significance level  $\alpha=.05$ .

The overall goodness of model fit was quantified using coefficient of determination,  $R^2$ . Adjusted  $R^2$  was also reported. In comparison to  $R^2$ ,  $R^2_{adjusted}$  accounts for the number of predictors in the different models. For joint significance testing of categorical predictors with more than one dummy variable (i.e. Discipline), an  $F$  test (referred to as  $F_{change}$  statistics in SPSS) was used to determine whether the predictor as a whole was significantly related to the outcome variable.

To approach the variable selection process, the MLRs were conducted using a Stepwise forward selection strategy. As one candidate variable was added at a time as the regression model progresses (English language, Doctoral time, Age, Gender, and Discipline), this strategy is effective at fine-tuning the model as each variable is assessed through the model fit. Though a common strategy, the known limitations of this strategy are also addressed through careful consideration of sample size, number of candidate variables, the use of  $R^2_{adjusted}$ , and examination of the dataset (Section 5.2) according to model assumptions. The models reported estimations on all variables of interest, whether they were significantly predicting the outcome variable or not, as all four predictors were relevant to report given the focus of the study. As previously discussed, theoretical criteria are used to select the predictors, as they had previously been shown to be significant towards aspects of

sojourners' and doctoral experience, e.g. English language, age, and gender (Abedi & Benkin, 1987; S. Poyrazli et al., 2004).

### 5.3.3 Linear mixed-effects models (LMEM)

#### 5.3.3.1 Rationale

Phase 2 used LMEM to answer RQs 4 and 5. According to the literature, significant variations in achievement, wellbeing, and adaptation outcomes were found between disciplines of study among doctoral students (Golde, 2005). Similar variations were observed with English proficiency for international graduate students (Berman & Cheng, 2001; S. Poyrazli et al., 2004). As a result, the purpose of this phase was to explore the relationship between Doctoral time and (RQ4) PWB or (RQ5) SCA, as well as how this relationship might vary with either English language or Discipline of study. Ideally, both English language and Discipline would be accounted for in the same model, but due to the small sample size, they were instead included in separate models. It is important to keep in mind how both Discipline and English language variables were collected, and what they might not reflect as we interpret the data. For instance, within each discipline, there are a wide range of factors that differ from one doctorate to another, and same goes for whether students have English as their first or additional language. There may be many factors unaccounted for under these umbrella categories, and interpretation of the results must consider these limitations.

Before deciding on LMEM, other analyses were considered. One approach is MLR as used in phase 1. However, since the focus of this phase required the use of interaction terms, this phase required as many available data points as possible, which was achieved using the different waves of the sample. This led to a requirement for a statistical approach that can account for clustering with the data (the correlation of measurement occasions nested within individuals). Given the clustering, one option was to use Repeated measures ANOVA, but there are two limitations of this approach. Firstly, for ANOVA, any predictor added to the model must be at the level of the individual, which means this does not allow any predictor that varies by time (Harrell, 2015). Secondly, ANOVA immediately revokes listwise deletion for any missing data, removing all available data from other waves, often resulting in biased parameter estimates and potentially reducing statistical power (Nakagawa & Freckleton, 2008). Beside LMEM, there are plausible statistical approaches that can utilise the longitudinal nature of the dataset to explore the changes in PWB and SCA over time and their relationship with one another. These include fitting a Latent growth curve model, and a Multivariate growth model, respectively. Unfortunately, as small sample size and unstructured time are highly problematic for the use of latent-curve approach, both of which were limitations of this dataset, it is not ideal to apply either of these models (McNeish &

Matta, 2018). The issues of sample size, retention rate, and the importance of periodicity (in terms of both frequency and timing) in longitudinal research (National Academies of Sciences, Engineering, 2017) will be discussed in the final Section 5.7 (Strengths and Limitations).

Among its many advantages, LMEM was chosen in this study for two main reasons: (1) clustered data in longitudinal datasets, and (2) LMEM's treatment of missing data. Firstly, longitudinal data requires different treatment from traditional linear regression because observations are correlated (inter-dependent) within subjects. While general linear models assume independence, LMEM is able to account for clustered data, and it can accommodate repeated measurements from survey respondents in a longitudinal study at both same and different time intervals. LMEM allows for distinguishing two kinds of parameters: the fixed effects, which are common to all individuals, and the random effects, which are individual deviations from these central values (Ghisletta et al., 2015; Goldstein, 2003). Specifically, the inclusion of random intercepts allows for the outcome to vary for each possible source of random variability among respondents. In this study, interactions were included, specifically between Doctoral time (level 1) and English language (level 1) / Discipline (level 2).

Secondly, given the current small sample size ( $N=80$ ) and the concern for dropout rate of longitudinal studies in general and the current study specifically (36.3%), LMEM has been shown to have higher power than both the repeated measures ANOVA method (19% more powerful) and generalised estimating equations methods (23% more powerful), especially in cases of missing data that are completely random (i.e. not due to any intervention) (Ma et al., 2012). As repeated measures ANOVA deletes all participants with missing data, this results in losing previous observations, while LMEM uses all available data and addresses the clustering.

### 5.3.3.2 Approach

As a result, LMEM models were fitted for PWB scores and SCA scores across three waves using Restricted Maximum Likelihood (REML) method of estimation (Raudenbush & Bryk, 2002). Intraclass Correlation Coefficient (ICC) was used to estimate goodness of model fit<sup>5</sup>, as it provides the ratio of the between-cluster variance to the total variance, and thus reflects the proportion of the total variance in the outcome variable that is accounted for by the clustering. For joint significance testing of categorical predictors with more than one dummy variable (i.e. Discipline), a Likelihood-Ratio (LR) test was used to determine if the predictor as a whole was significantly related to the outcome variable.

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<sup>5</sup> ICC was calculated as  $\frac{\sigma_{\mu}^2}{(\sigma_{\mu}^2 + \sigma_{\epsilon}^2)}$ .

## 5.4 Results: Phase One – Predictors of PWB and SCA at Wave One

### 5.4.1 Pearson's correlation

At Wave One ( $N = 80$ ), Pearson correlation found a significantly positive correlation between PWB ( $M = 349.6$ ,  $SD = 56.5$ ) and SCA ( $M = 78.9$ ,  $SD = 10.4$ ),  $r = .246$ ,  $p = .028$  ( $R^2 = .061$ )s. This indicated a weak correlation (J. D. Evans, 1996). This relationship can be seen in the scatterplot below (Figure 5.5).

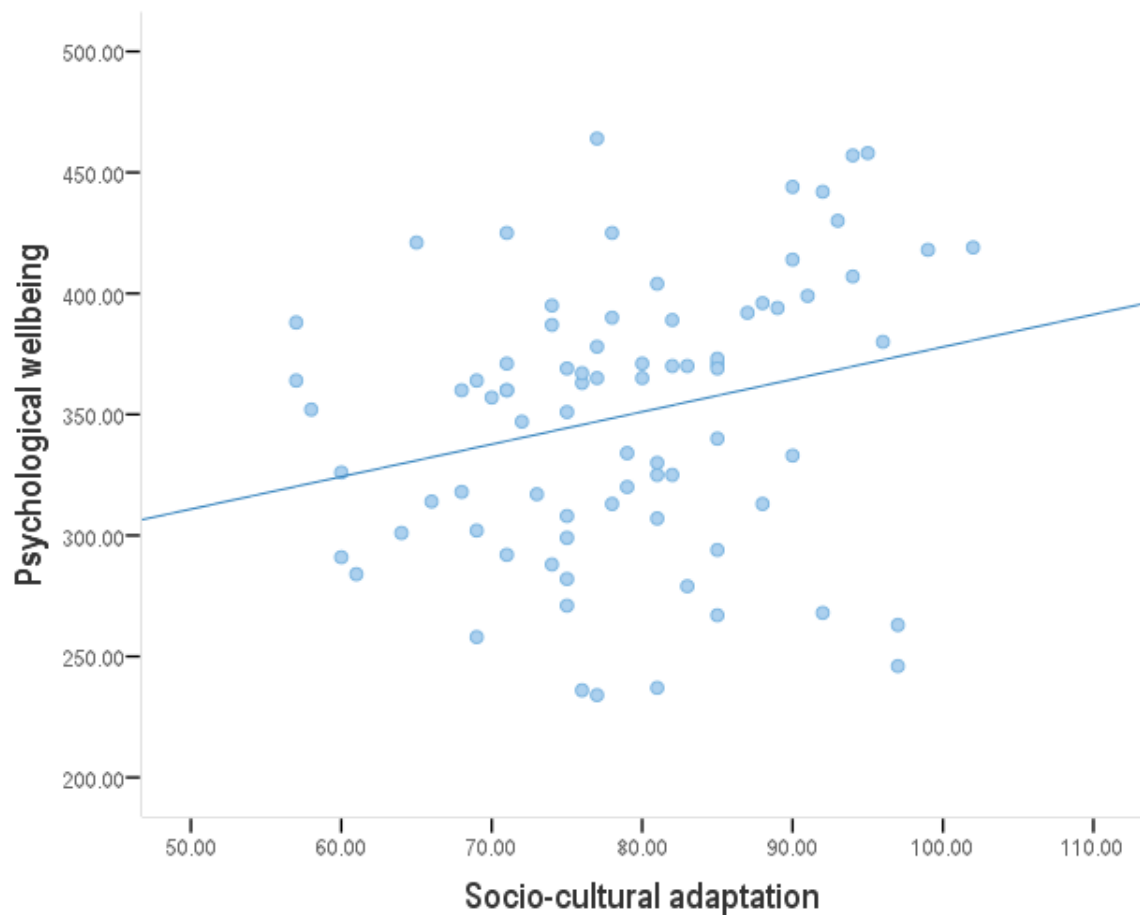


Figure 5.5 Scatterplot of PWB and SCA at Wave One

### 5.4.2 Regression: Psychological wellbeing

In order to address the RQ2a/b and examine the relationship between individual/ecological factors and PWB of the participants, MLR was used to analyse the data from the first round of questionnaire. Five predictors were added to the model (see Table 5.4 for estimation results).

Overall, Gender was the only non-significant predictor. English language (first or additional) and Age were significant predictors in models 1-2 and 3-4, respectively, yet in contrast to prior predictions, they seemed to have a negative relationship with PWB. Doctoral time was a significant predictor in models 2-4, demonstrating a positive relationship with PWB. Discipline was the only significant predictor when all the other factors were accounted for.

Table 5.4 Estimation results of regression models for PWB

Predictors	Model 1		Model 2		Model 3		Model 4		Model 5	
	<i>B</i> ( <i>SE</i> )	$\beta$	<i>B</i> ( <i>SE</i> )	$\beta$	<i>B</i> ( <i>SE</i> )	$\beta$	<i>B</i> ( <i>SE</i> )	$\beta$	<i>B</i> ( <i>SE</i> )	$\beta$
<i>B</i> <sub>0</sub> Constant	363.92 (7.71)		348.88 (10.12)		409.11 (27.43)		404.52 (28.81)		378.62 (31.16)	
<i>B</i> <sub>1</sub> English_First ref=Additional	-36.89** (12.39)	-.32	-33.42* (12.19)	-.29	-22.14† (12.78)	-.19	-23.19† (13.22)	-.20	-17.89 (13.35)	-.15
<i>B</i> <sub>2</sub> Doctoral_Time in Months			.79* (.36)	.23	.72* (.35)	.21	.70* (0.35)	.21	.33 (.39)	.10
<i>B</i> <sub>3</sub> Age in Years					-2.06* (.88)	-.26	-2.22* (.91)	-.28	-1.77† (.92)	-.22
<i>B</i> <sub>4</sub> Female							12.98 (15.00)	.09	12.80 (14.90)	.09
Discipline ref=Social_Sciences										
<i>B</i> <sub>5</sub> Sciences									30.00* (14.72)	.25
<i>B</i> <sub>6</sub> Arts_Humanities									32.87 (18.26)	.22
<i>R</i> <sup>2</sup>	.10		.16		.21		.22		.27	
<i>R</i> <sup>2</sup> <sub>Adjusted</sub>	.09		.13		.18		.18		.21	
<i>F</i>	8.86**		7.12**		6.87***		5.24**		4.51**	
<i>N</i>	80		80		80		79		79	

Note: *B* = Unstandardised beta. (*SE*) = Standard error for *B*.  $\beta$  = Standardised beta.

*R*<sup>2</sup><sub>Adjusted</sub> = Adjusted R-squared.

*F* = *F*-statistic of overall model significance compared to a model with no predictors.

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

#### 5.4.2.1 Model 1: Adding English language

$$H_0 : B_1 = 0$$

$$H_1 : B_j \neq 0, j = 1$$

**Null hypothesis:**

There will be no significant prediction of PWB by the student having English as their first language.

$$PWB_i = B_0 + B_1 \text{English\_As\_First}_i + \varepsilon_i$$

$$\varepsilon_i \sim N(0, \sigma^2_\varepsilon)$$

Model 1 adjusted for the characteristic of **English language** (having English as a first or additional language, with reference value being English as an additional language), thus testing the effect this predictor has on **PWB**. The estimated **PWB** average score was 363.92 for students with English as an additional language (**English-additional**). The results showed that, students who spoke English as their first language (**English-first**) scored 36.89 points lower in their **PWB** compared to their English-additional peers. This effect was statistically significant ( $\beta_1 = -.32$ ,  $t(78) = -2.95$ ,  $p = .004$ ). The coefficient of determination ( $R^2 = .10$ ) showed that this predictor accounted for 10% of the variability in **PWB**. The results suggested that IDSs' **PWB** and their **English language** shared a statistically significant relationship, as their wellbeing score was shown to be lower when English was their first language. Therefore, the null hypothesis was rejected.

#### 5.4.2.2 Model 2: Adding Doctoral time

$$H_0 : B_1 = B_2 = 0$$

$$H_1 : B_j \neq 0, j = 1, 2$$

**Null hypothesis:**

The following variables do not jointly predict PWB:  
 (a) having English as a first language  
 (b) the amount of time spent since the start of the PhD

$$PWB_i = B_0 + B_1 \text{English\_As\_First}_i + B_2 \text{Doctoral\_Time}_i + \varepsilon_i$$

Model 2 examined the predicting ability of both **English language** and **Doctoral Time** on **PWB**. The estimated **PWB** average score was 348.88 for English-additional students, who had not started the PhD (**Doctoral time = 0**). An expected increase of 0.79 points in **PWB** was estimated for every month having spent doing the PhD, after considering the students' **English language**. This effect was statistically significant ( $\beta_2 = .23$ ,  $t(77) = 2.22$ ,  $p = .029$ ). There appeared to be significant prediction of **PWB** by the amount of time having spent since the start of the PhD. **English**



language remained a significant predictor of PWB after accounting for Doctoral Time, with English-first students scoring 33.42 points lower, on average, in their PWB than their English-additional peers (previously 36.89) ( $\beta_1 = -.29$ ,  $t(79) = -2.74$ ,  $p = .008$ ).

The coefficient of determination ( $R^2 = .16$ ) showed that model 2 could account for 16% of the variability in PWB score. A statistically significant F result (comparing model 2 to a model with no predictor variable at all) ( $F(2,77) = 7.12$ ,  $p = .001$ ) meant that model 2 with the two predictors significantly improved the fit of the model compared to a simple model with no predictor. The null hypothesis was rejected.

#### 5.4.2.3 Model 3: Adding Age

$$H_0 : B_1 = B_2 = B_3 = 0$$

$$H_1 : B_j \neq 0, j = 1, 2, 3$$

Null hypothesis:

The following variables do not jointly predict PWB:

- (a) having English as a first language
- (b) the amount of time spent since the start of the PhD
- (c) student's age

$$PWB_i = B_0 + B_1 \text{English\_As\_First}_i + B_2 \text{Doctoral\_Time}_i + B_3 \text{Age}_i + \varepsilon_i$$

Age was controlled for in model 3 to explore its relation to PWB. An average PWB score<sup>6</sup> of 345.73 was estimated for a completely new English-additional student (Doctoral time = 0) at the mean age (30.75). A decrease of 2.08 points in PWB was estimated for every year increase in the participant's age. Results further showed that Age was a statistically significant predictor of PWB ( $\beta_3 = -.26$ ,  $t(76) = -2.35$ ,  $p = .021$ ).

English language's association with PWB became statistically non-significant at significance level  $\alpha = .05$  after having adjusted for Doctoral time and Age ( $\beta_1 = -.19$ ,  $t(76) = -.19$ ,  $p = .087$ ). This meant that the respondent's age for some reason was able to mediate the effect of having English as a first language, but the effect size of 0.19 was still relatively considerable. Further examination of the dataset revealed that English-first respondents were significantly older than their English-additional peers ( $t(76) = -3.30$ ,  $p = .002$ ), which could explain why English language became statistically non-significant as Age was added. Doctoral time remained a significant predictor of PWB ( $\beta_2 = -.21$ ,  $t(76) = 2.07$ ,  $p = .04$ ). Compared to 0.79 in Model 2, an increase of 0.72 in PWB score was observed for every month spent doing the PhD.

<sup>6</sup> PWB score was calculated as  $B_0 + B_3 \times \overline{AGE} = 409.11 - 2.061 \times 30.75 = 345.73$

Compared to model 2 ( $R^2_{adjusted} = .18$ ), the adjusted coefficient of determination ( $R^2_{adjusted} = .18$ ) showed that adding **Age** to the model could only account for a further 5% of the variability in PWB score. Model 3 significantly improved the model fit in comparison to model 0 with no predictor ( $F(3,76) = 6.87, p < .001$ ) and model 2 (with 2 predictors) ( $F(1,76) = 5.54, p = .021$ ).

#### 5.4.2.4 Model 4: Adding Gender

$$H_0 : B_1 = B_2 = B_3 = B_4 = 0$$

$$H_1 : B_j \neq 0, j = 1, 2, 3, 4$$

**Null hypothesis:**

The following variables do not jointly predict PWB:

- (a) having English as a first language
- (b) the amount of time spent since the start of the PhD
- (c) student's age
- (d) student's gender

$$PWB_i = B_0 + B_1\text{English\_As\_First}_i + B_2\text{Doctoral\_Time}_i + B_3\text{Age}_i + B_4\text{Female}_i + \varepsilon_i$$

Model 4 further adjusted for **Gender** to examine the joint effect the four stated predictors have on PWB. The estimated average PWB score<sup>7</sup> was 336.16 for a completely new male student at average age (30.75) with English as an additional language. In comparison, a female student would score 12.98 points higher in their PWB, on average. However, **Gender** had quite a low effect size, and it was further found to be a statistically non-significant predictor ( $\beta_4 = .09, t(74) = .87, p = .39$ ). **Doctoral time** and **Age** remained significant predictors of PWB ( $\beta_2 = .21, t(74) = 2.04, p = .049$  and  $\beta_3 = -.28, t(74) = -2.43, p = .017$ , respectively). PWB score was expected to increase 0.70 points (previously 0.72) for every month doing the PhD and decrease 2.22 points for every additional year in age.

It is also notable here that due to the missing value in **Gender**, the sample size was reduced to 79 participants in this model. The adjusted coefficient of determination ( $R^2_{adjusted} = .18$ ) showed that model 4 did not account for any more of the variability in PWB score compared to model 3.

<sup>7</sup> PWB score was calculated as  $B_0 + B_3 \times \overline{AGE} = 404.52 - 2.223 \times 30.75 = 336.16$

## 5.4.2.5 Model 5: Adding Discipline

$$H_0 : B_1 = B_2 = B_3 = B_4 = B_5 = B_6 = 0$$

$$H_1 : B_j \neq 0, j = 1, 2, 3, 4, 5, 6$$

Null hypothesis:

The following variables do not jointly predict PWB:

- (a) having English as a first language
- (b) the amount of time spent since the start of the PhD
  - (c) student's age
  - (d) student's gender
  - (e) PhD discipline

$$PWB_i = B_0 + B_1\text{English\_As\_First}_i + B_2\text{Doctoral\_Time}_i + B_3\text{Age}_i + B_4\text{Female}_i + B_5\text{Sciences}_i + B_6\text{Arts\_Humanities}_i + \varepsilon_i$$

**Discipline** was added as a final predictor in model 5, thus testing for the joint effect all five predictors have on PWB. The estimated average PWB score<sup>8</sup> was 324.36 for a completely new male PhD student in the Social Sciences at average age (30.75) with English as an additional language. In comparison, PWB score was 30.00 points higher for their peers in Sciences, and 32.87 points higher for their peers in Arts & Humanities, on average.

Notably, as **Discipline** was added, both **Doctoral time** and **Age** became non-significant predictors of PWB (at significance level  $\alpha=.05$ ), ( $\beta_2 = .10, t(72) = .85, p = .399$ ) and ( $\beta_3 = -.22, t(72) = -1.92, p = .059$ ), respectively. However, this result should be interpreted with care. As the dataset was further inspected, compared to their Sciences peers, the respondents who were in Social Sciences were significantly older ( $F(2,76) = 6.06, p = .004$ ; Games-Howell<sup>9</sup>:  $MD = 5.86, p < .001$ ) and had done the doctorate for a significantly shorter amount of time at the time they completed the first questionnaire ( $F(2,76) = 12.01, p < .001$ ; Games-Howell:  $MD = -11.06, p = .001$ ). While these characteristics might reflect the population of doctoral students (doctoral students in Sciences tend to be younger), they might also reflect the characteristics of doctoral students who were interested in responding to a questionnaire on wellbeing. A joint significance test indicated that there was no overall effect that **Discipline of study** had on PWB ( $F(2,72) = 2.59, p = .082$ ). The coefficient of determination ( $R^2 = .27$ ) indicated that model 5 was able to explain 27% of the variability in PWB score.

<sup>8</sup> PWB score was calculated as  $B_0 + B_3 \times \overline{AGE} = 378.66 - 1.766 \times 30.75 = 324.36$

<sup>9</sup> Games-Howell test (which uses Studentized maximum modulus distribution) was used to perform post-hoc due to unequal variances. Mean difference (MD) was reported together with p-values.

### 5.4.3 Regression: Socio-cultural adaptation

Similar with PWB, in order to address the second research question and examine which factors could significantly predict the SCA of IDSs, MLR was used to analyse the data from the first round of questionnaire. Five predictors were added to explore their effect on SCA as described in Table 5.5 below. Overall, Age appeared to be the only significant predictor, but contrary to previous predictions, both Doctoral time and Age were negatively related to SCA.

Table 5.5 Estimation results of regression models for SC

Predictors	Model 1		Model 2		Model 3		Model 4		Model 5	
	<i>B</i> ( <i>SE</i> )	$\beta$	<i>B</i> ( <i>SE</i> )	$\beta$	<i>B</i> ( <i>SE</i> )	$\beta$	<i>B</i> ( <i>SE</i> )	$\beta$	<i>B</i> ( <i>SE</i> )	$\beta$
<i>B</i> <sub>0</sub> Constant	77.80 (1.48)		78.12 (2.00)		89.14 (5.46)		88.05 (5.67)		88.21 (6.30)	
<i>B</i> <sub>1</sub> English_First ref=Additional	2.85 (2.38)	.13	2.76 (2.41)	.13	<b>4.84</b> <sup>†</sup> (2.54)	.23	<b>4.69</b> <sup>†</sup> (2.60)	.22	<b>4.81</b> <sup>†</sup> (2.70)	.22
<i>B</i> <sub>2</sub> Doctoral_Time in Months			-.02 (.07)	-.03	-.03 (.07)	-.05	-.04 (.07)	-.06	-.01 (.08)	-.01
<i>B</i> <sub>3</sub> Age in Years					<b>-.38</b> * (.17)	-.26	<b>-.44</b> * (.18)	-.30	<b>-.46</b> * (.19)	-.31
<i>B</i> <sub>4</sub> Female							4.32 (2.95)	.17	4.75 (3.01)	.18
Discipline ref=Social_Sciences										
<i>B</i> <sub>5</sub> Sciences									-.40 (2.98)	-.02
<i>B</i> <sub>6</sub> Arts_Humanities									-3.53 (3.69)	-.13
<i>R</i> <sup>2</sup>	.02		.02		.08		.11		.12	
<i>R</i> <sup>2</sup> <sub>Adjusted</sub>	.01		-.01		.04		.06		.05	
<i>F</i>	1.44		.74		2.08		<b>2.19</b> <sup>†</sup>		1.61	
<i>N</i>	80		80		80		79		79	

Note: *B* = Unstandardised beta. (*SE*) = Standard error for *B*.  $\beta$  = Standardised beta.  
*R*<sup>2</sup><sub>Adjusted</sub> = Adjusted R-squared.  
*F* = *F*-statistic of overall model significance compared to a model with no predictors.  
<sup>†</sup>  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

#### 5.4.3.1 Model 1: Adding English language

$$H_0 : B_1 = 0$$

$$H_1 : B_j \neq 0, j = 1$$

**Null hypothesis:**

There will be no significant prediction of SCA by the student having English as their first language.

$$SCA_i = B_0 + B_1 \text{English\_As\_First}_i + \varepsilon_i$$

Model 1 examined the relationship between *English language* and *SCA*. The estimated *SCA* score was 77.80 for English-additional students. As predicted, the estimations showed that English-first students scored 2.85 points higher in their *SCA* compared to their peers, on average. However, this effect was statistically non-significant ( $\beta_1 = .13, t(78) = 1.20, p = .234$ ). This indicated that while having English as a first language corresponded with a higher adaptation score, it was not a statistically significant relationship at significance level  $\alpha=05$ . The coefficient of determination ( $R^2 = .02$ ) shows that this predictor only accounts for 2% of the variability in *SCA*, and F-test showed that adding this predictor to the model did not significantly improve the fit of the model compared to one with no predictor ( $F(1,78) = 1.44, p = .234$ ).

#### 5.4.3.2 Model 2: Adding Doctoral time

$$H_0 : B_1 = B_2 = 0$$

$$H_1 : B_j \neq 0, j = 1, 2$$

**Null hypothesis:**

The following variables do not jointly predict SCA:

- (a) having English as a first language
- (b) the amount of time spent since the start of the PhD

$$SCA_i = B_0 + B_1 \text{English\_As\_First}_i + B_2 \text{Doctoral\_Time}_i + \varepsilon_i$$

Model 2 examined the joint predicting ability of *English language* and *Doctoral Time* on *SCA*. The estimated *SCA* score was 78.12 for English-additional students starting their doctorate (*Doctoral time* = 0). In contrast to the prediction, for every month having spent doing the doctorate, a decrease of 0.02 points in *SCA* was estimated. However, this had a small effect size and was statistically non-significant ( $\beta_2 = -.03, t(77) = -.24, p = .811$ ).

For *English language*, English-first students scored 2.76 points higher on average compared to their English-additional peers ( $\beta_1 = .13, t(77) = 1.15, p = .253$ ). Despite their statistical non-significance, it is worth noting the direction of these relationships with *SCA* in comparison to

those with PWB, as they were in opposite directions. Dummy variable *English\_As\_First* was associated with lower PWB and higher SCA, while *Doctoral time* was positively associated with PWB yet negatively associated with SCA.

#### 5.4.3.3 Model 3: Adding Age

$$H_0 : B_1 = B_2 = B_3 = 0$$

$$H_1 : B_j \neq 0, j = 1, 2, 3$$

**Null hypothesis:**

The following variables do not jointly predict SCA:

- (a) having English as a first language
- (b) the amount of time spent since the start of the PhD
- (c) student's age

$$SCA_i = B_0 + B_1 \text{English\_As\_First}_i + B_2 \text{Doctoral\_Time}_i + B_3 \text{Age}_i + \varepsilon_i$$

*Age* was added to model 3. An SCA score<sup>10</sup> of 77.46 was estimated for a completely new English-additional student (*Doctoral time* = 0) at average age (30.75). A decrease of 0.38 points in SCA was estimated for every additional year in *Age*, and a decrease of 0.03 points for every additional month in *Doctoral time*, on average. *Age* was a statistically significant predictor of SCA ( $\beta_3 = -.38, t(76) = -.26, p = .033$ ), while *Doctoral time* was a non-significant predictor ( $\beta_2 = -.05, t(76) = -.43, p = .666$ ). English-first students scored 4.84 points higher on average compared to their English-additional peers ( $\beta_1 = .23, t(76) = 1.90, p = .061$ ). The coefficient of determination ( $R^2 = .08$ ) showed that the model could account for 8% of the variability in SCA score.

#### 5.4.3.4 Model 4: Adding Gender

$$H_0 : B_1 = B_2 = B_3 = 0$$

$$H_1 : B_j \neq 0, j = 1, 2, 3$$

**Null hypothesis:**

The following variables do not jointly predict SCA:

- (a) having English as a first language
- (b) the amount of time spent since the start of the PhD
- (c) student's age
- (d) student's gender

$$SCA_i = B_0 + B_1 \text{English\_As\_First}_i + B_2 \text{Doctoral\_Time}_i + B_3 \text{Age}_i + B_4 \text{Female}_i + \varepsilon_i$$

<sup>10</sup> SCA score was calculated as  $B_0 + B_3 \times \overline{AGE} = 89.14 - 0.38 \times 30.75 = 77.46$

Model 4 further adjusted for **Gender**. The estimated **SCA** score<sup>11</sup> was 74.52 for a completely new male PhD student at average age (30.75) with English as an additional language. In comparison, their female peer would score 4.32 points lower in their **SCA**, on average. However, **Gender** had quite a low effect size, and it was further found to be a statistically non-significant effect ( $\beta_4 = .17$ ,  $t(74) = 1.46$ ,  $p = .148$ ). On average, **SCA** score was 0.04 points lower for every additional month in **Doctoral time** ( $\beta_2 = -.06$ ,  $t(74) = -.55$ ,  $p = .585$ ). **Age** was a significant predictor of **SCA**, with an estimated decrease of 0.44 points (previously 0.38) for every year older in age ( $\beta_3 = -.18$ ,  $t(74) = .30$ ,  $p = .016$ ). The sample size was 79 participants in this model due to missing data. The coefficient of determination ( $R^2 = .11$ ) showed that the model could account for 11% of variability in **SCA** score.

#### 5.4.3.5 Model 5: Adding Discipline

$$H_0 : B_1 = B_2 = B_3 = B_4 = B_5 = B_6 = 0$$

$$H_1 : B_j \neq 0, j = 1, 2, 3, 4, 5, 6$$

**Null hypothesis:**

The following variables do not jointly predict PWB:

- (a) having English as a first language
- (b) the amount of time spent since the start of the PhD
- (c) student's age
- (d) student's gender
- (e) PhD discipline

$$PWB_i = B_0 + B_1 \text{English\_As\_First}_i + B_2 \text{Doctoral\_Time}_i + B_3 \text{Age}_i + B_4 \text{Female}_i + B_5 \text{Sciences}_i + B_6 \text{Arts\_Humanities}_i + \varepsilon_i$$

**Discipline** was added to model 5 to test for the joint effect all five predictors have on **SCA**. The estimated **SCA** score<sup>12</sup> was 74.07 for a completely new male student in Social Sciences at average age (30.75) with English as an additional language. In comparison, **SCA** score was 0.40 points lower for their peer in Sciences, and 3.53 points lower for their peer in Arts and humanities, on average ( $\beta_5 = -.02$ ,  $t(72) = -.14$ ,  $p = .893$  and  $\beta_6 = -.13$ ,  $t(72) = -.96$ ,  $p = .342$ , respectively). A joint significance test (F-change) further indicated that there was no overall effect that **Discipline of study** had on **SCA** ( $F(2,72) = .51$ ,  $p = .604$ ).

**Age** ( $\beta_3 = -.31$ ,  $t(72) = -.31$ ,  $p = .017$ ) remained a significant predictor of **SCA** as we adjusted for all the other factors, with an estimated decrease in **SCA** score of 0.46 points for every year increase in age.

<sup>11</sup> **SCA** score was calculated as  $B_0 + B_3 \times \overline{AGE} = 88.05 - 0.44 \times 30.75 = 74.52$

<sup>12</sup> **SCA** score was calculated as  $B_0 + B_3 \times \overline{AGE} = 88.21 - 0.46 \times 30.75 = 74.07$

The coefficient of determination ( $R^2 = .12$ ) indicated that model 5 was able to explain 12% of the variability in SCA score, only 1% higher than model 4. Based on the results on the joint prediction, however, the null hypothesis could not be rejected.

## 5.5 Results: Phase Two – PWB and SCA over time

### 5.5.1 Mixed effect models: Psychological wellbeing

A total of 194 data points was available for models 1 and 2 in Phase 2 (80 participants x 3 waves, after having accounted for dropouts). Due to missing data in model 3 (in Discipline), 193 valid data points were included.

The aim of this part of phase 2 was to see if the effect of Doctoral time on PWB varied by English language and/or Discipline of study. Using data measured at different points over 12 months, the mixed models showed that this effect was significant for PWB only when Discipline was accounted for. Further interpretation of these results can be found in the discussion (Sections 5.6 and 5.7). Table 5.6 showed the estimation results of LMEM with PWB across three waves as the outcome variable.



Table 5.6 Estimation results of mixed models for PWB

		Model 1	Model 2	Model 3	Model 4
Fixed effects		<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )
<i>B</i> <sub>0</sub>	Constant	363.71 (4.67)	355.21 (7.56)	363.92 (7.46)	329.57 (10.95)
<i>B</i> <sub>1</sub>	Doctoral_Time		.41 (.28)	-.38 (.45)	<b>1.99**</b> (.62)
<b>English language</b> ref=Additional					
<i>B</i> <sub>2</sub>	English_First			<b>-31.73*</b> (15.64)	
<b>Discipline</b> ref=Social_Sciences					
<i>B</i> <sub>4</sub>	Sciences				<b>55.17*</b> (20.66)
<i>B</i> <sub>5</sub>	Arts_Humanities				<b>45.92†</b> (23.12)
<b>Interaction terms</b>					
Model 3					
<i>B</i> <sub>3</sub>	Doctoral_Time x English_First			<b>1.28*</b> (.59)	
Model 4					
<i>B</i> <sub>6</sub>	Doctoral_Time x Sciences				<b>-2.54*</b> (.88)
<i>B</i> <sub>7</sub>	Doctoral_Time x Arts_Humanities				<b>-2.13*</b> (.79)
<b>Random effects</b>					
$\sigma^2_{\epsilon}$		2114.86	2053.16	2052.58	1881.99
$\sigma^2_{\mu}$		808.77	889.31	861.78	1067.38
<i>ICC</i>		.28	.30	.30	.36
<i>AIC</i>			2084.01	2051.91	2047.12
<i>N</i>		80	80	80	79
$\bar{T}$		2.43	2.43	2.43	2.44

Note: *B* = Unstandardised beta. (*SE*) = Standard error for *B*.  $\beta$  = Standardised beta.

$\sigma^2_{\epsilon}$  = Variance estimates of nested effect (wave within individuals).

$\sigma^2_{\mu}$  = Variance estimates of individuals (between-individual variance).

*ICC* = Intraclass correlation coefficient.

*AIC* = Akaike's information criterion.

$\bar{T}$  = Average number of repeated measurements.

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

### 5.5.1.1 Model 1: ‘Null’ (Random intercept) model

$$\text{PWB}_{ij} = \mathbf{B}_0 + \boldsymbol{\mu}_j + \boldsymbol{\varepsilon}_{ij}$$

$$\boldsymbol{\varepsilon}_{ij} \sim \text{N}(0, \sigma^2_{\boldsymbol{\varepsilon}})$$

$$\boldsymbol{\mu}_j \sim \text{N}(0, \sigma^2_{\boldsymbol{\mu}})$$

**Level 1  $\boldsymbol{\varepsilon}_{ij}$ : Individual-specific random effect (Variations between waves)**

**Level 2  $\boldsymbol{\mu}_j$ : Occasion-specific residual (Variations between individuals)**

Model 1 took into account that we have subjects within a longitudinal design using repeated measurements. The subscripts  $i$  and  $j$  indicate that each observation  $i$  (wave) is nested within cluster  $j$  (individual). The purpose of this empty model is to examine inter-individual variation in PWB without regard to time (Shek & Ma, 2011) to allow for comparison to the later model with time as a fixed effect, where

- $\text{PWB}_{ij}$  is the **PWB** score in wave  $i$  for individual  $j$ ,
- $\mathbf{B}_0$  is the overall mean across individuals,
- $\boldsymbol{\mu}_j$  is the effect of individual  $j$  on PWB, and
- $\boldsymbol{\varepsilon}_{ij}$  is an occasion-level residual.

The individual effects  $\boldsymbol{\mu}_j$ , which we will also refer to as individual (or level 2) residuals, are assumed to follow a normal distribution with mean zero and variance  $\sigma^2_{\boldsymbol{\mu}}$ .

No predictor was added to this model. The random effect for individuals alone accounts for **28%** of the variance of PWB. As the ICC (0.28) is above 0.25, LMEM is an appropriate approach for examining the association between **Doctoral time** and **PWB**, and how it varies by **English language** and **Discipline** compared to the traditional models such as ANOVA (Kreft, 1996).

### 5.5.1.2 Model 2: Adding Doctoral time

$$\text{PWB}_{ij} = \mathbf{B}_0 + \mathbf{B}_1 \text{Doctoral\_Time}_{ij} + \boldsymbol{\mu}_i + \boldsymbol{\varepsilon}_{ij}$$

Model 2 explored the association between **Doctoral time** and **PWB**. An average **PWB** score of **355.21** was estimated for students at the start of their doctorate (**Time = 0**). For every additional month on the doctorate, **PWB** score **increased 0.41 points**, on average. This relationship was statistically non-significant ( $t(100.47) = 1.45, p = .151$ ).

### 5.5.1.3 Model 3: The effect of Doctoral time varied by English language

$$\text{PWB}_{ij} = \mathbf{B}_0 + \mathbf{B}_1\text{Doctoral\_Time}_{ij} + \mathbf{B}_2\text{English\_As\_First}_{ij} \\ + \mathbf{B}_3\text{Doctoral\_Time} \times \text{English\_As\_First}_{ij} + \mu_i + \varepsilon_j$$

Model 3 examined how the effect that **Doctoral time** had on **PWB** might vary with **English language** (English-first students:  $\text{English\_As\_First} = 1$ ,  $N=31$ ; English-additional students:  $\text{English\_As\_First} = 0$ ,  $N=49$ ). The estimated average **PWB** score was 363.92 for English-additional students starting the doctorate ( $\text{Time} = 0$ ). An expected decrease of 0.38 points in **PWB** was estimated for every month having spent doing the doctorate ( $t(97.18) = -.87, p = .388$ ).

Notably, in contrast to an overall positive association between **PWB** and **Doctoral time**, when we split students into groups according to **English language**, this association was different for the two groups (English-first and English-additional). At  $\text{time} = 0$ , English-first students scored 31.73 points lower in **PWB** than their English-additional peers. This effect was statistically significant ( $t(87.32) = -2.08, p = .041$ ).

The interactions between **Doctoral time** and **English language** were significant as predictors of **PWB** ( $t(99.72) = 2.22, p = .028$ ). For every additional month in doctoral time, English-first students scored 0.90 points higher ( $B_1 + B_3$ ) in their **PWB** than their English-additional peers, on average. In other words, the association between **Doctoral time** and **PWB** was negative for English-additional students, but positive for their English-first peers.

### 5.5.1.4 Model 4: The effect of Doctoral time varied by Discipline of study

$$\text{PWB}_{ij} = \mathbf{B}_0 + \mathbf{B}_1\text{Doctoral\_Time}_{ij} + \mathbf{B}_4\text{Sciences}_{ij} + \mathbf{B}_5\text{Arts\_Humanities}_{ij} \\ + \mathbf{B}_6\text{Doctoral\_Time} \times \text{Sciences}_{ij} + \mathbf{B}_7\text{Doctoral\_Time} \times \text{Arts\_Humanities}_{ij} + \mu_i + \varepsilon_j$$

Model 4 examined how the effect that **Doctoral time** had on **PWB** might vary with **Discipline**. According to LMEM results, the estimated average **PWB** score was 329.57 for students starting the doctorate in Social Sciences ( $\text{Time} = 0$ ). For every month spent on the doctorate, their **PWB** was expected to increase 1.99 points ( $t(110.66) = 3.23, p = .002$ ). Here, in contrast to an overall significant positive association between **PWB** and **Doctoral time** found in phase 1 MLR, and a non-significant positive association estimated in model 2, when we split students into groups according to **Discipline**, this association was different across the three groups.

At *Doctoral time* = 0, compared to students in Social Sciences, the *PWB* of their peers in Sciences and Arts & Humanities was on average 55.17 points higher ( $t(90.89) = 2.67, p = .009$ ), and 45.92 points higher ( $t(88.39) = 1.99, p = .050$ ), respectively. However, for every additional month in the doctorate, compared to their Social Sciences peers, students in Sciences scored 0.55 points lower ( $B_1 + B_6$ ) ( $t(100.64) = -2.90, p = .005$ ), and those in Arts & Humanities scored 0.14 points lower ( $B_1 + B_7$ ) ( $t(107.59) = -2.71, p = .008$ ). A joint significance test (LR test) indicated that the interaction terms between *Doctoral time* and *Discipline of study* were significant predictors of *PWB* ( $LR(2) = 12.14, p = .002$ ).

In summary, the model estimations were mainly reflecting the first two years of the doctorate as previously visualised in Figure 5.3, perhaps due to how the majority of the sample fell within this period of doctoral time. During this period, the *PWB* of students according to their discipline seemed to flip, as those in Social Sciences started with the lowest estimated *PWB* scores, but ended up with the highest scores, in contrast to their Sciences peers. This might be due to a difference in programme's structure across disciplines, perhaps by those in Social Sciences passing more concrete milestones such as upgrade or fieldwork. Notably, the qualitative data did allow for more insight into how similar milestones could influence wellbeing. There was not enough information to speculate further from the quantitative dataset, but overall, it could be concluded that *Discipline of study* significantly predicted how the *PWB* of students fluctuated over their time in the doctorate. Further discussion of this finding in combination with qualitative analysis can be found in Chapters Six and Eight.

### 5.5.2 Mixed effect models: Socio-cultural adaptation

Similar to the first part of phase 2, the aim of this analysis was to see if the effect of **Doctoral time** on **SCA** varied by **English language** and/or **Discipline of study**. Using data measured at different points over 12 months, the mixed models showed that this effect remained small in relation to **SCA**, and it was non-significant (Table 5.7).

Table 5.7 Estimation results of mixed models for SCA

		Model 1	Model 2	Model 3	Model 4
		<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )	<i>B</i> ( <i>SE</i> )
<b>Fixed effects</b>					
<i>B</i> <sub>0</sub>	Constant	80.34 (1.19)	78.66 (1.81)	78.99 (2.76)	79.01 (2.53)
<i>B</i> <sub>1</sub>	Doctoral_Time		.08 (.07)	.01 (.10)	.19 (.13)
<b>English language</b> ref=Additional					
<i>B</i> <sub>2</sub>	English_First			.52 (3.67)	
<b>Discipline</b> ref=Social_Sciences					
<i>B</i> <sub>4</sub>	Sciences				-2.57 (4.74)
<i>B</i> <sub>5</sub>	Arts_Humanities				-4.96 (5.46)
<b>Interaction terms</b>					
Model 3					
<i>B</i> <sub>3</sub>	Doctoral_Time x English_First			.15 (.13)	
Model 4					
<i>B</i> <sub>6</sub>	Doctoral_Time x Sciences				-.03 (.19)
<i>B</i> <sub>7</sub>	Doctoral_Time x Arts_Humanities				-.09 (.17)
<b>Random effects</b>					
$\sigma^2_{\epsilon}$		51.97	51.00	51.32	50.40
$\sigma^2_{\mu}$		88.45	91.28	88.13	95.49
<i>ICC</i>		.63	.36	.63	.65
<i>AIC</i>			1446.86	1442.05	1431.46
<i>N</i>		80	80	80	79
$\bar{T}$		2.43	2.43	2.43	2.44

Note: *B* = Unstandardised beta. (*SE*) = Standard error for *B*.  $\beta$  = Standardised beta.

$\sigma^2_{\epsilon}$  = Variance estimates of nested effect (wave within individuals).

$\sigma^2_{\mu}$  = Variance estimates of individuals (between-individual variance).

*ICC* = Intraclass correlation coefficient.

*AIC* = Akaike's information criterion.

$\bar{T}$  = Average number of repeated measurements.

†  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

### 5.5.2.1 Model 1: ‘Null’ (Random intercept) model

$$SCA_{ij} = B_0 + \mu_j + \varepsilon_{ij}$$

Model 1 with no predictors examined the inter-individual variation in *SCA* without regard to time to allow for comparison to the later model with time as a fixed effect. The result indicated that the random effect for individuals alone accounts for 63% of the variance of *SCA*.

