UNDERSTANDING THE PHENOMENON OF SKILL DISCOUNTING AND ITS IMPLICATIONS FOR MIGRANT EMPLOYMENT IN AUSTRALIA

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ABSTRACT

In Australia, migration has played a significant role in addressing the nation's skill shortage, driving innovation, and in growing the workforce and the economy. However, many migrants face the challenge of skill discounting where their knowledge, skills, experience, and abilities are undervalued, preventing them from obtaining jobs that match their skill levels. This thesis provides a comprehensive examination of skill discounting among migrants in Australia, aiming to shed light on the underlying mechanisms of the phenomenon and its implications for migrant employment outcomes. The findings of this thesis will help to inform policies and practices to better support migrants in achieving their full employment potential.

The thesis consists of four studies. The first three studies are quantitative, using data from the Continuous Survey of Australia's Migrants (CSAM) dataset – an ongoing data collection initiative by the Department of Home Affairs that provides insight into the labour market outcomes of migrants in Australia. The fourth study is qualitative, based on in-depth interviews with migrants.

Study 1 examines how demographic factors such as sex, age, time in the host country, and prior education influence the likelihood of migrants experiencing skill discounting. The study finds that male, younger, longer-resident, and higher-qualified migrants are more likely to experience skill discounting. The study also highlights differences in the reasons for skill discounting and the on-the-job experiences of these groups of skill-discounted migrants. Study 2 investigates which industries serve as a refuge for skill-discounted migrants, identifying wholesale trade; retail trade; transport, postal, and warehousing; rental, hiring, and real estate services; administrative and support services; and public administration and safety as providing refuge employment. The study notes that skill-discounted migrants employed in a range of industries experienced skill discounting for various reasons, implying a lower impact of these reasons in their current employment sector, and the methods they used to find these jobs also varied by industry. Study 3 assesses the impact of obtaining local qualifications in Australia on the likelihood of skill discounting experiences, analysing subsets such as field and level of local qualification. The study concludes that having local qualifications in Australia does not always help migrants overcome the challenges of skill discounting and does not always lead to favourable labour market outcomes. Study 4 qualitatively explores the employment trajectories of skill-discounted migrants. The study identifies three different employment pathways for skill-discounted migrants: desired job pathways where skill-discounted migrants perceive full or almost full utilisation of their skills; deviated job pathways where skill-discounted migrants

perceive partial utilisation of their skills; and distaste job pathways where they perceive under-utilisation of skills in their current job. The study details the employment journey of skill-discounted migrants, explaining their coping or navigating mechanisms owing to the challenges they face.

Collectively, these studies advance the literature on skill discounting by elucidating its underlying mechanisms, industry-specific patterns, educational factors, and their employment trajectories. The research contributes to a deeper understanding of the complex dynamics of skill discounting, paving the way for more equitable and effective integration of skilled migrants into the Australian labour market which, in turn, can contribute to economic growth and a more inclusive society.

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Glossary of key terms

ANZSCO	Australian and New Zealand Standard Classification of Occupations (ANZSCO) is intended to provide an integrated framework for storing, organising and reporting occupation-related information.
Cohort	Cohorts A group of migrants surveyed at the same time. Under the current design, Cohort 1 took part in the introductory survey October to December of 2013, and took part in the follow-up survey between October to December of 2014. Cohort 2 introductory survey was also conducted October to December of 2014, with their follow-up survey in October to December of 2015, as was Cohort 3 introductory survey. Cohort numbering of the surveys have continued sequentially since.
Nominated occupation	Migrants seeking to apply under Australia's Points Tested Skilled Migration are required to nominate an occupation from Australia's skilled occupation lists that is relevant to their qualifications and experience and to have a favourable skills assessment for this particular occupation.
Offshore visa	Visa granted to a person who applied for a visa outside of Australia.
Onshore visa	Visa granted to a person who applied for a visa in Australia.
Permanent visa	A permanent residence visa to remain in Australia indefinitely.
Primary applicant	The person who applied and was accepted to migrate to Australia (also termed 'primary visa holder').
Provisional visa	A provisional visa is a temporary visa that may lead to the grant of a permanent visa if the holder meets certain conditions.
Skilled migrant	those with at least 'a university degree or have extensive/equivalence experience' or training in an occupation(Iredale, 2001, p. 8). For the purpose of this thesis, skilled migrants are those who migrated on a *skill stream* to Australia and refers only to *primary applicants*.
Skill stream	Those categories of the Migration Program where the core eligibility criteria are based on the applicant's employability or capacity to invest and/or do business in Australia. The immediate accompanying families of Skilled Migrants are also counted as part of the Skill stream
State nominated	A permanent visa for people able to obtain nomination by a state or territory government. It has a lower pass mark than the Skilled Independent visa. For more information Department of Home Affairs – Working in Australia

SOURCE: DEPARTMENT OF HOME AFFAIRS (2023, PP. 11-13)

HTTPS://WWW.HOMEAFFAIRS.GOV.AU/RESEARCH-AND-STATS/FILES/CSAM-METHODOLOGY-PAPER-2013-TO-2025.PDF

Declaration

I declare that:

this thesis presents work carried out by myself and does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; to the best of my knowledge, it does not contain any materials previously published or written by another person except where due reference is made in the text; and all substantive contributions by others to the work presented, including jointly authored publications, is clearly acknowledged.

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Chapter 1: Introduction

This chapter introduces the research undertaken in this thesis, highlighting its significance and relevance. The research explores the factors influencing skill discounting among migrant employees and how these experiences shape their employment patterns and trajectories. By addressing the complexity of skill discounting, the study fills a critical gap in understanding the underlying mechanisms and processes behind this phenomenon among migrant employees in Australia. The chapter begins with the broader context and purpose of the research, followed by a summary of the methodologies used and the contributions of the study to the wider community. It concludes with an overview of the thesis structure.

1.1 Background

Migration has played a significant role in Australia's nation-building efforts and economic growth. According to the Australian Bureau of Statistics (ABS), almost 30.7% of Australia's population is born overseas, reflecting the nation's role as a prominent destination for migrants (Australian Bureau of Statistics, 2024). Australia has a long-standing history of emphasising migration to build the nation, address skill shortages, increase GDP per capita growth, drive innovation, and improve productivity and growth in the workforce (Cameron, 2011; Chand & Tung, 2019; Migration Council Australia, 2015; Phillips et al., 2010). However, despite the positive contributions of migrants, many exceptionally skilled migrants – those with at least 'a university degree or have extensive/equivalence experience' or training in an occupation' (Iredale, 2001, p. 8) face substantial challenges concerning the recognition of their skills and qualifications. As identified in a recent review (ABC, 2023), Australia's migration system is characterised by inefficiencies and deficiencies that prevent the effective utilisation of skilled migrants. The system's 'broken' state is manifested through various challenges, including the ineffective utilisation of migrants' skills, an outdated skilled occupations list that fails to address current and future skills needs, and the prevalence of exploitation and under-payment among skilled migrants (ABC, 2023). These issues can be considered manifestations of incidences of skill discounting.

Skill discounting, where the knowledge, skills, and experience of migrants are undervalued by employers and recruiters, despite being of equal standing to that of native-born employees, is a significant issue that leads to inefficiencies and substantial economic losses (Dietz et al., 2015; Esses & Dietz, 2007; Treuren et al., 2021a). According to a report by the Committee for Economic Development of Australia (CEDA, 2024), nearly a quarter of skilled migrants were

working in jobs below their skill levels and were earning more than 10% less than similar native-born employees. This disparity represents a significant economic loss, amounting to approximately $4 billion in potential annual wages that migrants in Australia could contribute if their earnings were on par with those of native-born Australian workers (CEDA, 2024). The urgency and importance of addressing this issue cannot be overstated.

Skill discounting is a prevalent and persistent issue (Banerjee et al., 2024; Cameron et al., 2019; Halvorsen et al., 2015; Tian et al., 2018), and its consequences are significant for individuals, employers, and the wider community (Treuren et al., 2021a). For migrants, skill discounting prevents them from finding jobs matching their skill level. They are most likely to find employment where they are under-employed, over-qualified, or earning less (Alaverdyan & Zaharieva, 2022; Crea-Arsenio et al., 2022; Crossman et al., 2021). Furthermore, devaluing skills can result in deskilling and a sense of less confidence and less autonomy for migrants (Lens, 2021). For organisations, this would mean less motivated, less satisfied employees, potentially leading to higher turnover and exhibiting of less organisational citizenship behaviour (Ang et al., 2003; Chowhan et al., 2016; Halvorsen et al., 2015).

Furthermore, failing to utilise the migrant potential in the labour market is a significant loss of talent for the host country and negatively impacts the overall economy (Banerjee et al., 2024; Wagner & Childs, 2006). A recent university magazine publication (Lens, 2021) featuring a research study highlighted that one out of every four permanent skilled migrants were employed in positions below their skill level. This under-utilisation of skills has been identified as a significant economic burden, estimated to have cost the Australian economy a minimum of $1.25 billion (Lens, 2021). Thus, understanding and addressing skill discounting is not only a matter of social justice, but is also crucial for leveraging the full potential of migrant workers and ensuring their successful integration into the labour market. The potential benefits of this research are immense, making it a vital area of study.

1.2 Purpose of the research

The phenomenon of skill discounting has become an increasingly salient issue hindering migrants from fully integrating into the labour market (Banerjee et al., 2021; Cameron et al., 2019; Raihan et al., 2023). While the incidence and consequences of skill discounting have been widely documented (Banerjee et al., 2021; Budría & Martínez-de-Ibarreta, 2021; Creese & Wiebe, 2012; Dietz et al., 2015; Esses & Dietz, 2007; Lens, 2021; Rafferty, 2020; Reitz, 2001; Shinnaoui & Narchal, 2010), there is still much that is not known about the why and how of the skill discounting experiences of migrants.