### 5.5.2.2 Model 2: Adding Doctoral time

$$SCA_{ij} = B_0 + B_1 \text{Doctoral\_Time}_{ij} + \mu_j + \varepsilon_{ij}$$

Model 2 explored the association between *Doctoral time* and *SCA*. An average *SCA* score of 78.66 was estimated for students at the start of their doctorate (*Doctoral time* = 0). For every additional month on the doctorate, *SCA* score increased 0.08 points, on average. This relationship was statistically non-significant ( $t(125.63) = 1.24, p = .217$ ).

### 5.5.2.3 Model 3: The effect of Doctoral time varied by English language

$$SCA_{ij} = B_0 + B_1 \text{Doctoral\_Time}_{ij} + B_2 \text{English\_As\_First}_{ij} + B_3 \text{Doctoral\_Time} \times \text{English\_As\_First}_{ij} + \mu_j + \varepsilon_{ij}$$

Model 3 looked at how the effect of *Doctoral time* on *SCA* varied by *English language* by adding interaction terms to the model. The estimated *SCA* score was 78.99 for English-additional students starting the doctorate (*Doctoral time* = 0). On average, an increase of 0.01 points in *SCA* was estimated for every month having spent doing the doctorate ( $t(141.39) = .07, p = .944$ ).

Again, when we split students into groups according to their *English language*, the association between *Doctoral time* and *SCA* was different for the two groups (English-first and English-additional). At *Doctoral time* = 0, English-first students scored 0.52 points higher in their *SCA* than their English-additional peers (in contrast to a lower *PWB* score as previously found). This effect was non-significant ( $t(103.71) = .14, p = .887$ ).

The interaction between *Doctoral time* and *English language* was a non-significant predictor of *SCA* ( $t(129.04) = 1.13, p = .263$ ). For every additional month in doctoral time, English-first students scored 0.16 points higher ( $B_1 + B_3$ ) in their *SCA* than their English-additional peers. In other words, similar to *PWB*, the association between *SCA* and *Doctoral time* was negative for English-additional students, but positive for their English-first peers.

#### 5.5.2.4 Model 4: The effect of Doctoral time varied by Discipline of study

$$SCA_{ij} = B_0 + B_1\text{Doctoral\_Time}_{ij} + B_4\text{Sciences}_{ij} + B_5\text{Arts\_Humanities}_{ij} \\ + B_6\text{Doctoral\_Time} \times \text{Sciences}_{ij} + B_7\text{Doctoral\_Time} \times \text{Arts\_Humanities}_{ij} + \mu_i + \varepsilon_{ij}$$

Model 4 examined how the effect that **Doctoral time** had on SCA might vary with **Discipline of study**. The estimation results showed that an average SCA score of 79.01 was estimated for students starting the doctorate in Social Sciences (**Doctoral time** = 0). For every month spent on the doctorate, their SCA increased 0.19 points ( $t(169.50) = 1.41, p = .160$ ).

When we split students into groups according to **Discipline**, the association between SCA and **Doctoral time** was different for the three groups, though none of them were statistically significant. At **Doctoral time** = 0, compared to students in Social Sciences, the SCA of their peers in Sciences and Arts & Humanities was 2.57 points lower ( $t(120.82) = -.54, p = .589$ ), and 4.96 points lower ( $t(94.57) = -.91, p = .366$ ), respectively.

For every additional month in the doctorate, compared to their Social Sciences peers, students in Sciences scored 0.15 points higher ( $B_1 + B_6$ ) ( $t(154.43) = -.18, p = .859$ ), and those in Arts & Humanities scored 0.10 points higher ( $B_1 + B_7$ ) ( $t(142.03) = -.50, p = .618$ ). A joint significance test (LR test) indicated that the interaction terms between **Doctoral time** and **Discipline of study** were non-significant predictors of SCA ( $LR(2) = 3.17, p = .205$ ).

In summary, the fixed effects were small and statistically non-significant for SCA. Overall, it could not be concluded that **Discipline of study** significantly predicted how the SCA of students fluctuated over time.

## 5.6 Discussion: Individual, ecological, and process levels of PWB and SCA

Overall, significant predictors of PWB were **doctoral time** (positively) and the student's **age** (negatively). The analysis found that the longer time the student has spent doing the PhD, the higher their PWB score will be. However, when cross-level interactions were explored, there were differences in how these variables varied together. For those with **English** as their first language, the relationship between **time** and **PWB** remained positive, yet it was negative for their peers who had English as an additional language. When the split was in relation to **Discipline of study**, this factor significant predicted how the **PWB** of students fluctuated over their time in the doctorate, as the fluctuation in PWB was different across Sciences, Social Sciences, and Arts & Humanities students.

Compared to PWB, SCA also had a significantly negative association with Age. It was predicted by reviewing of previous literature that found age to be a potential factor by which student experience differs (S. Poyrazli et al., 2001; Y. Ying & Liese, 1994), yet the negative associations were unexpected. Mixed findings regarding age and both well-being and adaptation have been reported, for instance higher levels of discrimination are associated with older students, and higher levels of homesickness are associated with younger students (Senel Poyrazli & Lopez, 2007). Due to the demographic characteristics of the IDS population, it might be that their well-being and adaptation might involve other factors such as family status, and children and spouse well-being and adaptation. These results showed the complexities of students' experience, and further reiterated the importance of qualitative data to understand these statistical patterns.

The association with English language was also important to interpret, because in comparison to a negative effect this variable demonstrates on PWB, the relationship between the individual's SCA and having English as their first language was positive. This was informative in two manners. Firstly, it distinguished the difference between PWB and SCA, and secondly, it indicated the manners in which language plays a role in adaptation. As SCAS measured levels of perceived competence, while PWBS was concerned more with negative and positive affect, the role of having English as a first language could be different for the two dimensions. While speaking English well might directly ease academic and socio-cultural adaptation (Wang & Mallinckrodt, 2006; Ye, 2005; Y.-W. Ying, 2005), a sense of well-being that is dependent on other aspects of life might not directly benefit from this. More research is needed to understand the underlying mechanisms that language in general and English language in particular plays in these two dimensions of the IDS experience. Moreover, whether the student has English as their first language was a significant predictor on its own, but the predictor was non-significant when doctoral time and student's age were included in the model. This result indicated that these factors were able to mediate the relationship between language and PWB.

However, unlike predicted, the individual's gender does not significantly predict PWB. This could be due to a small sample of 80 with nearly 80% being female participants. Doctoral time was a non-significant predictor of PWB in phase 2 as the only fixed effect as well as when included together with English language. However, it was a significant predictor of PWB when Discipline was accounted for. This means that due to the opposite directions and different magnitudes in which time was related to PWB for the two English language groups, as indicated by the effect sizes, the overall relationship was neutralised. PWB and Doctoral time had a positive association for students in Social Sciences, but a negative association for those in Sciences and Arts & Humanities.



In terms of the overall argument of the thesis, Phase 1 presented evidence for the **individual factors** (English language and Age), **ecological factor** (Discipline), as well as **time** (Doctoral time) in relation to PWB, and **individual factor** (Age) in relation to SCA. In Phase 2, we could conclude that time and ecological dimensions interact in relation to PWB – in other words, time matters differently depending on disciplines.

### **5.7 Strengths, limitations, and suggestions for future research**

Compared to cross-sectional and two-wave datasets, longitudinal data (including three or more waves) has many methodological and statistical strengths if techniques such as growth curve estimation is feasible with a larger sample size (Chapter Nine discusses how research design can be improved to address this issue). The methodological decision for longitudinal quantitative psychologists tends to be a balance between internal consistency and drop-out rate. Future research could explore how drop-out rates vary by questionnaire length, and how it affects the reliability. In the current study, the benefit of the three waves of questionnaire data was in the exploration of cross-level interactions. In other words, the advantage came from boosting the sample size to include moderation interactions and explore the multi-level nature of the IDS experience. The strength of this strand was evident in its finding regarding these cross-level interactions.

At the same time, careful consideration is required when using time-structured data, especially in relation to retention rate, and periodicity (frequency and timing of waves) (McNeish & Matta, 2018). To ensure the theoretical value of statistical models when longitudinal datasets are used, the importance of the timing of waves is further reinforced. Compared to multivariate analysis such as ANOVA, in multi-level models the nature of fixed vs varying occasions of measurements does not pose much problem (Hox et al., 2017) The issue comes when we interpret the timeline, as a difference in one month may mean a lot to a PhD student. A way to address this could be to collect more information on each respondent's milestones in their PhD. However, this poses other issues of interpreting results across disciplines. Perhaps this is an approach worthy of further investigation, as **discipline of study** did yield significant differences in PWB over time. It goes to further show how our understanding of contexts would benefit from other approaches such as qualitative data.

It is important to note that this is not a longitudinal cohort study, so more longitudinal research is required to understand this pattern. It was not possible for the current dataset and analysis to look at cohort effects (or period effects), as the dataset was collected from a longitudinal panel

study, as opposed to a longitudinal cohort study (e.g. a sample that shares the same timeline of the PhD).

## 5.8 Chapter summary

Overall, the most significant finding of this chapter is the complexity of the multi-dimensional and multi-level IDS experience. It was found that overall individual factors (English language and Age), ecological factor (Discipline), as well as time (Doctoral time) are important in relation to PWB, and individual factor (Age) is important in relation to SCA. The interactions between time, English language and disciplines are significant to PWB – in other words, for well-being, time matters depending on language and disciplines. Furthermore, effect sizes of non-significant results showed interesting directions of relationship, thus posing new directions for future research. These complexities also show that it is more than just what is significant and what is not, it is the overall patterns that could be uncovered through examining different dimensions and levels of human development<sup>13,14</sup>. Having discussed the predictors that may contribute towards IDSs' PWB and SCA, the next chapter will address how the interview participants.

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<sup>13</sup> I would like to thank **Professor Harvey Goldstein** and my colleague, **Dr Beatriz Gallo Cordoba**, for their ongoing counsel on the quantitative analysis process and LMEM in particular. I deeply appreciate their view as advanced quantitative experts that while important, statistical significance only plays one part in our understanding of human phenomena, and their reminding me that qualitative research is important to knowledge.

<sup>14</sup> I would like to thank my friend, **Dr Jenny Hang Luong**, for helping me with this chapter. I am thankful that she was willing to read and comment on research completely out of her comfort zone as a geneticist.

# Chapter Six

## Thematic analysis: Interacting with new ecologies

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### **RQ 6**

In relation to aspects of PWB and SCA,  
what are the ways in which IDSs' interact with their ecologies?

To a greater extent than for any other species, human beings create the environments that shape the course of human development. Their actions influence the multiple physical and cultural tiers of the ecology that shapes them, and this agency makes humans - for better or for worse - active producers of their own development.

(Bronfenbrenner, 2005, p. xxvii)

## 6.1 Chapter overview

The previous chapter, Chapter Five, has presented the quantitative results of the questionnaire phase. Chapter Six is the first part of a two-chapter report and discussion on qualitative findings from the longitudinal interviews. The two chapters, Chapter Six and Chapter Seven, differ from one another in terms of their approach to analysing qualitative data. In brief, the data analysis process consists of (1) an adapted *a priori* approach (using a theoretical template) to thematic analysis – template analysis (King, 2012) and (2) a data-driven approach to acknowledge any aspects that are (a) unrecognised by the theoretical framework, or (b) specific to the participants in the study, and can only be described at a more individual level.

Chapter Six explains the first part of the data analysis process, including an outline of the coding template and a description of how it was created based on the current study's theoretical framework. In this chapter, I adapted aspects from the methodological work from *template analysis* by King (2012) as well as from *hybrid thematic analysis* by Fereday and Muir-cochrane (2006), and tailored the process further to fit my longitudinal data and my research aims, a [Longitudinal Hybrid Thematic Analysis](#). These findings will begin with an introduction of the participants, followed by detailed and in-depth descriptions of the themes and the sub-themes. Chapters One, Two, and Three have provided a full overview of the components in the current theoretical framework, and the main themes do not deviate too far from these established dimensions of adaptation and well-being. In this sense, the findings in Chapter Six are the sub-themes built upon the analysis of the interview. They present evidence to illustrate how the themes of PWB and SCA are presented within the eco-developmental framework, or specifically, [in relation to aspects of PWB and SCA, what are the ways in which IDSs' interact with their ecologies?](#)

This chapter presents qualitative evidence for the bidirectional interaction between IDSs and their ecologies, in which IDSs actively draw from their available resources to adapt and negotiate between both intra-personal and ecological forces. As a result, both the student and their contexts transform as a result.

## 6.2 A hybrid approach to thematic analysis: Template analysis and semantic coding

As stated, the thematic analysis in the current study was an adapted version, in which I borrowed aspects from the methodological work from *template analysis* by King (2012) as well as from *hybrid thematic analysis* by Fereday and Muir-cochrane (2006). To explain how I tailored the process further to fit my longitudinal data and my research aims, I will first go through the core concepts of thematic analysis, template analysis, and what a hybrid approach could look like.

Being a form of pattern- and meaning- based analysis, the central units in traditional thematic analysis are **codes** and **themes** (the latter consisting of smaller sub-themes). **Codes** are the most descriptive analysis unit, which are labels (words or brief phrases) assigned to sections of textual data during the analysis process, and they are also the first level of analysis units upon which the analyst can consciously or sub-consciously exert influence. The codes are fitted into a hierarchy and at the top of that hierarchy is umbrella term, what here I am considering a **theme**. The common definition of what constitutes a ‘theme’ is built on two main features, *repetition* (both within and across cases) and *distinction* (between themes) (Braun & Clarke, 2006; King et al., 2018). This means that for an abstract concept to be considered a theme, it must be observed in more than one instance in the data, and it must also bear qualitative differences in comparison to other themes alongside which it is reported.

To answer RQ3, I used a hybrid approach to thematic analysis (**Hybrid Thematic Analysis**) (Fereday & Muir-cochrane, 2006), which was built from other hybrid approaches but was also tailored to the study. As I tailored the analysis based on the study’s aim to understand the dimensions and levels of development in IDSs’ experience, I must first explain the two types of thematic analysis that I have combined: **theory-driven** and **data-driven**. As Fereday and Muir-cochrane described, hybrid approaches to thematic analysis “incorporate both the data-driven inductive approach of Boyatzis (1998) and the deductive a priori template of codes approach” (pp. 82-83).

Similarly, in this study, the hybrid process indeed incorporated data-driven and theory-driven elements. However, my adapted approach for my longitudinal data differs slightly in two main aspects:

- (1) the use of the *a priori* template for themes and sub-themes/descriptors of sub-themes, but not for the codes; and
- (2) the introduction of the tracking stage to accommodate the individual progress provided by the longitudinal data.

As an overview, first, the interview data was coded inductively through semantic coding, i.e. using the participants' own wording before these codes were redefined and merged whenever necessary. Second, borrowing from [template analysis](#), a theoretical coding template was used to fit these data-driven codes into the sub-themes based on their theoretical descriptors. Any part of the data that could not be fitted well with the theoretical templates, or could contribute to the theory, was named and included in the findings as such. In the current study, this contribution was demonstrated specifically by the longitudinal nature of the data and the tracking progress stage in the analysis (explored below). I will go through the methodological basis of deductive and inductive approaches below.

Theory-driven approaches to thematic analysis are often employed by organisational and health research, and they work to balance “a relatively high degree of structure in the process of analysing textual data and the flexibility to adapt it to the needs of a particular study” (King, 2012, p. 426). The traditional approach in template analysis often makes use of a first round of data-driven analysis of the data (using only a few pre-defined codes as a guide) to create and continuously refine a coding template (King, 2004, 2012). This is due to the risk of having codes which are too strictly defined and will completely ignore parts of the data that do not fit with the researcher's theoretical assumptions. Instead of this usual approach, I addressed this risk in a two-part process, creating [theoretical templates](#) for fitting the codes but inductively coding the raw data to create ‘[semantic](#)’ codes (those that utilise the participants' wording). This approach recognises the heavy theoretical influence in both during data collection and analysis, and at the same time allows for the analysis to retain the participants' inputs. Template analysis does not sit within one particular methodology but rather is a group of techniques which similarly employ a priori coding templates that can be adapted by different philosophical stances. The decision to use template analysis was based on two distinct strengths of the technique: (a) its flexibility provided by the hierarchical coding structure, and (b) its ability to balance between within- and across- case analysis (especially in relation to longitudinal datasets). A strength of template analysis as an analysis technique is the flexibility allowed within its hierarchical coding process; rather than using a traditional model which includes three levels (one level of codes, one level of sub-themes, and one level of themes), template analysis allows for higher-order codes whenever necessary, which are clusters of specific and more fine-grained codes. This hierarchy accommodates different levels of specificity, which addresses two main features of the current study: the theory-driven point of view on student experience, and longitudinal element of the data.

Thematic analysis can also work inductively from the data. Addressing the analyst's inevitable influence, Braun and Clarke (2013) raised awareness towards the relative distinction between

‘semantic’ (data-driven) codes, and ‘latent’ (researcher-driven) codes. Latent codes are more interpretive as they come from the researcher’s implicit understanding of the data, often reflecting their theoretical framework and their own positioning. Semantic codes instead mirror the participant’s language and thus are more descriptive and dependent on contextualised and explicit meaning, rather than the researcher’s interpretation. In this study, I used semantic codes to retain participants’ input, before refining and merging them whenever appropriate. Traditionally, inductive analysis would form sub-themes and themes based on the codes. Instead, my tailored [Longitudinal hybrid approach to thematic analysis](#) fitted [semantic codes](#) under [pre-determined thematic templates](#) (consisting of different levels of themes and sub-themes).

### 6.3 The process of Longitudinal Hybrid Thematic Analysis

As clarified in Chapter Three, the data in this study was complex due to the contextual, individual, and time levels. Thus, I incorporated a third theory, which was Bronfenbrenner’s EST theory to help with the structuring of contexts in the analysis.

In my adapted process called [Longitudinal Hybrid Thematic analysis \(LHTA\)](#), first, I borrowed from King’s (2004) template analysis, specifically the hierarchical coding structures. In the current study, the hierarchical structures specifically address the use of an ecological theoretical framework to explore the IDS experience. The preparation for the analysis includes establishing the template based on the theoretical framework, with levels 1, 2 and 3 pre-specified. Different from the coding template in King’s (2004) approach, in my adapted version, level 4 (codes) remained open for the data-driven process. Specifically, based on [EST](#), Level 1 (L1) had five main themes according to the five levels of ecological and individual systems. Level 2 (L2) broke down [PWB](#) and [SCA](#) by their main elements (sub-themes), and each sub-theme had predefined Level 3 (L3) descriptors based on their respective theories and the IDS contexts. Before coding, these two levels remained separated, because fitting L2 and L1 required consideration of the data under each L3 descriptor. The templates can be found in Appendix VIII.

Second, to guide the combination between deductive and inductive approaches to thematic analysis, I studied Fereday and Muir-cochrane’s (2006) version of a hybrid approach, HTA. Similar to King (2004), Fereday and Muir-cochrane (2006) also start with developing an *a priori* coding manual. In comparison to their version, as my thematic templates were for levels 1, 2, and 3 only, it was different in terms of the level at which the deductive process starts, and how much inductive coding was used. To the latter difference, inductive elements are included in HTA in the form of codes that did not fit the pre-determined template, as “analysis of the text at this stage was guided, but not confined, by the preliminary codes”, and “additional codes were either separate from the

predetermined codes or they expanded a code from the manual” (Fereday & Muir-cochrane, 2016, p. 88). In contrast, in LHTA, I combined data-driven coding using semantic codes with theory-driven sub-themes and themes.

Furthermore, as per their insightful remarks, “although presented as a linear, step-by-step procedure”, the hybrid approach is “an iterative and reflexive process” (Fereday & Muir-cochrane, 2006, p. 83). This was also the case for the LHTA adapted in this study, as the steps do not linearly go from codes to sub-themes to themes, or vice-versa. The main analysis involved coding and fitting these codes to the pre-determined templates, and further refining and fitting of sub-themes through careful consideration of the data under each code.

This process included five main steps, as visualised in Figure 6.1.



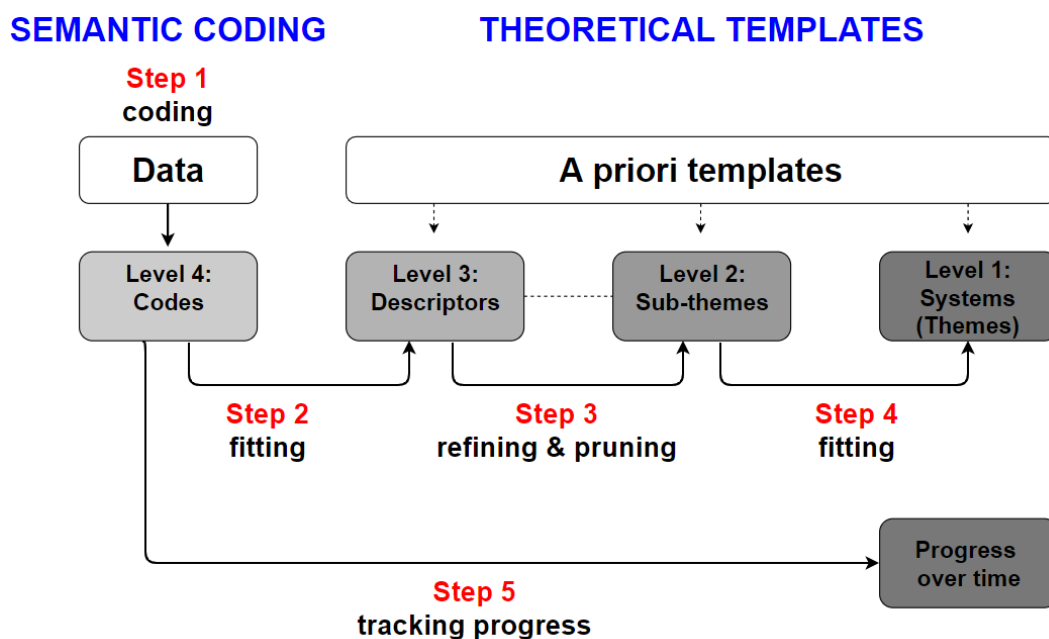


Figure 6.1 Hybrid thematic analysis: Five main steps

The five main steps require back-and-forth reconsideration of four different hierarchical levels based on the actual data. Table 6.1 explains what happens at each step.

Table 6.1 Descriptions of LHTA steps

Steps	Description
1 Semantic coding	The first level of code (Level 4) was established through mirroring the participant’s language, followed by re-fining and merging these L4 codes through consideration of the underlying data
2 Fitting codes	L4 codes were fitted under the appropriate L3 descriptors
3 Refining and pruning descriptors	L3 descriptors were refined and merged
4 Fitting sub-themes	Each L2 sub-theme was fitted under L1 themes
5 Tracking progress	Under L1 themes, within-participant progress/change between different interviews was also noted

This process of coding acknowledged the dominant theoretical influence in the data collection, as well as the complex nature of longitudinal data in the analysis. At the same time, the introduction of thematic templates in LHTA at sub-theme and theme levels instead of coding level preserved more instances of the participants’ semantic meaning wherever possible. Contextual elements were

initially mapped out for each individual (example in Appendix IX). The longitudinal element of the data brings another level of complexity to the analysis. Not only were the interviews needed to be analysed within and across cases, but patterns and meaning in the interviews were specifically required to be observed over time. The levels of specificity in having more than one level of codes in template analysis thus allows for the codes to be linked to levels of time, place, and individuality. Again, this specificity was achieved in the study through the first step of analysis, which includes the semantic codes mirroring the participant's language across all participants, as well as the final step, which requires tracking progress within participants.

The themes and sub-themes, as a result of this process, are the theoretically driven dimension of this analysis. L3 descriptors were those that went through most revision and redefining (insertion, deletion, merging) to fit under L1 themes/L2 sub-themes, and over L4 codes, where the former reflected the theoretical framework and the latter preserved the highest amount of participant's contexts and meaning.

Alongside its discussed benefits, there are a few cautions in using template analysis on qualitative data. King (2004) drew qualitative researchers' attention towards the application of template analysis in techniques such as content analysis – as the assumption that the frequency of a code is equivalent to its prominence may be problematic to the method of refining coding structures. In a different manner, template analysis's use of a priori templates (as opposed to the much more in-depth analyses) is also believed to limit the necessary space in which meaning and intention can be fully discovered.

Braun and Clark (2006) also cautioned researchers against the misconception that themes are independent of the analyst, as if they were sitting in the data awaiting their so-called 'emergence'. The person analysing the data can impact the resulting themes, so this influence should therefore be acknowledged throughout the entire analysis and discussion of findings. In addressing this risk, alongside the acknowledged use of theory throughout reporting the findings, there will be instances in which my interpretations and thoughts are included for the sake of transparency.

Before we move on to discuss the findings, the readers are reminded of the main purpose of this first qualitative analysis process. Its central task was not only to recognise the themes in the data (which have already been pre-determined using the theories), but also to search for illustrations of how the individual interacts with their ecologies, and how they change over time as a result. Given the discussed strengths of both hybrid and template analysis, LHTA as the combined and adapted approach is a plausible choice to address this aim.



### 6.4 Main thematic findings

Below is the thematic map that illustrates three levels of themes and sub-themes after having been refined (Figure 6.2). As it is based on a complex theoretical framework, the map is slightly unconventional. Five first level themes can be found in the inner-most level of the map: **macro**, **exo**, **meso**, **micro**, and the **person**. As we move closer from macro to micro, more sub-themes are included, as the individual would have more interactions with the more immediate systems. L2 sub-themes are those that mirror PWB and SCA theoretical aspects, and L3 descriptors presented here are those that have already been refined. Progress is also included as a component in the map to depict the longitudinal nature of the findings.

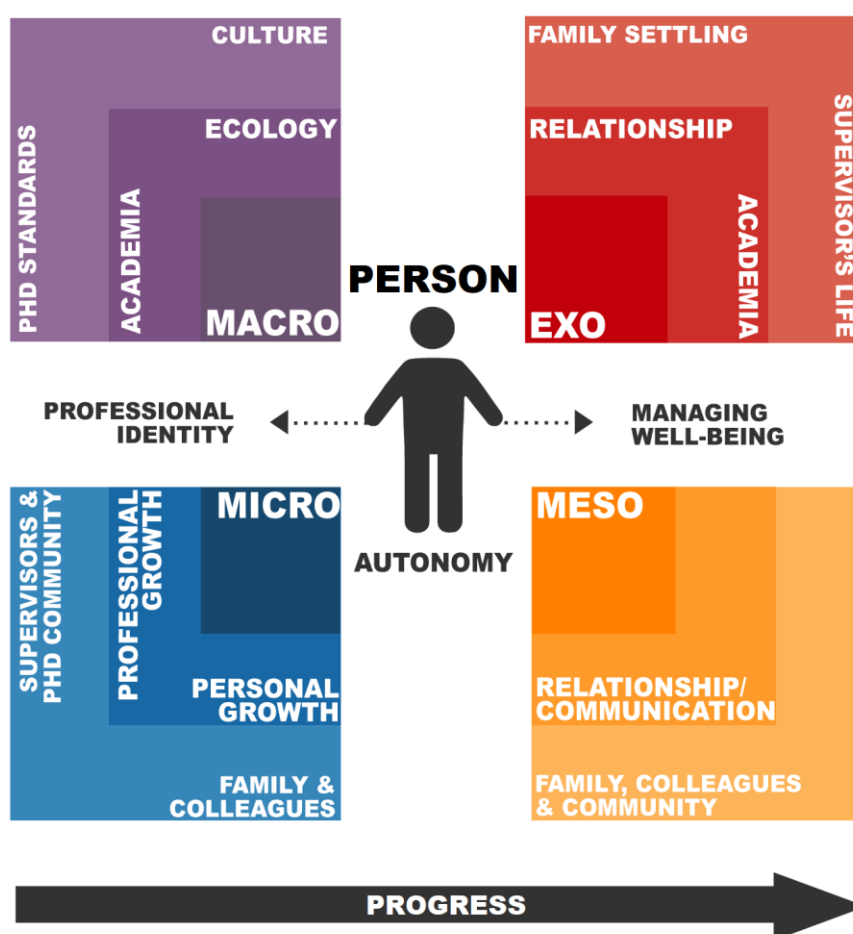


Figure 6.2 Main thematic map

Contrary to the linear and clear-cut appearance of the coding template, the final themes and sub-themes have many overlapping and interlinked components. This was not only because of the overlapping aspects within the theories (as can be seen in the merging of theoretical sub-themes),

but also due to the complex manner in which similar aspects of development could be identified in different eco-systems.

The discussion of findings will follow the sub-themes situated within each L1 themes. This means that there will be L2 and L3 sub-themes that are repeated across the five L1 themes, however the underlying data are qualitatively different. Only relevant sub-themes are presented in this analysis, in accordance to the research focus and question. It is also noted here that the discussion will move from the widest to the most immediate eco-systems, before discussing the intra-personal changes.

### 6.5 L1 Interaction with macro-systems

This theme, **Macro** (Figure 6.3), is characterised by cultural and language differences that the participants have identified. It also relates back to the previous discussion about what culture encompasses. The most dominant themes observed between the individual and macro-systems relate to **Ecological adaptation** and **autonomy**, and they can be distinguished between **academic** and **socio-cultural** differences. Culture and language, in this case, refer to wider contexts within both the geographical/national boundaries and academia.

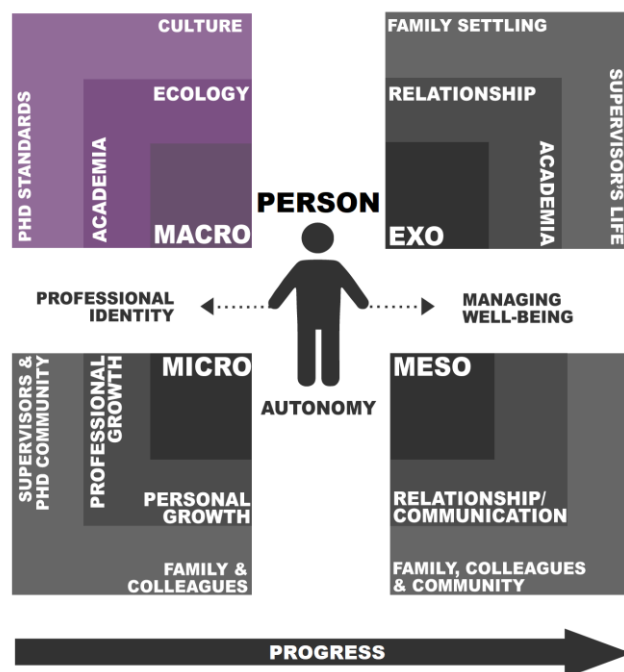


Figure 6.3 IDSs and the macro-systems

## 6.5.1 L2 Ecological adaptation and Environmental mastery

### 6.5.1.1 L3 Being in a different culture

Are the boundaries of culture geographical and national by nature? The participants directly and indirectly questioned this line of thought during their interviews. It is important at this point to note that culture did not appear on its own in many discussions, but rather as a thread that ran through many other themes and sub-themes. This sub-theme, *being in a different culture*, focuses on the instances where the wider culture was singled out and discussed more explicitly.

In this sense, the discussion on culture often involved contrasting between their own culture and the UK culture. For instance, Purple found exposure to the new culture a positive experience, particularly in contrast to their own conservative culture at home.

**I come from [home country], we're quite different culturally, we're quite conservative in that sense, so I cannot be as liberal as I perhaps want to be. Certain statements will not go down well, it's not appropriate.**  
(Purple, 1, 599-603)

For some participants, there were other distinct cultural differences they could observe between their country and the UK that caused discomfort as they first arrived. Orange, for example, recognised their growing tolerance towards the LGBT community since moving to the UK.

**I just can accept different cultures. And I get more tolerable, and because there are different people, they have different habits, beliefs, interests. So I need to accept maybe, actually, I don't need to accept what they do, but accept their existence. [Getting used to this] took several months. Here there is a gay culture, I don't accept that. I feel that it's really crazy. But when I came here, there are so many of them, I feel like it's a normal thing, it's different from our culture. I feel that it's okay. I am not influenced, but I accept that they exist.**  
(Orange, 1, 142-153)

Similar to how Orange redefined what was normal, Purple expressed how a similar change could cause a 'culture shock' when they visited home.

**I had a bigger cultural shock when I went back home, not when I came here. I think it was just, I realised my thought process has changed, I was more open to certain things, and I was more, yea, 'what's so wrong about it?' In my country, these things are not normal.**  
(Purple, 2, 613-624)

While recognising that certain things were not considered normal in their home country, Purple also highlighted the importance of context in changes to their perceived norms, especially as they attributed this change to possible cognitive changes in their thought processes. This process of moving back and forth between culture has also been discussed a lot in the literature. Christofi

and Thompson (2007) describe the process of international students' returning home after studying abroad as being filled with self-conflicts, where they face reality and question their previous idealisations of home, and the necessary re-adjustment. In the current study, not only this sense of self-conflict could be observed, but one can see that some students had already anticipated the difficulty once they finished their studies and needed to go home.

**I couldn't accept it [gay culture] at first. But now I think everyone has the right to have their own values, to make their own decision on what kind of person they want to be. I need to respect that. Not all my friends back home will understand that. If we discuss, I don't know what to say.  
(Orange, 3, 512-517)**

As Orange identified changes in their tolerance, we can contrast it to their stance in the first interview towards LGBT community. Participants also anticipated how they could re-adjust to their home country. This sense of push and pull was perhaps reinforced by both contact with host culture and the duration of the PhD, as they acted as catalysts to induce cognitive changes in participants.

While some maintained a more strategic approach to coming home – **'I will probably remain quiet, I do not see why my friends need to change their beliefs'** (Orange, 3, LL561-562), others, such as Purple, expressed a more emotional side of this requirement to re-adjust.

**It's a very weird feeling. It will always be home, it's where I come from, but I know a lot of people don't think the way I think. It's okay, you just have to accept it. I'm sure half of my friends don't think the way I think now. I don't even tell them what I think sometimes, because there's always this fear of being judged. Like I have expanded beyond their ability to comprehend, or they may think I'm just culturally losing it.  
(Purple, 3, 432-441)**

As participants recognised changes within themselves as a result of living in a different culture, even as part of interactions with a macro-system, participants' sense of autonomy seemed to be influenced (which was mainly related to self-efficiency, opinions and judgement). This could be because their opinions had changed, and they were now clashing with their previous cultural beliefs. Notably, through the ways participants positioned their family and friends back home as representing their home culture, there seemed to be an unspoken assumption on their part that they would be judged by this group of people with whom they might feel further apart (based on this positioning). Furthermore, Purple showed that the experience made them aware of the two different ways to perceive their change: Were they *losing* something, or were they *gaining* something? They seemed to realise that they were in the middle of two different perspectives, one that saw

their change due to life in the UK as a positive addition, and another – which they anticipated – that would see this change as a loss of their original cultural beliefs. We also see components of reduced autonomy here in relation to identity crisis, as participants sometimes placed focus on changes in others' definition of who they were.

Culture shock was also mentioned as a result of change after staying in the UK. For some, the discussion was more focused on having to adjust to a new culture, then coming back and finding out that there was a re-adjustment to home. Specifically, in some of the discussions, not only cognitive changes but behavioural changes were also discussed. Going home posed issues relating to different lifestyles at home and away from home. In this respect, the participants were emphasising the freedom they had experienced in the UK.

**It's just like moving between two totally different worlds. I will go back to live with my family, and there will be many people around me, it is cosy, but also there's no freedom. I will be distracted by people and won't be able to focus on my work. But if I live here, I can have more autonomy, I can do something that I like, I can decide when I wake up, when to go shopping, when to cook, eat or not eat, it's different back at home. If you live with elders, it's hard to communicate your lifestyle, even in your own language, you don't want them to judge you.**  
(Orange, 1, 166-174)

Behavioural changes due to a new context were also reflected in the difference of perceived safety. Blue, for instance, was originally from a dangerous city, yet they had received help from strangers, including a ride to their accommodation. This situation, as they commented, would not happen back at home, but it was able to change their behaviour when they were in the UK contexts.

**Back at home I would never enter a stranger's car. I had to bring my luggage from the coach station, and there was another stranger who helped me with two big suitcases.**  
(Blue, 1, 179-181)

A different cultural context also allowed people more freedom to live as who they were, as in Pink's case.

**In some Muslim countries, they have this law that men cannot wear women's clothes in public, or they would be imprisoned, especially if you are a government servant, which I am. One funny thing happened. A friend here asked me on Facebook, 'why is your profile in your university saying Mr? You should check, you're a woman'. I was laughing. I'm still a public servant, on a government's scholarship, they still pay me, so to be LGBT publicly as a public servant in my country, you can get penalised for that and can even lose your job. That is why if you see my uni profile, it's still Mr, with a short hair picture.**  
(Pink, 1, 136-145)



In a different manner from others, this situation also presented a dilemma regarding returning home in the future, and re-aligning oneself with more conservative beliefs. Contexts played an important role in how the participants behaved, thought, and felt. In summary, this theme presents the balance required in adaptation to the new culture. On one hand, participants reported self-transforming both cognitively (e.g. thought processes) and behaviourally (e.g. living styles). On the other hand, they recognised the issues this transformation might mean for their return. Even though these interactions with macro-levels were often indirect or abstract, aspects of the participants' well-being could be influenced due to the cognitive and behavioural changes that the participants had identified. Compared to other systems, the macro-systems were least likely to be reshaped by the participants, and they were more often used as abstract frames of reference for conscious or sub-conscious re-positioning.

## 6.5.2 L2 Academic performance

### 6.5.2.1 L3 The PhD standards

Academia as a culture was also important to the participants' PhD experience. Academic performance was the main sub-theme for this particular macro-system. Within this sub-theme, interactions between well-being and adaptation aspects could be observed. As academia was considered a macro-system, the participants often interacted with it through communications with their supervisors or peers, or through engaging with the PhD standards in their research process.

There were a lot of speculations on aspects of academia that the participants had either read elsewhere or observed in their experience. For instance, Red recognised concepts that they had not thought to be important for self-expression, especially in communication with their supervisors.

**I think it's my perception of what academia is all about. I had one situation where I was asked to explain what I meant, from my own point of view, and I've done that, and the reply was, 'you're actually speaking to two people who don't share your ontological – or was it epistemological – background. So, what I understood from that was, all well and good, 'this is what you're thinking, and this is where you are coming from, but we don't understand it because we don't have the same mindset'.**

**(Red, 1, 60-70)**

Like Red, many participants referred to PhD-related academic components to draw differences between themselves and others, implying an element of re-positioning their identity in relation to these academic differences. Instead of simply becoming an academic, the participants were using disciplinary/PhD-specific references to frame their identity.

Academia, as a culture, could also manifest itself in PhD students' experience in different ways. The interviews indicated that participants either attributed academic differences to UK-specific, or PhD-specific reasons.

**Those who did their studies here had a knowledge of coursework, lectures, assignments, everything, but for those who are international especially, who did their studies elsewhere, they don't have background of UK education and the UK HE requirements.**  
(Cyan, 1, 25-29)

While Cyan referred to criteria specific to UK education, Jade recognised that both the wider UK HE system and the PhD standards played a role in their struggle with the degree.

**If you didn't do your bachelor's degree here in the UK, it's going to be even more difficult. In PhDs, it's worse than other degrees, because all of my previous education is in another language, so writing and reading in depth in another language is so time-consuming, and sometimes it's frustrating when I can't express myself really well.**  
(Jade, 1, 87-98)

For others, the struggles lied specifically with the PhD. Purple and Lime both referred to the criterion of 'contribution to knowledge' as sources for concern. Acknowledging the complexity and intensity of familiarising oneself with the PhD standards and its different criteria, Purple discussed the importance of being flexible and accepting that the writing would need to be revised to follow the changes in the field, as well as the data they might collect.

**I think I'm still struggling with the lit review. Your contribution to the body of knowledge, I hate that line with all my heart, what does it even mean? We need to really narrow down, first combining different fields, for me as well, it's really not easy. When you are doing qualitative research, context matters so much. It is intense.**  
(Purple, 1, 684-706)

Lime also referred to their struggles with their contribution to knowledge. They specifically linked it to supervision and further support from PhD community.

**What is my doctoral contribution? I went in the meeting very confident, but when I was asked about that, I became unsure. I don't know. That's quite difficult, and I kept thinking, that may be an area of support that we could get from people from previous years. How did they find it, what was their journey like, in the end how did they come out of the tunnel? Isn't academia that kind of community? We are building knowledge together.**  
(Lime, 1, 309-315)

Here we see the participants referred to wider contexts in different manners. Purple identified the wider research contexts, which required them to be an expert not just in the subject matter but also the context of their research phenomenon. On the other hand, Lime referred to a different kind of context, which was the immediate PhD community that foster knowledge construction, highlight a sense of community for learning and practice. Furthermore, not only was Lime viewing the community as a supporting system, but they also used the micro-system of PhD community as a means through which they believed academia and its standards should manifest.

The participants recognised the need to learn about the academic practices from their own research experience, their supervisors, and their community of peers. This learning process also raised uncertainty for some participants, especially in terms of belongingness and identity. For instance, not being able to place oneself firmly in one discipline had affected Purple's process of choosing new supervisors and contributed towards them feeling lost.

**And I think, not being able to place my research in a particular body of literature has made it difficult for me to approach probable supervisors, but I don't know the damn field. I just hadn't met the right people, I felt lost, I just didn't know who to approach, how to approach, how to explain the damn thing, I didn't even know what I was trying to do.**  
(Purple, 1, 539-545)

In their example, Purple learned that there was a need to first establish a sound knowledge on where they stood within the bigger picture, and with it came the requirement to learn a new 'language' in order to "**explain the damn thing**". This was also experienced by other participants, such as Jade and Red, who both found conversations with their supervisors to be challenging at an academic level., e.g. academic language, terminology, etc. This links to previously discussed notions of crossing thresholds (Kiley & Wisker, 2009), as well as identity formation through social processes (Weidman & Stein, 2003). Here we see how the participant was referring to disciplinary knowledge (or lack thereof) as integral to their self-positioning and their potential communication with new supervisors, resulting in a sense of being displaced.

Learning to communicate within the new frames of disciplinary reference also extended to writing. Specifically, communication in the PhD is a specific task that was mentioned both in terms of communicating a foreign language, and with regard to meeting the PhD standards. First, students needed to correctly understand what the standards entail. For IDSs, this writing challenge was at least two-fold: they were required to use two foreign languages – *English* and *Academic English*. In relation to language proficiency, we see a number of overlapping aspects of adaptation. Academic/work performance, specifically during communication with their supervisors, was

influenced by the participants' level of confidence in this respect, and vice versa. Indeed, as an integral part of the PhD is communicated and assessed through both writing and speaking abilities, this challenge further created feelings of frustration in many participants.

**If there were any cultural differences between us [supervisors], it didn't have any negative impact. I think the language has been the main difficulty for me. Writing is difficult, especially grammar, it's not the same as my language. It's probably the most frustrating thing, because at the end of the day, you want to communicate, you want to write it down, just not being able to easily communicate the ideas I want to is frustrating.**  
(Blue, 1, 63-69)

While Blue felt frustration with English language barriers, Red instead raised an issue with unclear expectations regarding academic writing.

**I'm not sure what is expected with regard to academic writing especially. So sometimes I think I know what I want to say, but to put it into words that will be deemed academic, that's quite difficult for me.**  
(Red, 1, 28-32)

Again, one could attribute this uncertainty to students being new to the PhD, as well as the new HE system. Participants recognised that they could improve over time through familiarisation and practice. As Cyan pointed out, “**students can submit a draft before they submit assignments formally**”, which could help those who were “**unsure about UK criteria for assignment.**” (Cyan, 2, 20-22).

Not only were students struggling in communication with others or with academic writing, but they were also associating this struggle with how others perceived them as a PhD student. What also came out in Red's struggle with writing was the importance of an academic audience. Even on familiar platforms such as a blog, Red expressed how the thought of a different audience hindered their completion the otherwise simple writing task. They referred to this as a potential threat to their identity as a researcher.

**I keep thinking in my head, ok, a blog is not a journal paper, it's not going to be peer-reviewed, it's a blog, but I still have it in my mind, but for the past few days, I kept thinking, it's an academic audience, so I don't want to be too blog-y. A blog, I would have done it if it was a simple normal blog, but then when I sit down, I start thinking oh god, academics would read this, this professor, that professor, members in the department, members outside of the department, and then they will be like “oh this one, they are not serious are they, they can't be an academic.”**  
(Red, 2, 450-454, 459-463)

In an imagined space, participants like Red seemed to have internalised information from their experience of the doctorate and played out the scenario in which they would be judged harshly.

Again, while we could see that participants were attempting to re-position themselves in academic frames of references, they were not yet fully identifying with academics. At the same time, in their imagining of more senior academics perceiving them in a negative light (“this professor, that professor”), it was specifically through their writing that their professional identity was judged.

In terms of well-being, due to the struggle with writing – which was not something anticipated by some participants due to their high level of English proficiency – there was a sense of self-doubt and loss of confidence coming through in some of the discussions, especially linked to perceived own abilities as well as their new forming identity as a researcher, just like in Red’s case. For some, like Pink, it was about questioning their own image as a “good student”.

**As long as you just pass, and it’s just that there was a lot going on, the weather, the people, the language, especially the language, because of this I feel that I’m not a good student. Actually, I am, I am not that slow, you know, and I think it’s a very big challenge for me, the language.  
(Pink, 3, 47-53)**

In trying to re-affirm that there were reasons for why they felt they were falling behind, participants like Pink found themselves in the struggle for balance between learning academic standards through others’ feedback and maintaining aspects of their well-being. Not only was their autonomy invoked in this case, but they were also aware that other aspects of their ecological adaptation/environmental mastery also interfered with this difficult process.

For others, like Purple, the self-doubt manifested in the constant self-questioning whether they were doing the right thing. In their example, we could also see that as their professional identity was gradually forming, Purple began to distinguish between who they were as a person and who they were as a researcher, and the separate beliefs that came with the two identities.

**When I wrote my document and even now with the corrections, I’m always like, ‘oh my god am I even making sense?’ My supervisors didn’t say anything, so I assumed it made sense? But then again, isn’t your philosophical underpinnings as a researcher just the same as the philosophical underpinnings of the research itself? Like, do you see this division sometimes? As I write, my personal view as a person in life can be very different from what I adopt for my research.  
(Purple, 1, 492-504)**

As the participants began to question their own abilities, we can see how this influenced several aspects of their well-being. While the lack of confidence might bring about a reduced sense of autonomy (participants began to judge themselves based on other people’s comments), it also introduced an opportunity for personal growth (as the participants were challenged by their experience). Indeed, participants who referred to these challenges did not always see it in a negative

light. For instance, as much as many participants found philosophy to be a difficult subject, some also acknowledged that this had changed their thinking. In many discussions, the act of talking about a particular issue in their PhD also led the participants towards a deeper reflection of these issues. For instance, Purple moved from expressing frustration with their literature review to a more in-depth discussion that lasted nearly five minutes on the job of a literature review, linking it to the specific challenges to their context.

In other cases, the participants referred to support from either their supervisors, the PhD community, or institutions. Other participants such as Jade sought solutions from various resources such as university talks, or even comparing between the UK system to that back home.

**I rely on my supervisors quite a bit, for them to judge if I'm making enough progress, if my work is worthwhile, if it's good enough for a PhD  
(Purple, 2, 236-238)**

**I'm constantly looking for similarities between my own home country educational system, and the UK education system. I think if I can find the similarities, I can learn more easily. But the thing is there may not be a similarity at all.  
(Jade, 1, 274-278)**

What was being demonstrated in these examples is the degree to which different participants were dealing with the complexities in their research and how to express and overcome them in their academic challenges, and how they drew both emotional and practical support from available resources. It was clear that through aspiring to the PhD standards, students were influenced by academia in their well-being. However, in terms of adaptation, this learning process was recognised as an opportunity for development. While the participants registered the above issues as challenging, there was evidence in the interviews to show that most of them had an awareness of why these were important challenges which they needed to face, and a recognition of their own development by facing them.

## **6.6 L1 Interaction with exo-systems**

The exo-systems were also removed enough that interactions with this theme were not a dominant discussion among participants. However, this theme contributed to our understanding of how the PhD influenced well-being, especially through two sub-themes that stood out in relation to IDSs: (1) Child(ren)'s school and family re-settling, and (2) Supervisors' life and well-being (Figure 6.4). The former sub-theme (categorised under L2 sub-theme Positive relations) discussed some students' role as a parent and how their child(ren)'s well-being and education at

school had influenced how well they were feeling. The latter sub-theme (categorised under L2 sub-theme Academic/Work performance) briefly touched on a topic that will be heavily discussed under the L1 theme Micro-systems, Supervisory relationship.

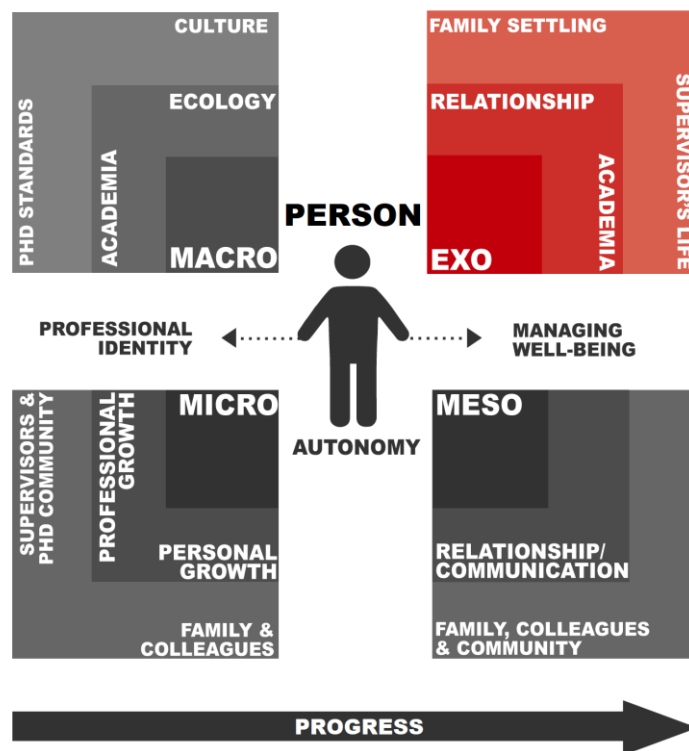


Figure 6.4 IDSs and the exo-systems

## 6.6.1 L2 sub-theme: Positive relationships and environmental mastery

### 6.6.1.1 L3 Family settling into the new ecology

Out of the three parents among the participants, two had moved together with their child(ren) for the PhD. While this sub-theme was not as recurring as others, I feel that it is important to include a wider element of work-family interface, a component through which doctoral students' mental health has previously been shown to be affected (Levecque et al., 2017). As an exo-system, instead of how work and family could interact and either support or get in the way of one another (like that of a meso-system), family settling referred more to the contexts in which the child(en) and/or spouse were directly situated.

For instance, a few months after their arrival, Lime had expressed distress over the complex visa application process their child had to go through as the sole parent moving to the UK.

**The law here requires that both of my children can only move to the UK with me if both parents were to come, unless I could prove I was a single parent. I am not, and my spouse also cannot move here because they had a job, they had to work to**



**support this family while I'm doing the PhD. Some days I miss them so much, I could not focus on work.  
(Lime, 1, 298-310)**

This demonstrated how an indirect exo-system (child's situation back home) could influence the individual. Only one of Lime's children could be with them, so the situation affected both Lime and their child who moved with them to the UK, as well as their family back home.

**My child is in nursery and it's really close to our place, so it's not too bad. My spouse takes care of the children so I can work all day, but it is not easy.  
(Cyan, 1, 157-159)**

For Cyan, their well-being was also related to their child's schooling and their spouse's support. At the same time, we see that the participants could borrow resources from their support systems to balance between the PhD and their well-being. Specifically, affected aspects of well-being such as positive relationships and environmental mastery revolved around the individual's ability to cope with the demands of their responsibilities for others and take control of their situations and relationships.

In short, this sub-theme represented a pathway through which the settlement of family members in the new contexts could influence IDSs' well-being. These contexts might not be an immediate surrounding for the participants, but they were still affected through their relationships and responsibilities outside of the PhD.

## **6.6.2 L2 Academic and work performance**

### **6.6.2.1 L3 Supervisor's life and well-being**

This particular sub-theme includes instances where participants commented on closely observing their supervisors' well-being to negotiate their own strategies in the PhD. The reason why these discussions belong partly under the exo-systems is because of the recognition by some participants that what happened outside of their immediate supervisory relationships was as important to understanding their supervisors. This was somewhat unexpected, as the focus of most discussions on the supervisory relationship was on the immediate interactions between the participants and their supervisors.

Departmental politics came up in some parts of the discussion, but the examples related to the exo-systems were those happening outside the immediate relations between the students and their



supervisors. For instance, Red discussed their disagreement as they perceived departmental politics potentially affecting their upgrade experience.

**My upgrade, my supervisors have agreed on a date, and when they were talking about the examiners, they mentioned two people, then one of them said ‘oh I think she would be good, because she owes me one’. And I was thinking, it’s an issue for me, because this lecturer has nothing to do with my research, has no common ground, so I’m thinking, that’s politics. I was thinking why? I was so shocked; I was surprised when it came up. I don’t know if they discussed it in advanced, but they both seemed to be on the same page, they both agreed on the same two people. (Red, 1, 450-460)**

Here, we also see Red questioning about a possible discussion between their supervisors outside of their knowledge, which they linked to a sense of lack of involvement – and perhaps lack of control – over the upgrade experience. Again, as previously mentioned, the discussion about wider contexts could involve an imagined space in which students were not a direct participant, but they had to guess what was happening behind the scene. On top of this alienation, the upgrade was often referred to as a challenging and at times emotional period for the participants. This presented a space in which their worries or concerns became magnified through a sense of uncertainty and lack of control. Moreover, we could also observe aspects of power relations in Red’s case. As much as they were against the decision, they also perceived the silent agreement (or lack of open discussion) between their supervisors as a political move that was perhaps beyond their position as a student. This sense of helplessness could potentially contribute to how students position their supervisor in their PhD experience. As Chapter Seven will go into more details about Red’s key events and their narratives, we will also see how these moments could potentially create tension between supervisors and supervisees.

Supervisors’ observable relations with one another could also influence the students’ experience. Blue made an observation that the relationship between their supervisors also impacted their own experience of supervision, but in a more positive way.

**It’s fun to observe the relationship between my two supervisors too, and because they are quite collaborative, they make jokes and make the atmosphere really relaxed. They are from different cultures, but they get on well together, so I find it easy for me too. (Blue, 1, 58-64)**

In a way, this could be seen as the manifestation of an exo-system through a micro-system, in which Blue’s supervisors’ prior and current relations as colleagues contributed to the friendly atmosphere in which their supervision meetings happened. This demonstrated how indirect systems could influence the individual as part of the interconnected ecologies.

In Red's case, they identified the unique relations between their first and second supervisors, as the two were also in the supervisor/supervisee roles. Red connected this to their relationship outside of the supervision meetings. This was discussed in relation to how their second supervisor advised them regarding working with their first supervisor, and the former was able to understand Red's perspective and console the student in the face of perceived negative feedback. This had also reinforced the differences in the way they treated the two supervisors, and how their negotiation strategy with their first supervisor needed to be planned.

**With [first supervisor], if it's like I've planned it a little bit previously maybe, so when [first supervisor] comes up with their doubt and their arguments I can, I have an ally [second supervisor], I can defend it. So yeah.  
(Red, 2, 84-87)**

In a similarly strategic manner, Purple commented on how their supervisors' well-being and workload allowed them to understand their place among the supervisors' priorities. This re-positioning contributed to how PhD students gradually adjusted their expectations of the supervisory relationship, or to 'come to terms with it'.

**It [supervisors' well-being] reflects... because it's a relationship that you share with the other individual. For four years of your life, and maybe it's just me, but that relationship means a lot more to us than to them. You're one among their many priorities, whereas for us, this is our top priority, you get what I mean? Somewhere at the bottom of the [priority] list maybe? You come to terms with it, you know. There's nothing wrong with that.  
(Purple, 1, 275-284)**

In discussions like these, we see students' gradual process of understanding their position within another individual's world. There was also an element of contrasting their supervisor's world with their own world, implying a recognition of the busy schedule of being a senior academic. Here, the nature of academic work could also be reflected, as students attempted to imagine and learn more about the worlds to which they were adapting.

To a PhD student, their PhD indeed means a lot to them, and likely a lot more than where it stands on their supervisor's responsibilities. Looking at this from the students' perspectives, we can begin to see how this process of negotiation began from changing and adjusting the student's own positioning, and thus adjusting their expectations accordingly. What students wanted might not be within their supervisors' capacity, whether it was time, expertise, or priority. As a result, students often adjusted to this through changing their expectations, like Purple did, or changing their approach to communicating and negotiating with their supervisors while keeping in mind their availability and preferences, like Cyan did.

**This depends mostly on the PhD student. The student, they can develop the relationship or they can prevent the relationship from developing. We can control it, you have to study your supervisors to see what they like, what they don't like. (Cyan, 1, 35-41)**

Again, it is important to keep in mind that through these examples, we could see how the eco-systems were interconnected, and interacted with one another to influence the individual's experience. This sub-theme shows that there are aspects of the supervisory relationship that occur outside of the immediate interactions between students and their supervisors. This also illustrates how students adjusted their work strategy and their supervisory expectations as they anticipated other aspects in their supervisors' life. Their supervisor's life, well-being, academic work, and relations with other academics seemed to play a role in students' experience. However, as many would expect, the majority of the participants' negotiation with their supervisors did come under the L1 theme of micro-systems.

## 6.7 L1 Interactions with meso-systems

While the participants' interaction with the meso-systems were not the main focus of the interviews, there were a few instances where participants credited the interaction of different micro-systems in their PhD experience. As a result, this was most prevalent in terms of sub-themes positive relations and interpersonal communication, under which their family, colleagues and other communities interacted (Figure 6.5).

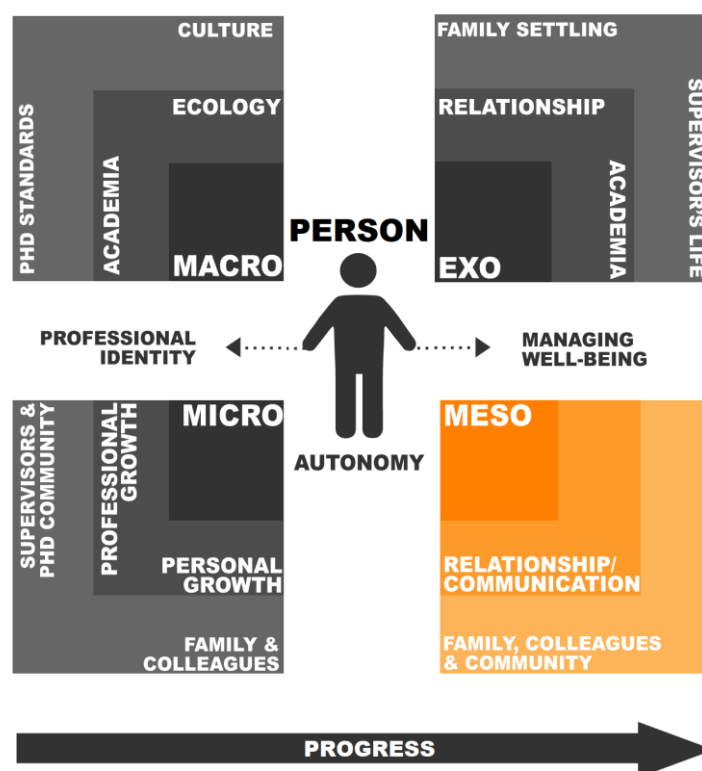


Figure 6.5 IDSs and the meso-systems

### 6.7.1 L2 Positive relationships/Interpersonal communication

#### 6.7.1.1 L3 Family, colleagues, and other communities

Like previous eco-systems, in the meso-systems, the interaction between micro-systems presented potential resources for balancing between work-life responsibilities and well-being aspects of the participants. This can be observed in how Red and Lime talked about their colleagues and family members meeting during the course of the PhD.

**It was good, I mean them meeting, as my children often asked why I kept studying at home. My friends, colleagues more like, were able to meet them, and they knew at least a part of what it is I do. My colleagues also offered to babysit for me, as a single parent that meant a lot.**  
(Lime, 2, 125-130)

**My son that is still living at home, he knows my PhD friends quite well, I invited them over for Christmas. They even met my mom. It's just a new experience, as everyone is from a different culture.  
(Red, 3, 12-15)**

In many ways, because of the interactions between the micro-systems, students could build up their resources to later support their coping with life demands. At the same time, students also reported holding celebrations with family and colleagues, in which they expanded their cultural knowledge and intercultural communication skills.

Touching on academic support, Purple remarked on how the PhD benefited from an outsider's perspective, in this case, their partner. This allowed them to have a different take on the PhD.

**My partner, they talk about their work quite a bit, they also ask a lot about my PhD, they have seen my drafts, they have my work, we've had countless discussions about it, they have been really helpful, because I think a third eye really helps. Very objective, somebody who has absolutely no idea what you're doing, to give you their feedback, you realise there are things you haven't thought of because you're not looking at it the way they do.  
(Purple, 1, 673-682)**

In Purple's example, it is noteworthy that there was an implicit positioning of their partner as an outsider in relation to the PhD process that they were going through, to the point that they could offer a "**very objective**" viewpoint. While these positive relations contributed towards the participants' well-being, they also demonstrated the interactions between two or more worlds that the participants had positioned separately. This also implied the merging of two different identities as embodied in a meso-system.

## 6.8 L1 Interactions with micro-systems

*They told me, ‘you’d better get used to it, it’s a very lonely process.’  
(Purple, 1, 146-147)*

This theme unpacked one of the richest discussions around the participants’ immediate circles. These were relationships with supervisors and peers, and their own professional identity, as well as relationships with friends and family. These were fitted under Personal growth (well-being sub-theme) and Professional growth (or academic/work performance, an adaptation sub-theme) (Figure 6.6).

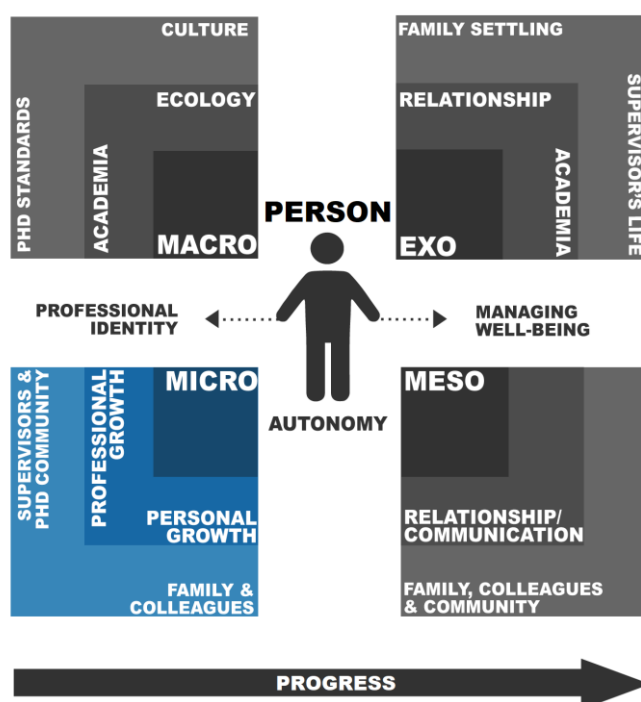


Figure 6.6 IDSs and the micro-systems

Even when surrounded by immediate circles, there seemed to be a thread of loneliness that ran through the discussion on the PhD. Grappling with the idea of what this loneliness was – as this does not necessarily equate to being alone – some participants referred to an abstract notion of loneliness, since everyone was doing a different project. *“You work in isolation in your mind”*, as explained by Purple.

*We don’t attend lectures together, we don’t do tutorials, there’s the smaller groups [...] we work in the same office but everyone is in different years, everyone is doing different projects, nobody is doing the same thing. So you work in isolation in your mind. I have worked in that kind of isolation before, but not for more than a year,*

**right? Only you know what the fuck you're doing. Honestly, nobody else knows what exactly you're doing, not even your supervisors.  
(Purple, 1, 149-162)**

However, this cognitive boundary was also combined with structures of the programmes as well as physical working space. In comparison to the MSc, for example, Purple identified the subtle difference that even though MSc students were also doing different projects, the immersion within their project was nothing alike the PhD. This takes us to our first L2 sub-theme under the micro-systems, professional growth, which consists of the individual's interactions with their supervisors and their PhD community.

### **6.8.1 L2 Professional growth (Academic/work performance)**

#### **6.8.1.1 L3 The supervisory relationship**

**Relationships are always hard to manage, but the one with your supervisors is the hardest one, because you cannot be friends, but at the same time, you need to share some personal information with them. I have to mention certain things in my life, especially if they get in the way of my study. It's a different balance. [...] We are not staff, we are also not entirely students, we're in between. That's why the supervisory relationship is hard to manage, they are not our boss, they are not our colleagues, who are they?  
(Jade, 1, 84-97)**

The sub-theme of supervisory relationship was the most common theme that was brought up by participants. It showed the individual aspects of the developmental process as well as but also of the social process through professional growth. As the participants developed as independent researchers and learned about different aspects of the supervisory relationship over time, this sub-theme also demonstrated a shift in control over time during the PhD process. These included examples involving not just the challenges in relationship management, but also the strategies that students had developed to approach negative feedback or to somehow persuade their supervisors of important decisions.

The data categorised in this sub-theme depicted the student's interactions with their supervisors, and the discussions ranged from positive and negative aspects of this complex relationship, to strategies to work with supervisors while maintaining own well-being. Again, we need to keep in mind that these experiences and strategies were either retrospective perceptions by the participants, or observations made by me as the researcher on their development across interviews.

This sub-theme is extremely rich not only for its importance to the PhD project, but also because of its strong dependence on the compatibility of two or more individuals, at both professional and personal levels. In a similar manner, it was difficult and unrealistic to separate supervisory relationship with other aspects of well-being and adaptation, which will be discussed in this section.

To some students, their strategies could range from simply navigating around their supervisors' busy schedule – “**they are very busy so I need to manage my time really well**” (Orange, 1, 232)– to more elaborate approaches like taking on board their supervisors' working styles or personality in their strategy. There was also a strong sense of trying to meet supervisors' standards across all participants, accompanied by the gradual process of guessing and finding out what their standards were in reality. Overlapping with the *PhD standards* sub-theme, *Supervisory relationship* also encapsulates the students' negotiation between their own abilities and (1) what they knew about the wider disciplinary requirements, (2) the criteria for PhD standards, and (3) their take on supervisors' standards. On this particular topic, there was also an overlapping discussion between relationship with supervisors and psychological impact on the students. Demonstrating this complex interaction, Jade illustrated how supervisors' feedback could influence their feelings, in conjunction with the pressure coming from an upcoming deadline.

**My supervisors don't seem to be satisfied with my work. Their feedback has become very critical, and as much as I appreciate it, I do feel negatively influenced by it. I struggle with my relationship with my supervisors. In my home country, the feedback is provided differently, perhaps less critical. They also would give me some directions, books, journals, important researchers in my area. But here the supervisors aren't very direct. They have their opinions, but they don't want to give directions, they just give you options or possibilities, and they don't warn you enough that if you take that direction it will ruin your research. So that's why I struggle with the relationship, because it affects my writing, my emotional well-being.**

**(Jade, 1, 15-57)**

Hockey (1996) distinguishes between two extremes of the strategies largely employed by supervisors with regard to their students' intellectual freedom, one free and unstructured, and the other much more strictly structured. As a result, expectation communication is found to be one of the key qualities for effective supervision. However, the data allowed us to observe more intricacies of the complex interaction between different components at contextual levels (deadline pressure, supervisors' perceived dissatisfaction, cultural differences) and individual level (autonomy, positive relations, and growth). Jade recognised both the impact their supervisors' feedback had on how



they feel, and the stress potentially caused by the deadline. It was unclear to which party Jade attributed the responsibility, but the discussion did seem to suggest that Jade was aware of the interacting levels at contextual, interpersonal, and intra-personal levels. There was also an element of comparison with practices back home in order to attempt analysing the reasons for the supervisors' critical feedback and Jade's emotional response. In a more implicit manner, we also observe Jade's expectations of the supervisor and supervisee roles based on their discussion. It is worth noting that similar to Jade, other participants also commented on the freedom – and thus responsibility – related to the decisions that rested on them in the PhD. This often stemmed from the discussion on how much support and feedback students expected to receive. As previously discussed, the complexity of relationships with supervisor rests on the compatibility at both professional and personal levels between two or more individuals. Some participants found the freedom to be a positive thing. Blue commented on how they had an option of communicating through emails, which set a contrast to Cyan, who preferred more contact time and face-to-face discussion.

The previously identified interactions between work and life could be further observed in how Red responded negatively to their supervisors' involvement in their decisions.

**I want to have a life outside of the PhD, so that was one. And then another thing was one of my supervisors was against me going back to my country, where my research was based, to do a pilot study. They first asked me to do a pilot study, and then when I planned to do it they said 'no no no you're not ready', and that was quite upsetting for me. So in an act of rebellion, I still went back home. Because I think I'm paying my fees, this is my time, this is my effort, this is my degree at the end of the day, so why do you have to call the shots. So yea, it did affect me.**  
(Red, 1, 149-157)

We can see a struggle for control over time outside of the PhD, and the manner in which the PhD had affected other aspects of the students' life. Beyond the discussion whether in reality the supervisors actually had that much control over the student's decision or not, what is important about examples like this is that decisions made as part of the PhD could influence other parts of students' life, i.e. other micro-systems. In order to manage these complex systems, students could make important life and financial decisions to balance their responsibilities as well as maintain their sense of control.

In order to meet their supervisors' standards, participants also speculated on the quality of work and how much effort was expected from students. Many participants were able to learn their supervisors' standards over time through on-going discussions and/or other interactions, as demonstrated by Orange.

**When I started, there was a lot of uncertainty, now things are clearer. Especially with my supervisor, I just know what standards my supervisor expects from me. The on-going discussions made me realise their standards were really high. I can try my best, but it is... complex, the PhD. Sometimes my health is not good, my spirit is not good, so I can't produce good enough work for her. Before progression, it was so stressful. I didn't know how to write, what kind of standards did they want from me. Now I know a bit more what they want.**  
**(Orange, 3, 314-325)**

Other participants opted for a more intra-personal strategy, such as Purple who focused on the necessity of drawing own boundaries in terms of trying their best.

**I'm just gonna do what I can, there's only that much you can do. I've just read so much in the last couple of months, I'm pushing myself, but I feel like I am trying not to push myself beyond certain limits, it would just reflect in the work. Hopefully that will be good enough for my supervisors.**  
**(Purple, 1, 757-761)**

In this case, a sense of autonomy stood out when students were able to set standards for themselves alongside acknowledging their supervisors' feedback. Environmental mastery also allowed participants like Purple to take charge of their responsibilities but also to accept their utmost effort and manage their well-being. In negotiating with supervisors' standards, professional differences were also a point of discussion for the majority of participants. The discussions often focused on the points of disagreement and different negotiation strategies with supervisors.

**I try to balance the fact that we are meant to be independent researchers with the fact that yes, we do need support. I think I'm a very courageous student who needs to stand up on my own two feet and do all these things, but I don't want to have to write all of this, thinking 'oh I know what I'm doing', and then have them rip it apart. So yes, there's a lot of negotiation.**  
**(Red, 1, 99-105)**

This negotiation of standards was extremely important to PhD students. In Red's example, they found that their supervisors could have quite a strong influence on their work, as well as how they felt. Red spoke about how two different meetings, one positive and one negative, were able to 'set the trail' for how they felt the rest of their day.

**These last meetings have set the trail for the rest of my day. The last one was a 9 o'clock meeting, and by the end of the meeting around 10, I was on a high, and it lasted for the rest of my day. I was so pleased, and that is because three meetings before, it was really bad, and I came out in tears. And that was three months ago, but it affected our relationship because it left such a bad taste in my mouth, it took a long time for me to get over it, and it took this positive meeting for me to get over something that happened over three months ago.**  
**(Red, 1, 124-133)**

Echoing this feeling, Lime further discussed the emotional influence their supervisors could have on them through feedback.

**I was a working professional for over a decade before I came to the PhD, but something about my supervisors' feedback really made me feel bad. It may not be them, but for some reason I could be made to feel down with just one email. Sometimes I try to tell myself it's just them having their own way of critiquing our work, but maybe I am just bad at taking in negative feedback. (Lime, 2, 192-198)**

The literature on doctoral supervision does echo the aspect of pastoral care, or mentorship, that is inherent in supervisory relationships (Al Makhamreh & Stockley, 2019; Hockey, 1994, 1995, 1996). The strategy to approach this aspect of the relationship is difficult from both supervisors' and supervisees' perspective. These examples showed that it is not necessarily about supervisors changing how feedback was delivered, but more about how students shifted the focus on how they themselves perceived and responded to feedback. Intra-personally, as participants judged their own abilities based on their supervisors' feedback, aspects of well-being such as the participants' autonomy were being influenced by the relationship with their supervisors. Contextually, however, there might be a process of repositioning happening, as we could see how participants who came back from a professional career could potentially struggle to re-enter education and academia. In the case of Red and Lime, this difficulty also had roots in their having to redefined and repositioned themselves as students, instead of staff or parents.

In micro-systems, culture was a major thread that ran through the discussion of supervisory relationship. With the exception of one (Orange), all the participants had a British member of staff as their primary supervisor. What stood out was the difference that the participants noticed between their own country and the UK, and most of the time they drew out the formality and professional boundaries in the UK as well as the clear hierarchical structure in their own countries. This discussion remained speculations and some participants, like Jade below, put it down to cultural differences.

**Sometimes I find that my supervisors, perhaps because they are from a different culture, they don't understand my emotions. I think there is a lack of empathy. It may also be that they would like to maintain a professional relationship. In [home country] you can share your personal problems and family problems. They would want to have conversations, but because they also have time. The relationship is more like friendship, but weirdly enough, there is a hierarchy. If your personal opinions are aligned with your supervisors', they will like you and the PhD would be easier. It's strange, it's a more formal relationship in the UK, but I don't feel as much of the hierarchy, because you call your supervisors by their first name. Back**

home, if I would like to say 'this is wrong', I don't think it's a good idea. If you want to tell them they are wrong, you have to be very careful.  
(Jade, 1, 58-74)

Like other participants, Jade noticed the professional distance between them and their supervisors. Similarly, in contrast to their home country, Orange also commented on this distance, though they observed that it did not necessarily affect their work or well-being.

The supervisory relationship here is not very close, don't you think? It's more distant. In [home country], we have very close relationships with our supervisors. We go to their house all the time, for new year, Christmas. Whereas the UK supervisory relationship is very professional, it's just a working relationship, lots of privacy. Sometimes I prefer the relationship in my home country, it's more comfortable, how to say... more humanity? More attachment. Here sometimes it feels really cold. It doesn't [stop me from anything], it's okay for me to finish my work, it's just an extra factor, emotional attachment. They just keep a distance really well.  
(Orange, 1, 67-83)

Towards the more positive take of this professional distance, Pink, a transgender woman, observed the confusion during their first supervisory meeting, and how topics like these tended to remain undiscussed for privacy purposes.

Actually I didn't have to tell my supervisor. When they first met me and they said 'no you are not my supervisee', I was very worried after they said that. First was no reply to confirm who was my supervisor, and then I came and they said this was my supervisor, then I met them and they said 'oh no you're not'. [...] No wonder they said that I wasn't their student, because actually their new student was supposed to be a male. So their perception was, you know, in the application form we must write we are male, and the pictures, right? So they assumed I would look like a man. I didn't tell them but they knew from that meeting onwards, and we never really had to address it.  
(Pink, 1, 182-199)

While influenced by a specific situation, stories like Pink's resonated among participants, usually through their observation of the different distances kept by their supervisors. This aspect was not always viewed as negative, though what was worth noting is that some attributed the nature of this distance to cultural differences between their country and the UK, while others questioned if the distances were due to professional or individual differences. Among other aspects, the 'professional distance' was almost a proxy through which students gauge their supervisory relationship, which is embedded in personal, professional, and cultural contexts. Hockey (Hockey, 1994, 1995) refers to this distance as part of the supervisor's strategies to establish boundaries. Boundaries are important due to the potential tension that results from supervisors being

positioned in between their students and institutional regulations, the latter of which requires them to provide guidance and criticism on doctoral students' intellectual thinking. This is an example of students taking notice of how their micro-systems are influenced by larger systems, and how this contextual interrelatedness potentially manifests through supervisors' strategies and shapes the individual's immediate contexts.

Another manner in which larger systems such as culture played a role in the immediate microsystem of supervisory relationships was the amount of respect that was supposed to be due, yet it either got lost with the use of English, or it tended to cause discomfort for supervisors. This was an important aspect to some of the participants' cultural identity – and changes to this part of their identity – and it demonstrated how students were able to relate this aspect to issues with language, culture, and relational identity.

For instance, Jade was referring to language as a barrier that complicated their navigation of the supervisory relationship.

**In English language we just use 'you'. In my language we have different pronouns, informal and formal ones. I find that navigating the English language while trying to show my respect is very difficult. If I could show my respect I think it would have impacted the relationship in a good way.  
(Jade, 1, 77-81)**

While Jade expressed the difficulty in expressing respect in English, Purple explained how the feeling of respect for their supervisors gradually changed from the beginning to two years into the PhD, referring to it as their struggle with a new cultural practice as they described their experience.

**I treat them with an immense amount of respect, but earlier there was a lot, I wouldn't call it fear, I wasn't petrified of them, it wasn't that kind of fear, but I guess it's just... hmm, more respectful? I used to be really nervous, now the nerves have calmed down. Now I am a bit more calm, a bit more confident, maybe because I have known them for a while as well. I think for me it will be a cultural difference. In my country, the teachers are above you, they are somebody who gives you knowledge, you treat them with an immense amount of respect, and there's also a sense of fear. I grew up pretty much all my life in my country, and that's my perception of teachers and teaching. So when I came here, I really struggled because everyone was addressing their lecturers by their first name, and I was like, 'where is the respect?' They have said no need to do that, especially in the beginning, but it's hard, I'm sorry, it's hard, so I put it down to a cultural thing.  
(Purple, 1, 212-239)**

Over time, participants like Purple recognised the change in emotions that underlined daily practices like calling people by first names. Issues like this could be more complex than just a language or cultural issue. In a way, the shift in how this hierarchy should be perceived may also signify an underlying epistemological shift (particularly regarding where knowledge comes from and how it is transferred)<sup>15</sup>. To some participants, the transfer of knowledge is embedded in a hierarchical structure of teacher (the giver of knowledge) and student (the receiver of knowledge), which reflects the educational and cultural practices in many Eastern countries. As PhD students transition between student and colleague roles, the uncertainty they are facing with the supervisory relationship may be more complex than just cultural.<sup>16</sup>

On the topic of language, Red – who had stayed much longer in the UK and thus had a strong grip of English as a second language – had a different take on what new language they were required to develop to communicate with their supervisors.

**When you get to the PhD, I even read somewhere that it is expected that, the expectation is higher basically, you're expected to think, read, write, and speak, more like an academic.[...] Say for example, the supervision meeting, you need to keep in mind that you're talking to your supervisors, so there may be times where I'm asked a question, 'explain what you are trying to say here'. And the way I would explain it to a friend, or a fellow PhD student is very different from the way I explain it to my supervisors, because I need to be mindful of the language I use. Again, trying to find the words that will sound academic rather than informal, and also rather than 'this is how I see it' and I find that I tend to be... because I'm trying to use words and phrases that would be understandable to the layman on the street, it tends to be too simplistic, so it doesn't fit the academic expectations.**

**(Red, 1, 43-59)**

Corresponding to the ambiguity of what is meant by language or culture, this again illustrated that on top of the difficulty stemming from having to study in a second language, there was a different kind of disciplinary/academic language that students were required to develop. At the same time, we see the participants redefine their identity as an academic through changing their speech. Demonstrating the complexity of the challenge IDSs face in terms of language, Jade expressed frustration, thinking they were perceived as “**stupid**” when unable to show their academic expertise due to language limitations.

**But then they don't seem to see us as adults who have probably thought about what we were saying already. I know it's hard, because we have different understandings, maybe due to the fact that my education was entirely in [home country]. Sometimes I wish they knew that I understood the field well, but because of my English, I**

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<sup>15</sup> See **Chapters One and Four** for more in-depth discussions on the role of epistemology in doctoral experience.

<sup>16</sup> I would like to thank my colleague, **Leanne Cameron**, for our discussion on epistemological shifts.



**cannot express the extent of my knowledge, and they think that I don't know this topic. I do know, but things like philosophy requires much more sophisticated language. It's a complicated thing to express, especially in writing. I think they think that I'm a stupid person.**  
**(Jade, 1, 149-157)**

Another point related to culture worth highlighting is how the participants emphasised on their supervisors fixing their English, as opposed to commenting on their professional work. This related closely to the potential discrepancy between how some participants positioned themselves (PhD researchers), and how their supervisors perceived them (international students). Blue mentioned their strategy of dealing with this problem.

**My second supervisor, they are lovely, but they seem to fix only my English whenever I send in something. I mean I understand, my English may not be that good, but I was hoping for more expertise advice. Now, every time I send an email with something attached, I would always say that I will have it proofread professionally, and I also ask them for comments on specific things.**  
**(Blue, 3, 652-657)**

Here we see Blue's strategy that worked around their issue with the style of their supervisor. This strategy was effective not only because it was able to achieve the kind of feedback required by the participant, but it also allowed the participant to address this issue indirectly, avoiding the risk of confronting their supervisor.

Another interesting pattern that came up in multiple discussions with different participants was the practice of hiding problems from supervisors. This was also observed in the form of reluctance to discuss problems with supervisors. Cyan expressed reluctance to tell their supervisors about their problems.

**My main supervisor doesn't seem to like their PhD student to have problems with work, that's why sometimes I choose to not tell them in detail, especially those problems that they can't help me with.**  
**(Cyan, 1, 41-45)**

In Lime's case, their strategy involved delaying as they attempted to fix the issue, as they feared how their supervisor would perceive them.

**I think I will deal with it for now. I know [it wouldn't it be better to tell my supervisor], but I just feel like I could fix it before it gets bigger. My first supervisor is the head of the department, I really feel that they will think I was incapable.**  
**(Lime, 1, 78-81)**

Again, similar to Cyan, Lime expressed how they were anticipating their supervisors' reaction, thus developing their strategy around this anticipation. While Cyan's reason was more on the strategic and practical side as they believed that their supervisor not only did not like to hear that their students had issues, but also would not be able to help with this technical problem, Lime was aware in the discussion that their strategy might not have been the best solution.

Finally, a change in supervisors was another common discussion among some participants. Out of eight participants, three had a change in supervisors during the PhD (participants Red, Purple, and Lime), and two had expressed their intention or consideration to change supervisors (Red and Cyan).

For those who had a change forced by circumstances, the issues often revolved around two areas: (1) an inter-personal level of having to adapt to a new working strategy, (2) an intra-personal level through the emotional impact of this change. The students either experienced difficulty in finding a new supervisor with similar research interests, or they would have to change their current topic to fit the new supervisor's expertise. Lime described how they reacted upon knowing the change, linking their reaction to the impact they anticipated for their research.

**I received this email, just short, simple, 'Let's meet this day and time', and I knew something wasn't right. There was nothing on the agenda. When I knew they were moving, I really panicked, as I did not know what that would mean for my research. I was close to progression, and I really didn't want to change anything.**  
(Lime, 2, 24-30)

Red had a slightly different reaction to the news, explaining that this was due to the close relationship they had with their second supervisor, and also due to the difference in age.

**When they let me know, I had to take break. I turned off the phone and I just put it aside. [...] But then I thought about it, you know, they were a young academic, this move was good for them, so it took time, but I finally wrote back, 'It's okay, I'm okay, I wish you all the best in the new job'. They said they would still follow my work remotely, and I appreciate that.**  
(Red, 2, 198-209)

A possible change to research topic had been discussed as part of supervisory change, and this was a topic that received mixed opinions. While Lime and Red expressed negative feelings towards the prospect of having to change topics, Purple reflected on the decision not to change topic to fit with their new supervisors' expertise, and its consequences.

**I suggested to change my topic because my upgrade didn't go so well, I told my supervisors I was happy to change my topic all from scratch, something we both can work on and in their areas of expertise as well. At least there'd be a sense of direction and focus, but it was too late. I felt I could have avoided a lot of things if**



we have had that expertise, that was the doubt I had, constantly, it just surfaced during the upgrade. We had a very honest discussion after the upgrade, there were points they said we could have prepared for that bit better, and I also said there were things I could have said better and clearer during the panel. It's a learning opportunity for both sides, I think, they learn as much as we do, in a different way. (Purple, 1, 746-757)

Participants referred to a sense of being lost, a sense of direction, were associated with the supervisory relationship. This demonstrated the integral role that the students perceived in their supervisors' influence on their PhD. Jade contemplated that the emotional influence their supervisors had on them might be due to a positive reason, drawing from their intra-personal feelings and inter-personal trust to help understand their own negative emotions.

**I think it's also because I didn't give much credits to the supervisors in my home country. Here in the UK, I trust them and care about them more, and so probably that's why their feedback has such an impact. I trust my supervisors here. I think they are really good at their areas, their expertise, and their approach to work.** (Jade, 1, 289-296)

We see that even though participants talked about different challenges within the supervisory relationship, each participant had their own strategy to negotiate or navigate. Most also acknowledged the chance to learn during the process. Overall, due to the nature of the supervisory relationship, it is a complex microsystem that depends not only on the individuals but also on the larger contexts in which it is embedded. Supervisors' strategies differ greatly, and they tend to reflect both their individuality and the institutional regulation for the role. Much has been argued in the literature about what the actual role of the supervisor in a PhD – a manager (Vilkinas, 2002), a mentor (Djerassi, 1999), a critical friend (Deuchar, 2008)? – and we see in the data presented here that students themselves reflected deeply on this relationship. At the same time, the rich data and the theoretical framework allowed for more nuances of these complexities to come through, especially in how students engaged with their own transitions, built resources and strategies over time to effectively work with their supervisors. It is undeniable from the data that there is a deep connection between students' professional growth, their well-being, and their contextualised relationship with their supervisors.

### 6.8.1.2 L3 The PhD community

A big part of the PhD experience and professional growth is the community of peers. This theme was challenging as it was difficult to separate the professional aspect from the personal aspect of growth in doctoral experience, especially when it came to their peers. Though intermingled with aspects of personal and well-being, in this section, I introduced parts of the data that stood out as related to a sense of a community of learning and practice, in contrast to a sense of friendship and personal support that will be explored in the next sub-theme (Section 6.8.2).

Particularly, a sense of community emerged when participants described discussions on PhD-related topics. The professional aspect of their relationship with peers was set apart especially in cases where the participants belonged to more than one departments and found themselves in discussions they did not understand.

**When people tell me about different methodologies etc., I can't contribute much, because I don't understand. I will still listen to them, it's okay, talk to me, but I wouldn't be able to give any advice.  
(Blue, 1, 30-32)**

It is worth noting that due to the nature of their scholarship, Blue belonged to two different department, one science and one social science, though their physical working space was in the latter. Though forming close friendships with their office peers, Blue often described not being able to understand their peers' discussions regarding philosophy or qualitative methodologies, and vice versa. Linking back to SCA-T, examples like this shed light on how aspects such as interpersonal communication and academic/work performance can be quite specific in the IDS experience. Because communication in their case could be both professional and personal, some IDSs may make distinctions regarding who are colleagues and who are friends.

Another example where this split between personal and professional came through was when communication with PhD peers could also present issues. Some participants identified instances where they could observe a reluctance to share among peers, especially on challenges that they were facing, for fear of being perceived in a negative light.

**The first few months that I was here I felt that I was complaining a lot, you know, I mean all the friends, I think that is what's wrong as well with people these days. Maybe not all, but what I've found is because I've a WhatsApp group for people under the same scholarship, I don't think that is a good thing, I mean, that people don't talk about their problems. That makes me feel very slow, like not a good student. When you have this kind of problem, in the WhatsApp group, the scholarship one, I started to do that, I don't mind talking about my problems, and since then they have started to talk about the own problems in their study. I think,**

**at this level, everyone thinks that ‘oh if I asked this question, it may make me look silly’.  
(Pink, 1, 80-91)**

Not only with their supervisors, but there is a possibility for students to feel reluctant to share with their peers, especially if they anticipate negative perceptions. In Pink’s example, we see how Pink positioned herself as part of the group of scholars, yet at the same time assuming that she was being judged by them. This was perhaps driven because of intra-personal PWB factors such as self-acceptance and autonomy in thought and action, as she would at times self-define as being “slow”, and at others reaffirm that she was a “good student”. This signified the struggle for autonomy in trusting her own ability, and her effort to master the environments through managing life as a PhD student. This fear of being judged by peers could be presented in different manners, such as Red’s previous discussion on their writing being judged by an academic audience, especially through imagining ‘what would they think’. As Ryff (1989a) explained, autonomy is “the regulation of behaviour from within” and “having an internal locus of evaluation” (p. 1071), which was repeatedly implied in the data as a PWM factor that went through transformation during the doctorate. This transformation happens through the change in locus of evaluation, which will be further discussed throughout Chapters Six and Seven.