The purpose of this thesis is to provide insight into the underlying processes and implications of the skill discounting experiences of migrants. It aims to uncover the multiple aspects of the phenomenon—the influence of demographic factors, industry contexts, the role of local qualifications, and the skill-discounted migrant employment journey. The overarching research question of this thesis is:

What factors influence the experiences of skill discounting among migrant employees and how do these experiences shape their employment patterns and trajectories?

To address the main research question comprehensively, the following sub-research questions are formulated to examine specific aspects of skill discounting:

1. ***How does the experience of skill discounting among migrants vary based on sex, age, time spent in the host country, and education level?***
2. ***Which industries provide refuge employment for skill-discounted migrants and how do they find employment across industries?***
3. ***Do local qualifications help reduce skill discounting for migrants?***
4. ***How do skill-discounted migrant employees navigate their employment journey in Australia?***

This research adopts four independent studies to address the sub-questions, with both quantitative (studies 1, 2, and 3) and qualitative methodologies (study 4), which are integrated to provide an understanding of the underlying mechanisms and processes of skill discounting. By delving into these dimensions, this thesis aims to provide a comprehensive understanding and implications of the phenomenon of skill discounting on the labour market experience of migrants. Additionally, this thesis aims to inform policies and practices to better support migrants in achieving their full employment potential.

Details of each of these studies is provided in the section below.

1.3 Study outline and structure of this thesis

This thesis includes four independent studies, each addressing specific aspects of skill discounting. The research objectives and questions guiding these studies are given in Table 1.1.

Table 1.1 Details of each study in this thesis

Study	Title	Research objective	Methodology
Study 1	Examining demographic factors in skill discounting among migrants	To examine how demographic factors such as sex, age, time in the host country, and prior education level of migrants influence their skill discounting experience	Study 1-3 undertakes a quantitative analysis of the government dataset – Continuous Survey of Australia's Migrants (CSAM). All three studies look at specific cases of skilled migrants who changed their pre-migration occupation (nominated occupation at the time of migration) to a different occupation due to skill discounting (Treuren et al., 2021a, 2021b). The analysis is carried out for cohorts 1-5 of the data for the period 2013-2017 and includes only primary applicants who came as skilled migrants. For the purpose of this thesis, skilled migrants are those who migrated on a skill stream to Australia. The experience of skill discounting is examined through its extent, forms, and consequences
Study 2	Examining refuge industries for skill-discounted migrants	To identify which industries, provide refuge or shelter employment for skill-discounted migrants and how they find these jobs.	
Study 3	Local qualifications and the likelihood of skill discounting for migrant employees	To examine whether obtaining local qualifications in Australia reduces the likelihood of skill discounting for migrants	
Study 4	Employment trajectories of skill-discounted migrants	To explore the employment trajectories and career paths of skill-discounted migrants in Australia	Study 4 will adopt a qualitative approach. 38 migrants who were currently residing and employed in Australia were interviewed. The participants included skilled migrants who were former international students, and those who arrived as permanent residents under the skilled migration program. Participants were recruited using different techniques: using alumni data from hospitality institutions and sending out emails to them, outreach via community organisations, posters in local ethnic areas, and snowballing from initial participants (e.g. Al Ariss, 2010; Turchick Hakak & Al Ariss, 2013)

This thesis is structured across seven chapters. This chapter (Chapter 1) introduces the research and its significance and objectives, and provides an overview of the thesis. Chapter 2 presents the literature review, detailing the context, the concept of skill discounting, the reasons why it happens, and its consequences, as well as theoretical and methodological approaches to understanding it. This chapter identifies research gaps and outlines the research questions explored in the thesis. Chapters 3 to 6 present the four independent studies that offer distinct perspectives on skill discounting. Study 1 (Chapter 3) examines the influence of demographic factors on migrants' experiences of skill discounting. Study 2 (Chapter 4) examines industries that provide refuge employment for skill-discounted migrants and how they find employment. Study 3 (Chapter 5) investigates whether obtaining local qualifications reduces the likelihood of skill discounting. Study 4 (Chapter 6) explores the employment trajectories and career paths of skill-discounted migrants. Each chapter includes an introduction, literature review, methods, findings, and a discussion of the implications. Chapter 7 consolidates the findings of all four studies, discussing their implications, limitations, and future research directions, and providing an overall conclusion. Further, details of the complete analysis undertaken for each study is presented in the appendix.

This thesis provides a comprehensive analysis of skill discounting among migrants in Australia, contributing to both the literature and to practical understanding. The four studies in the thesis will highlight the complexities of the skill discounting phenomenon and suggest pathways for improving migrant labour market experiences.

1.4 Theoretical contributions

This research makes several contributions to the skill discounting and broader migrant literature by providing a comprehensive, multifaceted analysis of skill discounting among migrants. Integrating quantitative and qualitative approaches across four studies advances our understanding of the complexities surrounding skill discounting in new ways.

Study 1 examines the experience of skill discounting between migrants based on demographic factors and contributes to the literature by detailing how these demographic factors influence their experience of skill discounting and subsequent on the job experiences. It advances our understanding of why specific groups of migrants are at greater disadvantage than others, offering new insights into the diversity of migrant experiences of skill discounting. This emphasises the notion that migrants are not a homogeneous group and their labour market experiences vary.

Study 2 advances and broadens the scope of the literature by identifying which industries serve as 'refuge industries' for skill-discounted migrants. This study contributes to an understanding of how skill discounting experiences influence migrant employment across different sectors. It details the prevalence of skill discounting across industries and how migrants find employment across a range of sectors, thereby filling a gap in current knowledge on industry variations in employment, particularly for skill-discounted migrants.

Study 3 investigates whether obtaining local qualifications reduces the likelihood of skill discounting, and identifies the factors that make a difference in migrants' skill discounting experiences. This contributes to the literature by identifying how local qualifications influence the likelihood of skill discounting for migrants and its impact on employment outcomes of the skill-discounted migrants.

Finally, Study 4 offers an in-depth qualitative exploration of the employment trajectories of skill-discounted migrants, contributing to the literature by providing an account of the lived experiences and strategies used by skill-discounted migrants to navigate the labour market.

1.5 Practical contributions

The research offers several practical contributions for policymakers, employers, educational institutions, and migrant communities.

First, the findings from Studies 1-4 will provide policymakers with valuable insights into the experience of skill discounting among migrants. This will enable the development of targeted interventions that address disparities in skill discounting, facilitating the creation of equitable labour market policies and tailored support programs. Such initiatives may include offering training, streamlining qualifications recognition, or mentorship programs to help those more likely to face skill discounting, even across sectors.

Understanding how and why skill discounting occurs allows employers to reflect on their hiring practices. By recognising the under-utilisation of migrants' skills, organisations can implement recruitment and workforce development strategies that better align the skills of migrant employees with their job roles. This would improve job satisfaction, boost productivity, and reduce turnover rates.

The insights from this research can inform educational institutions about the challenges that migrants face regarding recognition of their skills. This could assist with the development of specialised programs or courses to bridge the gap between migrants' pre-migration

qualifications and the actual requirements of the local labour market, supporting their transition into desired careers.

Finally, the insights generated from the research will highlight the factors that lead to skill discounting, show where migrants find employment despite the barriers, and explore the factors that influence their experience, which will help migrants identify how to better equip themselves to navigate the labour market more effectively, thereby setting a realistic picture of what to expect when they arrive in the host economy.

Additionally, this research aligns with the United Nations Sustainable Development Goals (SDGs), particularly SDG 8 (Decent work and economic growth) and SDG 10 (reduced inequalities), by examining skill discounting and its influence on employment experiences of migrants. By addressing the challenge of skill discounting, this research provides insight into policies that can enhance economic inclusion and social equity, supporting the global agenda for sustainable and inclusive growth.

Overall, this research provides insight into the complex dynamics of the phenomenon of skill discounting, paving the way for more equitable and effective integration of skilled migrants into the Australian labour market. This, in turn, can contribute to economic growth and a more inclusive society.

Chapter 2: Literature Review

This literature review chapter starts by contextualising the skilled migration program in Australia. The chapter then introduces the concept of skill discounting, explaining its meaning and theoretical foundations. It reviews the methodologies used to measure skill discounting in the literature and explores the underlying reasons and consequences of this phenomenon. Finally, the chapter identifies gaps in the existing research, setting the stage for further investigation in the following chapters.

2.1 Skilled migration policies and the phenomenon of skill discounting

Over recent decades, many countries have aimed to attract skilled migrants in response to their economic and demographic challenges. For example, most developed countries such as Australia and Canada face ageing populations and skill shortages and view migration as a means to address these issues (Cerna, 2014; Chaloff & Lemaitre, 2009; Dimanche & Perzyna, 2024). Skilled migrants are considered 'the best and brightest', with many possessing a tertiary level education (Chaloff & Lemaitre, 2009; Hawthorne, 2014, p. 1). To attract such talent, countries have implemented programs designed to select individuals with specific skills crucial for their economies. For example, the United States has the H-1B program, while France, Germany, and Canada have established skilled migration channels (Skeldon, 2009).