A sense of agency was not lost in the discussion about community. Echoing other participants from social sciences backgrounds, Lime expressed the need for more initiatives to connect PhD students from different year groups, emphasising the importance of sharing experience between all year groups.

**I think there’s a lack of a sense of community here. There’s not a sense of being part of something bigger, at least not for me. Even though there’s potential for that happening. I don’t know why not, maybe just no initiative yet. Also, what’s driving students could be you know, people with more experience, 3<sup>rd</sup> year, 4<sup>th</sup> year, let’s do something to support others based on our experience.  
(Lime, 3, 104-110)**

This active effort from the individuals to become part of a community can be understood both from an SCA and a PWM perspective. Gaining experience is integral to learning (both culturally and academically), and at the same time being part of a community of learning not only enhances personal growth but also positive relations. More particular to the intercultural aspect of IDSs’ experience, a call for more initiatives that promotes a sense of community also echoed the argument surrounding intercultural practices in the literature (see Introduction and Chapter One), specifically in line with de Wit’s (2011) caution against the assumption that intercultural practices would automatically happen in international settings.

When combined with the doctoral experience, this implied students' awareness of being (or not being) part of an active community, as they seek to position themselves in larger social and professional contexts. This positioning is important to the construction of professional identity in doctoral students (McAlpine & Amundsen, 2011). According to McAlpine and Amundsen (2011), the trajectory of professional identity in doctoral students is the around three main areas: intellectual, networking, and institutional. This sense of being and becoming plays to what is described as the ontological aspect of agency (Billet, 2009). This aspect follows a trajectory of doctoral identity construction, which not only indicates students' decision to "make or take for their own" (McAlpine & Lucas, 2011, p. 696), but also reflects resources from students' past and the present.

In this sub-theme of professional growth, participants were able to recognise the PhD community as an important micro-system, not only for their socio-cultural learning, but also for learning about the PhD itself.

**I think it's important to have these meetings [with colleagues] because it doesn't only enrich my knowledge of different cultures and their experience in the UK, but it also allows me to learn more about the PhD, what's going on with other people's research, and some gossip about the department. [...] This isn't high school, competition doesn't make sense, and it's more about helping one another getting through the PhD. I didn't see anyone who is competitive in my department, and everyone is helpful.  
(Jade, 1, 121-135)**

Overall, the PhD community plays an important role to students as this provides a sense of community for learning and sharing practice. This fits with previous research that conceptualises the doctorate as a social process, through which doctoral students form their professional identity as a part of their communities (Antony, 2002; Austin, 2002; Ellis, 2001; Gardner, 2007; Gonzalez, 2006; Weidman et al., 2001). These aspects also echoed the discussion in wider work on community of practice (Lave & Wenger, 1991), in which learning is embedded in communities that reflect social and cultural contexts, once again situating newcomers as apprentices. The next sub-theme explores how being a part of a community can support personal growth in students, especially through enriching their resources for coping and thriving in the face of challenge.

## 6.8.2 L2 Personal growth with family and friends

### 6.8.2.1 L3 Family: Being a parent

Being a parent as part of the students' interaction with the micro-system involved discussions on how the participants negotiated between this role and their role as a PhD student. Red, Cyan, and Lime were parents living with their children. While Cyan had their spouse with them to help with childcare, both Red and Lime were the sole parents present in the UK. Through different approaches to their parental role, this aspect of their life held either equal importance or more importance than the PhD.

One aspect that came up quite a lot was paperwork and procedural processes, including visa applications, school choices, and accommodation that accepted children. This was not expected by some participants, especially timewise.

**I came with my children. The procedure was really lengthy. I was hoping to be settled within two weeks, but it took me about one or two months.**  
(Lime, 1, 31-32)

With moving and paperwork also came financial strain. Cyan discussed the difficulty of moving an entire family to the UK, not only in terms of finding an optimal location, but also how expensive the UK is. These aspects further introduced strain for PhD work.

**My child is in nursery and it's really close to our place, so it's not too bad. Moving here cost me a lot of money, because the UK is really expensive, especially this city. I have had to live quite far from the city centre, because houses there are cheaper. This means the trip everyday to the university takes more time than I'd like.**  
(Cyan, 2, 65-68)

Even for parents who had been living in the UK for a while, it could still be difficult to reach a balance between roles. Red made a decision to go part-time to have more time as a parent, especially with the financial strain that came with this role.

**I'm a parent, so like I said, this year I didn't want the PhD to be the be all and end all of my life, so yes that was one of the reasons I went part-time. Apart from the PhD, I have motherhood responsibilities, and I also have a part-time job, a few actually. So I switched to part-time study.**  
(Red, 2, 239-243)

When asked what could be done to support their role as parents, participant commented on a lack of knowledge on the UK schooling system, and the need for a community that could support parents. Again, we see the importance of having resources from different contextual and individual

systems as students coped with their situation. They allowed students to build their strategy over time, knowing what support systems they could count on.

**Some sort of support from people who have ability to offer a more structured system to help parents. In my previous university in America, there were people working with families, saying ‘I will stay with your children while you go and check some places out, some supporting system. Here I didn’t have anyone to ask especially in terms of schooling, what’s the procedure, how to read Ofsted reports, all that. It doesn’t have to be, just as a community, department, school, faculty, I don’t know. (Lime, 1, 55-67)**

The micro-system of family did provide important emotional support for those who were parents, as Lime admitted that they did everything to have both their children in the UK with them, despite being the only parent living in the UK. However, what came through in the data was how larger systems – such as the UK immigration policy and schooling system – could reframe IDSs’ experience in the new context. In other words, while support came from positive relation with family, much of the strain experienced by IDSs who were parents was more likely an effect trickled down from larger interrelated contexts, as well as a lack of resources for immediate support. In the next section of personal growth through interacting with micro-systems, I discuss how new resources could be gained over time by participants through building friendships.

### **6.8.2.2 L3 Friendship with colleagues and non-PhD friends**

Being on the border between personal and professional relationships, students’ interactions with the PhD community are not clearly one or the other, because for doctoral students – especially those that are non-domestic – limited time and contacts means that their involvement with communities could be merged with the professional community they often physically find themselves. The majority of participants mentioned how a lot of their friends were PhD colleagues. To further explain this common occurrence, Purple drew on the unique experience of being a PhD and living away from home.

**They would understand the situation better compared to friends back home, because nobody was living alone doing a PhD. It’s a completely different experience. If you’re also good friends, they also understand it, that is the most important thing when you’re doing a PhD, to have at least, I mean not many, but just a handful who will listen without judging you, who can understand what you’re going through. (Purple, 1, 133-136, 386-393)**

Whether in reality the nature of the PhD could explain why the participants tended to make friends among their colleagues, there still was a predominant view that doing the PhD gave the participants a different insight that might not be shared by all their non-PhD friends.

**All of my friends here are students. I don't know anyone who isn't studying. Why don't I know anyone who is working in a shop for example? [...] If they asked me 'how are you' when I'm in Bristol, I would immediately want to talk about the PhD. I just think they won't know about the PhD and they won't understand me.**  
(Jade, 1, 311-325)

Not being able to connect and relate to someone without this combination of being both intercultural and doctoral was also described by Blue. Being affiliated with two different departments, they also weighed the pros and cons of having IDS friends, with whom they got along well personally but could not share expertise knowledge.

**For me it was a bit more difficult to adapt to one department than the other, as I am affiliated with two. One is with more home students, and the other is with more international students. The one with more international students, I feel more connected with the people there. I do like being able to come in and talk about all sorts of things, not just the PhD. I would like to be able to have somebody who understands better about what I'm working with. For the emotional support, it's great, but for expert support, it's not the same. Like if I need some help from my colleagues to proof-read my stuff, they wouldn't necessarily understand what I'm writing about.**  
(Blue, 3, 98-108)

Here, disciplinary boundaries were being merged and/or contrasted with social relations. SCAT suggests that adaptation is closely related to factor of personal interest and community involvement and applying this to the IDS experience revealed more nuances. Though there was a blurred line between personal and professional relations among PhD colleagues, the intercultural and doctoral aspects of their experience could sometimes be separated, like in Blue's case.

Larger cultural contexts were also one of the reasons why Cyan referred to their religion as a barrier to making friends.

**My social life is bad. Not because of the PhD. The culture here is very different from mine. In terms of food, social relationships, like, my department has a very low number of male students. Some female colleagues for example want to make friends, but my religion does not accept that – even if I was not married. I can't form relationships with ladies unless we get married, but my school is largely made of female students.**  
(Cyan, 1, 86-91)



Repeatedly, this interrelatedness of the eco-systems as theorised in EST came through in the data. Not only were macro-systems from their home countries still exerting an effect on their way of living and choices in the new country, but they also dictated who IDSs might be able to connect with on a personal level.

In terms of non-PhD friends, having friends outside of the PhD was also an important aspect for some participants. Again, like Blue, some participants leaned into the intercultural side of their experience when they sought common ground. Explaining their personal reason for having mostly a group of friends from their home country, Orange talked about the complexities of understanding contexts between cultures and conveying them via communication.

**It's not the language actually, it is just easier to speak to people from my own country, they can understand my contexts. I like speaking English, but sometimes you can get the meaning but not the contexts behind it, it takes a lot to convey contexts, and sometimes it makes me feel tired. I feel more relaxed being around people from my country. But I am in the UK so I need to make an effort to speak English, that's why I came to the office every day.  
(Orange, 2, 192-200)**

Orange's strategy was to balance between the need to improve their skills (e.g. English) and preserving their own effort. Echoing the aforementioned ontological aspect of agency (Billet, 2009) in doctoral identity, choices made by IDSs regarding their personal relationships could also be influenced by their intra-personal resources (such as mental capacity). Thus, the interaction between the individual and their contexts could be bi-directional, as not only were some participants being influenced by larger contexts, but they themselves were making choices to build their own communities and friendship groups.

Over time, much like with building a professional community, participants recognised that emotional support might not happen automatically despite constant physical presence. Thus, constant communication was part of many participants' strategies. For instance, Pink expressed how important it was to share about well-being with peers, remarking on how one could miss what was going on in their colleague's life despite sitting in the same office, which aligned with what Purple previously said about the nature of loneliness in a PhD.

**I had studied in the same room with this one colleague, last year they failed a core unit, and I didn't realise until last week. For months, I sat with them every day, in the same room, and I didn't realise they had a serious issue, that they might be terminated from the programme. I didn't know. That is why I advised them to please talk. From my own experience, luckily I have good friends here, so whenever I had a problem, I communicate, and they helped me to sort it out.  
(Pink, 2, 59-67)**



Overall, the sub-theme of personal growth in relation to friendship groups saw participants drawing from larger contexts both from their past and present. Both intercultural and doctoral aspects came through in terms of building a common ground for friendship. Though social dimension was integral to their experience, students weighed their options and made decisions based on who they were before coming, how they were feeling in the present, and who they would like to become in the future.

For an interim summary, the L1 theme of interaction with micro-systems revealed two main aspects of the IDS experience over time. First, the interrelatedness of eco-systems was strongly illustrated through the data as participants discussed the challenges they faced, and how they drew support from making use of their past resources as well as building new resources over time. Second, the interactions between IDSs and their contexts were bi-directional, as they exerted their influence on their own micro-systems through making their own choices, both professionally and personally. As discussed, this aligns with the literature on doctoral experience, especially in ontological aspects of self-transformation and agency. As such, the next L1 theme will focus on the developing person, where I discuss how IDSs' sense of autonomy – a recurring PWB factor – changes over time as part of IDSs' development.

## 6.9 L1 The developing person: The individual and their intra-personal changes

As observed throughout this thesis, it is difficult to separate the individual from their contexts. This final L1 theme represents changes that can be considered as intra-personal, i.e. those within the participants, particularly instances where they recognised their transformation as an individual, due to events during the PhD, or the PhD process itself. This theme spotlighted not only the challenges and triumphs of the doctorate, but also how the IDSs transformed as they responded to the experience. In relation to theory, I connected changes in my participants to a sense of autonomy as they learned and developed a new balance between developing professionally and managing their well-being (Figure 6.7).

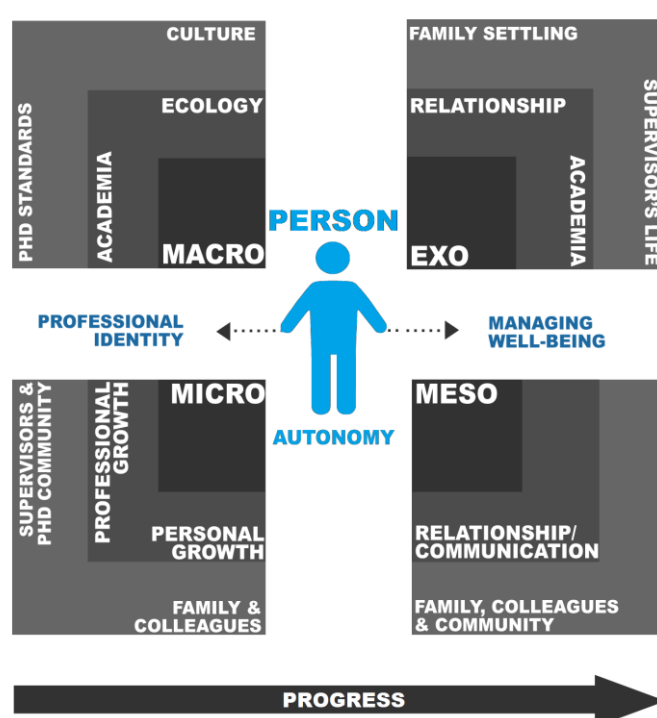


Figure 6.7 IDSs and their intra-personal changes

### 6.9.1 L2 sub-themes: Autonomy

Longitudinally, a shifting sense of autonomy could be observed in participants' discussion of their own experience, both personally and professionally.

For instance, the experience of living away from home was mentioned by younger participants and/or those who had not spent time abroad before the PhD. This was reflected upon by Blue, who unpacked the challenges of living away from home, and coming to the conclusion that for them, it was mostly due to their moving towards another part of adulthood.

**This was the first time I have ever lived so long away from home. I lived in the US for a few months, but that was it. I think that the part of moving away from home is more becoming an adult more than having to be away. If it was in my home country, I would have to move to another city anyway. I think it was about time.**  
(Blue, 2, 114-118)

Alongside living in another country, the PhD itself could also influence the participants to change as an academic and a person. Purple recognised their current changes as well as anticipated those in the future as a result of the PhD process.

**I can see there's more space for subjectivity in qualitative research. There's a lot of who you are. I have changed a lot as well, I can't imagine how I will change say two years from now, my perception of [...] which is my research will change, as I talk to my participants, as I see the work they do.**

**It's a very difficult feeling to explain, because sometimes, like I don't know whether you've had this, but you question who you are, why am I like this, what am I doing? It's not an out of body experience, but it's a very deep level of introspection, what is the point, what is the purpose of all of this. Sometimes I feel it's about making differences from another person's life in whatever way you can, it's helping in whatever way you can, I think I can do it through my PhD. Along those lines, just making a difference, improving something for somebody. And my country needs it.**

(Purple, 1, 515-520, 723-731)

Both Blue's and Purple's discussion spoke to the concept of ontological shift (previously discussed in Chapter One) (Kiley & Wisker, 2009; Wisker et al., 2010). However, their changes were different by nature, one more personal and one more professional. Particularly, while Blue described growth as an individual, Purple directly referred to their ontological growth in relation to crossing epistemological thresholds in qualitative research. For Pink, the PhD itself allowed them to achieve one of their purposes in life.

**I'm not going to detach that part from my life, as a trans woman, in my country or here. At this age, for me, I want to educate people about trans women. This is one of the reasons why I wanted to do this PhD, a minor reason, because I want to show people a good example. What I want to do is I want to educate people. I'm not saying that we should receive special treatment, all I want is respect. It's also to educate people like me, so they can have an aspiration. I am a teacher, and there are many ex-students on my Facebook, and some of them are like me, so to inspire them, that you can... of course you can do whatever it is you want, but at the same time even though you are a trans woman, you can still do well in your study.**

(Pink, 2, 200-212)

In Pink, we see a combination between PWB aspects of purpose in life and personal growth. In other words, their purpose acted as a catalyst for them to pursue a PhD, and to persevere. Their

identities as a trans woman, a teacher, and as part of a country that is yet to accept transsexuality were the intra-personal forces that drove their choices of who they wanted to become and what they wanted to represent.

The synthesis between professional and personal development was also observed in other participants. While Blue recognised what they have learned as a person, Red reflected on making a bigger contribution through their research decisions.

**Professionally I feel like I'm learning a lot, and I'm becoming an adult at the same time. I'm trying to find a balance, making progress into adulthood I guess, as I am in my late 20's now. I know what I want to work with. I'm also trying to balance between working, and then exercise, and having time for my family, and personal life. I'm trying to, but I'm okay with it not being perfect. I know it is hard.**  
(Blue, 1, 306-311)

**I came back and I read about my topic, and I found that, through reading about it, I've had to think of myself and [my own experience]. And through all that, I was thinking, how can I talk to my participants, when my own experience was in question. And it got me thinking. [My topic] isn't even in the discourse of my own country, and so that's what my research should be about.**  
(Red, 1, 319-329)

Similarly, through connecting the PhD to other aspects of life, Purple remarked on their supervisor's earlier comment of how lonely the PhD could be and relating this to their new approach to life as a result. This need for a work-life balance was also a topic mentioned by different participants on what they had learned from the process.

**The first year was harder, it was new, I wasn't used to it, and that was also when all this 'you have to get used to being on your own when you're doing a PhD' thing hit me. The second year got better, we just get used to it with time. So life has been, yea, life-changing, but it's just, learning to spend time with yourself, and then you start enjoying it, and things will get better.**  
**The PhD used to be this whole part of me, but now many life experiences during the last two years have changed that opinion. The PhD is important, I'm very passionate about it, but it's no longer the beginning and the end of everything. I wouldn't define myself just by my PhD, it's an important part but not the only part. Ever since I started doing yoga, I try to have work-life balance, which is what essentially yoga is about.**  
(Purple, 1, 371-376, 401-408)

Tracing experiences over the years they spent doing the PhD, many participants echoed this effort to try and separating themselves from their PhD. Some starting with the PhD as a big part

of their identity, which gradually gave place to other aspects they had developed to maintain their health and well-being. This is at least a two-fold process, which echoed the socialisation aspect of the PhD in the literature. First, IDSs' main goal seemed to align as they tried to develop their professional identity through learning and integrating in the new communities. Second, they began to combine their previous knowledge with new knowledge and resources to redefine their own expectations, refining their strategies for work-life balance. Thus, in the next two sections, I go into details on how these two aspects came through in the data.

### 6.9.1.1 L3 Developing a professional identity

Developing a professional identity was not a completely negative process. For some participants, especially those with a previous working background, the introduction and development of a new professional identity seemed an experience to be welcomed.

**For me I wanted to do this study to escape from everyday life of being a teacher. After being a teacher for over a decade, it was the same routine every day. (Pink, 1, 335-337)**

Some participants saw the changes in their writing as a reflection of their professional development. Specifically, the shift from being 'generic' to writing with a purpose, and with a structure. Like Purple discussed below, writing could become a process of calibration through IDSs adjusted their identity, moving back and forth between being too defensive to not being defensive enough, before finding out their own (writing) voice.

**They told me, 'I can see the change in your writing, I can see the change in your speaking, you are more confident'. I said, 'yes because I think now it is coming out as a defence'. What I'm working on is the corrections for the upgrade, and it's a response to what had been said in the upgrade, so I feel that I need to make my stance really clear, and I think in a draft that I gave my supervisors, it came out a bit more defensive than now, they were like 'you may want to tone it down a bit, don't come across too defensive. Now, it's very specific, especially those concerns they have voiced about my work, you know, conceptual framework, methodology, so it's about making a very clear stance, the transition was from being generic to exactly pinning it down to certain issues. (Purple, 1, 242-259)**

As Purple pointed out, milestones and intra-personal changes tended to go hand in hand, especially when these milestones reflected progress in the PhD. Often, doctoral milestones appeared in the form of writing, due to the nature of this process. Specialisation and pursuit of knowledge are integral to a doctorate (see Introduction and Chapter One), and this shift from

generic to specific is to be expected. The familiarisation of new concepts and terminologies were also mentioned a lot in the discussion on being – and becoming – a researcher. Much like the previously discussed English language and academic language, the participants often discussed new terminologies when prompted about their researcher identity. Some participants also related their professional development to specific aspects of the PhD such as philosophical affiliations. Red discussed below the process of choosing their own philosophical stance and related this to owning their research. This excerpt also demonstrated the long negotiation between the student and their supervisors (to be explored more in-depth in Chapter Seven).

**I said look, this has gone on for too long. I need to take a decision on what I am, and move on from there. Thankfully the second supervisor told me that they could clearly see [where] my research is headed. It was nice to finally come to that spoken agreement that ‘yes, this is what I am’, and for me that discussion was very beneficial.  
(Red, 1, 82-100)**

The finalisation of specific research decisions was also essential for other participants. Lime referred to their experience of the upgrade as a negative process in the second interview, just immediately after the outcome with major corrections that greatly delayed their data collection plan.

**There was a lot that was changed, I don’t even know what kind of data should I collect now, it was a complicated research design to begin with. I wish my supervisors had picked up on it, but one of them is moving, so I don’t even know if they cared.  
(Lime, 2, 203-207)**

However, in the next interview that happened after data collection, they had a slightly different view of the upgrade’s outcome.

**Honestly I don’t know if the data collection would have worked if I had continued with the previous plan. Maybe it would. I am just glad it worked out in the end.  
(Lime, 3, 15-17)**

The strength of longitudinal qualitative interviews was clear here, as the data allowed for tracking changes in perception after milestones. Here, Lime appeared more at peace with the outcome after having collected their data. Being an important aspect of development for IDSs, this change in perception upon experiencing doctoral milestones is discussed further in Chapter Seven through Jade’s story. The upgrade/progression process was a stressful milestone for most

participants, and a turning point for them in terms of comprehending their professional role as a researcher and taking ownership of their work. From previously not knowing to which discipline their research could belong, Purple found more solidification after their upgrade.

**But now after the upgrade, I can say this is what this is, so finding a supervisor would be easier. [...] So you know, hopefully when I hand in the corrections, they could connect me to somebody who could take on like an advisor position due to their expertise, and that would make my life much easier.**  
(Purple, 2, 121-125)

Similarly, Red remarked on their relief after passing their progression without any corrections, recognising affective changes as well as new opportunities as a result.

**It's just a real milestone. And it's unbelievable how much, uhm, confidence it gives you. So, like, when the new email talking about the summer term research assistant, my first thought was "Oh no no no no" but then I remembered that "Oh God I'm done with progression! Yes! I can apply." If I wanted to. So you know there's a difference. I don't know why. There's a difference, definitely.**  
(Red, 2, 10-16)

Intriguingly, there was also an implication that the choice was now in Red's hand - "If I wanted to" - which indicated a growing sense of autonomy in terms of action. With each important step in constructing a professional identity came more challenges, especially in planning and managing a big project on their own and learning how to effectively do so. Speaking of the influence of this responsibility, Orange drew the difference between the structured schedule of first year and the contrasting flexibility in the next years of the PhD, emphasising on the need to learn how to properly manage their time.

**I worry a lot. I need to go back home to collect data. It's difficult because I need to travel a lot. I know others who are struggling with it as well. I know some people who gave up on the PhD and went back home. It's an individual thing, psychologically and personalities. You need to be focused. Sometimes I find that I need more flexibility, but it's not always my way of working. Your work doesn't depend only on yourself in social sciences.**  
(Orange, 1, 128-131, 220-226)

This strict time management was also reflected in Cyan's short-term plans for the PhD.

**My short dream is to finish my data collection. I don't know how long it will take, I need probably 6-9 months. The analysis will be more straight-forward. I will try to do analysis during collection to sort out everything. Hopefully as soon as I finish all the data is clean and organised. I need to be extremely efficient or I will lose time.**  
(Cyan, 1, 153-159)

The dependence on external factors was a common worry among participants, especially those in Social sciences, as seen in the discussion with Purple.

**I'm lagging way behind. I don't know exactly when I can start, ethical approval, everything needs to be taken into account. It's gonna be a challenge, there will be some low points, but it's inevitable right? Not everything goes smoothly in the field. You have to get it right. That pressure. Ask the right questions, get the right data, meet the right people, review the right documents. It's that kind of pressure. When I think about it I get nervous.**  
(Purple, 1, 763-772)

This sense of dependence was a major contribution to low well-being, and specifically PWB-M suggests that this element signified a lack of environmental mastery, especially in limited control over the outcomes. In dealing with a big project, flexibility was mentioned as part of students' strategies. Lime commented on the need to remain flexible and to accept that a decision could be wrong.

**I think the biggest struggle is trying to make decision, and learning how to be okay with changing it. I mean there have been times when I had made a decision, and had it turned on its head by my supervisors. Not in a bad way, but still, you need to be able to justify different decisions and being willing to let go of some of them. It hasn't got to a point where I had been overly frustrated, but I have a feeling I will need to get used to it soon, before bigger decisions will come.**  
(Lime, 1, 206-211)

As the participants completed milestones in their PhD, they gradually learned how to follow academic practices in their field, and started to construct their professional identity over time. However, as time passed, dealing with external changes and the ever-changing PhD required IDss to learn how to be flexible and to deal with the stress. This involved managing their expectations and developing new strategies for coping with threats to their well-being.

### **6.9.1.2 L3 Managing well-being and expectations**

On the topic of well-being, participants discussed what the PhD was supposed to look like. What was normal, what was not normal, were questions constantly asked. The expectations often resulted in either overworking when there was a lot to be done or feeling frustration when they got stuck. For instance, Pink speculated that it was the norm for PhD students to lose sleep.



**I guess it's normal, but now I couldn't really sleep at night. I will wake up in the middle of the night a few times, and constantly have bad dreams. I don't know if that's normal, but I think that's normal for PhD students maybe?**  
**(Pink, 3, 13-18)**

Cyan and Jade also described physical impacts the PhD had on them, highlighting that for them being stuck was what caused distress.

**Yea, I'm trying, because the stress impacted me, sometimes heartburn, sometimes I feel stomach-ache, but I'm okay. Now I'm on medications, I had some acnes because of stress. At night I feel depressed, but in the morning, I feel happy, I don't know why. At night especially if I am facing some challenges. If I just had a lot to do, that's fine, I can work hard, but if I had some challenges, like the task not working, the experiments, it makes me nervous waiting for help.**  
**(Cyan, 3, 121-130)**

Purple recognised their overworking schedule, especially during illness, but further explained how they did not re-negotiate the deadline due to fear of being perceived negatively by their supervisors. The discussion further went into how the choice was supposed to be between physical or mental health, addressing the circle of missing deadlines and impacting students' confidence.

**I have fallen ill, and still going to work. There was this instance where I went to work and fell ill, and that was just a stupid decision. But, it's probably because I have to give in work and it was a close deadline, sometimes it just has to be done. If [the deadline] it's with my supervisors it's usually fixed for me. Once when I was really ill, I took a tablet and went to school. I was sacrificing my well-being. The deadline can be changed, I know, but don't you think it's become such a norm that either you sacrifice your well-being, or... I don't know. It's either your physical well-being, or your mental well-being isn't it? But I feel it's so wrong that we think that.**  
**(Purple, 1, 298-332)**

Lime also echoed this fatigue that came with the PhD, as well as talking about the psychological impact the experience had on them. There was this understanding throughout the discussion that the expectation to go back to university after fixing dinner for their children was unrealistic, but it was necessary nonetheless, making them feel guilty no matter which decision they were to make.

**It's juggling between different roles, it was difficult especially at the beginning. I questioned my own ability as a parent. They asked why I kept working. I could not work at home either, because I can't concentrate. So it's taking them to school, going to uni, taking them back home, fixing them dinner, then I want to go back to work but some days I just couldn't, either because they didn't let me, or I just didn't have enough energy left. So I felt that I was not good at either role. You have to come to term with it.**  
**(Lime, 2, 129-135)**

Through these striking excerpts, IDSs illustrated the nature of their challenges. The thread that connected these excerpts, however, was a game of guessing, not knowing what was normal and what was not. Losing sleep, bad dreams, heartburns, depression, or making a conscious decision to sacrifice one's health as IDSs balanced between work and life were a few among many examples. More importantly, many unrealistic self-expectations and practices also rested upon a lack of communication with supervisors, either for fear of being judged, or due to a prior missing deadline. Later on, Lime explained how they negotiated with their supervisors. The feeling of guilt, however, did not disappear.

**I talked to [supervisors] and told them this was the situation, I still feel bad, but I had to. We were able to move the meetings and some deadlines, but I felt bad having to do that. They said it was alright, and I am beginning to see that there was no other way. I am getting into the rhythm of work now, and I am on track, but there's still this back and forth between going home or staying. My flatmate can watch the children for a while, but I need to fix them dinner.**  
(Lime, 2, 148-154)

To find a balance, building communication over time with supervisors was essential in many participants' strategy. This takes us back to the discussion in L1 theme Micro-system with supervisors (Sections 6.8.1.1 and 6.8.2.1), in which initial expectations and gradual learning curve are influenced both by the individual and the larger contexts. This showed that managing well-being in relation to autonomy could be a process that involved both internal resource (e.g. expectations) and external resources (e.g. supervisors). Similarly, communication with the PhD community (Sections 6.8.1.2 and 6.8.2.2) added to the external resources available to students, as well as reinforced their internal strength through their professional identity. Underlying processes that might happen at an individual level to facilitate better communication will be more closely explored in Chapter Seven.

The thematic analysis ends with a similar topic to the beginning, the macro-system of culture. Here, closely overlapping with the aforementioned topic of moving back and forth between two cultures, participants also recognised changes within themselves that might raise difficulty when moving back home. For instance, Purple addressed the alienation, specifically how they felt they did not know where to belong after having experienced a new culture, as well as the PhD. The question of how they would be perceived in acknowledging that the PhD had changed them and how it seeped into other parts of their identity was a major part of Purple's experience.

**That's when you're thinking, 'now where do I belong?' [...] I didn't wanna sound nerdy, but I'm starting to make connection between real life experiences and relating it to philosophy. You are bracketed [by others as PhD students].**  
(Purple, 1, 624-652)

As the participants tried to position themselves in the larger contexts, their decisions signified the development of their new identities, and the role conflicts that they needed to overcome as a result of these evolving identities. Their intra-personal changes were reflected in the formation of new identities, their rejection of those that were forced on them, and their effort to regain a sense of balance through combining their previous and new experiences. Reaching a balance between well-being and academic aspects is indeed important to a fulfilling doctoral experience (Kaczan, 2015).

In summary of the L1 theme of the developing person, as participants remarked on their experience of coming to terms with a more realistic expectation of what a PhD was, they described a learning curve to maintain both their well-being and manage their identities. For IDSs, it was all a new experience in different ways, and the core of their development over time as illustrated through LHTA of all interviews was the thread running from the individual level all the way to larger contextual levels.

**This experience is very new for me, so that's why I can't decide what's wrong with me, whether I'm like this because of my low self-esteem, or I'm like this because of my experience in a new culture.**  
(Jade, 1, 243-247)

To summarise the complete LHTA analysis, I draw from the interrelatedness in EST, not only between the wider systems, but between them and the intra-personal changes reflected in both personal and professional development over time. For IDSs, adaptation and well-being were shown to go hand-in-hand, as their individual effort to thrive had been demonstrated through their learning curve. The sense of well-being, or thriving, was in itself a process of growth, as it went beyond immediate feelings of satisfaction to capture a process of overcoming challenges, of becoming a new person. Furthermore, change was very much bi-directional, as the individual also brought to the new contexts their own experience and resources, embodying their previous eco-systems. Through exercising their agency by evaluating options and making their own decisions, their development was a reflection of both who they were as individuals, and who they were becoming as they were embedded in the new contexts.

## 6.10 Chapter summary

The aim of Chapter Six was to explore the interactions between the developing individual and their eco-systems, borrowing from theoretical models that conceptualise the multi-dimensional (affective, behavioural, and cognitive) and multi-level (individual and contextual) nature of the IDS experience. As illustrated, while each student navigated in their own way to negotiate with internal states and external ecologies, the common thread that ran through the analysis was the interrelatedness between individual and larger contexts, and the bi-directionality of change. Learning and integrating as ways of gaining new resources – a combination of previous and current/evolving identities – students choose to navigate according to who they are and to what is available to them.<sup>17</sup>

In the next chapter, the hybrid analysis is followed by a [structural](#) approach to [narrative analysis \(SNA\)](#) – a form of storytelling that constructs sequences of events to narrate the participants' experience and is especially capable in detailing in-depth cases over time (Demuth & Mey, 2015; Riessman, 2008). Chapter Seven will be an in-depth data-driven narrative analysis of three individual cases, as longitudinal storylines were richer than could be completely captured with LHTA.

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<sup>17</sup> I am deeply grateful to my participants, who were all so generous to share with me their stories and to allow me to interpret and work with their data.

# Chapter Seven

## Narrative analysis: Stories of learning and thriving

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### **RQ 7**

Personally and professionally, how do IDSs develop as an individual through interactions with their eco-systems?

## **Jade: If I were them**

Self-confidence sometimes is not good. If you feel like that, you won't want to do anything else. You will feel that you're okay, and I don't want to feel like that. I want to keep improving.

(Jade, 2, 172-175)

## **Red: Fighting for my identity**

And there's this thing about the frying pan and the fire.  
There's this thing about the devil and the deep blue sea.

(Red, 2, 365-366)

## **Purple: Yes, my dance.**

It started with the PhD, and then surgery one, surgery two, death, breakup, and cancer. That's how my perspective changed.

(Purple, 1, 455-456)

## 7.1 Chapter overview

Chapter Seven is the final part of the three findings chapters. The main purpose of this chapter is to address [RQ7. Over time, how do IDSs develop as an individual through their interactions with the wider ecologies?](#)

This was addressed through the development of three particular participants whose adaptation strategies are slightly different from one another's. As Clandinin (2007) eloquently observed, the move from thematics to narratives can signal a switch “from a focus on the general and universal toward the local and specific” (p. 1). This focus on the particular in the final chapter of findings acknowledges the value of a case, as well as the role of specific contexts that accompany the individual progress. Chapter Seven starts with a detailed explanation and justification of the second phase of the analysis process – structural narrative analysis of longitudinal data. The first part of the chapter will explain (1) what narrative analysis is, and (2) the analysis procedure of how [Structural Narrative Analysis \(SNA\)](#) was adapted in this thesis.

The next part of Chapter Seven then provides the findings from the analysis through telling the participants' stories. As we will go into details on the findings, narratives from the experience of three participants will be shared, particularly, through stories of re-positioning as part of professional identity formation (Jade), fulfilling other life aspects to maintain work-life balance (Red), and developing old and new coping mechanisms (Purple). The final part of the chapter will be dedicated to the discussion of relevant literature and where these stories fit within the current body of knowledge in the field.

Overall, this chapter contributed to the longitudinal and developmental aspect of the thesis, drawing out some of the key arguments presented in Chapter Six in a more data-driven manner. As the students' voice is coming through more strongly, I also acknowledge my own position as an IDS and as a researcher throughout my telling of these narratives.

## 7.2 Story and progress: Focusing on the particular in narrative analysis

Building on the strength of narrative analysis in capturing both the personal and interpersonal levels of narrative accounts, my theoretical framework further demonstrated the complex interactions between the student and the different ecological systems within which they are required to operate and negotiate, especially illustrated through my analysis in Chapter Six.

In this second phase of qualitative analysis, theories did not play as much of an active role as they did in LHTA. However, they maintained their influence indirectly, through the

conceptualisation of internal-external interactions, and their influence on the data collection process.

The central theoretically driven viewpoint adopted in the current study focuses on the interactions between the individual and their surrounding ecological systems, and their development as a result. What this means for this chapter remains that the knowledge produced through this viewpoint will take into account both individual and contextual levels. On the other hand, what narrative analysis brings to the thesis is its ability to accommodate the contexts in which the data itself was collected – the circumstances in which both the participants and the researcher constructed knowledge through their interaction using the interview “a real communicative event” (De Fina & Perrino, 2011). What questions did I ask in the interviews, and why did I ask them? It is those questions that should also contribute to the understanding of narratives presented in the current study. Mishler (1989) highlighted the importance of pondering the influence of interviewer’s questions, as well as the context of research interviews (in comparison to other naturally occurring conversations). The narratives provided by the participants are not only directed by the interviewer’s questions, but also indirectly responding to the interviewer’s reactions as a listener (Murray, 2000). In this sense, the participant and the researcher contribute an equal amount toward the construction of knowledge.

Building on this argument, the second theory-driven reason for choosing narrative analysis responds to the nature of semi-structured longitudinal interviews. As discussed in Chapter Four (Methodology), the interview schedule was designed based on the theoretical framework. However, as the interview proceeded, the questions morphed in order to follow the participant’s narratives within each interview, and the structured part of the interview schedule also faded from the first interview to the last. In most cases, theoretical structure gave way to rapport with the researcher, increased familiarity to the research objectives, and the participants’ own sense of purpose in the final interviews. In other words, the interplay between theories and narratives changed with each interview. As a result, narrative analysis was chosen to recognise these “interpersonal processes as they occur within a given situation” (Doise, 1986).



### 7.2.1 Story as an analysis unit: Depicting contextual and individual levels

Even in what purport to be pictures of actual life, we have allegory.

(Hawthorne, 2013, Preface)

As a study of narratives and series of events, narrative inquiry as an analytical framework views stories as the most fundamental unit of analysis. What can be defined as stories, however, differs from one researcher to the next, depending on the researcher's approach (Lieblich et al., 1998). To understand what constitutes a story is to ponder the question, *So what's the point?* (Polanyi, 1979). This is where narratives come with underlying and at times implicit intentions. Labov (1972) defined a story as a method of "recapitulating past experience by matching a verbal sequence of clauses to the sequence of events which (it is inferred) actually occurred" (p.359-360). While Labov's version forefronts the sequence of a naturally occurred conversation based on a temporal order (Holmes, 1998), Bowditch (1976) expanded on the role of structure in how people form their narratives,

The thrust of a linguistic theory of narrative must be to describe "how" and "why" people encode information in narrative form and to account for all of the structures which appear in the surface structure of narrative texts.

(Bowditch, 1976, p. 59)

On one hand, the analysis must address the *how* and *why* with regard to the structure of the story told by their participants. On the other hand, as narrative analysis "brings the author/researcher and their relationship to the research material back to centre stage" (Fletcher, 2007, p. 657), it is important to bring to the front the interlaced theoretical and personal stances brought to the interpretation and analysis of these stories by the researcher (Clandinin & Connelly, 2000). As Mishler (1986) commented on the context and narrative of research interviews, narrative analysis commands high levels of reflexivity and honesty from the researcher, demanding that they ask themselves questions such as,

What is the role of the interviewer in how a respondent's story is told, how it is constructed and developed, and what it means? [...] How do an interviewer's questions, assessments, silences, and responses enter into a story's production? [...] How can the presence and influence of an interviewer be taken into account in the analysis and interpretation of a respondent's story?

(Mishler, 1986, p. 96)

Finally, the application of narrative analysis to understand psychological concepts is not a new practice. Murray (2000) outlined the use of narrative analysis in health psychology, a process through which the storytelling of health, illness and daily experiences can contribute toward a “mutually intelligible world” (p. 343). In this thesis, compared to the somewhat clearer distinction between individual and contextual levels in LHTA (Chapter Six), these levels are intermingled in the narratives. In this type of analysis, my aim is to make use of the interrelatedness of systems and person, rather than trying to deal with it.

### **7.2.2 The analysis process: Structural approach to narrative analysis**

Explaining SNA, Reissman c) highlighted its capability to represent the participants' overarching storylines by "graphing the contours" over time, and outlining the "turning points, peaks, and valleys" in their experience (p. 78). When applied, “a structural narrative approach centering on plot can allow for the complexity of decision making processes, actions” (Ahmed, 2012). Through each story of research, professional, and personal experiences, we learn about different events that elicit responses from the participants, and we have the luxury of longitudinal interviews to follow the development of their strategies in response to these events during their PhD.

In short, SNA focuses on the sequence of events and the main actors that underline the narrative, asking questions about *why*, *what*, and *how* each participants described their self-transformation, especially in relation to their PWB and SCA elements. My job is to first (1) establish a narrative belonging to each participant, in which I could then (2) situate these events in a structure that could be used to explain their strategies. The contextualisation helped me to understand the role of these events in the participant's life, and how they were related to the strategies developed according to each participant's context. Essentially, while the longitudinal interview data had the capacity to support answering these questions, a thematic approach was limited as a method of analysis in this case compared to narrative analysis.

Each narrative of Jade, Red, and Purple played a role in itself, as well as in the order in which they came together to represent my argument. To reiterate, my main argument states that the IDS experience is a developmental process that is both multi-level (individual and contextual) and multi-dimensional (affective, behavioural, and cognitive). This argument influenced which participants were chosen, and the ways in which their narratives were analysed and presented. Out of eight participants, there were many whose stories represented parts of this argument. However,

the combination of the three participants whose narrative were presented in this chapter was carefully built to gradually reflect the complexities of the IDS experience.

Starting from the beginning, as a self-reflexive individual, Jade's interviews revolved around their analysis of their supervisory relationship and their own professional growth. Red's story represented a rich and structured sequence of thoughts, feelings, and actions, in which an important decision was made as a result of their supervisory tension in order to preserve their well-being. Finally, Purple's story represented a tug of war between well-being and professional development, in which the individual constantly negotiated with external events and internal thoughts to maintain a balanced way of living.

The first step I did was to start refining the codes in all three interviews of each participant. The coding was done as part of the LHTA process, but for SNA I combined *in vivo* codes (making use of verbatim groups of words by participants) and the use of gerunds – i.e. actions in the form of verb-ing, e.g. feeling, trying, talking (Birks & Mills, 2015; Charmaz, 2012). Using gerund is a practice commonly used by grounded theorists to preserve meaning and incorporate action into the codes, and to foreground processes (Charmaz, 2012). This technique allows the coding to preserve the actions taken by people, while also maintaining the connection between the codes and the data (Tweed & Charmaz, 2011). My decision to use this technique of coding was to address the research question as closely as possible in relation to 'how' (the process) the participants developed over time. In the current study, the gerunds used in the coding phase were also taken from the participants' own words in the interviews. This facilitated the illustration of both their specific actions and the sequence of events or actions that underlie each story. Based on these gerunds, I built action sequence diagrams to track the actions, thoughts, and/or feelings of the participants (example in Appendix X).

The next step of the analysis was to construct a narrative from the action sequences of each participant. Examining the data underlying these diagrams, I refined the diagrams to demonstrate the core experiences of each participant based on their timeline and their core PWB and/or SCA components. For Jade, the thread that stood out was their personal growth, which was evident in their professional development and repositioning as an academic through interactions with their supervisors' feedback. For Red, it was the tension with their supervisor, which impacted their confidence and their sense of autonomy, thus prompting their decision to go part-time and re-establish a different professional life outside the PhD. For Purple, it was their approach to mastering the environment and a purpose in life, as demonstrated in the philosophical and emotional discussion of life and overcoming tragedies. Paying attention to the action sequences

that were built from the data as I constructed their narratives, I asked questions such as ‘in what sequence did their decisions, thoughts, feelings, and actions take place as they interact with their contexts?’, and ‘how does their storytelling change over time in connection with their development?’. Most of the answers to these questions were provided in the data (e.g. current events, their feelings and thoughts), but others were also my interpretation of underlying connections implicit in the transcripts, sometimes separated by months in between interviews. Through considering how the participants made connections between the ways they felt, thought, and acted, the purpose of using SNA was to explore in-depth narratives by looking at the structure in which the participants told the story of their transformation.

### **7.3 Findings: Stories of learning to thrive**

As previously described, under each participant’s story, there were two to three main sequence diagrams that summarised and visualised their process of reacting and responding to events. Therefore, the findings in this chapter are presented first with a brief overview of what diagrams are important to understand each participant’s story, and further evidence as well as my interpretation and thoughts will be presented together with each diagram to expand on their story. By seeing the sequence in which different events happened, and how a range of actions were taken in response, we will be able to understand how each of the three participants had their own growth curve, as well as their own reasons for making different decisions.

#### **7.3.1 Jade: If I were them**

**Self-confidence sometimes is not good. If you feel like that, you won’t want to do anything else. You will feel that you’re okay, and I don’t want to feel like that. I want to keep improving.  
(Jade, 2, 172-175)**

We begin with my account and interpretation of Jade’s narrative, whose development over time had played an important role in focusing my thinking towards the connectedness between intra-personal aspects and the surrounding contexts. Through the changes from the first to the last interview, Jade had provided a complex story about who they were as a person, as a PhD student, and as an academic. Most of the changes I will observe here are complex and intertwined, but I identified two main angles that stand out as relevant narrative sequences: (1) how their relationship with their supervisors changed over time, and (2) how they re-positioned themselves from a

learner's to an academic's perspective. These aspects were distinctive, but again, they were also interconnected and supportive of one another to inform Jade's development.

Our interviews spanned across 13 months (November 2016 to December 2017). My impression of Jade, with evidence from the interview data, was that Jade was someone with their mind set on self-development as an academic. As we started the first interview, Jade was preparing for their upgrade. My experience of interviewing Jade was quite unique, as accurately self-described by Jade, “**my mind is very complicated, I will start talking about one thing and then move on to another thing, lots of different perspectives**”, and “**psychologically, mentally, I overwork my mind. I overthink about little details.**” I would often be asked what the question was halfway through their answer, and Jade would often make use of moments of silence to reach further thoughts. My interviews with Jade felt similar to reading a diary filled with their careful self-reflections, a notion that will contribute to their narrative later on. In my account of Jade's narrative, you can observe their focus changing from (a) the interpersonal relationships with their supervisors, PhD community, and family, to (b) their recognition of the bigger systems (e.g. the university, data collection gatekeepers, funding bodies), and to the shift I found most intriguing, (c) their identity formation as an academic through re-positioning and self-reflection.<sup>18</sup>

In my first interview with Jade, the issues that came up revolved around their experience of receiving their supervisors' ‘**critical**’ feedback on their upgrade materials (Figure 7.1).

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<sup>18</sup> (Jade, 2, 161-163) (Jade, 3, 117)

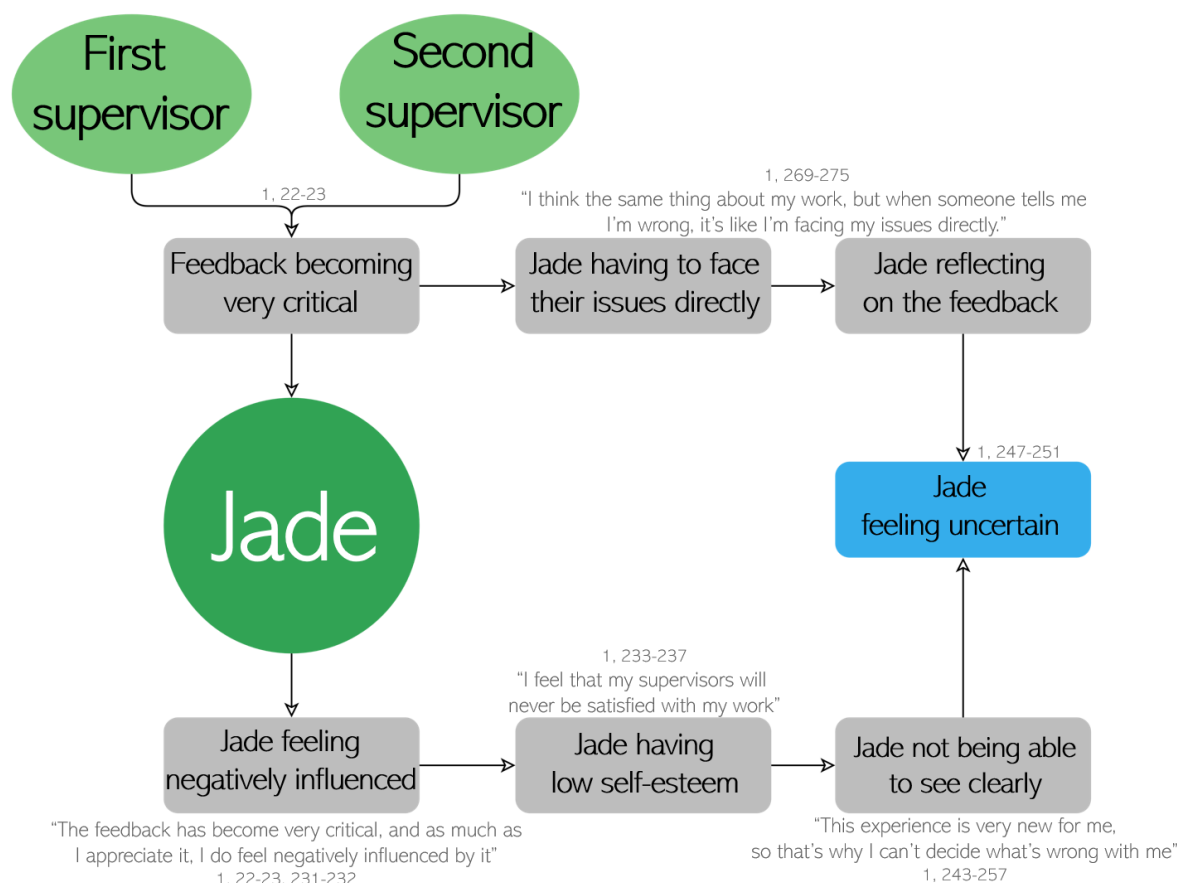


Figure 7.1 “I can’t decide what’s wrong with me”

The first sequence in Jade’s story came mostly from their first interview (right before their progression). This sequence demonstrated the path through which Jade’s supervisors had influenced Jade by generating a sense of uncertainty. According to Jade, this sense of uncertainty was a mixture of self-reflection on one hand, and low self-esteem on the other.

In their narrative, Jade expressed that they did enjoy starting the PhD and learning new things, “**it used to be fun**”, they explained as they identified with one of the blobs hanging on the tree. “When did it stop being fun for you?”, I asked.

**After the summer term, because that’s when thoughts about upgrade became stronger. When I started the progression document, after summer, fun was done. (Jade, 1, 223-225)**

Explaining what they meant by “fun was done”, Jade described the impact supervisory meetings had on them.

**Most of the time I feel really well, but after my supervisory meeting I felt horrible. Nowadays I feel that my supervisors will never be satisfied with my work, and that’s**

**why my self-esteem is pretty low. Who knows, the PhD is full of ups and downs, and perhaps in the future if my supervisors say I did well, my self-esteem will go up. It's very erratic isn't it? It all depends on my work, my life, and my supervisors' feedback.**

**(Jade, 1, 231-237)**

Jade often made comments about how they 'felt', at the same time trying to make sense of their feelings and what might have caused them. As we discussed the issue of their self-esteem, Jade compared their experience of receiving feedback back at home and in the UK. They identified that they felt low in terms of confidence, but commented that **"the UK supervisors are right actually"**. This surprised me as the first half of the conversation was on how critical their supervisors were perceived. "So do you mean you agree with their feedback?" I asked.

**Yea, actually I agree. I think the same thing about my work, but when someone tells me I'm wrong, it's like I'm facing my issues directly.**

**(Jade, 1, 269-274)**

The first sequence showed the underlying mechanisms through which Jade's described how their affects were influenced by external factors. It also served to establish my perception of Jade as a self-reflective person. The second sequence allows us to understand changes to Jade's intra-personal affect and formation of a new professional identity (Figure 7.2).

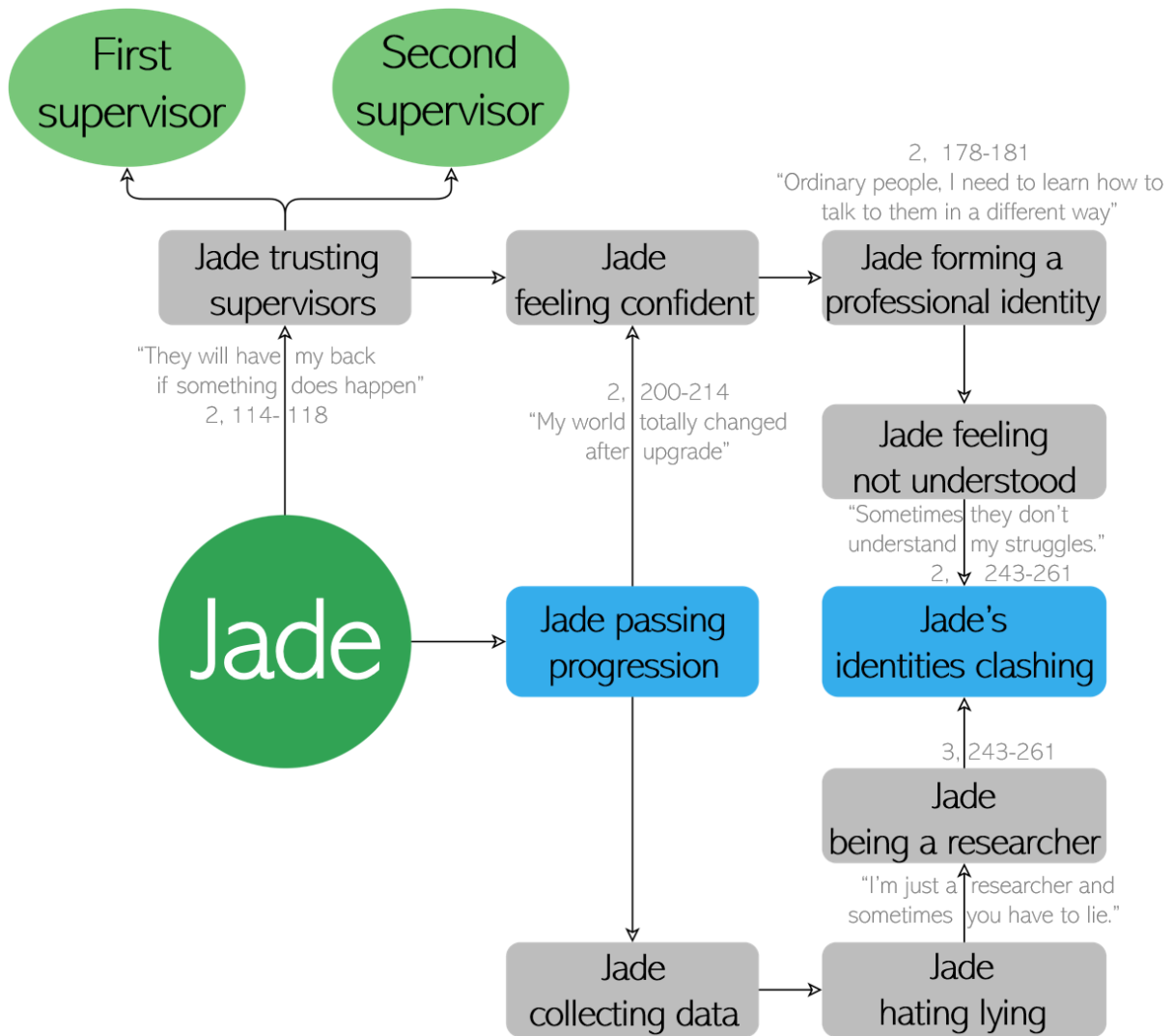


Figure 7.2 "People outside of academia don't understand us"

As the second interview came, it was after Jade had passed their progression with no corrections. There was a stark contrast to the first interview, as Jade rejoiced over the outcome.

Yesterday a colleague asked me how I was doing, and I told him, 'you won't believe me, but my world totally changed after upgrade'. This is a whole different world. [...] before submission, I felt overwhelmed, as if I would never be able to finish this in time. After passing I felt like now I'm totally free. This feeling makes me so happy. And I feel that my work is good enough, my study is important, and if I complete my work it will contribute something to the literature as well. Before upgrade, everything felt so uncertain. Now, everything is so clear. (Jade, 2, 200-214)



The cheerful description was accompanied by a complete shift in how Jade view their supervisors in comparison to how they previously felt.

**I trust my supervisors that they will have my back if something does happen. They did that for another colleague of mine. When I look at other supervisors, I think I'm lucky. Yesterday, I was asked how did I choose my supervisors, and I said I didn't choose them, my school did, so it's all down to luck.**  
(Jade, 2, 114-118)

Unpacking Jade's new perception, there was a shift in perspective as Jade moved to make comparisons with other supervisors. Previously, the boundaries of their discussion stopped at how their supervisors and the feedback had made Jade feel. At the same time, there was an evolving sense of trust as the milestone provided Jade with a better understanding of their supervisors' approach and feedback. This was also enhanced by a new sense of confidence. Yet, Jade was quick to backtrack, in which they observed a new challenge as they tried to self-position in their area.

**I feel confident, I can have a debate with people in my field, 90%, 80%, but if it's those looking at my area from a different perspective, I may struggle.**  
(Jade, 2, 170-172)

**I will also need to discuss this topic with someone who is not in academia, some ordinary people who don't know my field, so I need to learn how to talk to them in a different way. This is another difficult issue, because I always use some jargons from my field, and I need to learn how to explain what I mean.**  
(Jade, 2, 178-181)

Here, among the new struggles, we observe shifts in Jade's identity, specifically through their new struggle and their own re-positioning. Instead of identifying the previous struggle with academic writing and expressing themselves to their supervisors as they did before the upgrade, they were now identifying challenges involving communicating to people who might not relate to academic jargons, or those who did not have the same disciplinary perspective. These new struggles rest on their re-positioning as a member of their own academic field, which was reflected in their distinction from people outside of academia (e.g. '**ordinary people**'), or from even academics in another field. Jade moved onto describe how their sense of community had also shifted as a result of the PhD.

**Having a good doctoral community who would understand, and even a romantic partner in academia who would understand and can help you is also important. Normally, just someone having the empathy is enough, you don't have to be in the same position. But in academia I think people outside of academia don't understand us, they don't understand our experience, our feelings, and our**

**thinking process. [...] Some of my friends who did a Masters but didn't move on to a PhD, sometimes they don't understand my struggles.**  
(Jade, 2, 243-261)

Another aspect that was new in the second interview was Jade's expansion of their horizon. In other words, instead of pondering how their self-esteem would go up or down depending on their supervisors' feedback, in the second interview, Jade began to discuss more long-term aspects of the PhD, i.e. how Jade believed that the upgrade experience will help them “**prepare for the viva**”.<sup>19</sup>

As their professional identity was forming, it was apparent from Jade's account that they were also a person who paid it forward and an active member in their PhD community,

**That's why it's so important to have the PhD community, I have a colleague who had been working at home and last week when I met her, she looked so stressed. I told her about my experience and other colleagues as well, and she was surprised. Knowing other people's experience is good for you, so she was feeling regretful for not being a part of the community.**  
(Jade, 2, 261-266)

Furthermore, Jade's identity formation as a researcher was further evident in the role conflict that they experienced during data collection in the third interview.

**I hate to lie. My political orientation, gender, and age, they are important to me. In my fieldwork sometimes I couldn't say anything, sometimes I had to lie about my political orientation. There were times I thought I needed to say the truth, but at the same time I told myself I am a researcher, so it's also important to protect myself, my study, and my scholarship. It doesn't mean I'm a bad person, I'm just a researcher and sometimes you have to lie. But despite that, I feel really bad, really down. [...] But I liked fieldwork, I developed as a researcher, I spent time in [location], it's the nature of being a researcher, I was trying to understand how other researchers deal with the same methodology, overall I learned a lot, and it was a good experience for me.**  
(Jade, 3, 138-152)

The presence of a role conflict signified changes to Jade's identities as a result of engaging with the research process. As Jade explained here, this clash was between who they were before they even started the PhD, and a formation of a researcher identity was creating some contrasting elements. Alongside Jade's professional identity formation, there was also their development of

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<sup>19</sup> (Jade, 2, 236-237)

new perspectives. This aspect is presented in the final sequence of Jade's narrative, which shows a trajectory of their supervisory relationship as featured in Jade's self-reflection. Jade's narrative pushes forward the interaction between professional identity formation (through learning and adapting) and personal development over time (PWB). As demonstrated in both quantitative analysis and LHTA, development happened as a multi-dimensional and multi-level process, with changes to identity being embedded within the larger contexts. In Jade, we saw previous contexts and new contexts coming together through the individual's intra-personal conflicts as part of their development.

The final sequence in Jade's narrative presented how Jade's self-reflection made use of old and new resources they had developed since their first interview. There were a number of interviews that were scheduled on the same day as a supervisory meeting by many of my participants. My third interview with Jade was one of them. Moving on from the post-upgrade high, Jade started data collection. Right before our final interview, they had a supervisory meeting about their fieldwork. I could see as they entered the room that we would be in a different mood compared to our second interview. "How are you, how was data collection?" I asked. "**I'm alright, the PhD is always ups and downs, today is obviously not up,**" Jade answered.<sup>20</sup>

The second sequence from Jade was drafted based on their line of self-reflection, starting from being upset with their supervisor, to self-explanations, to recognising the trust they had for their supervisor, and eventually seeing the situation from their supervisors' perspectives (Figure 7.3).

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<sup>20</sup> (Jade, 3, 4-5)

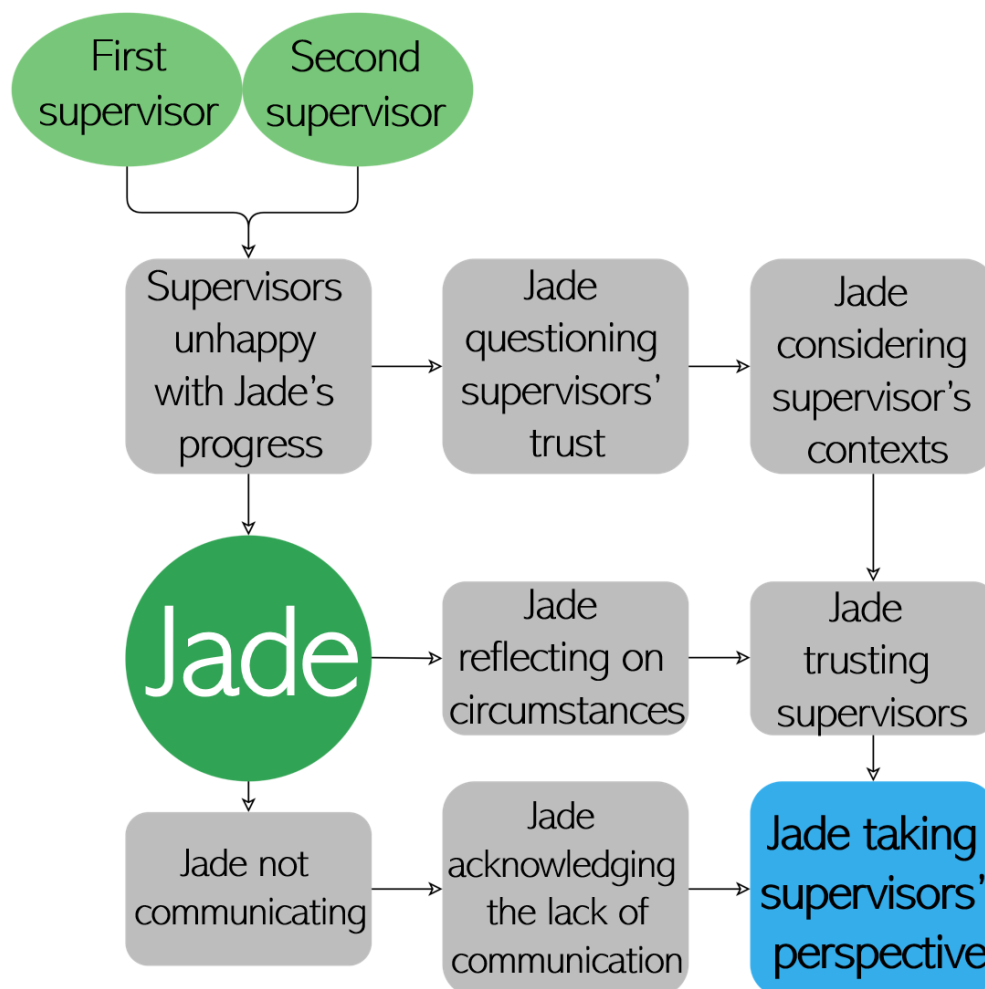


Figure 7.3 "I did promise them"

Jade told me that their supervisors seemed to have a different perception of their work. Their descriptions at times felt as if they were talking to their supervisors, justifying their progress.

Sometimes I think my research was alright, but one of my supervisors said that it's not good enough. When I hear that kind of comments, I don't feel really well. Maybe I was expecting something positive, like 'well done'. They didn't say 'well done', but my participants are very difficult to reach. I believe I did my best. I believe I did a good job. They asked me lots of questions, they asked me what I normally did in the field, I told them everything about my data collection. Communicating with my participants can be hard, it makes me tired mentally, when you come across someone new, he or she should trust you first. That's why I always feel that I need to present and justify myself well, so they can trust me and my study. It's not just tiring physically but also mentally. (Jade, 3, 16-20, 133-136)

As Jade explained to me what happened in the meeting, they went into details about why it did not go as they had expected.

**I was supposed to finish some tasks two months ago according to my schedule, but I haven't finished them. [...] I said 'ok, I will try', but it turned out I couldn't, and I didn't have enough time because I am doing a lot of other things at the same time. Fieldwork itself is really hard, I'm doing everything I can at the same time, and I'm not a multitasker. Sometimes I'm very slow, especially when I'm really tired. I travelled so much for my fieldwork. They know, I told them, they do understand, but at the same time, they are expecting other things. I don't have the capacity.**

**(Jade, 3, 39-48)**

Jade's ongoing process of self-reflection throughout our discussion moved from them dealing with the initial negative feelings by trying to explain why they missed the deadline. However, they moved on to discuss what they should have done, taking a step further but still pondering the perceived lack of flexibility from their supervisors.

**Maybe I should have kept them informed about my process, I didn't expect this to be so hectic, I could have told them I'd like to move the deadline, but I didn't tell them. I think for some reason I was expecting some kind of flexibility from them, and in our first and second meeting this term, everything was alright. I felt like they trusted me very much, that's why I felt the flexibility, but in the meeting this morning, I did not feel this trust and this flexibility anymore. It felt like they didn't trust me. Now I feel like a child.**

**(Jade, 3, 54-62)**

On top of Jade's frustration, two aspects kept nudging at me throughout this discussion: Jade feeling like a child, and Jade wanting to be trusted by their supervisors. In reflection, as you see in Jade's narrative and their speech, *trust* was an important element to Jade. Between the second and third interview was when their data collection had happened, and this is often the time when PhD students find themselves having to make their own decisions in the field. Combined with Jade's increasing identification with academia and positioning within their own field – which we observed in the second interview – perhaps Jade's reflections had shifted to accommodate the justification of their decisions and the reinforcement of their professional identity. As Jade had described, having their activities and decisions during the data collection questioned might have affected this professional identity, making them feel like “a child”, “a primary school student” in front of their supervisors. We can further see Jade struggling in this next excerpt to come to terms with what happened in the meeting.

**I think one of them was more okay with the way things were, but the other seemed to be upset with me. If I am procrastinating, it's also my problem, I know they**

wanted to help but asking me so many questions about what I do with my time makes me feel like a primary school student. Even my mother doesn't ask me this kind of critical questions.  
(Jade, 3, 65-70)

'Did you tell them? Do you think they knew that's how you were feeling at the time?', I tried to approach their intense feelings from a different angle, but it felt like I could easily say the wrong thing. Jade said they didn't know, "**they might have**", but perhaps their supervisors did not "**fully**" know how they were feeling. However, Jade added that they felt the next meeting would be "**okay again**", that "**the PhD process is always up and down, and this meeting just happened to be kind of down**". I had heard this statement from other people many times, but I was curious why Jade believed in this fluctuation. When I asked what factors might have caused such fluctuation, Jade told me,

**Maybe it's both my progress and their moods. If my progress is not good enough, that may be a big reason, but it also depends on my feelings, and their feelings as well. I think it's a very busy day for them, and the weather is very cold today, maybe that's important too? I don't know. But this time it was about my progress. I promised two times, and I missed both times.**  
(Jade, 3, 77-82)

There was a brief silence after this observation. Based on the manner in which Jade often used their discourse to go back and forth between different sides of the same situation, I felt that there was now a minute shift in their state of mind compared to 10 minutes before, when their speech was still indicating that they were upset and the focus was on their feelings in the meeting. A little more than 10 minutes into their reflection, we see Jade attempt to put together different pieces to understand their supervisors' perspectives. Here, it was interesting to see how Jade was beginning to consider aspects of their supervisors' well-being (as discussed in meso-system – Chapter Six). I left the silence as it was, because I felt that Jade was reflecting on something important. "**This time, they were absolutely right,**" Jade said. They added, "**but I also wanted them to understand that I was very busy, and I tried my best. They should trust me. But this time they didn't. No, one of them didn't.**"<sup>21</sup>

This push-and-pull manner in Jade's reflections intrigued me, as it felt to me like Jade was self-negotiating to deal with the criticism and find a way to move forward. It is also important for me to convey how their reflexivity and self-awareness increased over time in our interviews. This

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<sup>21</sup> (Jade, 3, 82-86)

development is evident in the way that Jade was self-positioning, as we could see their evolving new mindset. The narrative revolving trust was further added even to Jade's retrospection of the period around the first interview, coupled with their push-and-pull coping style in this brief moment of recall.

**It felt more horrible back in the first interview, right before my progression. Everything was negative, I was probably also procrastinating, they probably weren't trusting me either, I did meet those deadlines, but I didn't produce good work. I don't feel that bad now, I believe they do trust me, it's just that they were upset because I promised two times and I haven't done that. Actually, no, [second supervisor], not they.**

**(Jade, 3, 97-102)**

As they were slowly working through their emotions, Jade was pointing out to me that they understood why the two promises might have impacted the trust that one of their supervisors had for them (Jade said 'they' several times, then self-corrected and used the singular pronoun to indicate that one of their supervisors was more affected). Addressing these two promises, I asked if Jade had tried to communicate with their supervisors to reschedule them.

**I can try to negotiate but their justification seems to be 'you can do it in this much time'. During meetings, they make sense to me, I do feel like I can do that. I didn't say it because I genuinely thought I could do it as well. It's complicated.**

**(Jade, 3, 107-110)**

It felt to me that Jade did not want to go back on their words. This was something that I had observed with other participants, as they would sometimes push back against the notion of re-negotiation due to having previously agreed to a deadline. This indicated how some participants, like Jade in this case, invested their attention on how they would appear to their supervisors, and sometimes even if that meant sacrificing their social life or well-being, or even ending up missing a promised deadline, as long as they did not have to re-negotiate, as Jade added, "**I can say no to my friends if I don't have time, but I can't seem to say no to my supervisors.**"<sup>22</sup>

We have observed this reluctance to communicate from other participants in the LHITA (Chapter Six). Yet, at the same time, as Jade's narrative represents the process of re-positioning as part of professional identity construction, supervisor's trust was an important element to Jade's evolving identity.

**It may change in our next meetings, according to their expectations for me. [Second supervisor] may actually trust me, they suggested to do a publication**

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<sup>22</sup> (Jade, 3, 112-113)



together with me. The same person, can you believe? I feel trusted, and they said they would help me, so I feel good.

(Jade, 3, 123-126)

Later on, Jade reflected on the lack of communication,

Maybe they did understand that I worked hard, but they didn't tell me. Maybe they did tell me, but I didn't understand them. I trust them, so that's why this feeling is temporary for me, it will change in our next meeting. They trust my study, they maybe trust me, but they want to push me to finish. [...] Another problem is I did promise them, they were expecting from me, how many months and I couldn't finish, and that's why I believe they were disappointed. And actually, now that I think about it, it's my third promise, not the second one, I didn't finish what I promised. See? It's my fault. Am I right? Because if I were them, if someone promised me to finish something since four or five months ago and didn't do it, I would be very upset. Maybe worse than them right now. [...] Next time if I cannot meet deadlines, I will send them an email to explain. I didn't send them anything, nothing. That's why it may have been a big disappointment for them.

(Jade, 3, 159-176)

There are several notable elements in Jade's admittance that this might have been "a big disappointment" for their supervisors. Firstly, I want to highlight the switch from "upset" and "unhappy" to "disappointment" in Jade's description of their supervisors, as disappointment could signify broken trust. In Jade's speech, *trust* was foregrounded as an integral element in their coping strategy: their trust in the supervisors, the supervisors' trust in their research, and their trust in Jade as a researcher. It was the reason why they felt disappointed in how the meeting had gone, and it was also the element that helped them pull through the criticism.

Secondly, we further see an element of perspective-switching, which gradually formed during their reflexive process. As Jade laid out why they believed their supervisors were right to be disappointed, they kept asking if I agreed, and that was the moment in which I felt that they had fully taken on their supervisors' perspective. There was no longer a sense of push-and-pull in their speech from before. As Jade moved from a surface to an internal level, they went beyond superficial misunderstandings or mismatched expectations. Here, Jade focused on their own values, how they wanted to be viewed, and demonstrated their own academic standards through taking responsibility.

The third element present in their reflection is their arrival at the solution as a result of fully accepting their limitations, and their admittance that they did not inform, negotiate, nor explain to their supervisors. These elements were not only the immediate result of more than 30 minutes of



Jade's self-reflection, but they were also Jade's progress in self-development that we could put in contrast to the first interview 13 months prior.

From Jade's narratives, we have observed the element of trust that grew with identity formation and became an integral part of their well-being. At the individual level, Jade experienced a challenging relationship with their supervisor, potentially promoting their growth. They recognised the value of critical intellectual feedback as a result of passing a doctoral milestone, allowing for the evolving research to influence them at both ontological and epistemological levels. The sequences in their narrative illustrated their identity conflict, their re-positioning between past and present contexts, and their use of self-reflection within their own discourse to come to grip with negative feelings. As a result, we saw closely how context-situated human development happened at an individual level.

### 7.3.2 Red: Fighting for my identity

**Well, that, or I'm just being careful not to get downtrodden again.  
(Red, 3, 478)**

Red was a second year PhD student when they first took part in the study, and was a mature student with children. Their three interviews spanned over nine calendar months (December 2016 to August 2017), with over three months between the first two interviews (between which their upgrade happened), but six months between the last two interviews (due to their fieldwork). Their story was shaped largely around their relationships with both supervisors, especially around the influence their first supervisor had on their well-being, and how they went part-time in response to their financial and well-being situation. The three main topics that stood out from Red's story were fighting for their identity, going part-time, and finally the development of their negotiation strategies given available resources.

From the first impression, Red was someone for whom I immediately felt a sense of respect. The reasons could perhaps be cultural, as they were older than me, a working parent of four children, and had what I would describe as a resilient personality. They gave you the feeling that they had experienced the harder side of life, without having to say it out loud. At the start of their PhD, realistically, Red had expected a demanding process ahead. This was not only based on their own exploration before arrival, but also due to their first supervisor's preface ("**I was told in the first meeting, 'I'm going to work you really hard'**"). However, during their first year, and

especially at the start of their second year, in preparation for their upgrade examination, the relationship with their first supervisor became challenging to the point that it was influencing their emotional well-being. There were supervisory meetings after which they “**came out in tears**” feeling like “**a stupid person who doesn’t know what they’re doing**”. According to Red, it all started with the back-and-forth discussion on their philosophical and theoretical stance. Red even described it as their first supervisor almost trying to “**convert**” them, and equated the finalisation of this decision as deciding who they were, as their “**identity**”. Figure 7.4 visualises the sequence of events that happened in this storyline.<sup>23</sup>

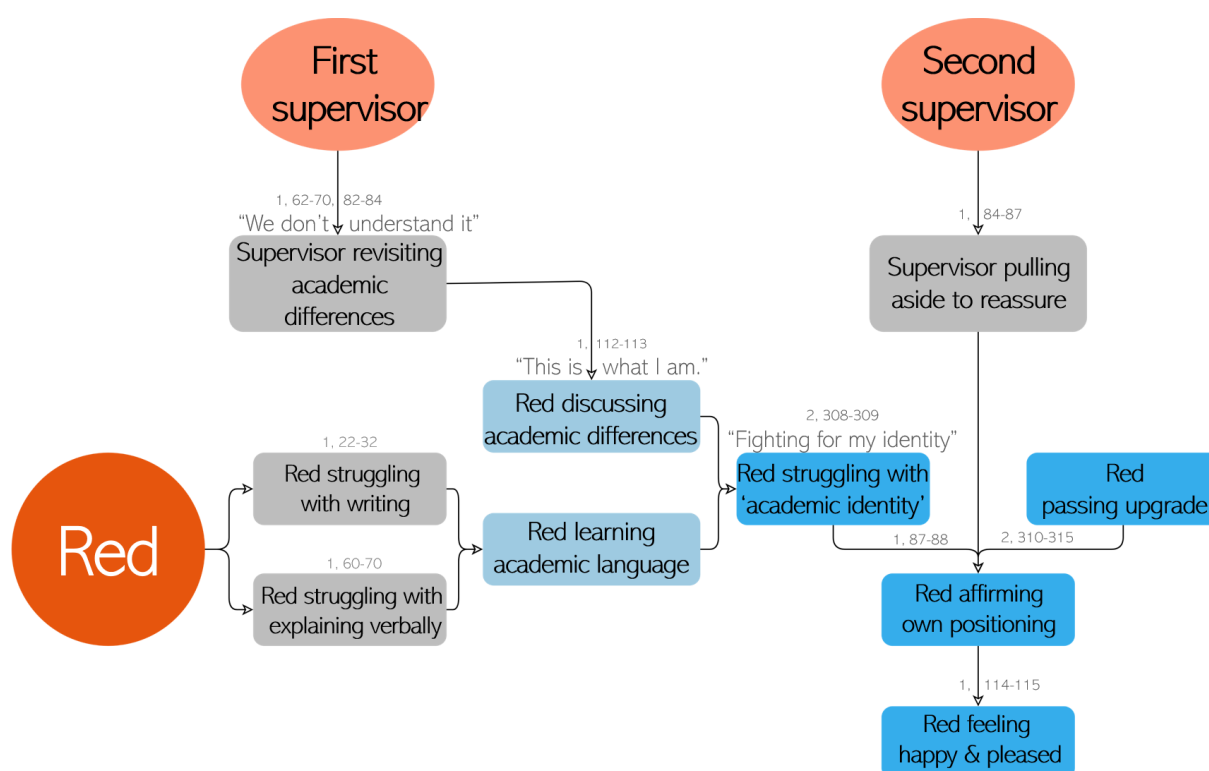


Figure 7.4 "This is what I am"

As observed in Figure 7.4, it started with Red telling me their struggle with learning academic language, specifically having to “**think, read, write, and speak more like an academic**”. As I curiously asked what they meant by speaking, they elaborated by describing the pressure they felt to “**fit academic expectations**” every time they were asked to explain their work to their supervisors. This was specifically linked to the (at the time) on-going conversation about their philosophical and theoretical standpoint. Given my impression of and respect for Red, I wanted to understand why such an issue had caused them such distress. What exactly happened that could

<sup>23</sup> (Red, 1, 29, 74-97, 167-168) (Red, 2, 59, 309)

make Red cry? They explained to me that their first supervisor had kept revisiting this topic on several occasions, and had “**recommended this or that book**”, but none of it “**made sense**” nor spoke to Red’s own positioning. Due to this on-going process, Red became “**so confused**”, and started to feel the tension between them and their first supervisor, which also influenced their progress. “**This has gone on for too long. I need to take a decision on what I am, and move on from there,**” Red commented with frustration.<sup>24</sup>

So how did Red solve their positioning issue? Figure 7.4 traced a series of events spanning from before until after Red’s first interview that contributed to this. In the first interview, Red told me – with what I will describe as fondness in their eyes – that their second supervisor would take Red “**to the corner**” after some meetings and give them “**a mantra, a motivating speech**”. The mantra was, “**This is your work, this is your PhD, don’t forget that**”.<sup>25</sup>

This had stayed with me, as I moved on to comment much later in the interview that one supervisor seemed to reinforce their identity, and another would take it apart. At the end of this interview, Red expressed their desire to change their main supervisor. In the second interview, I asked, what changed? Why did Red not ask to work with a different supervisor? Red gave me two reasons.

Firstly, Red explained to me the risks of the unknown, while using phrases like ‘the frying pan and the fire’. In their own words, their speech was so powerful that it took me a second to react, as it felt like I almost needed to reframe my thinking to understand Red’s perspective.

**There was no one I could change to. And there’s this thing about the frying pan and the fire, there’s this thing about the devil and the deep blue sea. Have you heard of that before? Out of the pan, and right into the fire. That was the main reason, I thought, it could turn out to be worse, so, stick to the devil you know. And, at the end of the day, I still have the second supervisor to fight my corner.**  
(Red, 2, 365-371)

In reflection, the reason why I felt the need to reframe my thinking was Red’s use of language. It is important to highlight that most of Red’s language when talking about their relationship with their first supervisor across all three interviews had a lot to do with general tension (“**the devil you know**”), or specifically fighting (“**fight my corner**”) or strategy (“**them having told me that, it was a weapon for me to use later**”). This language also reflected how aspects of Red’s PWB might have been negatively influenced, particularly the lack of autonomy (e.g. negative self-

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<sup>24</sup> (Red, 1, 45-59, 76-84, 106)

<sup>25</sup> (Red, 1, 253-156)

perceptions based on their supervisor's feedback). An example is when Red described how they couldn't "**relax**" because they needed to "**fight**" criticisms and the feeling of being stupid.<sup>26</sup>

**You can't relax, you can't, you know, and like I said to you the first time, you know, at one point they made me feel I was stupid, you know, I really had to fight that.**  
(Red, 2, 164-166)

It was unclear to me if Red was aware of their use of this war-like language, and it is not my research aim to dig deep into their discourse. Whenever Red used this framing ("**So all of this criticisms and critics or whatever, we should take them all and use it as a defence**"), I would become highly aware of my own inner reaction. Here, my own stance had potentially influenced the flow of Red's narrative, especially through my approach to this discussion. I would describe myself as someone who tends to hold onto hierarchy as a blueprint, who would subconsciously bow down to a teacher, or an individual of authority. This detail was important as it guided my attention and follow-up questions whenever Red described their strategy as if it was a fight, one in which you would need "**a weapon**", or some sort of "**defence**" measures. As I tried to understand Red's specific framing of this relationship, I would consciously avoid appearing confrontational or questioning their experience and perception. As a result, I found myself using paraphrasing and summarising from my own perspective, e.g. "it feels to me that you had to put a lot of effort into your strategy, do you think it's the way it should be?", or offered my own experience as a comparison while asking for further elaboration e.g. "your approach to supervisory relations seems different from mine". In reflection, while the approach of inserting myself and my own experience did encourage a further discussion, my own stance might have influenced the direction of Red's narrative, as they might have felt the need to define their viewpoints. In this sense, though I might have been perceived in the beginning as someone with relative insider's knowledge to a certain extent, there was an element of us being different individuals with our own personalities that shaped the discussion on supervisory relationship.<sup>27</sup>

Their second reason for not changing their supervisor, as well as an important factor contributing to their solution for the positioning issue, was their newfound confidence. This confidence was the result of passing their upgrade, which happened between our first and second interviews. The first thing they described was how the nature of their supervisory relationship changed after this event. When asked whether their opinion of their first supervisor had remained, Red reflected that the relationship had changed, but Red was the one becoming "**more confident**". This change stood out to me because it was a constant across most participants, where

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<sup>26</sup> (Red, 2, 340)

<sup>27</sup> (Red, 2, 182-184)

they all became more confident after passing their upgrade (or equivalent yearly progression reports). Red told me, **“I told my supervisors, ‘This is who I am, and this is what I bring to my research, and so this is my world view’”**, and I asked if they would have had the confidence to say that before the progression. **“Maybe I would have said something similar, but it would be a rebellious thing and not a confident thing,”** they replied, **“It would have been ‘No! That’s it! I’m not doing this, it’s not me, whatever happens, let it happen.’”**<sup>28</sup>

In terms of developing their strategy to use both this newfound confidence and their second supervisor’s support as resources, a specific example is what Red called **“a slight issue”**, which Red had kept from both of their supervisors – they had decided to change their methodology even before the upgrade, but this was not included in their document. I asked why they felt the need to delay this revelation, and I was also curious to see how they were going to break the news (See Figure 7.5 for Red’s reasoning and strategy).

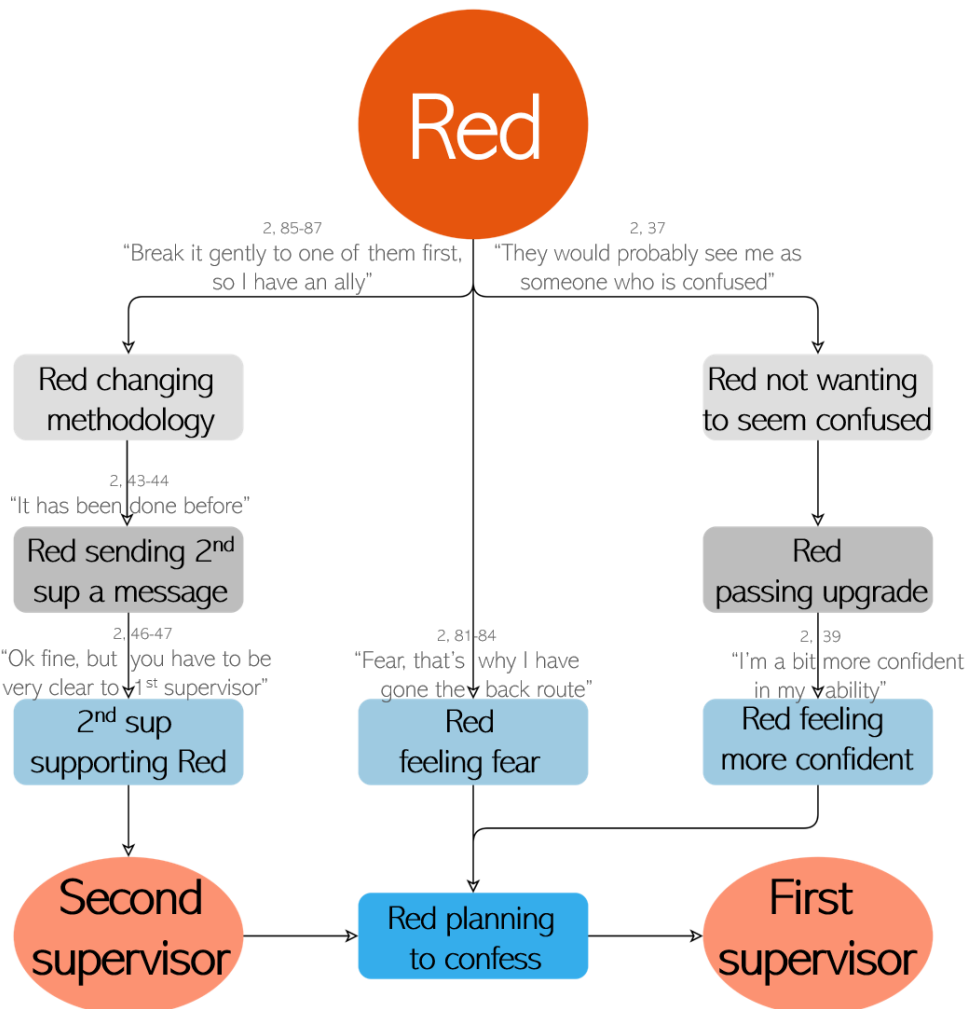


Figure 7.5 "A slight issue"

<sup>28</sup> (Red, 2, 39, 193-312)

When Red was asked why they delayed informing their supervisors, they told me they wanted to avoid appearing as “**someone who was confused**”, and also to avoid complicating things before “**passing the hurdle**”. By the second interview, having passed their upgrade, it was time for them to consider “**confessing**”. The first step of their negotiation strategy was executed, which involved sending “**a private message**” to their second supervisor explaining that they were considering a new methodology. As the exchange went on (in which they were asked to send more information and justify their decision), their second supervisor finally concluded that it was “**okay**” to do so, but they needed to “**be very clear**” to the first supervisor when presenting this new methodology. Intrigued by this carefully thought-out strategy and by their roundabout plan of confessing, I asked “what was going through your head” (as I was taken aback) when they were coming up with this plan. I prompted, “is it trust”, “is it doubt”, to which they replied, “**Fear, the best word is fear**”. Responding to my widened eyes, they explained they had to first “**gently break it to one of them**”, so that when they had an actual meeting, they would have “**an ally**” who would not “**look shocked**”.<sup>29</sup>

This strategy rested not only on their new confidence, but also due to a different side of their first supervisor that they had not seen prior to their upgrade.