Australia, in particular, places high emphasis on skilled migration which constituted about 73.0% of the overall migration intake in 2022-23 (Cameron, 2011; Department of Home Affairs, 2024; Hawthorne, 2014; Rajendran et al., 2020). These migrants often come to the country either through the employer sponsored scheme or the independent skilled migration scheme (Chaloff & Lemaitre, 2009). In the employer sponsored scheme, potential employers play a key role. Based on their skill needs, employers assess individual skills and offer jobs to migrants who meet their skill requirements (Parsons et al., 2020). Here, the migrants come with a job offer. By contrast, the independent skilled migration program involves a points-based system that evaluates potential migrants based on their human capital (Boucher & Cerna, 2014; Rajendran et al., 2020). This system assesses individuals on various skills criteria, awarding points based on factors such as age, English language proficiency, work experience, education, and other relevant attributes (Hugo, 2014; Parsons et al., 2020). This points-based assessment ensures that migrants possess the necessary qualifications and skills that are in demand across the economy, thus screening out individuals with lower skills and qualifications (Macaluso, 2022). Unlike those individuals with a job offer, people who are assessed based on the skill

needs of the country will not have a job arranged prior to their arrival. Selective migration policies such as these have enhanced the flow of skilled migrants mainly from developing countries to developed nations, seeking to fill gaps in their economies (Ehrlich & Kim, 2015).

While migration benefits the receiving countries by addressing skill shortages and contributing to economic growth, it is often regarded as a 'brain drain' for the source countries, as they lose valuable skills (Artuç et al., 2015; Hagopian et al., 2004). Nonetheless, skilled migration is widely seen as a driver of economic growth in destination countries. Skilled migration nurtures economic growth by increasing the effective labour supply and contributing to GDP expansion. In their study, Strzelecki et al. (2022) highlighted the substantial contribution of Ukrainian workers to Poland's GDP growth which amounted to about 13% of the country's GDP growth in the period from 2013 to 2018. In Australia, migration significantly influences employment dynamics, with migrants accounting for a large portion of employment growth. For example, McDonald and Valenzuela (2017) noted that from July 2011 to July 2016, migrants contributed to the majority of employment growth, and positively impacted the age structure of the workforce. According to the study, migrants accounted for 613,400 of the total increase in employment, with the majority (595,300) being under the age of 55 years (McDonald & Valenzuela, 2017). Migrants, particularly those with high levels of education and specialised skills, also play a significant role in driving innovation. Bernstein et al.'s (2022) study found that despite representing only 16% of all US inventors, migrants contributed 23% of total innovation output. This was measured by patents, patent citations, and the economic value of these patents. Similarly, Fassio et al. (2019) found that highly-educated migrants positively impact innovation in European industries.

Given the pivotal role skilled migrants play in enhancing economic growth and the increasing demand for their specialised skills to fill skill shortages, this group is both 'economically and politically important'(Harvey, 2012, p. 659). Accordingly, there is a widespread acknowledgment that skilled migrants should have better success in the labour market (Crea-Arsenio et al., 2022; Ferrer & Riddell, 2008). However, despite being selected for their skills and qualifications, and the effort of having skills assessed pre-migration and being granted entry to fill skill shortages, migrants (not sponsored by employers) face significant barriers in fully utilising their potential in the labour market (Hawthorne & To, 2014; Junankar & Mahuteau, 2005; Ressia et al., 2017a; Usanova et al., 2023). One significant reason for this is the phenomenon of skill discounting – where the overseas obtained knowledge, skills,

experience, and other abilities of migrants are less recognised in the host economy labour market (Dietz et al., 2015; Treuren et al., 2021a).

Skill discounting is an issue for most migrant receiving countries. Researchers have looked at the labour market experiences of migrants across different migrant receiving countries. Canada has been the subject of extensive study, with Banerjee et al. (2021), Bauder (2003b), Dean and Wilson (2009), Grant (2005), and Guo (2015) providing insights into migrants' unfavourable labour market experiences. Europe has also been a context of interest (Aleksynska & Tritah, 2013; Bisin et al., 2011; Federico & Baglioni, 2021; Hansen, 2012; Hussein et al., 2013; Kofman, 2000; Kogan, 2006). In the United Kingdom, Currie (2007) has explored the experiences of Polish migrants, revealing potential obstacles to employment and integration. In the UK, Misko (2012) highlighted employer preferences for migrants from Anglophone countries, potentially affecting migrants from non-Anglophone backgrounds. Similarly, in Germany, Heizmann et al. (2017) examined migrant occupational patterns and earnings, shedding light on their integration into the German labour market. Similarly, in the United States, research by Somerville and Walsworth (2009) and Xie (2024) has contributed to understanding migration and employment dynamics. Meanwhile, in Turkey, Sert (2016)focused on the phenomenon of de-qualification among migrants, reporting on issues surrounding skill recognition and utilisation. A New Zealand study by (Maydell & Diego-Mendoza, 2014) has also provided comparative perspectives on migration and integration. In Australia, studies byDe Alwis et al. (2020), Shinnaoui and Narchal (2010), Tan and Cebulla (2023), and Treuren et al. (2021a, 2021b) have scrutinised the occupational composition and earnings of migrants and non-migrants, revealing notable disparities and potential barriers to the economic integration of migrants.

This persistent issue of skill discounting undermines the economic benefits expected from skilled migration, both for the migrants and the host countries that rely on them to fill critical labour shortages. While skilled migration is designed to bring immediate economic benefits, the under-utilisation of migrant skills presents significant challenges for policymakers, employers, and migrants themselves.

The next section provides an overview of the skill discounting literature. It starts with discussing what skill discounting is by providing an overview of its definitions, theoretical understandings of the concept and the methodologies used to determine it, followed by explaining the reasons for, and the impact of, skill discounting. Figure 2.1 provides an overview of the phenomenon of skill discounting.

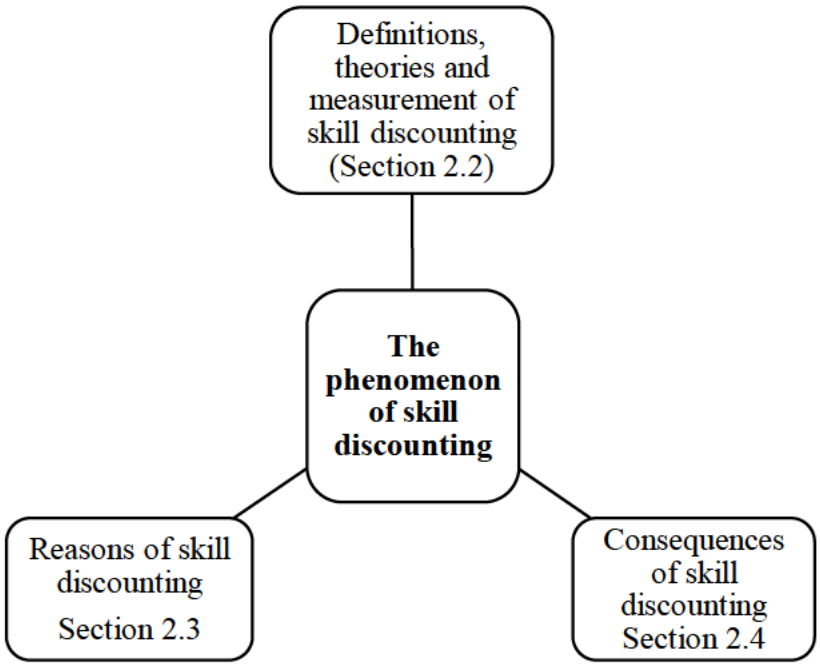


Figure 2.1 Conceptual framework of the phenomenon of skill discounting

2.2 Key concepts and theoretical foundations of skill discounting

This section delves into the meaning of skill discounting, explores different theoretical perspectives used to understand the phenomenon and its occurrence across different contexts, and the diverse methodologies used to investigate it. By exploring various perspectives, from human capital to relational and policy perspectives, and understanding various methodological approaches, this section aims to provide a comprehensive understanding of the phenomenon of skill discounting in the existing literature.

2.2.1 What is skill discounting?

Skill discounting is the phenomenon whereby the knowledge, skills, and abilities of migrants are not fully recognised in the host economy (Esses & Dietz, 2007; Treuren et al., 2021a, 2021b), even when they are ostensibly equal to those held by locals (Dietz et al., 2015; Shinnaoui & Narchal, 2010; Treuren et al., 2021a, 2021b; Wright & Dimanche, 2023b). Migrants typically experience skill discounting as they start looking for a job in the host economy, particularly during the recruitment stage when employers or recruiters devalue their pre-migration skills (Treuren et al., 2021a). Skill discounting is not only the devaluing of objective qualifications or experience of migrants gained overseas, it also includes employers or recruiters (d)evaluating all other skills that are relevant (or deemed relevant) to employment that migrants bring with them (Mahmud et al., 2014). This includes the assessment of the communication skills of migrants, such as confidence, fluency, modesty, personal

characteristics, and the capability to 'fit' the organisation and role being applied for (Almeida & Fernando, 2017; Daly et al., 2005). In some cases, for certain occupations such as doctors and engineers, migrants are required to clear further assessments or training to gain full recognition of their overseas skills and eligibility to practice their profession. These evaluations are usually administered by relevant professional associations or government agencies (Salaff et al., 2002). Thus, skill discounting indicates that the pre-migration assessments by governments for the migration process are not always easily converted into professional recognition in the host economy labour market (Esses & Dietz, 2007; Faaliyat et al., 2021; Reitz, 2001).