**After we finished everything, I was so relieved I was shaking and they said to me, “How do you feel now?”, and tears filled my eyes you know and they went “Oh Red” and they hugged me and I was like “Thank you, thank you”. So, it was a change, it was a shift in the relationship.  
(Red, 2, 128-132)**

I commented, “so you saw new possibilities”, but Red immediately cautioned, “**I am trying not to get carried away with it all**”, self-reminding that their first supervisor “**might reverse to the same old critical version**”, so they would still “**have to be prepared for that**”. Upon this reply, I realised that the effect of that initial positioning tension, which had set the scene for their relationship, was still there. Here, this lingering effect could be because aspects of their well-being, e.g. autonomy, was significantly affected prior to this milestone that the newfound confidence did not completely changed their perception like it did for Jade.

This brings us to the second half of Red’s narrative: their decision to go part-time, the events leading up to that decision, and their relationship with their first supervisor as a result (Figure 7.6).

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<sup>29</sup> (Red, 2, 30-47)

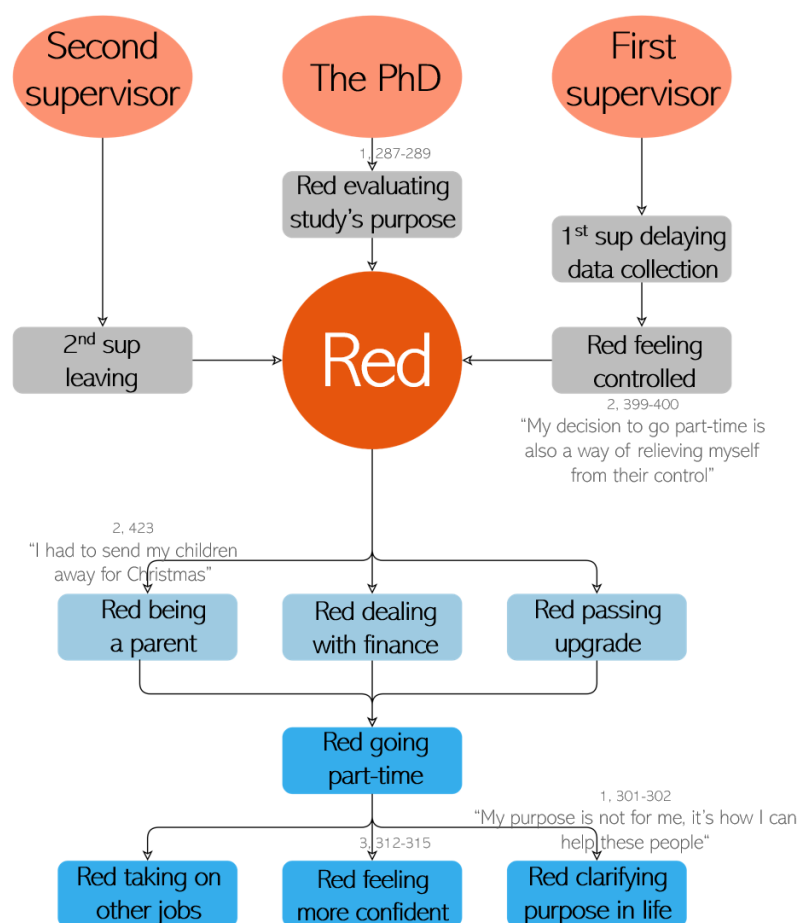


Figure 7.6 Going part-time

Red's decision to switch to part-time study rested on a range of reasons. First of all, Red was a parent in a religious family, yet they realised they had to send off their children to their relatives and spending the entire Christmas day on their own working.

**When I had the Christmas deadline, I had to send my children away for Christmas, and I spent Christmas day working... I sat down in my living room working all day. (Red, 2, 422-425)**

On top of being a parent, they also cited their financial situation, which was later partly relieved by their availability to take on more part-time jobs. When I asked how their supervisors reacted to them going part-time, they smiled, and noted that part of their reason was also to be relieved from their first supervisor's control (this is a notion I kept exploring back and forth with Red, as I believe they themselves had multiple definitions nested in this notion of 'control'). When asked what kind of control, they elaborated that despite the new side, they still felt "threatened" by their first



supervisor. I repeated, “threatened?”, to which Red replied by contrasting how they felt with each of their supervisors.

Red explained that once, they were told by their second supervisor that the beginning of the PhD would be filled with “**many voices**”, both the literature and different people would have their own views, but as time would go on, Red was assured that they would “**own it**”. Red told me, “**you’ll feel more comfortable, and you’ll be able to talk back and defend and say ‘yes that’s fine but that’s your view, your opinion’.**” Though younger than Red, the second supervisor was like a “**critical friend**” whose approach was focused on both Red’s academic growth and well-being. Red’s view of their first supervisor was slightly different,<sup>30</sup>

**Every time I do something, [first supervisor] always goes on about where they stand philosophically. [...] But is it some kind of a bad joke, or am I supposed to feel like a lesser human being if I have a different philosophical stance? That’s who I am. That’s what I am. [Second supervisor] was able to see that from the very beginning.  
(Red, 2, 271-282)**

Perhaps as I myself did not identify so strongly with where I stood philosophically, up until that point, I had not realised how Red’s tension towards their first supervisor was related to Red’s identification with their positioning, and how much this stance was contributing to Red’s identity. Later on, as I listened to the recording, I wondered to myself if their first supervisor knew.

As part of their decision, Red expressed the desire to “**detach**” to “**not feel so bad**”.

**I thought, let me go part-time, let me have another world, and let me build up my experience in other areas, too. The feelings of doubt are gone, and the reason why they were gone is because my decision to go part-time is also a way of relieving myself from the control of my supervisor. [...] So when I talk about my work-life balance, this is what I meant. I wanted a balance between home, work, and study. I don’t regret it at all.  
(Red, 2, 391-401)**

I further asked Red how going part-time had impacted their life. Was that decision able to solve their previous issues? “**I’m a parent, I have my life outside of the PhD, I have work, so the PhD is not my whole life, it’s only a part of it, so that’s one thing that going part-time has reflected.**”<sup>31</sup> Red further touched on a topic we had discussed in the first interview, as they

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<sup>30</sup> (Red, 2, 244-261)

<sup>31</sup> (Red, 2, 404-406)



explained to me how their life purpose was “clarified” through their PhD. In the first interview, Red had said,

**I've always been someone who has a purpose in life, but for a long time I didn't. My PhD has clarified it. [...] My purpose is not for me, it's not how much money can I make, where I can make that money, it's how can I help these people, and that's why the PhD helps, because again, it was through my PhD that I found out through one of my supervisors, especially when this philosophical thing came about, and they mentioned that I'm a bit of an activist as well, and I was like 'Really?', for me activism was like carrying a banner, and they were like, 'No, in your own way'. So in my own way, that fulfils my purpose.**  
 (Red, 1, 287-288, 301-311)

So how was Red's relationship with their first supervisor afterwards? The final sequence in Red's story happened in our final interview, the entirety of which was spent to describe the details of Red's frantic morning, which started with an email from their first supervisor and spanned across only two hours (Figure 7.7).

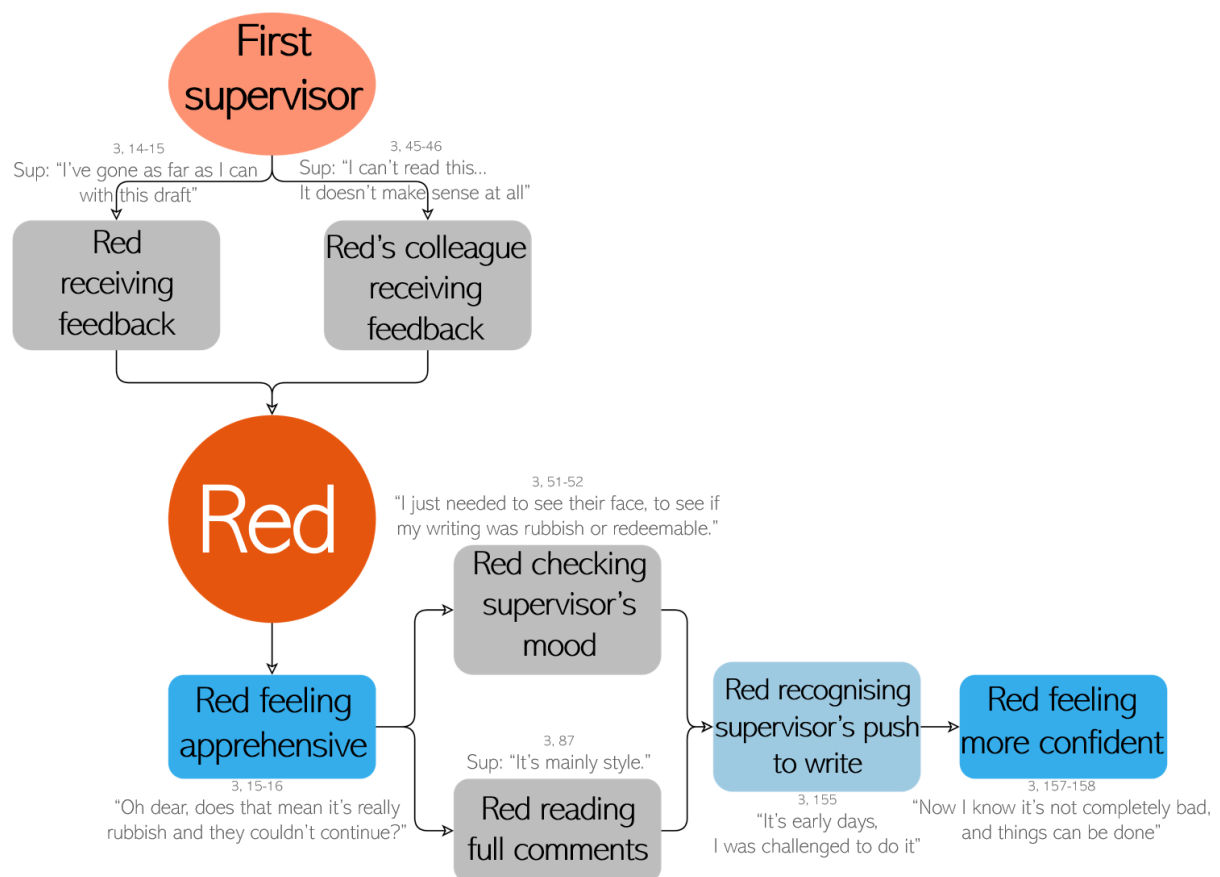


Figure 7.7 Within the span of two hours

As Red woke up that morning, they received an email from their first supervisor on the most recent writing they had sent. The short email, as described by Red, said “I have gone as far as I can” and “we have a lot to discuss”. A while before, one of Red’s colleagues had received some “**demoralising**” comments from the same supervisor, which read “I can’t read this, most of it doesn’t make sense at all”. Partly influenced by this, Red’s reaction to the email they received in the morning was, “**oh my god was it that horrible?**”. They decided that no matter what, they still wanted to come in and “**see their [first supervisor] face, just to see if my writing was rubbish, or was it redeemable**”. However, in the moment, Red had failed to realise that there were also more detailed comments in the attached Word document. They realised this after they had arrived on their campus and re-read the email before going to see their supervisor. They sat and read the comments and realised at this point that the comments themselves “**were not that bad**”. These were things that “**could be fixed**”.<sup>32</sup>

As a fellow PhD student, I understood their reaction, and yet logically I later asked myself, what could not be fixed? What would have been something unredeemable that just the thought of it could make Red want to search for clues from their supervisor’s face? Did Red fear the way their supervisor would perceive them? As findings from LHFA previously shown, supervisors were integral in students’ shifts in their autonomy, especially in the first stages during which students judged themselves with external sources such as their supervisors. Even at a much later stage, like in Red’s case, we could still see how this dynamic remained.

Their supervisor later told them face-to-face that it was “**mainly styles**”, and an impromptu meeting with their supervisor (“**...even if it’s just popping my head around and checking to see if they were in a good mood**”) was all it took to make Red “**feel a lot better**” compared to two hours before.<sup>33</sup>

So, what was Red’s story about? Even though the positioning disagreement was solved after the upgrade and with the passionate support by their second supervisor, it had set the scene for their relationship with the first supervisor, and the way they viewed this relationship. The upgrade was able to change how Jade saw their first supervisor, so why was it different for Red? “**Fight**”, “**defend**”, “**weapon**”, “**threat**”, “**ally**”, it was the beginning of the persistent tension they felt towards their first supervisor, and their story revealed to us one of the manners in which tension can arise in a supervisory relationship, and how it remains. The sequence of events that set this in motion demonstrated that in Red’s case, even after they had witnessed a different side to their

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<sup>32</sup> (Red, 3, 14-15, 45-48, 51-52)

<sup>33</sup> (Red, 3, 28-29, 39-40)

supervisor later in the relationship, something within the first disagreement had produced this sense of uncertainty within them, which had kept them cautious, and had also maintain the influence the supervisor's words had on Red's well-being. In the last interview, I commented, "you seem to know your supervisor well enough to navigate now", they replied, "**Well, that, or I'm just being careful not to get downtrodden again.**"<sup>34</sup>

While as a student, I immediately identified with the manner in which Red's emotions were dependent on their first supervisor's facial expression, mood, and impromptu verbal feedback. As a researcher, I was drawn to how their sequence of event illustrated students' interactions with their supervisors in an emotional dimension. Overall, Red's story demonstrated a different strategy to deal with PhD challenges, revolving around a shift of focus on other identities. This narrative further showed the importance of ontological aspects of agency, as Red faced the challenge of redefining, perceived lack of autonomy, and combining past, present, and future aspirations to achieve their purpose in life.

### 7.3.3 Purple: Yes, my dance

**The PhD takes a major portion of my life, and a major portion of my time. It's like a job, but you're talking about it, you're discussing it, you're thinking about it all the time, so it's in the centre, and everything else seems to just happen around it. (Purple, 1, 460-464)**

Purple was in their third year of the PhD when we had our first interview. We had crossed paths in our orientation week of the PhD at a faculty welcome event. I happened to come with a colleague from my department who was from Purple's home country, and we all started talking. As we were from different departments, around a year later, I saw Purple at the traffic light, and as we exchanged some standard greetings, I realised Purple was just back from what would be their first of many surgeries in their home country. I did not ask much about the details of the surgery out of respect for their privacy, as we had just met each other once prior to that. Later, through a sequence of events, we became close friends, and around late 2016, I asked if they could help circulate my online questionnaire to their colleagues (quantitative strand). When they expressed their interest to join my study, it was already after the second surgery, a family member's passing, and a breakup with their then-partner.

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<sup>34</sup> (Red, 3, 478)

My honest impression of Purple was, and still is, that they were rarely a victim of external events. Their locus of control was almost always internal, and my observation was that they either felt they could do something to improve the situation, or if not, that they would try to let it go. It was not the only quality I saw in them, but it was the most distinctive quality that pervaded in the way they talked about coping with life and the PhD – both as a friend in private, and when they were a participant being recorded during the interviews. Yet, this way of coping had its own ups and downs, as we will observe in their narrative.

Purple's story is the concluding narrative to my final findings chapter. Due to the sensitive nature of their timeline, their three interviews ran across the longest timespan – 18 months (January 2017 to July 2018). The threads that ran through Purple's interviews were the challenges due to changes to their supervising team, the relationship with their family and culture, and their unyielding passion for self-care (through dance, music, and philosophy). Through these components, I demonstrate that Purple's experience of the PhD was a tug of war between external circumstances and internal effort to thrive, both personally and professionally.

A bit over a month into their PhD, their first supervisor – who had single-handedly convinced them to apply for a PhD and supported them through their application process – announced that they would “**move to another city**”. To Purple, this news “**was devastating**”, “**it was beyond words**”. As their ex-supervisor's expertise was closely aligned with their initial proposal, Purple was at a loss. Emotionally, they felt that they had lost a close working relationship with a mentor that they would never experience again – “**They were like my mentor, we spoke about everything under the sun**”<sup>35</sup>. Practically, Purple had to find another first supervisor. This was perhaps the start of one of the persistent issues with their PhD – expertise misalignment (Figure 7.8).

**I think when [ex-supervisor] decided to leave, that was when it started. I was trying to make progress in my PhD and I wasn't getting anywhere. Maybe because of the lack of guidance and support. I was beginning to question my ability as a research student, my intelligence, my ability to see things from different perspectives. [...] So my confidence took a beating to that effect, and that started affecting other areas in my life.**  
(Purple, 1, 92-101)

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<sup>35</sup> (Purple, 1, 61-63, 204-205)

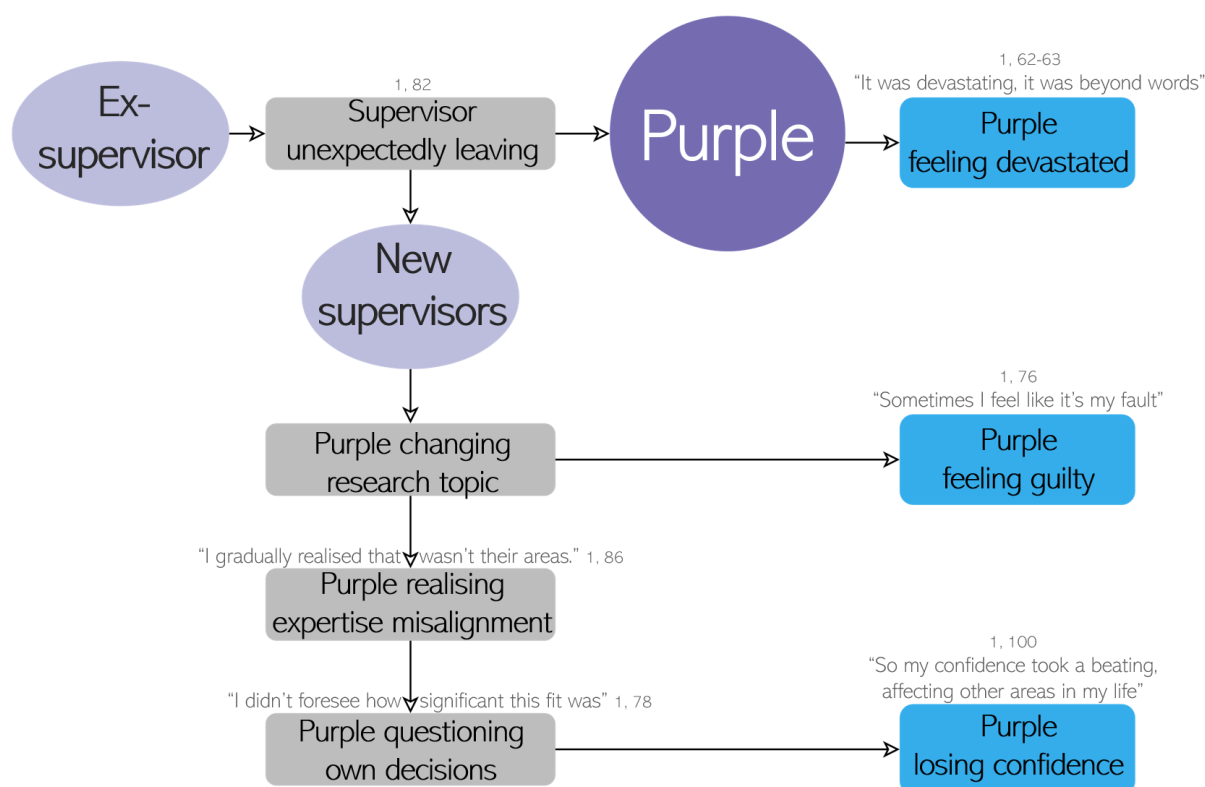


Figure 7.8 "It was beyond words"

Upon their ex-supervisor's departure, they had a change of supervisors, and Purple also made changes to their proposal. Reflecting on these decisions in the first interview, Purple expressed that it was their **"fault"**. I asked why, adding that they **"were not informed"**, so **"how could anyone have guessed?"**. Purple said that they **"couldn't foresee how important this fit was"**, referring to their supervisors' expertise misalignment with their topic. They explained that as their ex-supervisor had left and they failed to progress as expected, this had made them **"question"** their **"intelligence"** and **"ability as a researcher"**. This was a foreshadowing of many stories to come in over four hours of interviews, in which Purple took responsibility for their own actions – and in many cases, for their own mistakes – and revealed their harsh inner critic. In comparison to Jade's shift in perspective from connecting their feelings with their supervisors to recognising shortcomings of their personal work, Purple's self-criticism had remained throughout our interviews.<sup>36</sup>

I asked if this loss in confidence perhaps was because they have a new supervisor with different standards, to which they disagreed, **"it's all self-inflicted. It's not external, it's not family, it's**

<sup>36</sup> (Purple, 1, 78-85)

not peer-pressure, it's just... within. Like when you have these standards for yourself".

"How do you deal with something like that?", I wanted to understand.

I try to think a bit more positively, it's hard, and it takes time, but it does help you get over the slope. It's just being sad, disappointed [...] that's what happens when you get hit. Just deal with it. I think earlier there was this urgency to fix things, and to make sure I feel okay real quick, so you tend to feel a sense that you need to fix it and get on with it. But nowadays, I think, if I'm feeling bad, then yea, I'm feeling bad. It will settle. And then you carry on. Like I've slowed down in that sense. Sometimes I just let the emotions be – I feel the emotions, and then they will pass. (Purple, 1, 108-129)

Across the three interviews, Purple had described their way of being as becoming slower as time went. The PhD caused them "**panic**" and to feel "**the need to fix things**", and their way to counter those feelings were to "**slow down**", specifically by "**stopping, taking a step back, and being mindful**." Whether it was a sense of acceptance as their coping strategy, or a shift away from the PhD to preserve their well-being, Purple struggled to maintain a work-life balance required conscious effort from the individual.

In all the three interviews, Purple and I also spent a lot of time talking about their home country, culture, and their family. These conversations were revolving around both upbeat and sombre topics. They were running across all three interviews, where Purple's story was painted with different shades of emotions, yet they insisted on "**taking away more of the good than the bad**" (Figure 7.9).

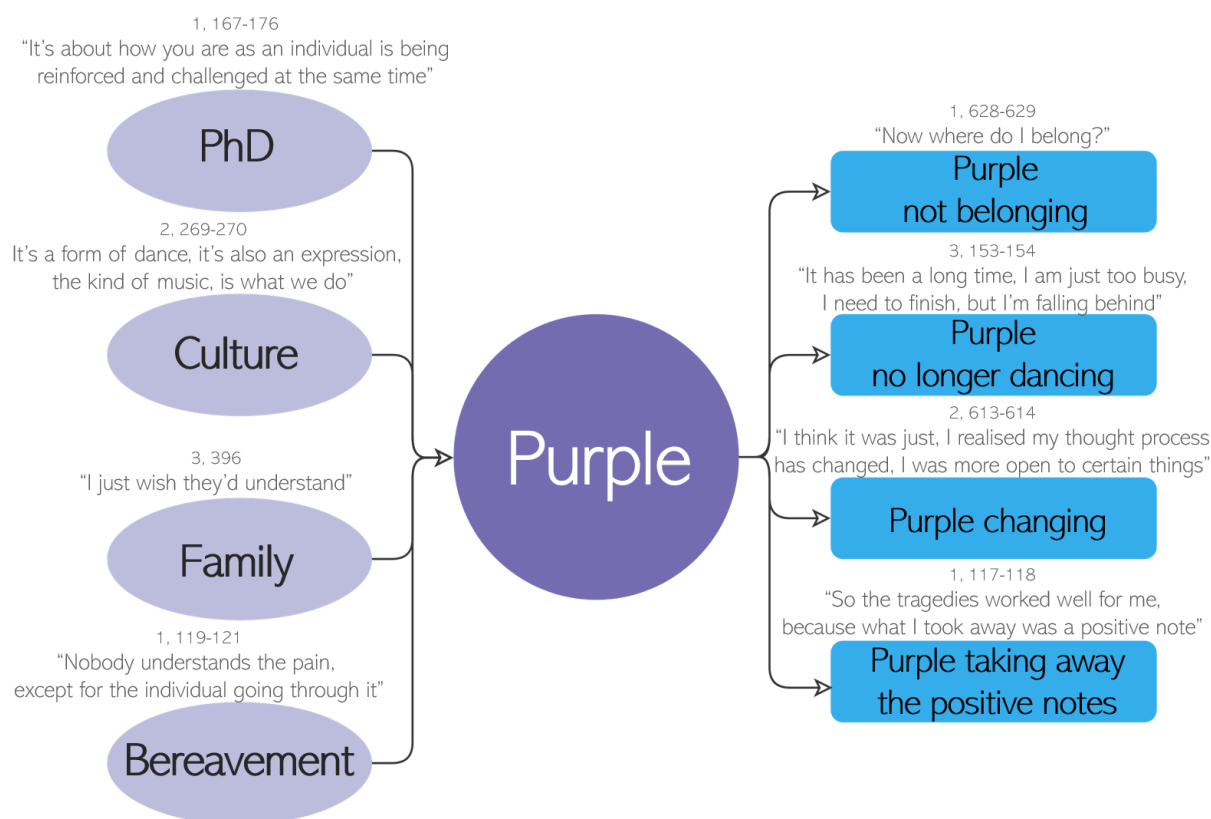


Figure 7.9 "Taking away more of the good than the bad"

As Purple described their time during the PhD as one of the most difficult periods in their life, with the passing of one of their family member, followed almost immediately by a terminal cancer diagnosis of another, Purple reflected throughout our interviews about the influence these family tragedies had on them, both in negative and positive ways. Upon my concern to their acknowledgement that they had not had time to grieve, they explained that even though they were **"lucky enough to have people to speak to"** if they needed to, they felt that talking about it would be almost **"reliving the entire process again"**, and **"nobody would have understood the pain, not even family"**, because **"only the individual going through it will understand it"**.<sup>37</sup>

In the second interview a few months later, I asked how they had been dealing with this pain, and their answers encapsulated three main support systems: (1) their love for their country's music and dance, (2) the PhD and its philosophical training, and (3) their family and friends. The first two of these coping mechanisms will be discussed in more detail in the next sequence diagram (Figure 7.10). However, in the current sequence (Figure 7.9), I wanted to illustrate how the same

<sup>37</sup> (Purple, 1, 110-120)

systems that contributed towards Purple's challenges were also the same systems that supported their sense of balance and well-being.

Culture was a topic of both uncertainty and love for Purple, as they expressed **“feeling uncertain”** about where they **“belonged”** due to their life in the UK. They had had several reverse cultural shocks when they visited home. And yet, Purple would make sure to **“watch a movie from home at least once every month”**, and to **“listen to music from home all the time”**. In the third interview, Purple looked exhausted, as it was right around one of their deadlines. At one point, I asked, “how long has it been since you last danced?”. They said they could not remember. **“It has been a long time, I’m just too busy”**, coupled with the **“need to finish”**, and the fact that they felt like they were **“falling behind”** schedule, there was not any free time for dancing. There was a sense of panic, painted by exhaustion. Despite the side-effects of the PhD, Purple consistently talked about its positive sides. **“I love philosophy. It drives me mental, it drives me crazy sometimes, but it’s just amazing. I can just go on and on, I’m still learning, but I love to talk about it for hours.”**<sup>38</sup>

Essentially, their training on Philosophy encouraged them to see that during a PhD, **“how you are as an individual is being reinforced and challenged at the same time”**, that **“it’s an on-going battle”**, and that Purple's PhD was able to **“completely”** change their perspective and the way they **“looked at life”**. **“It has been good and bad, but I try to takeaway more of the good than the bad, because I think that’s the only way to keep going”**. Similarly, tragedies that happened in their family, combined with a series of private family issues – **“I just wish they’d understand”** – were factors that had tipped the balance for Purple over to the negative side on many occasions. At the same time, Purple acknowledged the importance of their family as their **“rock”**, their **“sounding board”**.<sup>39</sup>

Here we see the complexities of Purple using a variety of intra-personal and contextual resources to cope. The PhD process was also integral to their longitudinal development, with aspects such as philosophy becoming an additional layer of their evolving professional and personal identities.

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<sup>38</sup> (Purple, 1, 651-567)

<sup>39</sup> (Purple, 1, 16-17, 167-176)



Before we conclude Purple’s story, I will further unpack Purple’s coping mechanisms – and their way of being and becoming as a combination of the past and the present – through presenting their love for philosophy, music, and dance (Figure 7.10).

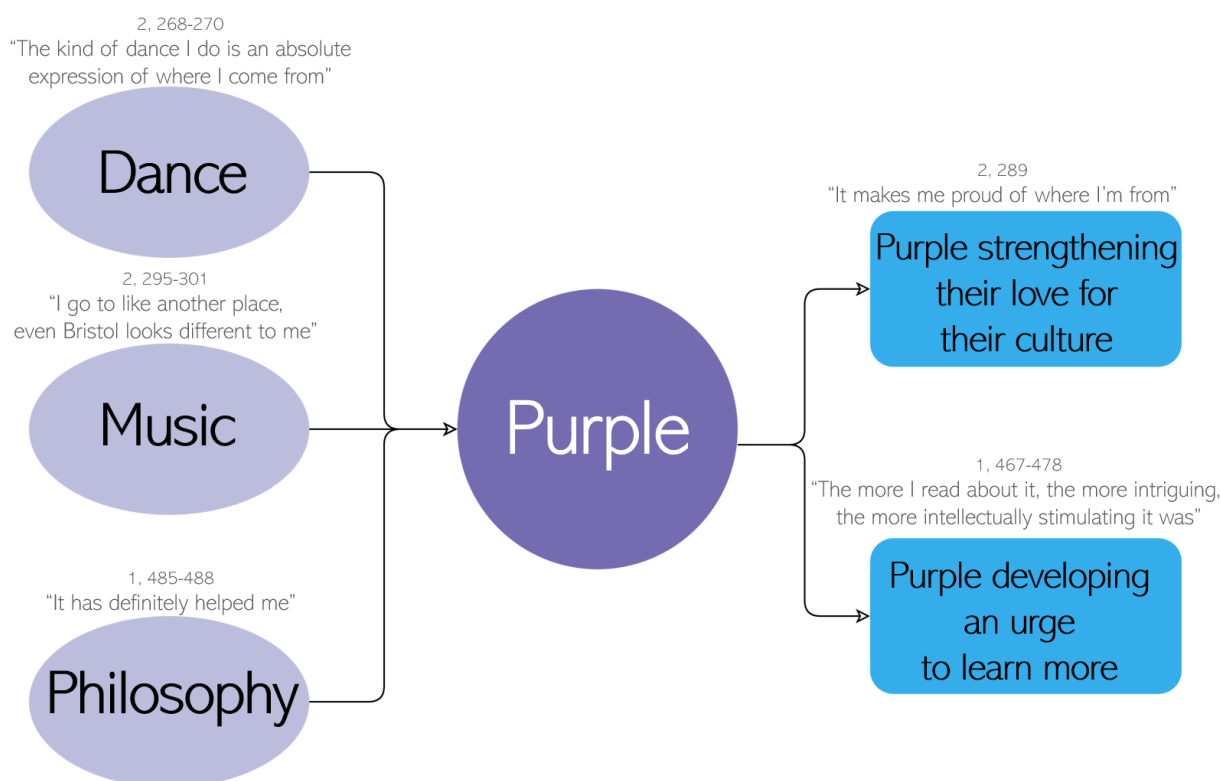


Figure 7.10 Dance, music, and philosophy

The first time Purple expressed their love for philosophy, I was astonished by this rare affection for such a mind-bending subject, so I asked what was so special about philosophy.

**When I started doing philosophy, and the more I read about it, the more intriguing, the more intellectually stimulating it was, it was beyond me, I was like, ‘what is all this? Why didn’t I know about this?’ And it made me question such fundamental beliefs in my life, it made me question my own perceptions, the way I was brought up, the way I see things, the way I view people. In that way it’s really changed for the better, and it has brought a lot of good to my life. So I started taking philosophy on board, and there’s always this urge to learn more.**  
(Purple, 1, 467-478)

Here we can see Purple taking an aspect of the PhD, philosophy, into other parts of their life. They used it as a tool, a lens through which they re-examined their perception and even their origins. With similar sparkling eyes, Purple expressed their love for dancing and music from home with a delightful passion. **“Yes, my dance”**, they exclaimed in the second interview in the middle of a quiet café. They told me that their particular kind of dancing was **“an absolute expression”** of their city. Yes, it was a form of dance, but it was also **“an expression”**, a combination of **“a**

type of music” and “a style of dance” that “strengthened the bond” with their city, country and culture. With a smile, they reflected on how they both “missed home more” and felt closer to home at the same time while listening to their music – “our music” – and dancing to it. To Purple, music was another factor that was able to transcend space and take them elsewhere.<sup>40</sup>

**When I’m listening to our music, I’m somewhere else. I go to another place, even Bristol looks different to me. Even when I’m walking and listening to our music and I see Wills Memorial, it would look and feel different to me.  
(Purple, 2, 295-301)**

So, what was Purple’s negotiation strategy with elements that both raised them up and beat them down? As Purple put it, maybe the PhD had given Purple their philosophical approach to life. Life, for Purple, had “a meaning”, “a purpose”, “it’s what you learn from it, and then what you take away to use in the future”. During our first interview, I told Purple, “most of us just act like the PhD was the entire experience, and everything else just happened on the side. Then it changed.” They replied by telling me exactly how their perspective had changed. “Yea, you know how I look at it? I look at it like PhD 2014 at the start, and then surgery one, surgery two, death, breakup, cancer. You know, that’s how my perspective changed.” It would be presumptuous of me to say that Purple had not changed during the 18 months between the three interviews, but as I observed, Purple’s coping mechanisms and unyielding outlook toward life were shaped largely during the “life-changing” sequence of events that happened during the first and second years of their PhD, before my research even started. My research was a space for Purple to reflect on these events and their influence. Through a different route, they arrived at a similar place to Red, “the PhD is not everything”. However, different to both Jade and Red, in their own way, Purple had kept the self-deprecating sternness towards their own work – “Sometimes you tell yourself ‘you can try harder, you’re not trying hard enough’” – and yet also built a strong philosophical approach to life and the PhD – “I realised I have started to live for me, which is something I never used to do in the past. It’s a combination of growing older, and the experience of the PhD. Every day when I try to turn left, it’s turning right. Every time when I try to brake, it accelerates. I just thought, if it’s meant to be, it will be. I’m not wishing for anything, I’m not hoping for anything. One day at a time.”<sup>41</sup>

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<sup>40</sup> (Purple, 2, 268-292)

<sup>41</sup> (Purple, 1, 357-360; 406-413; 451-453; 574-578)

#### **7.4 Discussion and chapter summary**

Across all three narratives, I presented the nuances of different ways of becoming and being from the participants, both in terms of their personal and professional lives. In Jade's sequences, an evolving sense of self-reflection aided their development as a doctoral researcher and an academic in their own professional field. As LHTA previously revealed, intra-personal changes within the individual actually reflected the larger contexts in both their past and their present. In Jade's case, we also observed how their anticipation of the future (e.g. the viva) was weaved into their narrative as they developed a new identity. This shift in their identity was signified by the conflicts they experienced during their research process, thus foregrounding a process of negotiation.

Negotiation process was also integral to Red's storyline. Though starting with a similarly challenging supervisory relationship, the structure of Red's story was surrounding their struggle to retain their previous identities as a working professional and as a mother. An evolving professional identity – with philosophical stance as a proxy – meant that they had to find ways to deal with challenging intellectual conversations with supervisors, while maintaining the self-definitions they brought to the PhD. After gaining back their confidence as they passed a milestone, by going part-time, Red showed that the exercise of agency in a PhD at times required rebuilding or gaining new internal resources.

In comparison to both Jade and Red, Purple's started with a strong supervisory and mentor bond, yet their story highlighted the internal struggles as both their professional and personal lives witnessed drastic changes. In Purple's sequences, I zoomed into their use of old and new sources of support, and how these resources themselves proved to be complex over time. As Purple self-transformed, they grew apart from their own cultures, and their own family. This sense of solitude and of not being understood has surfaced in LHTA, but through SNA, we could see how it was a catalyst for self-development.

The final findings chapter has addressed how IDSs develop as an individual through interactions with their eco-systems personally and professionally. In the next chapter, I discuss all the core findings from Chapters Five-Seven in light of the research literature, and consider the thesis' empirical and theoretical contributions to our understanding of the development process in IDSs.

# Chapter Eight

## Overall discussion

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The world of concrete personal experiences to which the street belongs is multitudinous beyond imagination, tangled, muddy, painful and perplexed. The world to which your philosophy-professor introduces you is simple, clean and noble. The contradictions of real life are absent from it.

(James, 1907a, Lecture I)

### 8.1 Chapter overview

James' philosophical pondering resonates with the analytical work presented in the last three chapters. The IDS experience is complex and tangled, and the task of bringing together a coherent picture in the findings demands a strong theoretical and methodological ground. In the previous three chapters (Chapters Five, Six, and Seven), the threads running through the findings have been supported by the theoretical framework (combining EST, PWB-M, and SCA-T), and considered in connection to their respective research literature. In relation to the eco-developmental perspective, it is important to reiterate that this thesis aims to understand the process of change as part of human development, as opposed to focusing on outcomes of change. This aim has been inherent both theoretically and methodologically, as the IDS experience was explored using quantitative and qualitative analysis of longitudinal empirical data. In this chapter, I will reflect on the core findings of the thesis, and how they contribute to the larger research literature.

Relating to the previous literature, I will discuss the main findings for IDS experience in two aspects: (1) the IDS experience as a developmental process of learning, and (2) the multi-dimensional, multi-level, and bi-directional nature of this process. Building on from the earlier chapters, which explained and discussed individual findings, Chapter Eight will connect these separate threads to the overall arguments, and further consolidate the knowledge gaps addressed by the thesis. Finally, I will discuss the strengths and limitations of the theoretical framework in capturing the complex IDS experience.

## 8.2 Empirical contribution

### 8.2.1 IDS well-being as a developmental process

PWB-M makes the argument in line with Aristotle's eudaimonia that well-being is about self-actualisation and fulfilment of one's own potential in life (Ryff, 1989a). Situating well-being as an ongoing process in human lifespan, this argument implies that well-being as a process encapsulates change within the individual that potentially allows them to thrive in any context. This is a befitting conceptualisation to describe the doctoral experience in general, and the IDS experience in particular.

At the individual level, doctoral students often go through a role transition from a student to a professional academic (Laudel & Gläser, 2008), and this mixed role-identity is reflected in many of their responsibilities. In socialisation frames that posit strict emulation practices, doctoral students are conceptualised to emulate behaviours from senior members of staff/students (e.g. supervisors) through observing and interacting with them (Delamont et al., 2000). This perspective, however, was also criticised for failing to take into account variations and individuality among doctoral students (Gardner, 2008b), thus potentially taking the individual out of their own transformation. Putting the individual at the heart of their own development, this thesis revealed the nuances in how IDSs change over time as they interact with their environments. Specifically, not only was longitudinal change observed as the individual went through a process of learning appropriate skills for survival and coping, but we also saw them exercising their agency to embrace or reject different kinds of change. Epistemologically, students were seen to weigh what they wanted to prioritise in their learning and gaining new resources. Ontologically, agency was exercised through decisions that influenced identity formation, with some leaning towards their evolving academic identity, some preserving other important identities, and some looking for a balance between old and new identities. This purposeful response to new contexts addressed the gap of variations and individuality of doctoral as well as intercultural students identified in the literature.

For intercultural students, there is often a set of expectations for their experience in the new country right from the start of their sojourn. In terms of pre-arrival and post-arrival, intercultural and doctoral students have overlapping but distinctive sets of expectations. For intercultural students, their satisfaction levels can be influenced by their context-specific expectations such as those for their university (Arambewela & Hall, 2009), or for the new culture (Redmond & Bunyi, 1993). Similarly, for doctoral students, their experience is influenced by their expectations towards supervision (Pole et al., 1997), peer support and informal mentoring (Noonan et al., 2007), and the

quality of provided HE services (Lampley, 2001) - all qualities embedded in larger contexts. My current findings acknowledged and painted a clearer picture on how the gap between these expectations and their actual experience can play a role in students' overall satisfaction.

Firstly, dissatisfaction was observed among participants in relation to both their doctoral and intercultural dimensions. Their prior expectations contributed towards different aspects of their psychological well-being, e.g. some experienced low levels of autonomy and environmental mastery, while others formed positive and/or negative relations. At the same time, making use of longitudinal data, we also saw that over the course of the PhD, the comparison between expectation and reality changed as each student gained more resources. These resources could take the form of emotional resilience or newfound confidence, which acted to support their negotiation between their own values and the new wider practices.

In parallel with these growing resources, students started to form new identities, gained new knowledge, and thus shifted their expectations. Different milestones or significant events during the PhD acted as a shifting point, influencing their well-being in positive manners for some and negative manners for others. Milestones have been explored in the doctoral literature through different lenses, the most relevant to the current findings being those which allowed students to cross important thresholds that are either ontological or epistemological by nature. Equally, this thesis added an intercultural dimension to the milestones, and explored the developmental aspects underlying different significant moments for IDSs.

Addressing how these underlying mechanisms could occur, the findings revealed how students responded to challenges by going through a learning process. According to Tobbell and colleagues (2010), learning can be used by postgraduate students to negotiate social and professional identities. As argued throughout, the process of transition for doctoral students is not merely about trying to fit the mould, but rather to actively participate in a bi-directional process of change. Through interacting with and influencing practices around them, permanent intra-personal changes may occur, leading to self-transformation and development.

In addition, student response to different events during the PhD embodies their negotiation between the context-specific learning and their own values, echoing the search for individual/contextual balance suggested in the literature (Pychyl & Little, 1998). This thesis further suggests that the old and the new contexts were embodied by the individual and their PhD work. As such, the findings specifically contrasted with the one-dimensional approach of previous conceptualisations in which students were mere "objects in transition" (Tran & Vu, 2018, p. 17), whose single purpose appears to be assimilation into a new context. Based on the evidence

presented, I argued that the strategic decisions made by IDSs are their individual responses to the new ecologies – including their negotiation process between the old and the new – are related to their decision to balance between their own (intra-personal) characteristics, and the external factors (inter-personal and contextual aspects).

As introduced in Chapter Six (thematic) and further discussed in Chapter Seven (narrative), this argument has been illustrated with qualitative evidence showing the nuances of these strategies. The development of different negotiation strategies relied on how the participants negotiated different elements in their contexts as well as their identities. This finding extends previous arguments in the field in that as doctoral students face difficulties, they enact their agency by relying on their resilience, resources, and capacity to decide on changing tactics or breaking away (Hopwood, 2010). Furthermore, the findings from Chapter Seven's narrative analysis illustrated different manners in which the participants repositioned, resisted, and developed their own strategies by combining past and present resources.

Finally, within this developmental process, the current study provided additional evidence for previous arguments that international students are active, self-forming agents who take actions according to their own needs and environmental structures (Marginson, 2014; Montgomery & McDowell, 2009; L. T. Tran & Vu, 2016). Individual/contextual levels to negotiations were also discussed in the literature in relation to negotiation approaches, e.g. approaches that are needs-focused (when students want to achieve particular learning, social or well-being needs), or are struggle-resistive (when students resist against what they perceive as problematic practices in their contexts) (Hopwood, 2010). In my research, in terms of negotiation process and maintenance of well-being, doctoral students negotiated their learning and well-being via different ways of identity formation, a contextually embedded process as suggested by the longitudinal qualitative data. Findings from both thematic and narrative methods of analysis have thus contributed to a more nuanced picture of IDSs' developmental process.