As a result of skill discounting, migrants may be deskilled, a situation where they find it difficult to be employed in jobs that match their qualifications and experience, or the equivalent of what they previously held in their home country (Almeida & Fernando, 2017; Crea-Arsenio et al., 2022; Creese & Wiebe, 2012; Grant & Nadin, 2007; Kosny et al., 2017; Man, 2004; Rajendran et al., 2020; Ressia et al., 2017a). Skill-discounted migrants may remain unemployed or look for the next best job available. Owing to financial necessities such as settling into a new social environment, survival, or providing support back home, they might even accept entry-level jobs or working in jobs unrelated to their expertise, such as in less skilled jobs (Almeida et al., 2012; Creese & Wiebe, 2012), leading to situations of under-employment or over-qualification for jobs (Galarneau & Morissette, 2009; Kim & Allan, 2020; Landolt & Thieme, 2018). Thus, it is likely that when skill-discounted, “optometrists become taxi drivers, social workers become hospital cleaners, teachers become clerical assistants, and environmental engineers stack supermarket shelves” (Wagner & Childs, 2006, p. 50). Skill-discounted migrants are likely to find themselves unemployed, under-employed, or earning less compared to native-born (domestic applicants born and educated in the host country) employees with a similar skillset (Anisef et al., 2003; Crea-Arsenio et al., 2022; De Alwis et al., 2020; Dietz et al., 2015; MacKenzie & Forde, 2009; Picot & Hou, 2003; Reitz, 2001; Salaff et al., 2002; Somerville & Walsworth, 2009; Syed, 2008).Skill discounting can be considered an issue primarily for migrant applicants rather than for native-born applicants. While non-migrants, particularly those who are new entrants or trying to re-enter the labour market, may also experience under-recognition of their skills (Syed, 2008), migrants face distinct challenges when it comes to hiring, selection, and career progression (Dietz et al., 2015; Guo & Al Ariss, 2015; Lee et al., 2020). Migrant employees are often considered “less productive, prone to higher market turnover and have a lower employment rate”(Syed, 2008, p. 32). Furthermore,

the experience of skills mismatches (Green et al., 2007; Tani, 2017), job insecurity (Tian et al., 2018), and lower earnings (Alboim et al., 2005; Galabuzi, 2006; Li, 2001a, 2003; Reitz, 2001) are typically more severe for migrants than non-migrants. As such, this thesis will focus on skill discounting specifically within the context of migrant employment experiences.

2.2.2 Theoretical concepts of skill discounting

The phenomenon of skill discounting can be understood through a variety of theoretical frameworks and perspectives, from human capital theory through to policy considerations. A majority of the reviewed studies focused on the human capital attributes of migrants and discrimination theories to understand the labour market experiences of migrants. However, a range of studies have also considered the social and cultural factors influencing the labour market experiences of migrants. A number of studies have incorporated social capital theory to examine how migrants' social and cultural capital affect their labour market outcomes (Lancee, 2010; Piracha et al., 2016; Portes, 1998; Xue, 2008). This shift has broadened the understanding of skill discounting. Recent studies have adopted an intersectionality lens and a relational perspective to understand the multiple factors at multiple levels explaining labour market outcomes for migrants. These are explained below.

Human capital

One of the early approaches to understanding labour market barriers and skill discounting among migrants has been through the human capital lens. According to human capital theory, the education and skills of individuals are viewed as investments that enhance productivity and earnings (Becker, 1975). The phenomenon of skill discounting in this approach is studied as the devaluation of human capital where migrants' qualifications and work experiences are under-recognised (Reitz, 2007). This under-recognition of human capital is often expressed in the research as lower returns on human capital, meaning the 'premium available in the labour market for additional qualifications' is diminished (Reitz, 2007, p. 18). Early research focused on comparing the returns to education and the experience of migrants and non-migrants, highlighting discrepancies in earnings as a measure of skill discounting (Chiswick et al., 2003; Chiswick & Miller, 2010; Li, 2000; Reitz, 2001; Sweetman, 2004). The lower returns to education were mainly attributed to the lower quality of the skills of migrants (Reitz, 2001). A number of studies have also looked into specific aspects of human capital such as the language skills of migrants, their experience, and the place of education of migrants. In this regard, poor proficiency in the host country language was found to contribute to lower earnings (Pieroni et al., 2024). Moreover, the research found how education and experience obtained from wealthy

developing countries lead to better employment prospects for migrants than those obtained from poor developing countries (Bratsberg & Ragan Jr, 2002; Bratsberg & Terrell, 2002; Li & Sweetman, 2014). The education and experience obtained from poor developing countries were often characterised as not being equal to the standards and relevance of the host country and not compatible with host country norms and institutional requirements(Alba & Nee, 2003).

Recent studies have also moved beyond considering only formal education and training. In this regard, Moroşanu et al. (2021) illustrated how migrants with lower levels of education (such as secondary education and those with no degree) often utilise a broader range of attributes, including generic ones such as creativity, hard work, and a strong work ethic, to navigate and succeed in the labour market. Furthermore, the research has examined the role of acquiring host country qualifications to improve employment prospects (Singh & Mutum, 2024).

Thus, the human capital approach relies on individual investments in education and training as the key determinant of the employment experiences of migrants (Ho, 2006).

Discrimination theory

While studies using the human capital approach focused on migrants' individual knowledge, skills, and experience, another major approach has focused on the behaviour of employers. This approach suggests that the discriminatory behaviour of employers and recruiters plays a significant role in skill devaluation. Factors such as ethnicity, race, and the nationality of migrants were found to play a role in hiring decisions, unemployment, and under-employment of migrants (Faaliyat et al., 2021). The research here draws on concepts such as statistical discrimination, taste-based discrimination, and social identity theory to understand the incidence of skill devaluation and poor labour market outcomes for migrants. The research based on statistical discrimination theory suggests that employers' make their assessments of job applicants based on their previous experiences with the members of the same group (Bonoli & Hinrichs, 2012; Lippens et al., 2022; Rissing & Castilla, 2014; Zschirnt & Ruedin, 2016). In this regard, a number of studies have found that employers' assumptions that migrants are less skilled or less likely to be successful in a particular job, may lead them to be less likely to hire someone from that background, even if they are well-qualified (Ahmad, 2020; Dietz et al., 2015; Esses & Dietz, 2007; Shinnaoui & Narchal, 2010). Taste-based discrimination refers to discriminatory behaviour based on an individual's personal preferences and biases. An employer's prejudices and negative taste towards migrants have been found to influence their hiring decisions (Lippens et al., 2022; Zschirnt & Ruedin, 2016). Employer prejudice can be explained through social identity theory, which distinguishes 'in-groups' and 'out-groups'.

Accordingly, employers tend to favour members of their own group (the in-group), often granting them preferential treatment, while marginalising those perceived as outsiders, such as migrants (Ashforth & Mael, 1989; Tajfel, 1986; Tajfel & Turner, 2004). In the context of migrant employment, studies suggest that employer bias based on in-group favouritism and negative stereotypes about migrant out-groups, results in the devaluation of migrants' skills, unfavourable hiring decisions, and poor employment outcomes for migrants (Almeida et al., 2015; Auer et al., 2019; Birkelund et al., 2020; Dietz et al., 2015; Fibbi et al., 2022). The discriminatory approach to understanding the labour market barriers and outcomes of migrants have moved beyond bias and stereotypes to cultural judgements of employers about the accent, dress, and other embodied behaviours of migrants. In this regard, it has been identified that migrants may need to resemble non-migrants in their language, dress, or speech to gain entry to professional jobs (Thomson & Jones, 2016).

Social capital

The social capital approach emphasises the role of social networks, connections, and cultural know-how of migrants in shaping their labour market outcomes (Bourdieu, 1986; Lin et al., 2001). Social capital consists of the social resources that individuals obtain through their relationships and networks, that provide them with access to information, opportunities, and support in the labour market (Granovetter, 1973; Lin et al., 2001).

However, studies show that migrants often lack the kind of social capital needed to access key resources in the labour market, and frequently rely on ethnic networks to secure employment (McDonald et al., 2009; Ryan et al., 2008; Sanders et al., 2002). While these networks can help migrants find jobs, the positions they secure are often of lower status and not matching their qualifications or skills (Hou & Picot, 2003; Kracke & Klug, 2021; Ryan et al., 2008; Sanders et al., 2002). This reliance on ethnic networks limits access to broader labour market resources, often obtained through professional networks that are essential for better employment prospects and finding jobs that match their skills (Lu et al., 2013). The lack of such professional connections is a significant factor contributing to skill discounting as migrants are unable to connect to networks that provide knowledge of labour market norms and opportunities that could lead to better employment outcomes.

Within this approach, skill discounting is understood as the limited reach of migrants' social capital such as reliance on family and friends in accessing higher skilled, better paying jobs that align with their qualifications and skills (Lu et al., 2013; Mahuteau & Junankar, 2008; Winterheller & Hirt, 2017). Their limited access to local networks makes it difficult to obtain

information on the labour market compared to their non-migrant counterparts (Reitz, 2023; Syed, 2008) who can seek assistance from the broad base they have (Halvorsen et al., 2015; Simon & Warner, 1992). In contrast, those with access to professional networks, particularly within the dominant labour market, are more likely to find employment that matches their skills and qualifications (Cooke et al., 2013; Shinozaki, 2014; Thondhlana et al., 2016). Therefore, the social capital approach reveals the mismatch between migrants' skills and their labour market outcomes as not only the result of individual qualifications or employer bias, but also the limitations in the type and quality of social capital of migrants.

In this regard, studies have found that migrants' social connections were mainly within ethnic networks. These ethnic connections did help these migrants to find jobs; however, these jobs were often of lower status. Moreover, these ethnic networks were unable to connect migrants to the resources available in the broader labour market. Migrants have been found to lack the social capital necessary to provide them with better resources in the labour market such as professional networks that can help migrants through better knowledge of labour market norms and opportunities. These kinds of networks have been found to help migrants to find jobs matching their qualifications and skills. Researchers have examined how the lack of social capital among migrants, such as professional networks, cultural distance, and lack of familiarity with local labour market norms, has acted as a barrier to finding suitable employment (Ryan et al., 2008; Schmidtke, 2013). Studies have also found that the type of social network plays a role. For example, migrants' social connections with similar ethnic friends helped them gain jobs, but these jobs were of lower status (Hou & Picot, 2003; Sanders et al., 2002). On the other hand, migrants' professional networks in the host economy were a significant network that helped them to gain jobs that matched their qualifications (Cooke et al., 2013; Shinozaki, 2014; Thondhlana et al., 2016). Apart from social capital, researchers have also applied the concept of cultural capital, where the cultural background of migrants, such as whether they are more culturally close or distant to the host country, influenced their labour marker outcomes (Schmidtke, 2013; Tubadji et al., 2017).

Intersectional and relational approaches to migrant employment issues

Intersectional and relational perspectives, although not having been thus far used explicitly to understand skill discounting, offer insights into the broader labour market challenges faced by migrants. The intersectionality perspective emphasises that migrant experiences in the labour market are shaped by various factors such as sex, race, class, skin colour, nationality, and other markers of difference (Browne & Misra, 2003; Liu, 2019; Lutz, 2002; Ressia, 2013; Stypińska

& Gordo, 2018). For example, Ressia et al. (2017b) examined how gender, race, ethnicity, and being a migrant influenced migrants' job seeking experiences. The study showed how gender and family roles complicated the job seeking experiences of migrants (Ressia et al., 2017b). This approach recognises that migrant experiences are not homogeneous and that multiple factors of disadvantage can interact together, exacerbating labour market disadvantage. Efforts have so far been made to identify several factors of difference such as skin colour, ability, origin, nationality, wealth, religion, accent, and gestures (Lutz, 2002; Ressia, 2013).

Complimenting this approach is the relational perspective that considers the interplay between different levels – individual, organisational, and societal factors – in addressing the employment experiences of migrants (Syed, 2008; Syed & Özbilgin, 2009). This approach suggests that the employment challenges of migrants cannot be considered solely at the individual level as in the human capital approach, or solely at the employer level as in the discriminatory approach, but also needs to consider structural concerns of equality at multiple levels. Studies based on this perspective emphasise the role of relational dynamics between national employment structures, organisational practices, and individual attributes in shaping migrants' employment experiences and choices (Fossland, 2013; Rajendran et al., 2020; Turchick Hakak & Al Ariss, 2013). For example, Rajendran et al.'s (2020) study demonstrate how individual (age, years of settlement, qualifications), national/societal (citizenship and settlement), and organisational-level factors (climate of inclusion) influence the employment outcomes of highly skilled migrants to Australia.

The above literature provides a better understanding of the meaning of skill discounting, explaining it through different theoretical lenses. These include the human capital approach, which views the phenomenon as a devaluation of migrants' education and experience; the employer discrimination approach, which highlights biases and prejudices in hiring practices; and the social capital approach, which examines the role of limited professional networks in hindering access to better employment opportunities. This study emphasises skill discounting as the non-recognition of migrants' knowledge, skills, experience, and all other abilities in the labour market by employers and recruiters (Dietz et al., 2015; Treuren et al., 2021a).

2.3 Reasons for skill discounting

This section describes the different ways in which a person may be skill discounted. Skill discounting occurs in several ways. The skills of employees include their formal educational qualifications and all the abilities they possess relevant to the employment context (Mahmud et al., 2014; Mavromaras et al., 2007). Skill discounting may seem objective, through

evaluation of the formal education and experience of migrants. However, there can arise factors that are either socially constructed by employers, or in the actual inadequacy of the job candidate's individual skills which can affect the evaluation of those skills. As such, skill discounting can occur for employer-related reasons, for reasons pertaining to the individual migrant themselves, or for reasons that are beyond the control of both the employer and the individual migrant.

In their study, Alboim et al. (2005) outlined a number of reasons for skill discounting among migrants in their review of the Canadian migration literature, including racial prejudice or discrimination, limited proficiency in the host country's language, lower quality of education and skills, lack of relevance of skills to the host country, and absence of professional accreditation. In addition to these ways of skill discounting, insufficient local work experience is another way through which migrant skills may be discounted, as will be discussed later in this chapter.

The following sub-sections provide a detailed explanation of the different aspects of skill discounting by drawing on Alboim et al. (2005) suggested framework and the broader migrant literature.

2.3.1 Discrimination

Discrimination for migrants means different labour market treatment in regards to recruitment, income, promotion, and other benefits due to their migrant status or other demographic attributes, rather than being based on their skills or equivalent qualifications to those of native-born individuals (Aigner & Cain, 1977; Banerjee, 2022). Migrants might be prone to discrimination at the employment level during the selection and recruitment phases, and even in career advancement (Almeida et al., 2012; Banerjee, 2022; Dietz et al., 2015; Esses & Dietz, 2007; Guo, 2015; Turchick Hakak & Al Ariss, 2013).

Discriminatory behaviour from an employer can arise in different ways. Employers may hold conscious or unconscious prejudices and form stereotypes based on the individual migrant's race or ethnicity, cultural background, gender, religion, or even their name (Almeida et al., 2012; Esses & Dietz, 2007; Oreopoulos, 2011; Reitz, 2023; Shinnaoui & Narchal, 2010; Syed & Pio, 2010). In this regard, a number of studies have identified that migrants from non-European origins, with ethnic rather than English names, and female migrants faced discrimination in the labour market of the host economy (Ahmad, 2020; Oreopoulos, 2011; Syed & Pio, 2010). In an experimental study, Shinnaoui and Narchal (2010) examined the

effects of prejudice on the devaluation of migrants' qualifications. They created three experimental conditions with the place of birth and location of potential applicants differing (Lebanese, UK, Australia), while the level of qualifications remained the same. The participants were asked to rate applicants for the job. It was found that despite the similar level of the qualifications, the Lebanese applicants were rated less favourably for jobs than the UK and Australian applicants. Similarly, migrants who are visibly different to that of the majority in the host economy are considered to face further discrimination (Li, 2001b; Morissette & Galarneau, 2004). In this regard, Udah et al. (2019) identified that skin colour was racialised. In their study, of African migrant experiences in the Australian labour market, 28 out of 30 participants mentioned that their lower employment participation was due to their darker skin colour than the major white population. The cultural background of migrants can also be a basis for discrimination (Almeida et al., 2015; Veit & Thijsen, 2021). The recruiter or employer might be comfortable with hiring people who follow the same social codes as themselves, even if these codes might not necessarily be related to work performance(Bursell, 2007; Veit & Thijsen, 2021). For example, Almeida et al. (2015) reported that a higher cultural similarity between a recruiter and a migrant job applicant resulted in less discrimination in the recruitment process. In addition, the names of migrants was often a factor in discrimination(Booth et al., 2012; Oreopoulos, 2011). It was reported that migrants with non-Anglo names, such as Chinese, Indian, or Pakistani names, had a 40% lower chance of getting an interview (Oreopoulos, 2011). Similarly, it was reported that responses to job applications were significantly lower for people with Chinese and Middle Eastern names than those with English or Anglo sounding names (Booth et al., 2012).

Discriminatory behaviour of employers can often lead to unfavourable labour market outcomes for migrants. Migrant job applicants often receive fewer call-backs for interviews (Midtbøen, 2015; Oreopoulos, 2011), which can ultimately lead to unemployment, over-qualification, and job-qualification mismatches for migrants (Dietz et al., 2015; Esses, 2021; Rafferty, 2012, 2020). For example, Batalova et al. (2016a) found that Hispanic and Black migrants were more likely to be working in jobs requiring low skill levels compared to White people, the effect being stronger for Black men. In their study, Midtbøen (2015) identified that, despite everything being equal in terms of skills, having a Pakistani name reduced the chances of call-backs for interviews by 25.8%. Furthermore, discrimination can adversely impact the mental health of migrants and their psychological wellbeing (Ayón, 2015; Di Napoli et al., 2021).

2.3.2 Lack of language proficiency

Language proficiency, 'reading writing, listening and speaking abilities', plays an important role in the labour market for migrants, serving as a major source of human capital for their employment success (Carlsson et al., 2023; Chen & Hong, 2016, p. 275). Employment selection for migrants may be influenced by their proficiency, or lack thereof, in the language of the destination country (Pieroni et al., 2024). Several studies underscore the critical role of language proficiency in the host country for migrants. For example, the research highlights the importance of proficiency in Italian language for migrants in Italy (Pieroni et al., 2024), English language proficiency for migrants in the USA and Australia, Swedish language skills for migrants in Sweden (Delander et al., 2005), and Spanish language skills for migrants in Spain (Budría & Swedberg, 2012).