### 8.2.2 The bi-directional, multi-dimensional, and multi-level experience of IDSs

As previously discussed, the element of learning in the field of acculturation and adaptation is an influential conceptualisation (Gill, 2007). Socio-cultural adaptation has been theorised to take the form of culture learning (Masgoret & Ward, 2006), which refers to acquisition of knowledge and skills through meaningful contact with host nationals (Sam, 2006). Acculturation and adaptation are believed to occur during meaningful contact between individuals of different cultural backgrounds (Ward, 2001). The behavioural competence aspect of adjustment, SCA, is described as the individual's ability to "fit-in", to "acquire culturally appropriate skills" and to successfully "negotiate interactive aspects of the host environment" (Ward & Kennedy, 1999, p. 660). In Chapter One, I discussed how this process can inform students' adaptation strategies (integration, separation, assimilation, and marginalisation) (Berry & Kim, 1988; Berry et al., 1989; Ward & Kennedy, 1994) as well as their psychological adjustment (Berry, 1990; Ward & Kennedy, 1999). Acculturation research has long recognised this multi-dimensional nature of culture learning, conceptualising this process into affective, behavioural, and cognitive dimensions (Zhou et al., 2008). However, many acculturation studies have been criticised for potentially discounting the skills and knowledge that the individual brings to their new contexts, and for overlooking their agency to decide whether they will combine their previous and new practices, creating individual pathways for cultural and academic integration.

First, the *bi-directionality* of this developmental process was also observed in the interactions between the individual and their different eco-systems. As the findings indicated, changes within the individual were embedded not only in the new contexts, but also as an embodiment of the merging of the old and the new. The construction of professional identity was a leading example in students trying to adapt their previous knowledge to the new academic system (Antony, 2002; Austin, 2002; Ellis, 2001; Gardner, 2007; Gonzalez, 2006; Weidman et al., 2001). This thesis also further contributed to our understanding of the intercultural and personal aspects of the IDS experience, as the data showed how the old and the new contexts influenced each student's choices differently. In the other direction, echoing the ontological aspect of agency (Billet, 2009) in doctoral identity literature, choices made by IDSs regarding their personal relationships could also be influenced by their intra-personal resources. In this thesis, the interaction between the individual and their contexts was bi-directional, as not only were some participants being influenced by larger contexts, but they themselves were making choices to build their own communities and friendship groups.



Second, my research sought to address the complex issue by relating to all three dimensions in the research, while longitudinally tracking the individual's self-transformation. My findings illustrated that for IDSs, this **multi-dimensional** nature is part of an entangled process. Affectively and cognitively, negotiation strategies in the current study refer to two interconnected aspects of the experience: identity negotiation (in relation to both the intercultural and academic transitions) (Fotovatian, 2012; Jazvac-Martek, 2009; Petersen, 2007), and coping strategies (in relation to well-being and social support) (McClure, 2007; Schartner, 2015). Moreover, these two dimensions are supported by the behavioural dimension of culture learning. In other words, the findings suggested that change in affective and cognitive dimensions might be the result of a learning process happening in the behavioural domain. Gaining context-appropriate skills involved IDSs in larger communities of learning and practice, and thus not only did the transformation occur cognitively in their identity, but also affectively in their ongoing self-actualisation.

Finally, what longitudinal interviews had allowed us to observe is that these priorities would change through time as each student found their way through the new environments and learned how to reposition themselves in academia and in the UK. Moving across **individual and contextual levels**, multiple factors that were found to be important in PhD well-being research literature were echoed in my findings. For instance, loneliness was not a direct focus of the study, but a sense of solitude emerged in many of the discussions. Research literature connects this feeling with other factors, such as loss of networks and social support, and absence of cultural familiarity among international students – e.g. personal, social, and cultural loneliness (Sawir et al., 2008) – or social isolation among PhD students due to lack of emotional and pastoral support in particular departmental and disciplinary cultures (Janta et al., 2014). These connections were part of my findings, which also highlighted that students recognised the strain that intercultural and academic sojourns could bring to their sense of well-being. The **multi-level** quantitative results particularly suggested significant interactions between factors at time, individual, and contextual levels, implying the interrelatedness of human eco-development. Overall, equipped with the theoretical framework, the study presented evidence for the bi-directional, multi-dimensional, and multi-level nature of the IDS developmental process.

### 8.3 Theoretical and methodological contribution

#### 8.3.1 Ecology, adaptation, and well-being

It is a little like a biologist putting his experimental animals through a hamburger machine and looking at every hundredth cell through a microscope; anatomy and physiology get lost, structure and function disappear, and one is left with cell biology [...]. If our aim is to understand people's behaviour rather than simply to record it, we want to know about primary groups, neighbourhoods, organisations, social circles, and communities; about interaction, communication, role expectations, and social control.

(Barton, 1968)

The complexity of the experience of non-UK PhD students has been acknowledged throughout the current thesis. As I previously discussed the limitations of adaptation theory, there are two important aspects to be cautious about regarding researching this experience. As explored in Chapter One, the expectation of adaptation frameworks that students would choose to adopt in the first place is presumptuous and problematic for both research and practice. Moreover, while the longitudinal application of adaptation frameworks is able to offer us data on how much (quantity of development) and in what ways (quality of development) students have progressed professionally and socio-culturally over time, these frameworks are not taking into account all the interactions that each individual will have with their environments during this process, namely their personal development and well-being. This thesis brought together EST, PWB-M, and SCA-T to form a theoretical framework (Figure 8.1, previously presented in Chapter Three) that could capture a more holistic understanding of the multi-dimensional and multi-level complexities in the IDS experience over time.

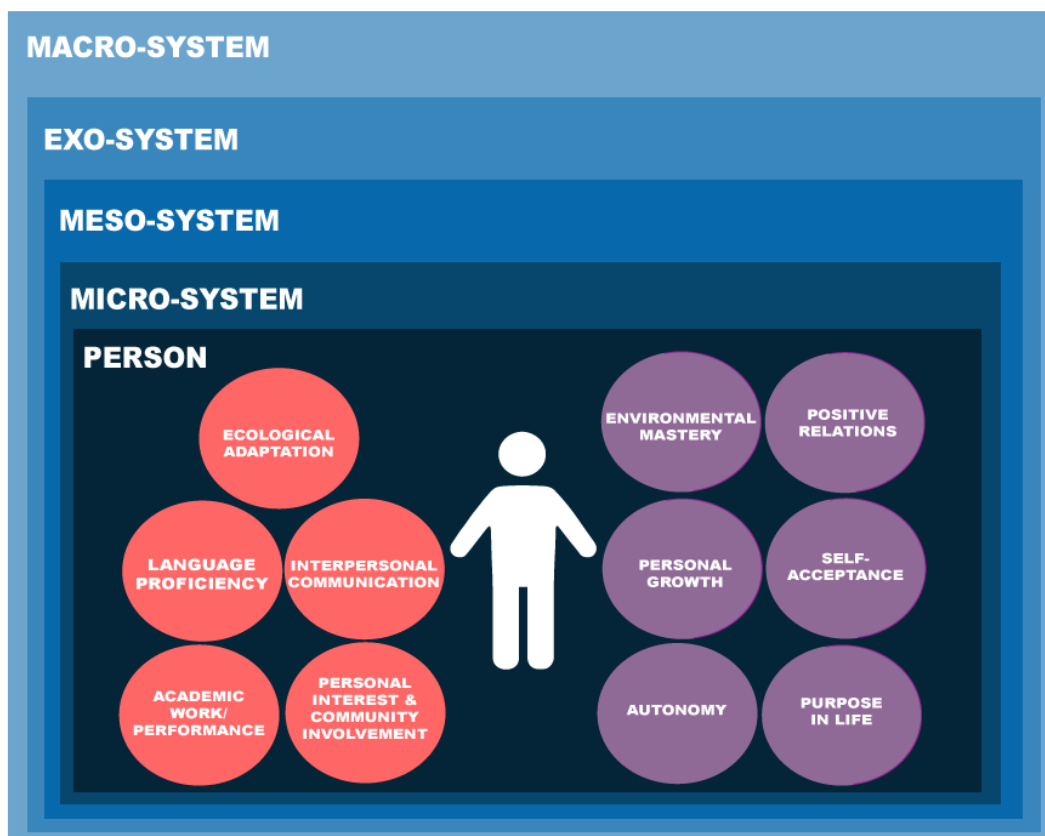


Figure 8.1 Combined theoretical framework

This framework strongly influenced and guided the data collection and analysis of the current research and enables us to develop our understanding of the IDS experience in more depth and more holistically than has been achieved in previous work. The framework proposed by this thesis therefore has the potential to make an important contribution to research in this field.

The main discussion thread in the literature review (Chapters One to Three) highlights the importance of recognising the ecology of contexts surrounding an individual, the individual's agency, and change over time as part of a developmental and learning process. There is an increasing awareness that research on individual development processes needs to go beyond the focus on variables and relationships (Bergman et al., 2003). In line with this line of argument, we need to recognise students as dynamic and agentic individuals who can realise their agency through responding to their contexts (Tran & Vu, 2018). This perspective acknowledges the need for a framework and a methodology that can capture these elements in the experience of non-domestic PhD students. With this clear goal, I have argued for the combination of SCA-T (Ward & Kennedy, 1999), PWB-M (Ryff, 1989a), and EST (Bronfenbrenner, 1979, 1989, 1999) among other equivalent bodies of work.

Specifically, these theories were synthesised in the current thesis to support a conceptualisation that can capture (a) the process of cultural and professional learning, (b) the process of negotiating between the individual and their different ecologies, and (c) the individual's process of balancing their professional development and their well-being over time.

The SCA-T allowed us to apply the concept of cultural learning to our understanding of the intercultural transition in five main revised domains: (1) Interpersonal communication; (2) Academic/Work performance; (3) Personal interests & community involvement; (4) Ecological adaptation; and (5) Language proficiency (Ward & Kennedy, 1999; J. Wilson, 2013). One of the research aims was to understand how this learning process occurs among non-domestic PhD students in the UK, and how it can be unique to each individual depending on their behavioural (culturally acquired skills), perception, intrapersonal/interpersonal, as well as environmental and academic aspects (Ward & Kennedy, 1999).

In a similar manner, as I discussed the literature on what constitutes well-being, happiness, and satisfaction in life based on the concept of eudaimonic well-being, the six elements of affective dimension using PWBM's multi-dimensional approach were broken down: (1) Autonomy, (2) Environmental mastery, (3) Personal growth, (4) Positive relations with others, (5) Purpose in life, and (6) Self-acceptance.

Both models contributed greatly to understanding the multi-dimensionality of the IDS experience, capturing the affective (PWM-M), behavioural and cognitive (SCA-T) aspects. Quantitatively, their corresponding scales were useful in exploring significant factors as well as cross-level interactions. Qualitatively, especially in the LHITA, these models allowed for a more structured understanding of how the bi-directional interactions between the individual and their interrelated contexts happened for IDSs. The combination of SCA-T and PWBM supported the interpretation of the between- and within-participant similarities and differences. To understand why some participants' strategies were more successful than those of others at a point in time, the analysis sought explanations through a within- and between-participants approach, first (1) identifying all the relevant SCA-T elements and PWBM factors within each participant's stories, and then (2) comparing and contrasting them between participants to separate the contributing elements. This approach was refined during the course of data analysis, as the SCA and PWB elements were originally used for comparison within each individual, but further application of these theories for between-participant analysis proved to be relevant and productive in two ways. Not only was this analysis approach able to perceive and understand similarities and differences through in-depth discussion of individual narratives, it also allowed for further reflection on the

conceptualisation of the experience of non-domestic PhD students. In other words, the findings from this analysis approach further argues for the role of the dynamic and agentic individual in their own journey and development, through using the theoretical elements to categorise responses, compare across participants and timepoints, and draw out the bi-directionality of contextual-individual interactions. In general, the combination of SCA-T and PWBM for within- and between-participant analyses made it possible for the analysis to understand the roles of adaptation and psychological well-being in response to a number of significant events during the PhD, and how the students negotiated to maintain the balance between intrapersonal, interpersonal, and ecological elements.

Furthermore, it is these very elements that exemplify the complex interactions between the individual and their ecology of contexts. The EST helped us to capture the bigger picture by defining the ecological systems of each participant, while keeping in mind their individual progress. The EST used in the current study was a more developed version – ppct model (Bronfenbrenner & Morris, 1998), as Bronfenbrenner (1989) criticised his earlier version of EST for neglecting the active role of an individual within their own development. Methodologically, the LHTA and SNA benefited the most from the systematic conceptualisations provided by the EST, especially in characterising and understanding the participants' experience and responses in relation to these ecological systems. The micro-systems were the richest in the data and they offered the most direct influences on well-being and adaptation through interpersonal relationships and support systems. At the same time, the meso-systems, the exo-systems, and the macro-systems were also highlighted as contributing factors towards the participants' negotiation strategies. While the meso-systems were shown to play a role in resolving family-work and work-family conflicts, the exo-systems were observed by participants as being important to their supervisory negotiations, as well as to the parental roles for some. The macro-systems were further recognised when both academic and cultural practices were perceived to be consistent beyond institutional level. In this sense, in comparison to previous research, the application of this ecology of contexts helps to identify where the issue may arise and where the individual directs their effort. Specifically, as the analysis showed, students developed different solutions for issues that were perceived to be stemming from more immediate ecologies (e.g. professional and social interactions) and those that were perceived to be influenced by a larger ecology (e.g. supervisor's well-being and busy schedule, academia as a whole). If the cause is perceived to be within more immediate ecologies, students may be more likely to work on strategies that focus on interpersonal changes. This is in contrast with a more likely focus on intra-personal changes (i.e. changes within the individual's approach and way of thinking) when dealing with cultural and academic practices that are perceived as context situated.

The latter strategy has also been described by Biesta and Tedder (2007) as the individual's ability to change their 'agentic orientations' (p.138) to either influence their contexts or to restructure their relationship with these contexts within the constraints. Thus, an extremely important finding of this study is the bi-directionality of contextual/individual interactions.

Before we move on to discuss the findings of the study in more detail, I also want to briefly highlight how the theoretical framework complimented the longitudinal design. While keeping in mind these processes, the longitudinal approach to studying a sojourner's experience can help us understand the changes that happen throughout their learning and negotiating processes. By comparing the SCA and PWB of participants at different points in time, the study aimed to observe any pattern of changes that may happen during part of the PhD journey. Not only were the qualitative analyses benefiting from the combination of SCA-T, PWB-M, and EST in longitudinal interviews, there were also theoretical strengths in the longitudinal quantitative strand. The combination of longitudinal design and the theoretical framework allowed us to capture change over time, which is an important element that contributes towards both (1) the ecology of contexts and (2) the individual's agency. While context should be put front and centre in researching human behaviour (Shinn & Rapkin, 2000) so should the individual, particularly their struggle and triumph in response to their contexts. SCA-T, in particular, highlights adaptation as a process of skill acquisition. This means that research into adaptation should be able to capture the individual's development through skill acquisition over time, rather than just a snapshot at one moment.

Furthermore, a lot of cross-sectional and longitudinal research using PWB-M has focused on age profiles and age-related patterns (Clarke et al., 2000; Ryff, 1989a, 1989b; Ryff & Keyes, 1995; Ryff et al., 2003; Springer et al., 2011) and much of the existing cross-sectional and longitudinal research using PWB-M has focused on age profiles and age-related patterns (Clarke et al., 2000; Ryff, 1989a, 1989b; Ryff & Keyes, 1995; Ryff et al., 2003; Springer et al., 2011). A number of short-term longitudinal studies have shown that an individual's PWB can be both a cause and an consequence of other factors, such as the individual's physical health, their daily struggles, their worldview, their coping ability (Feist et al., 1995), and significant life events and life goals (Iwasaki & Smale, 1998). This implies that there may be a bi-directional relationship between an individual's PWB and other aspects in their life, indicating complex interactions between these factors over time. Ryff (2014) further commented on PWB as being "fundamentally anchored in how individuals negotiate their way through the challenges of life" (p.13). This underscored the importance of PWB in relation to adult development and its change over time during the course of life. In the current thesis, the combination of the theoretical framework and longitudinal mixed methodology allowed not only contributed towards a more nuanced categorisation of these

complex interactions using affective, behavioural and cognitive dimensions, but also supported the tracking of this contextualised process over time.

With equal importance, EST benefited the ecological understanding (or contextualised process) of individual development, which puts the individual in the centre of their experience through their “active engagement with aspects of their contexts-for-action” (Biesta & Tedder, 2007). As a result, research can approach this ecological understanding of individual progress through designs that take into account temporal dimension,

In order to understand differences between individuals in similar contexts, and differences ‘within’ individuals in different situations, it is important, therefore, to include both the contextual and the temporal dimension in the analysis. It requires, in other words, an understanding of changes and differences in agentic orientations against the background of biography and life-course, and against the background of the histories of contexts for action themselves.

(Biesta & Tedder, 2007)

We have explored this conceptualisation in-depth in Chapters One through Three, and the combination of EST and longitudinal research was a response to this need for a theoretical approach that further captures this ecological perspective of individual action and progress, as most evident in main elements seen in this research – learning to thrive using previous and new affective, behavioural and cognitive resources. An individual’s engagement with their life events is guided by their past/present experiences and their future aspirations – or the individual composition. At the same time, their response to these life events is also influenced by the characteristics of their ecology of contexts – or their temporal-relational contexts (Biesta & Tedder, 2007). In other words, it is important to situate human experience within their intrapersonal, interpersonal, and ecological changes over time.

Overall, the application of all three theories in combination with the longitudinal design was able to address the complexity of the non-domestic PhD experience. The study further effectively applied this theoretical framework through its within- and between-participant analysis approach, demonstrating the significant contribution of this framework. Future research in this area will be more equipped to address the complexity of this experience through the linkage between quantitative and qualitative strands and guided by theoretical conceptualisation. To improve from the current study, longitudinal mixed methods studies could combine the strands further with more focus on trajectories and significant events. For example, as the qualitative strand enabled more understanding of the relationship between significant events during the PhD and students’ well-being and adaptation, future research could aim to explore this relationship further in the quantitative strand. A framework that captures both well-being and adaptation over time will work

best when these measures are put against specific events during the PhD. This would enable the exploration of questions around whether an event such as upgrade/progression significantly influences the individual's well-being, and whether the acquisition of new skills corresponds with any important milestones.

Furthermore, as discussed, non-UK PhD students are not a homogeneous group, and neither are home PhD students. Future research could seek to address the definition and boundaries of culture to explore the differences, if any, between different groups of PhD students. Policy and practice need to cater for the whole student body, and the current study provided a picture of non-UK PhD students whose experience reflects another dimension with its own challenges. Research that recognised the heterogeneity of PhD community could help to add more knowledge to the bigger picture. The literature has painted a fluctuating and individual process for every student, but there may be strategies that could further benefit a wide range of students.

Finally, on an ethical level, it is important that researchers are not focusing only on asking students about their challenges, but we must also recognise students' agency in reacting and dealing with these challenges. This reaction can be seen as a process of trials, of both successes and failures. This means that there is a responsibility for research to avoid taking a static viewpoint of the experience and move towards reflecting a complex process during which well-being and strategies will fluctuate and evolve.

### **8.3.2 Methodological contribution: Longitudinal hybrid thematic analysis**

Theoretical and methodological levels are inseparable in research. Having to deal with a theoretically complex phenomenon means that the methodology – both in terms of data collection and data analysis – needs to address these complexities. As this thesis used longitudinal mixed methods study, the analysis was required to be adapted from the rich methodological body of work in the qualitative literature. The result of this was the development of *Longitudinal hybrid thematic analysis*, which was adapted for the longitudinal interview data in this thesis based on the Template analysis by King (2004) and Hybrid thematic analysis by Fereday and Muir-cochrane (2006). This adapted approach to thematic analysis recognised the hierarchical structures in Template analysis, and the non-linear analysis process in Hybrid thematic analysis. It took a step further to change the level at which a template approach is introduced, i.e. at the sub-theme and theme levels rather than at a coding level. Unique to this study, LHTA also allowed for the tracking of within-individual changes and progress over time, thus allowing for both between-participant and within-participant analysis. Alongside these strengths, the LHTA in this thesis is still limited in its ability



to completely recognise to what extent can data that was collected from a theory-driven process be analysed inductively (both carried out by the same researcher). Another limitation of LHTA in this thesis is related to the tracking of changes within the individuals. Specifically, even though the LHTA was looking at changes between interviews, the combination of context, individual, and time elements was not easily illustrated. In contrast to this, the use of Structural Narrative Analysis was more applicable. While this limitation does speak to the different aims between Thematic analysis and Narrative analysis in general, the use of LHTA to follow changes within the individual and how we can more effectively map the connection between context, individual, and time elements could be further explored in future longitudinal studies.

# Chapter Nine

## Conclusion

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Our minds thus grow in spots; and like grease-spots, the spots spread. But we let them spread as little as possible: we keep unaltered as much of our old knowledge, as many of our old prejudices and beliefs, as we can. We patch and tinker more than we renew. The novelty soaks in; it stains the ancient mass; but it is also tinged by what absorbs it. [...]

New truths thus are resultants of new experiences and of old truths combined and mutually modifying one another.

(James, 1995 Lecture V)

### 9.1 Chapter overview

With a specific interest in psychological well-being and socio-cultural adaptation, the focus of this thesis has been on the doctoral journey of those who came from a foreign country and the development of their strategies to prosper in the new contexts.

The reflection of each separate data collection and data analysis method has been considered more thoroughly in the methodology (Chapter Four) and their corresponding findings chapter (Chapters Five to Seven), respectively. The final chapter will reflect on the research process as a whole, including the current study's strengths and limitations, as well as considering the take-away findings within these boundaries. Keeping in mind the theme of adaptation and well-being of IDSs, my reflections will address the outcomes from longitudinal mixed methodology. Further to these reflections, I will also discuss the implications and recommendations that the current thesis has for both research and practical contexts, which can be useful for stakeholders who play a part in the IDS sojourn, including supervisors, HE institutions, the students themselves and/or those who may be planning to begin their PhD journey in a foreign country.<sup>42</sup>

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<sup>42</sup> I would like to thank my friends and colleagues, **Dr Anh Tu Nguyen**, **Leanne Cameron**, and **Aminath Shiyama**, for the ongoing discussions regarding my findings, and for their generous help in shaping my conclusion.

## 9.2 Research objectives and main findings

Table 9.1 outlines the main research objectives and corresponding findings in the current thesis. Overall, the most important finding is in the interactions between contexts and the developing person. Quantitatively, we see evidence in the regression results for the significance of factors at contextual and individual levels, and how the effect of time on well-being varies differently when they interact with both context and individual factors. Qualitatively, there is in-depth evidence for the bi-directionality of the process, specifically in how contexts influence the individual's adaptation and well-being, as well as how the individual previous knowledge and experience can enrich their new contexts. The findings also demonstrated the multi-dimensional (affective, behavioural, cognitive) and multi-level (contextual and individual) nature of the IDS experience. The qualitative analyses used the rich longitudinal interview data to further explore these cross-level interactions, and they found not only that these levels are interrelated in their influence on IDSs' experience, but also that over time, students adopted different strategies depending on their available resources. This was reflected through their self-positioning and their development of other parts of life, including old and new coping mechanisms.

This thesis set out to address the complexities in the IDS experience and how it can potentially change over time. Recognising the importance of contexts, individual, and time, the quantitative and qualitative strands were both necessary to address different aspects of the complexities.

Specifically, the quantitative findings were able to demonstrate the importance of contextual factors in the PWB of students. Alongside this finding, the statistical analysis also allowed more insight into how time interacted with ecological factor (i.e. Discipline of study) and individual factor (i.e. English as a second language). The quantitative strand explored the significance of these dimensions and levels, and indicated that factors across time, individual and contextual levels also interacted to influence adaptation and well-being. Factors such as English language, time on the doctorate, age, and discipline of study were shown to be important to students well-being and adaptation, and their relationship was also interacting across context and individual levels.

The qualitative findings further offer individual perspectives and narratives on IDSs' experience, adding nuances and clarity to the overall picture. Most importantly, the bi-directionality was illustrated through qualitative evidence, which strongly suggests that the interaction between individual and contexts goes in both directions, especially in how change took place both within the individual and in the wider contexts over time.

Table 9.1 Research objectives and main findings

Research objective	Research question	Method of analysis	Main findings
Exploring individual and contextual factors which may be related to well-being and the adaptation of intercultural doctoral students	<ol style="list-style-type: none"> <li>1 Is PWB associated with SCA in IDS experience?</li> <li>2 How are different ecological and individual factors associated with PWB?</li> <li>3 How are different ecological and individual factors associated with SCA?</li> <li>4 How does the effect of time in the PhD on PWB vary by individual/ecological factors?</li> <li>5 How does the effect of time in the PhD on SCA vary by individual/ecological factors?</li> </ol>	<p>Correlation</p> <p>Regression</p> <p>Regression</p> <p>Mixed effect models</p> <p>Mixed effect models</p>	<p>PWB is significantly and positively correlated with SCA.</p> <p>Age has a significantly negative association with PWB. Doctoral time has a significantly positive association with PWB. English language and discipline of study are also significant predictors of PWB.</p> <p>Age has a significantly negative association with SCA.</p> <p>Cross-level interactions were significant for PWB. The effect of doctoral time on PWB varies significantly by English language and discipline of study.</p> <p>No significant results were found.</p>
Combining theoretical lenses at both individual and contextual levels to better understand the developmental process of intercultural doctoral students	<ol style="list-style-type: none"> <li>6 In terms of PWB and SCA aspects, what are the ways in which IDSs interact with their ecologies?</li> </ol>	<p>Longitudinal hybrid thematic analysis</p>	<p>Bi-directionality was evident in the data, and the richest interactions are found between the individual and their microsystems.</p> <p>The larger contexts (e.g. culture, academia) indirectly influence the developmental process through relationships with family, the institutional policy, supervisor, and the PhD community.</p> <p>Over time, to support well-being as an affective dimension, (1) behaviourally, the learning process needs to recognise and incorporate the old and the new knowledge, and (2) cognitively, the identify formation process should be embedded in personal and academic communities.</p>
Reaching an in-depth understanding of the dynamic interplay between the individual, their development process, and their contexts	<ol style="list-style-type: none"> <li>7 Personally and professionally, how do IDSs develop as an individual through these interactions?</li> </ol>	<p>Structural narrative analysis</p>	<p>Resources (academic, social, cultural) play an important role in how students cope with life challenges.</p> <p>Over time, students' development and agency was illustrated particularly through self-positioning, re-focus on a different identity, and new coping mechanisms.</p>
Evaluate the theoretical framework	<p>Research process and findings of both strands</p>		<p>At the contextual levels of development, EST contributes significantly to an in-depth understanding of the development.</p> <p>At the individual level, SCA-T and PWB-M captured academic, socio-cultural, and psychological adaptation. However, validity and reliability of corresponding research instruments need to be reconsidered.</p>

### **9.3 Reflections on the research process: Strengths, limitations, and implications for future research**

#### **9.3.1 Mixed methods research**

In terms of mixed methods research, as discussed in detail in Chapter Four (Methodology), the current study combined numerical questionnaires and semi-structured interviews. This was important due to the complexities of the IDS experience, both in its multi-dimensional and multi-level nature (see Chapters One to Three). As both strands were based on theoretical models built by experts in their own field, they allowed for a more holistic understanding of the developmental process experienced by IDS. They also reflected the strong theoretical and practical foundations of previous literature in designing mixed methods studies. Combined with the application of the theoretical framework in the interviewing data analysis, the data collected through the questionnaires and the semi-structured interviews were able to address overlapping areas (i.e. theoretical elements of IDS experience as a developmental and social process). Based on their own intra- and inter-personal contexts, we also know from the literature that each individual can experience the PhD and the cultural adaptation differently. This leads us to the second strength of the current combination of research methods – the emphasis on contextualised and individual experiences. This was reflected particularly in the data analyses: regression and mixed-effects models (Chapter Five), deductive thematic analysis (Chapter Six), and in-depth analysis of three cases with narrative elements (Chapter Seven).

The quantitative strand allowed for the pursuit of knowledge of the commonalities and patterns experienced by IDSs, particularly how well-being and adaptation may change over time in relation to individual and ecological aspects. At the same time, situating individual narratives within their specific contexts and personal perceptions allowed me to recognise and interpret the possible mechanisms underlying these changes. The contribution made by this thesis is evident in its mixed methodological approach to address the complexities of the IDS experience.

#### **9.3.2 Longitudinal research: Qualitative, quantitative, and mixed methods**

With specific regard to the collection and analysis of longitudinal data, the qualitative strands strongly benefited from the longer length of data collection period, and the theoretically informed and refined design of the semi-structured interviewing method. These included increased rapport with the participants, flexible focus of interviewing stages, data analyses between interviews, and the ability to address contextual and in-depth information.

Secondly, reflections on the strengths and limitations of the longitudinal quantitative strand were discussed in Chapter Five. The longitudinal approach allows the students' experience to be captured as progress instead of one point in time, especially when it comes to both their well-being and adaptation process. This ensures that research on student experience can reflect their developmental process, during which they acquire new knowledge and interact with their ecologies in different personal and professional capacities. In the quantitative strand, patterns in factors associated to students' well-being and adaptation could be observed through the use of questionnaires.

On the other hand, consideration of the main limitations from the quantitative strand is also beneficial for future longitudinal research, specifically in terms of (a) frequency and timing of data collection points, and (b) dropout rate. Firstly, due to the relatively varied length (3-6 years) of different PhD degrees, and the different stages of study that participants were at, combined with the limited time for data collection of the current study, the three time points became arbitrary and could not be mapped to any specific patterns in the PhD for further interpretations and understanding. There was also a lack of information on contextual factors that may have helped in understanding the statistical patterns. Further, not only were the response rates relatively low (N=80 in the first time-point, despite emails being sent to a range of schools and departments in all Russell Group universities), but the dropout rate also became an issue in the second and third time-points, resulting in limits on the statistical analyses. In hindsight, the duration of the data collection may have contributed to dropout, as the questionnaires appeared long.

Future longitudinal research on doctoral experience may benefit further from (a) a longer period of data collection focusing on more specific time points in the PhD, perhaps including pre-arrival and post-graduation; (b) a better balance between shorter but still reliable version of questionnaires; and (c) collecting contextual information through optional open-ended questions. These changes should happen with careful consideration of the research questions to recognise the multi-dimensional and multi-level nature of the phenomenon. This type of research could also be more feasible for research carried out at departmental or institutional levels. If done at a departmental or faculty level, both the frequency and content of questionnaires and/or interviews could also be tailored to milestones specific to each discipline.

The use of longitudinal questionnaires could inform both research and practice to help students keep track of their development and identify areas for individual growth. Both well-being and intercultural adaptation can raise sensitive emotions, so it is strongly recommended that any kind

of implementation is put through a rigorous process of ethical consideration, together with feedback from clinical experts and the student body themselves.

Finally, the current study also has a number of learning points that may be useful to researchers who are interested in combining quantitative and qualitative methods longitudinally. In terms of mixed methods research, there is potential to make use of the [linkage between the quantitative and qualitative strands](#). For example, with the participant's permission, interviews could make references to the interviewee's questionnaire responses. To improve the articulation between quantitative and qualitative findings, the interviews could start with either questions informed by the statistical findings found at that time point, or questions that are based on specific answers that the participant has given to a corresponding PWB or SCA factor and their strategies to address any potential issue identified from the questionnaire response. This means that the qualitative strand could help to interpret any statistical patterns observed in the analyses and will further ensure the coherence between both strands.

#### **9.4 Recommendations: Facilitating well-being and adaptation**

Recommendations are drawn from the current study's findings and main arguments on PhD well-being and adaptation, and they are presented below according to the different stakeholders in students' ecologies: [IDSs](#), [doctoral supervisors](#), and [HE institutions](#). Due to the boundaries of this thesis, recommendations focus on practices that may improve students' experience over time through facilitating their self-growth.

In general, the findings demonstrate the importance of students allowing for time to adjust to their new ecologies at the start of the doctorate. The process of adapting to a new culture and negotiating a position within that culture can be facilitated by [social and professional support systems](#) (which are the context to many flourishing intercultural practices) and strategies that are conscious of balancing between professional development and well-being. In terms of interactions with supervisors, it can be helpful for [students](#) to adjust to and negotiate with their supervisors' style of working and giving feedback, both from experience gained over time and communication with fellow supervisees. Additionally, an awareness of this complexity of adjustments may be beneficial toward strategies adapted by supervisors of IDSs and could inform mechanisms that are introduced into supervision processes. Both expectation management and communication strategy that account for both intellectual expertise and individual growth over time can further help IDSs to acquire additional skills necessary to enacting their agency and overcoming their challenges. Finally, institutional bodies may find benefits in applying effective methods of tracking the

students' development over time, further funding for research on well-being, and addressing the climate of academia by addressing the issue of well-being at wider ecological systems (e.g. staff well-being).

#### **9.4.1 Intercultural doctoral students: Well-being as a developmental process of learning to thrive**

At the core of the recommendation for students themselves is the value of their own background, their previous socio-cultural, educational, professional and personal experiences. This stems from the main finding of this study, which is the interactions between the individual and their contexts, evident through the bi-directionality of the IDS experience. Within this bi-directionality, the recommendations to support well-being as an affective dimension are split into two aspects, (1) behaviourally, the learning process of recognising and incorporating the old and the new knowledge, and (2) cognitively, the identify formation process, in which the individual gradually builds the academic identity into who they are and their practices, specifically through their roles in the academic community.

##### **9.4.1.1 The learning process: Negotiating between the old and the new**

For PhD students who come from outside the UK, there is a pressure to integrate both socially and professionally (Barrie, 2007; Laudel & Gläser, 2008; Ward et al., 2004; Zhou et al., 2008). Yet, the belief that those who come from a different educational system are somehow one-sidedly lacking skillsets (e.g. academic and language skills) is missing the mark (Chapter One). This one-dimensional perspective fails to capture the nature of their challenges, and neither is it recognising students' potential to take action and create changes in their ecologies. In other words, IDSs should be encouraged to (1) apply their relevant expertise and previous skills to enrich their new environments, and (2) learn what are the new skill sets they are expected to obtain.

More effectively, students may find that it is useful to initiate communication with their supervisors from the beginning in terms of their expectations, and conveying their previous experiences, values, and educational practices they are more familiar with. As students and supervisors both have different capacities, the current study found that those with more successful strategies engaged in a process of trial and error over a period of time, and they took into account their supervisors' well-being and changing capacity at different stages. This means that students are encouraged to take initiative within their own capacity to identify their supervisors' styles and



adjust accordingly. This adjustment process encompasses socio-cultural, and psychological dimensions.

As well-being and adaptation are captured as a developmental process in the current study, we were able to observe the way they interact with one another in an in-depth manner. This often takes the form of ongoing skill acquisition through interactions with surrounding environments, and perceived psychological well-being being reinforced or diminished throughout this process. It is recommended for students to maintain some form of self-reflection to ensure an awareness of their well-being over time. The constant pressure of the PhD as well as life events means that different aspects of well-being can fluctuate throughout their journey, and there are many chances for burnout to occur. Moreover, there is evidence in the current study to show that in some cases, participants were able to use the interviews as a form of reflection on their own progress. Their negotiation with the external environments and the internal aspects of well-being is dynamic and can change according to their capacity. Students may gain more from allowing for plenty of time for self-development and self-care. Indeed, the PhD journey has been described as an individual process that can be improved with agency, self-care, and internal reflection (Haynes et al., 2012; Kumar & Cavallaro, 2018; Schmidt & Umans, 2014; Zahniser et al., 2017). While this does not remove the challenges that many IDSs have to face, reflexive approaches could establish early prevention of burnout through timely help-seeking behaviour. As well-being dimensions often are interdependent and can act as a cascade and affect one another, reflexive practices may help to prevent this cascading process. They may also allow students to realise how far they have come and to identify successful strategies that they have developed over time. Beyond initiatives taken by individuals, self-care can also be facilitated by support systems.

#### **9.4.1.2 The identity formation process: Becoming an academic**

Firstly, both PWB and SCA are found to relate to social support (Ward & Kennedy, 1999). The current study's findings further indicated that support from PhD community could take the form of professional structures (e.g. reading groups, proof-reading, mock examinations), as well as more personal forms of friendship and social circles (e.g. cooking and eating with friends, exercising and travelling). In relation to the participants' adaptation strategies, social circles were shown to act as a space within which some could experience their own culture and/or the new culture, as well as rebuild their social circles lost after the international move. On the other hand, professional structures with peers and colleagues provided students with a space for gaining and practicing skills to adapt to their academic sojourn. This was reiterated throughout the thesis, as the construction

of the professional identity through time requires combining old and new knowledge. To gain new knowledge and skills, a large part of this experience can come from belonging to a community with peers. The current findings echoed with previous literature on the important role that PhD communities play in both professional and social support, and the construction of IDSs' professional identity (McAlpine & Amundsen, 2011). Furthermore, this study revealed the nuances in how a strong sense of community can support this construction.

Finally, there is a need to recognise the importance of friends and family as support structures. It is often advised in research literature that family and friends are important to the PhD experience (Ivankova & Stick, 2007; Lovitts, 2001, 2004; Polson, 2003; Protivnak & Foss, 2009), yet in reality, understanding the process of the PhD on top of the difficulties of a intercultural transition is a complex task that family and friends are perhaps unable to comprehend or respond to. Petridis (2015) identifies the greatest predictor of PhD thriving to be the student's sense of community, particularly with respect to both friends/family and departmental colleagues. According to the current study's findings, immediate resources of support can occur through two main manners: through (1) direct forms of social support and (2) indirect support through interacting micro-systems (meso-systems). Both work to compliment the individual's strategies. The current study highlights the importance of participation in professional communities, but also emphasises the reality that other aspects of life do not get put on hold during the PhD. According to Levecque and colleagues (2017), work-family conflict is among the most important predictors of psychological distress among PhD students. This foregrounds the benefits of interactions between two immediate microsystems, as further evidenced by the current study. The findings suggested that interactions between family and peers, whenever possible, provided resources for coping and development. It is important to also note that many IDS parents are in the UK on their own, as their partners often need to maintain financial income for the family. To this end, future research may be interested in family arrangements and personal circumstances as relevant factors for negotiation strategies of IDS parents.

#### **9.4.2 Supervisors: Expectations and communication strategies**

Two main recommendations that would benefit the supervisory relationship are in relation to [expectation management](#) and [communication strategies over time](#), which often go hand in hand. As students arrive in the UK and start their PhD, there are expectations that will change as they start to experience more of the actual contexts (e.g. the UK, the university, academia) and build new relationships (e.g. colleagues, supervisors). As demonstrated by the current findings, this

reshaping of prior expectations is an on-going process of adaptation, during which students' PWB may be influenced by environmental, inter-personal and/or intra-personal factors. Furthermore, depending on their background, international students can have different expectations, needs and behaviours, as well as other factors that can influence their educational experience. For instance, different learning strategies and aims that students have developed from their home country's educational system mean that students will require some time and resources to adjust to the Western/UK HE working styles and expectations (C. Evans & Stevenson, 2010).

#### **9.4.2.1 Expectation management**

So, what can be done to facilitate this expectation management process for a more positive outcome? The current study was able to observe the development of different strategies both regarding the maintenance of workload and inter-personal relationships among the participants. These findings indicated that most of these strategies were built upon both failing and successful negotiations, and they required time as well as resources (new knowledge, new relationships) to master. Over time, the students learned to re-adjust their strategies in accordance to their environments and their own psychological well-being. Students encounter many opportunities for a change in their perception; this change occurs through a process which requires that students to acquire skills and knowledge. This may be accompanied by increased rapport in inter-personal relationships, which could help to build professional identity and self-confidence. In terms of psychological well-being, this process highlights components such as environmental mastery, personal growth, autonomy, and positive relations. In this sense, supervisors may find benefits in introducing the students to the new environment's expectations early on in their working relationship, together with their own expectations in terms of PhD work. According to Brown (2008), students and academic staff members often have different expectations specific to the roles of the supervisor and the student. These expectations can also revolve around something more specific, such as the frequency and structure of tutorials, how to approach the supervisors, and how to express the need for help (Channell, 1990; Cortazzi & Jin, 1997). Similarly, the current study found that with time, students began to learn about their supervisors' ways of communication, styles of giving feedback, as they tried to build new working relationships with their supervisors and avoid intercultural miscommunications. This learning encompasses both individual and contextual levels, where the negotiation requires students to gain an understanding of the supervisors as individuals, as well as the cultural/institutional contexts in which the interactions occur.

Furthermore, research has found that there are several aspects that have a significantly positive influence on the doctoral journey, including opportunities and support for the student to disseminate their research, feedback from experts, and interaction with other researchers (Corcelles et al., 2019). Expectation management is an important initial step as well as an ongoing process, as every supervisor and institution will have different capacities regarding these aspects. Its purpose is for both students and supervisors to make informed adjustments to each other's expectations (Channell, 1990). The findings from the current study not only reinforce but also shed light on the need for early discussion of working strategies and expectations between supervisors and students.

#### **9.4.2.2 Communication strategies over time**

On top of this process of managing expectations, the new environments to which students will be adjusting consist of both academia (the PhD process) and intercultural knowledge and practices. For academic skills, it is important to recognise the agency and contributions that IDSs bring to academic communities and HE institutions, as they contribute to both the scientific endeavour and their professional communities. For instance, while critical thinking is one of the most important skillsets through which students could demonstrate their own thought process and research expertise in academia, the literature on international students' experience has ironically been criticised for the popular deficit view of other countries' non-critical educational models. This can be seen as an inappropriate and culturally imperialist view (Chalmers & Volet, 1997) that takes the agency away from international students, by assuming that they came as a deficit version and therefore must master a new skill to fit in the new educational system. As a result, many researchers in the field have been advocating for approaches that would emphasise the agency of international students, and for educational policy and practices that can complement both Western academic values and students' own skills and resources from their respective educational backgrounds (Cadman, 2000; Tran & Vu, 2018).

To reiterate the line of argument in the current thesis, this perspective encourages researchers to shift their focus from 'mastery' towards 'access' (Cadman, 2000). To reiterate the line of argument in the current thesis, this perspective encourages researchers to shift their focus from 'mastery' towards 'access' (Cadman, 2000), taking into account both the new skills that students need to accumulate, and allowing for opportunities in which they can apply their previous skills to the new academic learning environment (Cadman, 2000). We should collect data regarding students' skill acquisition, but we also need to capture their well-being and self-development. In

terms of practical application, this new angle indicates that approaches that recognise students' previous knowledge, expertise, and skills may help to strengthen supervisory strategies to support students' agency. Such an approach moves beyond simply acknowledging their need for new skill sets. This also allows supervisors to build a supportive environment in which students can learn to balance their professional development and their well-being.

In terms of intercultural adaptation, as previously explored in Chapter One, interpersonal communication in the supervisory relationship is one of the many areas in which problems can arise. *Culture learning theory* posits that human interactions and communication occur as a “mutually skilled” (McInerney & King, 2012, p. 211) social performance between individuals, and so students begin to follow specific patterns of communication to avoid misunderstandings. In the case of intercultural supervision, these patterns of communication can misalign and interrupt effective understanding (Argyle & Kendon, 1967; Trower et al., 1978; Xu, 2017). This has been reflected in the current study through instances in which participants attempted to dissect and interpret their supervisors' response or action, and through the extreme importance students associate with their supervisors' feedback on their work. At the same time, the current study also provided evidence to show that as more time passed, cultural learning – i.e. acquisition of cultural skills and knowledge (Ward & Kennedy, 1999) – also allowed for changes to the students' understanding and interpretation of their supervisors' communication and feedback, thus informing their evolving negotiation strategies. With a focus on this process of change, we could further see the importance of managing expectations and establishing a communication system between supervisors and students (Xu, 2017).

So, how can this knowledge facilitate supervisor-IDS communication? The current qualitative findings indicated that beyond personal communication styles, cultural conventions and norms, students placed more focus on supervisors' ability to support their *academic writing* and *professional competence*. These aspects were also among critical points for impact on their well-being. This has been reflected in the literature, where PhD supervisors are described as ‘writing teachers’ who facilitate students ‘discipline specific discourse practices’ (Paré, 2011) through their feedback, comments, conversations and in-text track changes (Kamler & Thomson, 2014). For the participants in the current study, the focus was placed on both *content* and *delivery* of supervisors' feedback on the quality of their writing, in both written and verbal forms. As evident in instances where the participants thoroughly interpreted supervisors' written feedback and sought to understand their supervisors' verbal and facial cues during meetings, the aim of their interpretation was mainly to decipher supervisors' critique and assessment of their work. These interpretations – whether accurate, incomplete, or mistaken – were in some cases translated by

students into perception of their own competence and, as a result, was shown to contribute toward several aspects of their psychological well-being. In light of this, the findings provided evidence for equal importance of both delivery and content of feedback (Bing-You, Paterson, & Levine, 1997). They also established a deeper understanding of how IDSs interact with this important aspect of their PhD. In particular, the delivery of feedback also contributes toward students' interpretation of its content. For instance, effective delivery of feedback often accommodates both dimensions of intellectual expertise and guidance for growth (Hockey, 1994).