Isphording (2015)suggests several factors associated with migrants' poor proficiency in the host country language. Firstly, the greater linguistic disparity between migrants' native language and the language of the host country increases the difficulty of learning the latter. Additionally, relying on ethnic enclaves can limit exposure to the host country language, hindering language acquisition. Short durations of stay in the host country also contribute to limited language proficiency among migrants. Moreover, some studies suggest that the age at which migration takes place makes a difference, with those arriving at a younger age more easily adapting to the host country language (Bleakley & Chin, 2004, 2010). Apart from language fluency, the accent of migrants can pose challenges for job seeking migrants (Creese & Wiebe, 2012; Timming, 2017; Udah et al.2019). Speaking with an accent (a foreign accent that is different to native speakers) can create bias in employers about the language ability of migrants, thereby adversely affecting their employability (Hebbani & Colic-Peisker, 2012). For example, Udah et al. (2019) studied the employment experiences of African migrants in Australia and found that speaking with an African accent posed challenges for these migrants in finding meaningful employment – that is, commensurate to their skill levels. Similarly, Timming (2017) found that recruiters discriminated in phone-based job interviews against candidates who spoke English with Chinese, Mexican, and Indian accents. All three groups of candidates were rated as being more suited to non-customer-centric jobs than for customer-centric jobs. Moreover, beyond English language skills, employers also tended to assess different forms of communication skills of migrants in hiring for jobs (Almeida & Fernando, 2017). In this regard, Mahmud et al. (2014) noted the significance of specific communication

skills such as ‘confidence, tact, fluency, modesty, interaction skills, interpretation skills, and the use of effective face-to-face communication skills’(Mahmud et al., 2014, p. 341).

Poor proficiency in the host country language or employers’ perceptions of lower language ability for migrants has been identified as a major difficulty for migrants in obtaining a job that uses their qualifications, skills, and experience (Ariss & Crowley-Henry, 2013; Budría & Martínez-de-Ibarreta, 2021; Creese & Wiebe, 2012; Fossland, 2013; Giampapa & Canagarajah, 2017; Schmaus, 2020; Wong, 2020; Zikic et al., 2010). Poor language skills can lead to unfavourable labour market outcomes for migrants such as unemployment (Leslie & Lindley, 2001) and lower earnings on the job (Chiswick & Miller, 2007; Dustmann & Fabbri, 2003; Kossoudji, 1988). For example, Chiswick and Miller (2007) emphasised the role of proficiency in English language in the Australian labour market. It was identified that migrants who were bilingual and spoke English proficiently earned 7.9% less than monolingual English speakers. Those who did not speak English very well had a wage penalty of 58% compared to monolingual English speakers. On the other hand, proficiency in the host country language helped migrants to access better employment opportunities. Proficiency in the English language has been found to increase employment possibilities for migrants, improve earnings on the job (Dustmann & Fabbri, 2003), reduce the problem of over-qualification (Budría & Martínez-de-Ibarreta, 2021), and increase job search clarity and the self-efficacy of migrants (Guerrero & Rothstein, 2012). For example, Dustmann and Fabbri (2003) study of language proficiency and labour market performance of migrants in the UK found that fluency in the English language increased migrants’ chances of being employed by 20% and raised their earnings by up to 20%.

2.3.3 Lower quality of qualification, skills and experience

The devaluation of migrants’ skills is related to the quality of the skills they have acquired abroad. Several attributes affect the quality and standard of the human capital of migrants acquired overseas such as the financial cost of obtaining their tertiary qualifications, the use of English language as the medium of instruction, and the country in which the qualifications were obtained may all play a role (Özden, 2006; Pecoraro & Tani, 2023; Reitz, 2023).

The research has identified that differences in the quality of education lead to unequal labour market outcomes for migrants (Argue & Velema, 2022; Chiswick & Miller, 2010; Friedberg, 2000; Li & Sweetman, 2014; Sweetman, 2004). The quality of educational qualifications, particularly those attained from developing countries, tends to be lower than those from developed countries (Chiswick & Miller, 2010; Zeng & Xie, 2004). For example, in Zeng and

Xie's (2004) study, the student-teacher ratio (a measure to assess the quality of education across countries) as of 2000 was 19 in China, 25 in Vietnam, and 34 in India; however, it was 15 in the United States, indicating the higher quality of the US system. Similarly, Kustec et al. (2007) mentions that the lower quality of migrants' qualifications could also be due to poor instruction in the educational institution of the source country compared to that in the host economy, and hence, despite the title of the qualification remaining the same, its value is lower in the host economy. Evaluating migrant skills to be of lower quality can also be due to employers' limited information in assessing the quality of educational institutions in the source country, particularly the academic programs and curriculum (Kustec et al., 2007). In addition, it was found that employers often interpret the ability of migrants based on the prestige of their educational credentials, attributed to universities with rigorous admission processes, and the elite institutions where only competent students are given entry (Argue & Velema, 2022). Also, evaluation of migrants' qualifications as being of lower quality is considered questionable for migrants who have cleared the points-based assessment and gained entry into the country based on their skills. Moreover, there has been significant development in many of the source countries, particularly across the Asian region, where education delivery standards have been high and comparable to developed countries (Esses et al., 2006).

The differences between the educational system of migrants' source country compared to that of the host economy create barriers in the employment outcomes of migrants leading to being over-qualified on the job (Aleksynska & Tritah, 2013) and differences in earnings (Argue & Velema, 2022; Friedberg, 2000). For instance, Friedberg (2000) reported that migrants who had attained degrees in Europe had higher earnings for their qualifications than migrants who had obtained qualifications from Asia or Africa due to the differences in educational standards, with the former considered to be of higher standard than the latter. Indeed, a higher quality education is likely to lead to a higher payoff for migrants in the labour market (Chiswick & Miller, 2010). Similarly, Argue and Velema (2022) highlight that employers consider the cultural distance between the place of education of migrants and the host country as resulting in a lack of relevant cultural competence. In addition, the wages associated with these qualifications from more culturally distant countries are often lower (Argue & Velema, 2022).

2.3.4 Irrelevance of migrant skills in the labour market

In some cases, the devaluation of migrant skills can be due to the lower levels of 'fit' of migrants' education or experience to the requirements of the host economy. In this regard, individuals from different countries may have degrees that imply the same qualification level,

but these may be different in terms of the skills acquired. In addition, some of the skills (such as general skills including communication, critical thinking, problem solving skiills) acquired by migrants can be highly relevant in the host economy and are thus easily transferable, while other skills (such as occupation-specific skills) may not be as easily transferable (Dean, 2018). For example, some employers may look for more general skills such as those recruiting salesperson, others may require more job-specific skills such as with electricians. Also, for some degrees such as law, the knowledge and training acquired in the source country may not be transferable to the host economy (Chiswick et al., 2003; Friedberg, 2000). For example, Thondhlana et al.'s (2016), one participant mentioned how their degree in Law from Zimbabwe, which was based on Dutch-Roman law, was irrelevant in the UK:

> "I had three interviews and that's when the challenges started. Because in Zimbabwe our system is based on Roman-Dutch Law, all prospective employers said, '… in as much as I appreciate your experience but in terms of the qualifications that you have, they are not relevant in this country"(Thondhlana et al., 2016, p. 587).

Skills not fitting the requirements of the host economy can be a result of occupational characteristics. For example, Zorlu (2013) describes the transferability of the skills of migrants in three occupations, namely computer programmer, psychologist, and lawyer. Among these three occupations, the skills of a computer programmer were found to be more readily and easily transferable, as programming languages are similar among programmers, even at the international level. In the case of psychologists, they would need more country-specific and cultural knowledge of the host economy to direct clients, as mental health cases can be culture-oriented and practice may differ between countries. The skills of the lawyer would be the least transferable of the three, as the laws and legal system will be fundamentally different between the two countries. In another study, one participant who had specialisation in human resources found that her knowledge of local labour legislation was significant for finding a job with her qualifications (McCoy & Masuch, 2007).

The lack of relevance of educational qualifications obtained from the country of origin, often prevents migrants from attaining jobs that match their qualifications (Thondhlana et al., 2016).

2.3.5 Lack of professional accreditation

The lack of recognition of professional credentials by professional and regulatory organisations is another form of skill discounting. Non-recognition of credentials is a major challenge for the more regulated occupations compared to non-regulated occupations (Kurup et al., 2024a). Regulated occupations are those that require licensing/registration with professional

associations in order to practice. Individuals in these occupations need to go through an accreditation process where the quality and standard of their qualifications are assessed (Davda et al., 2022; Groutsis, 2003). For example, doctors, engineers, and teachers need to get their qualifications accredited by professional associations to legally practice in their field. Non-regulated occupations do not require assessment of qualifications by professional associations or require licensing/registration to practice (McCoy & Masuch, 2007). Migrants in regulated professions face challenges to enter their profession in the host economy, although it is not uncommon for a migrant in a non-regulated profession to also face challenges. For example, Zikic et al.'s (2011) study found that 40% of migrants who intended to work in regulated occupations had difficulty getting their credentials accepted. On the other hand, migrants in unregulated professions had a reduced chance of occupational degrading, meaning they were less likely to be employed in positions below their skill and qualifications levels (Banerjee & Phan, 2014). This is because unregulated professions do not require credential accreditation by professional bodies, allowing migrants to access roles that more closely align with their expertise.

Regulation of certain occupations is undertaken to maintain quality and standards in the field, to reduce risks to public health and to ensure consumer protection (Davda et al., 2022; Kustec et al., 2007; Reitz, 2003). One reason for the poor recognition of overseas qualifications is the difficulty professional associations face in assessing the worth of qualifications attained from countries that are very different (in terms of cultural background and educational system) to the host economy, particularly those from Asia and Africa (Grant, 2005). However, these accreditation processes are also seen as a way to exclude migrants from entering the upper segments of the labour market (Bauder, 2003a). Similarly, Khan (2007) mentions non-recognition of foreign qualifications as a means of ensuring that power and status are maintained by certain members of regulated professions, thereby restricting particular groups from accessing this power and status. Often, the accreditation process can be costly and a slow painstaking process, delaying migrants' entry into the labour market. For example, Ramboarison-Lalao et al.'s (2012) study explains how Malagasy physicians faced challenges in practicing in France. These migrants had to undertake several years of a specialisation degree in France, had to work as an acting nurse for about three years, pass an examination, become an associate practitioner for a probationary period, and finally get registered with the French Doctors Guild which enabled them to practice their profession.

Lack of professional accreditation leads to high levels of under-employment (Kurup et al., 2024b; Qureshi et al., 2013), switching of careers to a different occupation (Bauder, 2003a; Ramboarison-Lalao et al., 2012), and often prevents people from fully utilising their abilities(Boyd & Schellenberg, 2007).

2.3.6 Non-recognition of overseas experience and lack of local work experience

The low level of recognition (or non-recognition) of migrants' overseas acquired work experience is another form of skill discounting. The literature demonstrates that a lack of recognition of overseas acquired work experience is a significant factor that prevents migrants from obtaining jobs matching their skill levels (Aydemir & Skuterud, 2004; Bauder & Cameron, 2002; Covell et al., 2017; Farashah & Blomquist, 2022; Rajendran et al., 2017; Syed, 2008).

Local work experience is often seen as a sign of familiarity with local professional terminology, thereby hindering migrants with no local work experience from accessing job opportunities (Hathiyani, 2017). The lack of recognition of migrants' overseas acquired work experience is often compounded by the demand for local experience by employers (Almeida & Fernando, 2017; Bauder & Cameron, 2002; Coffey et al., 2021; Colic-Peisker, 2011). The need for local work experience can be occupation-specific. For example, Almeida and Fernando (2017)identified that Australian employers in the accounting field preferred migrants with local experience, even if they knew that the fundamentals of accounting were the same irrespective of where they were obtained from. This is because accounting roles required knowledge on Australian specific laws, regulations and tax system thought the system of taxation was different in Australia. On the other hand, employers in the IT field were not concerned about migrants having local work experience. They recognised the work experience of migrants obtained overseas. Such fields are considered to be 'vendor based' where country-specific laws and standards do not apply (Almeida & Fernando, 2017, p. 893).

Low recognition of overseas acquired work experience often leads to migrants taking up jobs below their skill levels (Cameron et al., 2019; Krahn et al., 2000) with low wages (Aydemir & Skuterud, 2004; Bauder, 2005) in low-skilled occupations (Bauder, 2005). For example, in their analysis of migrants' pre- and post-migration occupations, Cameron et al. (2019) found that 27.5% of participants reported being employed in jobs unrelated to their pre-migration work experience and education, among which 78% reported being under-employed. Lack of local work experience has been found to decrease migrants' prospects of getting a job that matches

their qualifications (Liversage, 2009; Thondhlana et al., 2016). For example, Thondhlana et al.'s (2016)study of Zimbabwean migrants in the UK found that those who had a local qualification and experience working in the UK had a better chance of finding employment. Furthermore, in a study by Udha et al. (2019), African migrants in Australia reported that employers demanded local work experience even for entry-level jobs.

The above section has identified multiple reasons for skill discounting, indicating the many ways in which a migrant might be skill-discounted. However, the skill discounting literature has tended to focus on singular reasons for the phenomenon, such as poor language proficiency (Timming, 2017) or discrimination (Dietz et al., 2015), without providing a comprehensive framework that captures the multiple forms of skill discounting. This study aims to address this gap by identifying the multiple factors contributing to skill discounting, utilising Alboim et al. (2005) framework and drawing on the broader literature. By moving beyond a singular focus, this research will provide comprehensive evidence of the various forms of skill discounting that migrants encounter in the labour market.

2.4 Consequences of skill discounting for migrant employees

This section discusses the consequences of skill discounting for migrant employees. As migrants enter the labour market of the host economy, they might start by looking for jobs within their occupation – usually starting with one similar or equivalent to a job they held before migration or one with matching skills and qualifications. This is not an issue for sponsored migrants, who are offered a visa in order to fill a specific position. For the remainder, the self-initiated migrants, some may find jobs equivalent to their pre-migration occupation or matching their skills without much difficulty. In these cases, they are able to utilise their skills and knowledge in their respective fields and continue to grow and develop professionally. However, as mentioned earlier, migrants are often likely to experience skill discounting in the host economy labour market. As a result, they may find it difficult to obtain jobs equivalent to what they held pre-migration, commensurate with their skill levels, thereby often leading to unemployment. Even if employed, these migrants are more likely to be in jobs in which they are either underemployed, over-qualified, or in lower paid positions. Being in such jobs can have implications for migrants' attitudes toward their job and their physical and psychological wellbeing. These outcomes for migrant employees are explained in detail below.

2.4.1 Unemployment

The literature suggests that migrants experience higher levels of unemployment than non-migrants (Arai & Vilhelmsson, 2004; Banerjee et al., 2024; Duvander, 2001; Hansen, 2012;

Kogan, 2006; McDonald & Worswick, 1997; Thapa, 2004). For example, in an evaluation of the labour market integration of migrants in the UK using the UK labour force survey, Frattini (2017) found that the employment rate of migrants was 68% compared to the higher 73% employment rate for non-migrants. The employment rate of migrants varied according to a range of factors such as host economy language proficiency (To et al., 2017), level of education, and discrimination based on ethnicity (Colic-Peisker & Tilbury, 2006; Udah et al., 2019) and religion (Fullin, 2016). For example, To et al.'s (2017) study analysed the Australian Household, Income and Labour Dynamics in Australia (HILDA) survey dataset using data from 2001 to 2014 and found that migrants who: (i) only spoke English or (ii) who had high English-speaking proficiency were more likely to be employed compared to migrants who were less proficient in the English language. In regards to ethnicity, studies have shown that migrants from Africa are more likely to be unemployed than other migrants and non-migrants in Australia (Colic-Peisker & Tilbury, 2006; Udah et al., 2019). In Udah et al.'s (2019) study of black Africans in Australia, participants mentioned the colour of their skin as a reason for their unemployment. Furthermore, migrants are more likely to be employed in jobs located in the secondary labour market involving seasonal or temporary work. In the secondary labour market, these jobs and the hours employed in these jobs fluctuate with the business cycle. During economic downturns or a recession, migrants are more likely to be dismissed first from jobs (Kogan, 2004), leading to higher unemployment rates (Dustmann et al., 2010; Orrenius & Zavodny, 2010).

2.4.2 Under-employment

One consequence of skill discounting is under-employment, where a migrant holds a job where they might not fully utilise their skills, education, and abilities or hold insecure employment, in a position outside the field of their education, training, or experience, or that is lower in quality and earnings compared to other individuals of similar ability (Feldman et al., 2002; Glyde, 1977; Kim & Allan, 2020). The broader migrant literature demonstrates that migrant employees are more likely to be under-employed than non-migrants (Batalova et al., 2016a, 2016b; De Jong & Madamba, 2001; Gilmore & Gilmore, 2009; Guo, 2015; Li & Campbell, 2009; Mawani et al., 2022; Ramboarison-Lalao et al., 2012; Reid, 2012). For example, in her study of migrant employees in Australia, Reid (2012) found that 40% of migrant employees were not utilising their skills on the job 18 months after their arrival. Similarly, Batalova et al. (2016b) found that about 19% of college-educated migrants in the US were employed in jobs below their skill levels compared to only 14% of non-migrants. In a study on under-

employment among migrants in US metropolitan areas, it was found that in one area, 35.9% of migrants were over-educated for their job, while only 9.4% of non-migrant whites faced this issue (Wang & Lysenko, 2014). Similarly, an analysis of the 2006 Canadian census found that 28% of university-qualified migrant men and 40% of university-qualified migrant women were employed in jobs requiring sub-university levels of skills compared to 10% and 12% of non-migrant Canadian men and women (Galarneau & Morissette, 2009). More recently, Banerjee et al. (2024) identified that migrants were 153% more likely than non-migrants to be working in a part-time job not of their own choosing. These under-employed positions often involved poor quality jobs involving manual labour (Creese & Wiebe, 2012; Reid et al., 2014), low pay (Man, 2004; Schenker, 2008), lower levels of responsibility (Treuren et al., 2021a), and were more likely to be part-time or temporary compared to the industry average(Gilmore & Gilmore, 2009).

Furthermore, the research reveals that under-employment is significantly influenced by language proficiency, local work experience, the discriminatory behaviour of employers, the financial necessities faced by migrants, and their legal status (Al Ariss, 2010; Batalova et al., 2016b; Chen et al., 2010; Creese & Wiebe, 2012; Esses et al., 2014; Kosny et al., 2017; Ndiuini & Baum, 2021). For example, Batalova et al.'s (2016b) study reports that migrants with lower proficiency in the English language (who did not speak English well or not at all) were five times more likely to be under-employed (defined as employment in low-skilled jobs) compared to migrants who spoke English only. Furthermore, migrants might also accept jobs below their capabilities as they are readily available and do not require local work experience, recognition of credentials, or a high level of proficiency in the host country's language (Kosny et al., 2017). These jobs may be considered low-quality and include manual labour (Creese & Wiebe, 2012; Reid et al., 2014), menial jobs with low pay (Man, 2004; Schenker, 2008), and involuntary part-time or temporary positions (Gilmore & Gilmore, 2009). They may also have a higher risk of work-related injuries (Premji & Smith, 2013). Migrants are also more likely to fill so-called '3 Ds' jobs, which include "Dirty, Dangerous, and Degrading" jobs, compared to non-migrant employees (Benach et al., 2010, p. 339). Such positions do not fully utilise migrants' pre-migration knowledge, skills, abilities, and experience and are likely to have negative consequences for both the migrants and the economy. Under-employment can lead migrants to feel over-qualified for their jobs, meaning they may hold skills, experiences and qualifications beyond what is required for their current roles (Grant & Nadin, 2007), can trigger feelings of losing their skills (Adhikari & Melia, 2015; Dean & Wilson, 2009; Humphries et al., 2013),

hinder career growth and the aspirations of migrants (Ndiuini & Baum, 2021), and can adversely affect their physical and mental health through social isolation, workplace injuries, and the stressors inherent in poor quality jobs (Premji & Shakya, 2017; Premji & Smith, 2013; Reid, 2012). This also has implications for employers who miss out on the potential benefits these employees could bring in through the full utilisation of their skills, qualifications, and experience (Ndiuini & Baum, 2021). Furthermore, under-employed skilled migrants can negatively affect the economy as they contribute less to labour market skills, economic growth, and tax revenue (Guerrero & Rothstein, 2012). The under-employment faced by migrants is often considered as brain waste or brain abuse, costing billions of dollars to the economy (Apatov & Sundaram, 2023; Batalova et al., 2016b; Farivar et al., 2021; Liversage, 2009; Riaño, 2021).