So, while PhD supervision is institutional, disciplinary-specific, and individual, dynamic strategies (specifically those that recognise students' changing needs and progress over time) have yielded effective results (Wright, 1992). These strategies can also facilitate a wide range of supervisory styles. Highly successful supervision is often 'tailored' to the individual students, as opposed to a "one-size-fits-all model" (Nulty et al., 2009). This dynamic approach also stresses the recognition of development as a process that happens over the course of the PhD. Similarly, changes over time also affect the nature and interpretation of communication between supervisors and PhD students (Gunnarsson et al., 2013). Overall, the current findings further suggested that (1) PhD students valued both the content and delivery of critique and feedback of their academic work and competence, and that (2) dynamic and individual supervisory guidance that takes into account students' professional growth over time is often crucial to students' development of effective communication strategies. Essentially, the thesis revealed the process of learning over time further supports students to reframe and re-interpret communication between them and their supervisor.

#### **9.4.3 UK HE institutions: An infrastructure that supports well-being**

As reflected in the qualitative findings, academia as a culture and overarching context is a commonality among how the participants made sense of their triumphs and challenges. So how can this inform the policies and practices of HE institutions?

Right from the beginning, one of the principal aims of the current study was to go beyond viewing IDSs as a static, deficit, and marginalised homogeneous group previously conceptualised as devoid of agency. This aim was achieved specifically through (1) [quantitatively and qualitatively studying their experience during the doctorate](#), and (2) [learning about the development of their adaptation strategies – socioculturally, professionally, and personally](#). As suggested by the qualitative data, students will attempt to overcome their challenges in their individual ways and by means of their own circumstances. Even though this is a personal and complex process, there are

practices that institutional bodies can implement to further support their PhD students through these challenges. Taking into account both the well-being and adaptation dimensions of this complex experience, current and new strategies can direct more attention to opportunities that recognise students' cultural and professional contributions to the institution and community, where both domestic and non-domestic students can gain access to the best practices among their diverse community.

With regard to the adaptation of IDSs, the findings illustrated the unique circumstances of this demographic: There is not only another layer of obstacles in their experience (quantitative), but there is also a qualitative difference in the nature of their struggles. In other words, the challenge goes beyond simply improving one's language proficiency, or expecting one to adapt to the new ecologies over time. Adding to the complexity of the experience, the analyses showed that students have their own adaptation strategies, and while certain factors such as language proficiency and other adaptive skills are more important in facilitating or hindering these strategies, each student has their own well-being and adaptation trajectory. Furthermore, HE institutions may also benefit from research-led strategies that are built from longitudinal research into PhD student well-being, with the aims to understand students' development over time, and to evaluate current and new approaches that may facilitate PhD students' professional development.

In relation to well-being, it is important to provide PhD students – especially those coming from another cultural background – with some form of awareness on the process of the PhD in order to avoid normalisation of common problems such as stress, fatigue, and burnout. This should go beyond initial talks in the welcoming/orientation week, when students are typically bombarded with new information. Well-being support should be further implemented as an on-going element throughout the training programme alongside research and professional skills. Issues like not being able to sleep at night, having bad dreams, experiencing heartburn, having depressed thoughts, or work-family guilt should not be ignored nor normalised, even if they may be common to students doing a PhD. Despite the lack of support resources in academia, and the reality that academic staff members are already tasked with a countless amount of responsibilities, these institutions need to be pushed – and, indeed, push themselves – for a culture change to address the issue of well-being. HE institutions should not assume that PhD students – particularly those from another culture – will recognize and address (rather than normalise) unhealthy signs. This could relate to (1) [further opportunities and platforms for diverse communities to develop](#), and (2) [building an institutional climate that promotes well-being of both students and staff](#).

With the application of Bronfenbrenner's EST to the analysis, the current study was further able to identify the importance of the bigger contexts (exo- and macro- systems) to students' well-being and overall experience. The individual's development, while agentic, is also characterised by their contexts. One such context is academia as an overarching culture, which not only affects the student's experience directly, but also influences their well-being indirectly through the well-being of their supervisors, and through their departmental climate. In other words, while the current focus on specific readjustments to the immediate training of PhD students is necessary, we cannot simply expect to address the roots of the well-being issue without taking into account the stressful workload on staff members as a whole and PhD supervisors in particular. While this was not my main focus, the current study's findings recognised students' awareness of their supervisors' well-being, and how this aspect could play an integral part in students' adaptation and negotiation strategies. This implies several possibilities for research into HE well-being. Re-shaping the culture of academia is an extremely ambitious aim, but no matter the feasibility, there is a need for researchers to raise concern with well-being in academia. This thesis addresses this goal by reflecting the complexity of IDSs' experience in close relation to their surrounding environments and emphasising the need for an overarching architecture that supports necessary changes for the sake of well-being.

## **9.5 Final remarks**

The current thesis set out to explore the intercultural experience of non-domestic PhD students in the UK, acknowledging the complexities of this experience. In order to address these complexities, the proposed theoretical framework combined an eco-developmental lens with models of well-being and adaptation, allowing for the process of human development to be studied at both individual and contextual levels. The depth of the findings demonstrated that this theoretical framework had contributed to our understanding of how students develop to negotiate and adapt to their old and new environments, while attempting to maintain their own identities and values. Using a longitudinal mixed method design, the study also contributed towards informing future research. This research has addressed its goals to reimagine IDSs' experience and sojourn through positioning the student and their journey in eco-developmental psychology. While the experience of being an intercultural doctoral student is undoubtedly complex and challenging, many students use it as an opportunity for personal and professional growth and also to reshape their contexts. In demonstrating such, this thesis has contributed to the re-conceptualising of the



doctoral student experience and their journey, contributing to future research that further explores these complexities.

There is a reason why the doctoral experience is often referred to as a journey. From the outside, or with hindsight, many understand that it is a degree that can last from three to nearly eight years, with ups and downs, and its own unique formats and pathways. Yet, for students who are in the middle of their individual journey, facing one challenge after another, it may seem as if each moment – and its challenges – was there to stay. However, this thesis argues that the complex and multi-dimensional experience of IDSs is part of a developmental process, and their experience and development can be studied through focusing on the interactions at individual, ecological, and process levels. To this end, the thesis has demonstrated that

- (1) **The doctorate is a multi-dimensional, multi-level and bi-directional process of development for intercultural students:** In this thesis, the case is made for a conceptualisation that captures the affective, behavioural, and cognitive dimensions of the IDS experience. Through the doctorate, their development is related to dimensions of learning and thriving, achieved through bi-directional interactions between individual and contextual levels. Over time, students will develop as an individual through the process of learning new knowledge and skills in order to better negotiate within the frame of their personal values, their expectations, and their available resources. Change also happens in the other direction as the individual becomes part of the larger communities and combines their previous and current experiences. Well-being (affective), identity formation (cognitive) and learning (behavioural) are distinct but overlapping dimensions of this process.
- (2) **Context matters:** Due to the importance of ecologies to human development, the HE sector plays an important role to address the well-being crisis by advancing an infrastructure that can support both professional and personal development. IDSs undergo intra-personal changes which reflect their agency as they combine previous resources with those available in that new, HE sector context. In contrast to assumptions of deficiency, their self-development requires supportive ecologies, and thus IDSs would benefit greatly from an environment which respects and fosters individual contributions.

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# APPENDICES

Appendix I.	School of Education Ethics Application.....	284
Appendix II.	Participant information sheet (Online questionnaire) .....	287
Appendix III.	Participant information sheet (Interviews) .....	290
Appendix IV.	List of contacted Russell Group universities.....	293
Appendix V.	Email to Russel Group school/departments .....	294
Appendix VI.	Questionnaire (Demographic, PWB, SCA) .....	295
Appendix VII.	Interview schedule.....	303
Appendix VIII.	Thematic templates.....	305
Appendix IX.	Exemplar: Initial contextual mapping for each participant .....	307
Appendix X.	Exemplar: Action sequence diagrams .....	308

# Appendix I.

## School of Education

### Ethics Application

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**Name(s):** Trang Mai Tran

**Date:** 18/04/2016

**Proposed research project:** The cross-cultural transition of EU/international doctoral students: A longitudinal study on psychological wellbeing and socio-cultural adaptation

**Proposed funder(s):**

**Discussant for the ethics meeting:** Narasimham Peri

**Name of supervisors:** Dr Jo Rose, Dr Frances Giampapa

**Has your supervisor seen this submitted draft of your ethics application?** Yes

**Please include an outline of the project or append a short (1 page) summary:**

The current study hopes to look at the psychological well-being (PWB) of non-UK doctoral students as well as their sociocultural adaptation (SCA) in a longitudinal manner (three time points over a period of 9 months September 2016-May 17).

Using mixed methods approach, the study will first require the participants to complete the SCAS-R questionnaire (Searle & Ward, 1990; Ward & Kennedy, 1996, Wilson, 2013). Over time, the study is also interested in looking at the developments in the scores of the different constructs during cross-cultural adaptation. The questionnaires are done on Bristol Online Survey.

The qualitative part of the research includes two strands of data collection. Firstly, the participants will be asked at the end of the questionnaire to provide the researcher with their contact details if they are happy to be contacted for the next SCAS-R questionnaire, and to join an interview with the researcher. The interviews will be semi-structured, and partly based on the questionnaires. A copy of the visual prompts and questions is included with the application. Secondly, they will also be asked if they would be happy to keep an electronic journal (Wordpress blog, account opened and maintained by the researcher) until May 2017. The participants are encouraged to write or include any form of media in the entries, which will be kept private and can only be seen by the author and the researcher. A list of prompts and a sample entry will be provided, and the participant will be encouraged to reach a minimum amount of entries per month (e.g. two entries per month), but this is not compulsory. To keep the participants interested in the

journal, discussion in the comments section will be utilised. New lists of keywords will be updated every month to keep the participants engaged with the journal.

The questionnaires and interviews will happen at three instances over a period of 9 months, depending on the availability of the participants and researcher. The sample will include non-UK students who are on a doctoral programme at a UK university, regardless of their year group. A longitudinal approach is proposed in order to observe the change in the participants' cross-cultural adaptation, specifically in terms of their SCA. In turn, if there is a negative or positive change, further details can be pursued using qualitative data. Thus, an overall picture can be obtained without losing the in-depth details running under the surface.

For the three parts of the study (questionnaires, interviews, journals), each part will have its own information sheet and consent form. This is due to the sensitive nature of data regarding psychological and mental health. The information sheets will explain to detail what the participants will be asked to perform, as well as making sure that the participants fully understand their rights, including the right to withdraw without any penalty. The Participant Information Sheet is included with the application.

### **Ethical issues discussed and decisions taken**

#### **Researcher access/ exit**

At this point, I have not made any contact with the gatekeepers (head of PhD programmes at different universities/departments, Postgraduate/doctoral networks, doctoral colleges etc.). A letter to be sent to these parties has been drafted, explaining the research and how it could benefit both the institutions and its students. As the participants will click on the link to view the participant information sheet and consent form, I will only gain access to their contact details if they decide to provide them to me together with their questionnaire submission. In terms of research exit, due to its longitudinal element, I am highly aware of a possible dependency developed between the researcher and participant in this particular study. The information sheet has been updated to include the role of the researchers, and what will happen once the data collection is completed.

#### **Information given to participants (Complaints procedure, Anonymity/confidentiality, Information on how the data will be stored and transferred)**

The discussion adds more items to the information sheet, especially how the data will be kept confidential and anonymous during data collection, analysis, and storage. Specifically, all names will be switched by numbers in the data, and a separate encrypted file which stores the names and

numbers will be stored separately. Clarification on the only instance in which the research has the responsibility to reveal information (when the participant is believed to be a serious risk to themselves or another person) is also added. Complaints procedures, i.e. formal contact information of the researcher as well as the supervisors, are provided.

### **Data collection/Data analysis/Safety and well-being of participants/researchers**

The blog may contain photos or mentions of other individuals, which will not be analysed nor shared in any way. The blog guidelines will include a request that any faces or identifiable information belonging to other individuals are to be blurred or anonymised.

As a result of the discussion, more thinking was given to the location of the interviews, and moreover, the impact the discussion and its topic can have on both the participant and the researchers. In addressing the impacts on the participants' wellbeing, I have made sure to stress in the information sheet that the participant is in no way required to answer all questions, and they can ask to pause/stop data collection, to withdraw parts of the data or to withdraw completely. It was also made clear to the participants that the researcher does not have the professional capacity to provide any formal form of help or emotional support, but I will try my best to signpost them to appropriate sources of professional support whenever possible. I am also keeping a journal of my wellbeing, and will immediately report to my supervisors if I believe anything has gone wrong in the research, or there has been a significant impact on my wellbeing as a direct/indirect result of the study.

The researcher will maintain an interview schedule, which will be shared with the supervisor for safety, and the researcher will have a mobile phone at all time during the interviews.

### **Feedback**

In order to gain more research access, I also proposed to promise the participants with general feedback after each instances of data collection on how the whole group is doing in terms of their adaptation. Furthermore, at the end of the research, where applicable, I am going to write a short feedback on the relevant findings from the study to the universities/departments that have offered help with research access, and all information will be anonymised to make sure nobody or no organisation is recognisable.

## Appendix II.

# Participant information sheet (Online questionnaire)

---

You are being invited to take part in a research project. Here is some information to help you decide whether or not to take part. Please take the time to read the following information carefully, and please inform the researcher if there is anything you do not understand or if you would like more information on any aspect of the project.

### **What is the purpose of the study?**

This study wants to look at your **psychological wellbeing and sociocultural adaptation during your cross-cultural transition as an EU/international doctoral student in the UK**. For the purpose of this study, you will be asked to complete an online questionnaire on your experience, in the interest of the topics above. Due to the longitudinal of this study, it is hoped that you can agree to complete the same questionnaire at three instances over the period of one academic year. The three instances are September 2016, January 2017, and April 2017.

### **What are the benefits for becoming a participant?**

The study offers an opportunity to learn more about your own wellbeing during one academic year of doctoral work (September 2016 – May 2017) in the UK. The surveys you are going to complete look at both your psychological wellbeing and sociocultural adaptation, which break down the two concepts into more recognisable and manageable items. As a result, upon the completion of the surveys at three different points in time, you can systematically keep track of your development and wellbeing during your first year of your doctoral research.

### **Do I have to take part?**

No, taking part is entirely voluntary. It is up to you to decide whether or not to take part. If you do decide to take part you will be asked to sign a consent form and give you a copy of this information sheet and the consent form to keep. If you decide to take part you are still free to withdraw at any time without any penalty. If you decide not to take part you do not have to give a reason, there will be no penalty involved.

### **What will happen to me?**

You will be asked to complete an online questionnaire based on your experience studying and living in the UK as a doctoral researcher. This will take you no more than 30 minutes to complete. Upon completion, you will be asked for your contact details if you are interested in joining a one-on-one interview, which will last for approximately 30-45 minutes with the researcher of this study. The interviews are semi-structured, and the discussion will begin with two visual prompts, as opposed to using a prepared list of questions. You are under no obligations to answer all the questions in the surveys as well as in the interviews.

**Anonymity and Confidentiality – Who will be able to see my given information?**

The data from the surveys and all information related to you will be stored in a secured and password protected computer account in accordance to the University of Bristol ethical codes, and each file will be given a corresponding number instead of your real name. All results will be anonymised and it will not be possible to identify individual participant's data. Any names mentioned will be changed to ensure anonymity. It is anticipated that the results of this study will be written up as a formal report, but all the identifiable data will be altered or removed in order to protect your identity.

**What are my rights as a participant?**

You also retain the **right to withdraw from the study at any time** during the interview, and also after surveys have been completed. However, the completion of the report will be August 2018, and it would be advised that any request for withdrawal can only be possible before 01 July 2018.

Upon completing the survey, you will also be given a briefing in which the full purpose of the study will be explained in details. At this point you will also be given the opportunity to withdraw any given information from being used as part of this study. I would like to stress that you will not be judged in any way on any of the information you choose to disclose, and I would ask you to be as honest as possible.

This study is conducted in accordance with University of Bristol and Departmental ethics guidelines. Your rights as a participant, including the right to withdraw at any point without penalty are ensured.

**What is the role of the researcher?**

The researcher of this study will be maintaining contact with you through the contact details you have provided (if you agree to take part in the research). If you agree to join the interviews and/or keep an online journal, the researcher will also be engaging in a exploratory discussion with you regarding the information you choose to share. It is, however, beyond the researcher's professional capability to offer any formal support regarding your wellbeing. The researcher will

try their best to signpost you to any available sources of support whenever appropriate, but please remain assured that your information and identity will not be revealed at any point without your explicit consent. There are certain circumstances where the researcher would be required to disclose information about you to someone else. This is extremely rare and would only happen if it is strongly believe that you may be a risk to yourself or another individual, and are not capable of making a rational decision yourself, or if it is required to do so by law.

Upon completion of data collection (May 2017), the researcher will only contact you in case there is any questions regarding the data you have shared. It is important that the researcher maintains a respectful and confidential manner towards your data.

**What do I do now?**

If you have any questions please feel free to ask them now.

If, after reading this information, you decide to take part in the study, you will be asked to sign a consent form to confirm this. You will be given this information sheet to keep so that you can contact the researcher if you have any further questions at any time.

**Contacts for further information:**

**Trang Tran** (trang.mai.tran@bris.ac.uk)  
PhD researcher

The supervisors in charge of this project are

**Dr Jo Rose** (Jo.Rose@bris.ac.uk)

**Dr Frances Giampapa** (Frances.Giampapa@bristol.ac.uk)

Graduate School of Education

University of Bristol

**University of Bristol student counselling service**

3rd Floor, Hampton House, St. Michael's Hill, Cotham, Bristol, BS6 6AU

<http://www.bristol.ac.uk/student-counselling/>



# Appendix III.

## Participant information sheet (Interviews)

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You are being invited to take part in a research project. Here is some information to help you decide whether or not to take part. Please take the time to read the following information carefully, and please inform the researcher if there is anything you do not understand or if you would like more information on any aspect of the project.

### 1. What is the purpose of the study?

This study aims to understand your **psychological well-being during your sojourn as an EU/international doctoral student in the UK**. You are being invited to join an interview with the researcher of the study. Due to the longitudinal nature of this study, we hope that you will also agree to take part in further follow up interviews at two other instances over a period of one year. We appreciate that you are extremely busy and your participation in the interviewing stage is highly appreciated.

### 2. What are the benefits of taking part in this study?

The study offers an opportunity to reflect on your own cross-cultural experience and well-being during a period of one year of your doctoral work in the UK. The questionnaire you have completed looks at both your psychological well-being and sociocultural adaptation, which breaks down the two concepts into more recognisable and manageable items. The interviews will help the study to further understand your well-being and your adaptation to life in the UK in greater depths. As a result, upon the completion of the questionnaire and interviews at three different points in time, you can systematically keep track of your development and well-being during your doctoral research.

### 3. Do I have to take part in the study?

No, taking part is entirely voluntary. It is up to you to decide whether or not to take part. If you do decide to take part, you will be asked to sign a consent form and give you a copy of this information sheet and the consent form to keep. After giving your consent, you are still free to withdraw at any time without any penalty. If you decide not to take part you do not have to give a reason, there will be no penalty involved.

### 4. If I agree to become a participant, what will happen next?

You will be asked a series of questions based on your experience of studying and living in the UK as a doctoral researcher. This will take you no more than one hour. You are under no obligations to answer all the questions in the interview, so if you feel uncomfortable to answer any question, please let the interviewer know and the interview will move on, and you will not be asked for a reason. The interview will be **audio recorded**, and will be transcribed. In conducting the research and handling collected data, the project will comply with **University of Bristol Data Protection Guidance**. This will mean that your contributions to this research project will be

recorded, handled and transferred securely using encrypted devices. In reporting results and findings of the research project, the researcher will take care to ensure that **no individual student will be identifiable**. We may use quotes or examples from participants' responses but these will be carefully selected to ensure that it is impossible to identify students from the examples.

There are certain circumstances where we would be required to disclose information about you to someone else. This is extremely rare and would only happen if we strongly believe that you may be a risk to yourself or to another individual, and may not be capable of making a rational decision yourself, or if we are required to do so by law. Please note that the transcription of your own interviews is available to be sent to you upon request.

#### **5. Anonymity and Confidentiality – Who will be able to see my given information?**

The data from the surveys and all information related to you will be stored in a secured and password protected computer account in accordance to the University of Bristol ethical codes, and each file will be given a corresponding number/pseudonym instead of your real name. All results will be anonymised, and any names mentioned will be changed or omitted to ensure anonymity. It is anticipated that the results of this study will be written up as a formal report and publications, and all care will be taken to remove all the identifiable data, either by altering or removing them in order to protect your identity.

#### **6. What are my rights as a participant?**

You also retain the right to withdraw from the study at any time during the interview, and also after the questionnaires have been completed. You will also be given the opportunity to withdraw any given information from being used as part of this study. I would like to stress that you will not be judged in any way on any of the information you choose to disclose, and I would ask you to be as honest as possible. Information provided by you via the questionnaire can be withdrawn from the project, provided that you have included contact details in your submission. If no contact details have been provided, your submission will not be individually identifiable and so it will not be possible for it to be identified and withdrawn.

If you would like to withdraw parts or all of your data, please contact the researcher in charge **before 01 June 2018**, before the findings are submitted and published.

This study is conducted in accordance with University of Bristol and Departmental ethics guidelines. Your rights as a participant, including the right to withdraw at any point without penalty are ensured.

#### **7. What do I do now?**

If you have any questions, please feel free to ask them now.

If, after reading this information, you decide to take part in the study, you will be asked to sign a consent form to confirm this. You will be given this information sheet to keep so that you can contact the researcher if you have any further questions at any time.

Before proceeding, please indicate that you have read and understood the participant information and, particularly, that you understand that:

- **The researchers involved in the project will not be able to provide you with advice or guidance about your well-being.**

- **By signing this form, you will provide the researchers with your consent to collect and analyse the data you choose to share, as well as to present and publish findings from the data you provide.**
- **You have read and understood your rights as a participant, including the right to withdraw parts or all of your data before 01 June 2018.**
- **You have been offered opportunities to clarify any questions you may have about the research.**

Name (please print):

Signature:

Date:

**8. Who do I contact for further questions?**

Contacts for further information and formal complaints:	Contacts for further support:
<p style="text-align: center;"><b>Main researcher</b></p> <p><b>Trang Mai Tran</b> trang.mai.tran@bris.ac.uk</p> <p style="text-align: center;"><b>Formal complaints</b></p> <p><b>Dr Jo Rose</b> Jo.Rose@bris.ac.uk</p> <p><b>Dr Frances Giampapa</b> Frances.Giampapa@bristol.ac.uk</p> <p>Graduate School of Education University of Bristol</p>	<p><b>University of Bristol Counselling Service</b> 0117 954 6655 <a href="http://www.bristol.ac.uk/student-counselling/">http://www.bristol.ac.uk/student-counselling/</a></p> <p><b>Bristol MindLine (Mental Health Support)</b> 0808 808 0330</p> <p><b>Samaritans UK (Mental Health Support)</b> 116 123 <a href="http://www.samaritans.org/">http://www.samaritans.org/</a></p>

## Appendix IV. List of contacted Russell Group universities

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University of Birmingham  
University of Bristol  
University of Cambridge  
Cardiff University  
Durham University  
University of Edinburgh  
University of Exeter  
University of Glasgow  
Imperial College London  
King's College London  
University of Leeds  
University of Liverpool  
London School of Economics and Political Science  
University of Manchester  
Newcastle University  
University of Nottingham  
University of Oxford  
Queen Mary University of London  
Queen's University Belfast  
University of Sheffield  
University of Southampton  
University College London  
University of Warwick  
University of York

## Appendix V.

# Email to Russel Group school/departments

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Dear Sir/Madam,

I am a PhD student at the Graduate School of Education, University of Bristol, who is researching into the **Cross-cultural Wellbeing of EU/International Doctoral Students at UK Universities**. I would be incredibly grateful if I could receive your help to forward the information on the study to your Doctoral community.

The link for more information and the questionnaire is as follows,

<https://union.onlinesurveys.ac.uk/psychological-wellbeing-of-internationaleu-doctoral-students>

For any further information, please kindly contact me. Thank you so much in advance.

Trang Tran

PhD student

Graduate School of Education  
University of Bristol  
35 Berkeley Square  
Bristol BS8 1JA

# Appendix VI.

## Questionnaire

### (Demographic, PWB, SCA)

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#### 1. Demographic questions (Wave 1 only)

- a) Please enter a nickname that you want to use to identify your questionnaire?  
(Nickname, letters, number, etc.)
- b) Please enter your email address if you would like to be contacted for the next waves.
- c) Approximately when did you start your doctorate? (dd/mm/yyyy)
- d) What is today's date? (The date you are completing this questionnaire)
- e) What is the estimated percentage of your time in the UK during your doctoral degree so far?
- f) Which country are you from?
- g) What is your gender?
- h) Is English your first or additional language?
- i) Which category of students do you identify with? (Home, EU, or International)
- j) What is your discipline of study for the doctorate?
- k) At which university are you carrying out your doctorate?

#### 2. PWB scales (Ryff, 1989)

- (+) indicates positively scored items
- (-) indicates negatively scored items

##### **AUTONOMY**

Definition:

High Scorer: Is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards.

Low Scorer: Is concerned about the expectations and important decisions; conforms to social pressures to think and act evaluations of others; relies on judgements of others to make in certain ways.

- (-) 1. Sometimes I change the way I act or think to be more like those around me.
- (+) [2.] I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.
- (+) [3.] My decisions are not usually influenced by what everyone else is doing.
- (-) [4.] I tend to worry about what other people think of me.
- (+) [5.] Being happy with myself is more important to me than having others approve of me.
- (-) [6.] *I tend to be influenced by people with strong opinions.*
- (+) 7. People rarely talk me into doing things I don't want to do.
- (-) 8. It is more important to me to "fit in" with others than to stand alone on my principles.
- (+) [9.] *I have confidence in my opinions, even if they are contrary to the general consensus.*
- (-) [10.] It's difficult for me to voice my own opinions on controversial matters.
- (-) [11.] I often change my mind about decisions if my friends or family disagree.
- (+) 12. I am not the kind of person who gives in to social pressures to think or act in certain ways.
- (-) 13. I am concerned about how other people evaluate the choices I have made in my life.
- (+) [14.] *I judge myself by what I think is important, not by the values of what others think is important.*

## ENVIRONMENTAL MASTERY

Definition: High Scorer: Has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values.

Low Scorer: Has difficulty managing everyday affairs; feels unable to change or improve surrounding context; is unaware of surrounding opportunities; lacks sense of control over external world.

- (+) [1.] *In general, I feel I am in charge of the situation in which I live.*
- (-) [2.] *The demands of everyday life often get me down.*
- (-) [3.] I do not fit very well with the people and the community around me.
- (+) [4.] *I am quite good at managing the many responsibilities of my daily life.*
- (-) [5.] I often feel overwhelmed by my responsibilities.
- (+) 6. If I were unhappy with my living situation, I would take effective steps to change it.
- (+) [7.] I generally do a good job of taking care of my personal finances and affairs.
- (-) 8. I find it stressful that I can't keep up with all of the things I have to do each day.
- (+) [9.] I am good at juggling my time so that I can fit everything in that needs to get done.
- (+) 10. My daily life is busy, but I derive a sense of satisfaction from keeping up with everything.
- (-) 11. I get frustrated when trying to plan my daily activities because I never accomplish the things I set out to do.
- (+) 12. My efforts to find the kinds of activities and relationships that I need have been quite successful.
- (-) [13.] I have difficulty arranging my life in a way that is satisfying to me.
- (+) [14.] I have been able to build a home and a lifestyle for myself that is much to my liking.



## **PERSONAL GROWTH**

Definition:

High Scorer: Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing one's potential; sees improvement in self and behavior over time; is changing in ways that reflect more self knowledge and effectiveness.

Low Scorer: Has a sense of personal stagnation; lacks sense of improvement or expansion over time; feels bored and uninterested with life; feels unable to develop new attitudes or behaviors.

- (-) [1.] I am not interested in activities that will expand my horizons.
- (+) 2. In general, I feel that I continue to learn more about myself as time goes by.
- (+) 3. I am the kind of person who likes to give new things a try.
- (-) [4.] I don't want to try new ways of doing things--my life is fine the way it is.
- (+) [5.] *I think it is important to have new experiences that challenge how you think about yourself and the world.*
- (-) [6.] When I think about it, I haven't really improved much as a person over the years.
- (+) 7. In my view, people of every age are able to continue growing and developing.
- (+) 8. With time, I have gained a lot of insight about life that has made me a stronger, more capable person.
- (+) [9.] I have the sense that I have developed a lot as a person over time.
- (-) [10.] I do not enjoy being in new situations that require me to change my old familiar ways of doing things.
- (+) [11.] *For me, life has been a continuous process of learning, changing, and growth.*
- (+) 12. I enjoy seeing how my views have changed and matured over the years.
- (-) [13.] *I gave up trying to make big improvements or changes in my life a long time ago.*
- (-) [14.] There is truth to the saying you can't teach an old dog new tricks.

## **POSITIVE RELATIONS WITH OTHERS**

Definition:

High Scorer: Has warm satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships.

Low Scorer: Has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships; not willing to make compromises to sustain important ties with others.

- (+) [1.] Most people see me as loving and affectionate.
- (-) [2.] *Maintaining close relationships has been difficult and frustrating for me*
- (-) [3.] I often feel lonely because I have few close friends with whom to share my concerns.
- (+) [4.] I enjoy personal and mutual conversations with family members or friends.
- (+) 5. It is important to me to be a good listener when close friends talk to me about their problems.
- (-) [6.] I don't have many people who want to listen when I need to talk.
- (+) 7. I feel like I get a lot out of my friendships.
- (-) [8.] It seems to me that most other people have more friends than I do.
- (+) [9.] *People would describe me as a giving person, willing to share my time with others.*
- (-) [10.] *I have not experienced many warm and trusting relationships with others.*
- (-) 11. I often feel like I'm on the outside looking in when it comes to friendships.
- (+) [12.] I know that I can trust my friends, and they know they can trust me.
- (-) 13. I find it difficult to really open up when I talk with others.
- (+) 14. My friends and I sympathize with each other's problems.

## **PURPOSE IN LIFE**

Definition:

High Scorer: Has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living.

Low Scorer: Lacks a sense of meaning in life; has few goals of aims, lacks sense of direction; does not see purpose of past life; has no outlook or beliefs that give life meaning.

(+) 1. I feel good when I think of what I've done in the past and what I hope to do in the future.

(-) [2.] *I live life one day at a time and don't really think about the future.*

(-) [3.] I tend to focus on the present, because the future nearly always brings me problems.

(+) 4. I have a sense of direction and purpose in life.

(-) [5.] My daily activities often seem trivial and unimportant to me.

(-) [6.] I don't have a good sense of what it is I'm trying to accomplish in life.

(-) [7.] I used to set goals for myself, but that now seems like a waste of time.

(+) [8.] I enjoy making plans for the future and working to make them a reality.

(+) [9.] I am an active person in carrying out the plans I set for myself.

(+) [10.] *Some people wander aimlessly through life, but I am not one of them.*

(-) [11.] *I sometimes feel as if I've done all there is to do in life.*

(+) 12. My aims in life have been more a source of satisfaction than frustration to me.

(+) 13. I find it satisfying to think about what I have accomplished in life.

(-) 14. In the final analysis, I'm not so sure that my life adds up to much.

## **SELF-ACCEPTANCE**

Definition:

High Scorer: Possesses a positive attitude toward the self; acknowledges and accepts multiple aspects of self including good and bad qualities; feels positive about past life.

Low Scorer: Feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; wishes to be different than what one is.

- (+) [1.] *When I look at the story of my life, I am pleased with how things have turned out.*
- (+) [2.] In general, I feel confident and positive about myself.
- (-) [3.] I feel like many of the people I know have gotten more out of life than I have.
- (-) 4. Given the opportunity, there are many things about myself that I would change.
- (+) [5.] *I like most aspects of my personality.*
- (+) [6.] I made some mistakes in the past, but I feel that all in all everything has worked out for the best.
- (-) [7.] *In many ways, I feel disappointed about my achievements in life.*
- (+) 8. For the most part, I am proud of who I am and the life I lead.
- (-) 9. I envy many people for the lives they lead.
- (-) [10.] My attitude about myself is probably not as positive as most people feel about themselves.
- (-) 11. Many days I wake up feeling discouraged about how I have lived my life.
- (+) [12.] The past had its ups and downs, but in general, I wouldn't want to change it.
- (+) [13.] When I compare myself to friends and acquaintances, it makes me feel good about who I am.
- (-) 14. Everyone has their weaknesses, but I seem to have more than my share

## 3. Revised SCAS (Wilson, 2013)

Living in a different culture often involves learning new skills and behaviours. Thinking about life in [country], please rate your competence at each the following behaviours (1 = Not at all competent; 5 = Extremely competent).

	1 Not at all competent	2	3	4	5 Extremely competent
1. Building and maintaining relationships.	1	2	3	4	5
2. Managing my academic/work responsibilities.	1	2	3	4	5
3. Interacting at social events.	1	2	3	4	5
4. Maintaining my hobbies and interests.	1	2	3	4	5
5. Adapting to the noise level in my neighbourhood.	1	2	3	4	5
6. Accurately interpreting and responding to other people's gestures and facial expressions.	1	2	3	4	5
7. Working effectively with other students/work colleagues.	1	2	3	4	5
8. Obtaining community services I require.	1	2	3	4	5
9. Adapting to the population density.	1	2	3	4	5
10. Understanding and speaking [host language].	1	2	3	4	5
11. Varying the rate of my speaking in a culturally appropriate manner.	1	2	3	4	5
12. Gaining feedback from other students/work colleagues to help improve my performance.	1	2	3	4	5
13. Accurately interpreting and responding to other people's emotions.	1	2	3	4	5
14. Attending or participating in community activities.	1	2	3	4	5
15. Finding my way around.	1	2	3	4	5
16. Interacting with members of the opposite sex.	1	2	3	4	5
17. Expressing my ideas to other students/work colleagues in a culturally appropriate manner.	1	2	3	4	5
18. Dealing with the bureaucracy.	1	2	3	4	5
19. Adapting to the pace of life.	1	2	3	4	5
20. Reading and writing [host language].	1	2	3	4	5
21. Changing my behaviour to suit social norms, rules, attitudes, beliefs, and customs.	1	2	3	4	5

## Appendix VII.

# Interview schedule

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### 1. Introduction

The interview will start with at least one of these 3 activities:

The participant will

- Brainstorm and produce keywords that they think would best describe their PhD and their life in the UK
- Choose a figure most similar to how they view their current self on the 'Blob tree' (figure 2), and elaborate on their choice

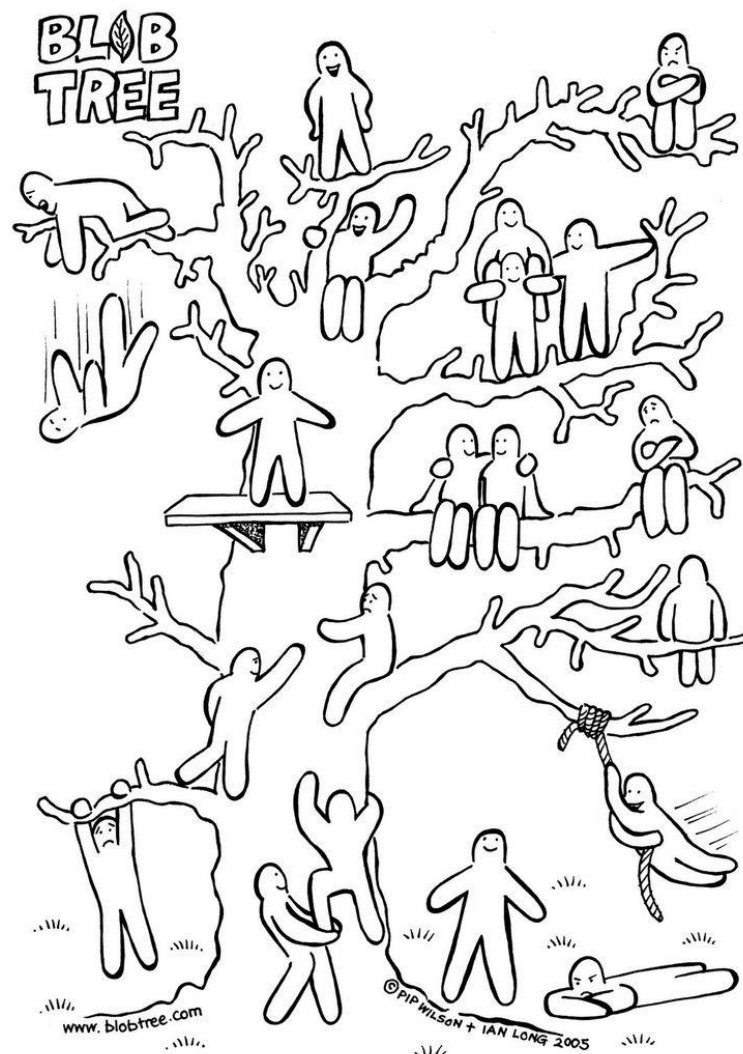


Figure 1. Blob tree

Below are the questions that can be used to steer the conversation, but the interviewer will make sure to provide as much space for the participant to follow their line of thought as the research aim allows.

## **2. Sociocultural adaptation**

- a) What are the differences between the UK culture and your own culture that you find to be particularly impactful on your experience?
- b) What are some of the difficulties you have faced since you have arrived in the UK?
- c) What are the skills you have learned as a result of living in the new culture? Which ones do you think are the most important skills, and why?
- d) What have you learned about the UK culture?
- e) How has living in the UK influenced your understanding of your own culture and your own identity?
- f) Have you had any notably positive and/or negative experience with regards to cultural differences?
- g) There are beliefs that in order to integrate in a new culture in a healthy manner, one has to adapt to the new culture whilst maintain their own cultural values. What is your opinion on this idea of integration?

## **3. Psychological wellbeing**

- a) How has living in a new culture influence your health, physical or psychological?
- b) If you could change anything in your life at the moment, what would you change, and why?
- c) How has this experience influenced
  - your personality?
  - your goals in life?
  - your contribution as a person?
  - your ability to deal with complex problems when they arise?
- d) (If English is a second language) How has the use of English influence your life in terms of
  - Academic performance?
  - Social relationships?
  - Communication of your thoughts/feelings?

# Appendix VIII. Thematic templates

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## 1. Template 1: Level 1 themes

Level 1
Macro-systems
Exo-systems
Meso-systems
Micro-systems
Person

## 2. Template 2: Level 2 sub-themes and Level 3 descriptions

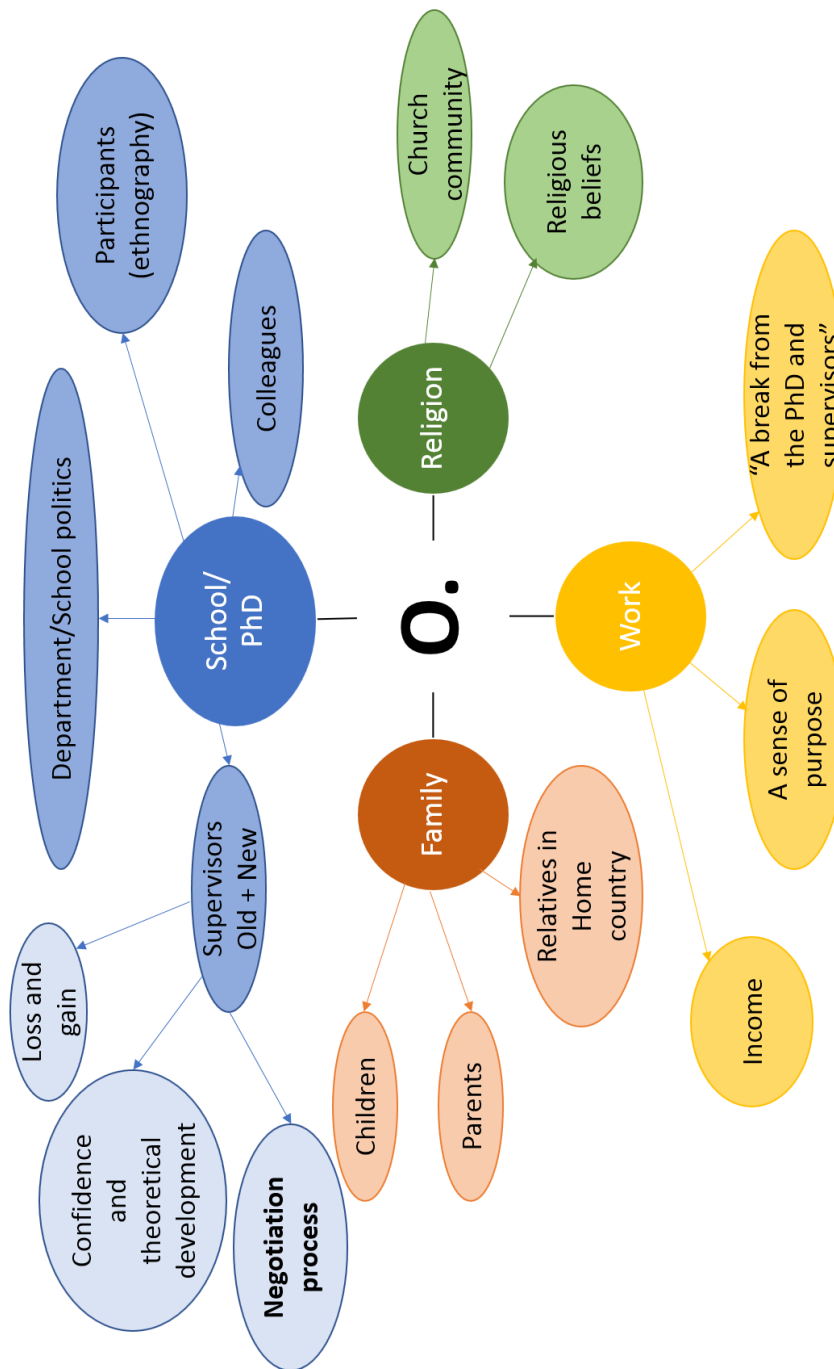
PSYCHOLOGICAL WELL-BEING	
Level 2: Sub-themes	Level 3: Descriptors
<b>Self-acceptance</b>	
	Positive or negative self-regard
	Self-awareness (or lack thereof)
	Comparison with other people
<b>Environmental mastery</b>	
	Making impacts on the outside
	Manipulation of environment or situation to accommodate self
	Not overwhelmed by responsibilities
<b>Positive relationships</b>	
	Own capacity for interpersonal relations
	Perception of personal relations
	Perception of professional relations
	Perspective-taking: Being able to see from others' perspectives
<b>Autonomy</b>	
	A sense of independence
	Having personal standards (internal locus of evaluation)
	Possible questioning/departure from social norms
	Having an internal locus of control



<b>Personal growth</b>	
	An openness to new experience
	Seeking self-development
	Awareness of own development
<b>Purpose in life</b>	
	Creating meanings for own work and roles
	(Searching for) a more reflective stance towards life
	Having directions in life
<b>SOCIO-CULTURAL ADAPTATION</b>	
<b>Level 2: Sub-themes</b>	<b>Level 3: Descriptors</b>
<b>Psychological impact</b>	
	Expressed stress/emotions due to culture-related issues
	Coping strategies (Use of humour, distancing, immersing, etc.)
<b>Personal interest &amp; Community involvement</b>	
	Developing and maintaining social networks and friendships
	Involvement in HOST community activities
	Involvement in OWN community activities
	Intercultural communication, making friends
	Maintaining own personal pursuits (hobbies, etc.)
<b>Ecological Adaptation</b>	
	Adjusting to the new physical environment (Finding their way around)
	Impersonal communication (im-personal interactions, banking, etc.)
	Understanding own culture
	Understanding local perspectives, values and world views
	Changes to own identity
	Adjusting and negotiating cultural expectations
<b>Interpersonal Communication</b>	
	Changing behaviour in relation to own and host cultures
	Understanding body language
	Social skills acquisition
	Academic adjustment: Managing academic responsibilities
	Language proficiency & adjustment
	Making oneself understood
<b>Academic/Work Performance</b>	
	Writing/reading skills improvement
	Project management - professional aspects

# Appendix IX. Exemplar: Initial contextual mapping for each participant

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# Appendix X. Exemplar: Action sequence diagrams