2.4.3 Over-qualification

Skill discounting leads to over-qualification where a migrant who is under-employed is likely to have excess knowledge, skills, and abilities than what is required for the position held, termed as over-qualification (Maynard et al., 2006); for example, holding a Master's degree in business administration and working as a nanny, or working in the right professional field, but being overqualified for mundane tasks such as data input (Landolt & Thieme, 2018). These situations are likely to result in under-employment, and under-utilisation of knowledge, skills, abilities, and experience. At the same time, the person is over-qualified in terms of these attributes. The research has shown that migrants are more likely to be over-qualified than non-migrants (Akgüç & Parasnis, 2023; Chen et al., 2010; Fernández & Ortega, 2008; Green et al., 2007; Kler, 2007; Larsen et al., 2018; Lianos, 2007; Lindley, 2009). For example, Lindley (2009) found that 27.3% of migrant men in the UK from 1993-2003 were over-qualified compared to 22.5% of non-migrant men. In a Canadian study, Chen et al. (2010) examined the prevalence of over-qualification among migrants along three dimensions: highest educational levels, previous work experience, and expectations about jobs. Four years after arrival in Canada, 51.6% of migrants were found to be over-qualified in their attained jobs based on their educational levels. A further 44.4% of migrants reported to be over-qualified when compared to the skills required in their pre-migration jobs, and 42.8% reported to be over-qualified related to their expected skill requirements for jobs in Canada. Additionally, Altorjai (2013) found that male migrants had a 10.7% greater probability of being over-qualified than non-migrant males in the UK. Similarly, Cornelissen and Turcotte (2020) found that migrants who studied outside Canada were more likely to experience over-qualification (14.3%) than migrants who attained

their highest level of qualification in Canada (4.4%). They also identified that migrants were three times more likely to experience over-qualification than non-migrants (Cornelissen & Turcotte, 2020).

Furthermore, over-qualification among migrants is significantly influenced by the place of education of migrants, their language proficiency, their job search strategies, and the discriminatory behaviour of employers (Battu & Sloane, 2004; Budría & Martínez-de-Ibarreta, 2021; Cornelissen & Turcotte, 2020; Kracke & Klug, 2021; Larsen et al., 2018). For example, migrants who used informal job search strategies, such as reliance on family and friends or networks of similar people, are at higher risk of over-qualification (Kracke & Klug, 2021).

Prolonged over-qualification where individuals will not be able to apply what they have learnt over a lengthy period can lead to the loss of their skills, also known as skill atrophy or skill erosion (Cameron et al., 2013; Frank & Hou, 2017; Fuller, 2015). This can have a negative long-term effect on the career path of these individuals, such as periods of unemployment and lower wages (Frenette, 2004). Over time, this can also lead to feelings of resentment and alienation for migrants which can, in turn, influence their sense of social connection (Wagner & Childs, 2006).

2.4.4 Lower earnings

Several studies have identified that migrants often earn lower wages than non-migrants (Alboim et al., 2005; Banerjee et al., 2024; Crossman et al., 2021; Li, 2000; Reitz, 2001, 2005; Smith & Fernandez, 2017). As mentioned earlier, skill discounting leads to migrants taking up positions for which they are under-employed and over-qualified. As a result, their earnings might not reflect their education or skill levels, and are instead lower than those of non-migrants with similar or lower skill levels (Bratsberg et al., 2014; Hardoy & Schøne, 2014; Lindley, 2009; Reitz, 2005). Recently, Banerjee et al.'s (2024) study identified that migrants earned 24% less than their non-migrant counterparts. Additionally, skill-discounted migrants are more likely to be employed in low-paying industries such as hospitality and retail and lower-paying occupations within those industries (Alfano et al., 2016; Bagshaw, 2016). Several other reasons for skill discounting, such as discrimination (Li, 2008; Reitz & Banerjee, 2007; Udah et al., 2019), place of education of migrants(Tong, 2010; Zeng & Xie, 2004), and language proficiency (Chiswick & Miller, 2003, 2007; Dustmann & Van Soest, 2002) also negatively affected the earnings of migrants. For example, Li (2008) identified that migrants who were members of visible minorities earned less than migrants of British origin), the difference being

more than $18,000 pa for Chinese and black migrants to $13,000 pa for migrants from a South Asian and other visible minority background.

2.4.5 Psychological wellbeing

As mentioned earlier, skill discounting can lead to unemployment, under-employment, over-qualification, or lower earnings for migrants. There is evidence that these situations are likely to negatively impact on the psychological wellbeing of migrants (see Raihan et al., 2023). Under-use of migrant skills has been found to be associated with poor mental health for migrants (Chen et al., 2010; Reid, 2012). In this regard, Chen et al. (2010)identified that all three dimensions of over-qualification (educational level, experience, and expectations) had a negative impact on the mental health of migrants. A study by De Maio and Kemp (2010) revealed a significant increase in emotional or mental problems for migrants in Canada over time. The study found that only 5.1% of respondents reported persistent feelings of sadness, depression, or loneliness in the first wave (six months since arrival) of Longitudinal Survey of Immigrants to Canada, but this number rose to 30% and 28.6% in the second (two years after arrival) and third wave (four years after arrival in Canada) of the survey, respectively. The experience of discrimination, bias, and unemployment can adversely affect the psychological and physical health of migrants (Chen, 2008; Kennedy & McDonald, 2006). Perceived over-qualification was positively associated with depressive symptoms and negatively linked to life satisfaction among migrants (Wassermann & Hoppe, 2019). The jobs taken by skill-discounted migrants are more likely to be repetitive and low wage, and viewed as 'low-status' (Creese & Wiebe, 2012). This can develop into a negative evaluation of the self, as socio-economic status is considered to determine human worthiness (Aycan & Berry, 1996). Naidoo (1992) Canadian study indicated that migrants whose qualifications, education, and skills were recognised and valued during the migration approval process felt demoralised when they found themselves unable to find appropriate employment. Not finding a meaningful job can negatively affect a person's self-concept and self-esteem (Aycan & Berry, 1996).

Furthermore, the lack of host-country language proficiency can lead to a personal sense of lacking in efficacy (Naidoo, 1992). The challenges migrants face while searching for jobs that match their skill level can often lead to feelings of disappointment, frustration, anger, and psychological distress (Aichberger et al., 2012; Chen, 2008; Grant & Nadin, 2007; Missinne & Bracke, 2012; Syed et al., 2006). On the other hand, better integration into the host economy enhances migrants' wellness, making them feel more productive and healthy in the new economy (Chen, 2008).

2.4.6 Physical wellbeing

Skill discounting leading to unemployment, under-employment, and over-qualification can have negative effects on the physical health of migrants (Akhavan et al., 2004; Premji & Shakya, 2017; Shirmohammadi et al., 2023; Zheng & Yu, 2022). A study using the data from the U.S. National Health Interview Survey found that when they first arrive in the host country, migrants generally have better health outcomes than non-migrants. However, the study found that over time, the experience of unemployment can reduce their health advantages, as measured by mortality rates (Zheng & Yu, 2022). This suggests that the longer migrants stay in the host country, the more likely they are to experience negative health outcomes as a result of unemployment. Similarly, De Maio and Kemp (2010) found that visible minorities and migrants who reported experiencing discrimination and unfair treatment by others because of their ethnicity, culture, race, language, or religion were more likely to see a decline in their self-reported health status after settling in Canada. This was evidenced by a decrease in the percentage of respondents who rated their health as 'excellent' at six months of their arrival in Canada, from 43.0% to 30.2% after 2 years since their arrival to 23.0% after four years since arrival in the third wave. Similarly, Premji and Shakya (2017) conducted 30 interviews with migrant women in Canada. Their study found that unemployment and under-employment had negative effects on the physical health of the participants and their families, including unhealthy weight gain, sleep deprivation, and chronic health conditions such as high blood pressure, heart disease, diabetes, and chronic pain. This was linked to social isolation caused by unemployment, as well as poor working conditions in low-quality jobs. Additionally, the study found that those who were unemployed or under-employed intensified their job search strategies – skills training, attaining new qualifications, volunteering – in an effort to secure decent employment. These intensified strategies combined with household workload involving domestic work and taking care of children also contributed to poor health outcomes for migrant women.

Furthermore, skill discounting lead migrants to take up jobs that are precarious and risky such as in construction and agriculture (Cubrich & Tengesdal, 2021; De Maio & Kemp, 2010; Forst et al., 2010; Orrenius & Zavodny, 2009; Smith et al., 2009; Wu et al., 2005; Zhang et al., 2022). These jobs put them at higher risk of injury and illness in workplaces where workers were often subject to human rights violations (Orrenius & Zavodny, 2009; Premji & Smith, 2013). For example, a review based on 31 studies from 16 countries showed that migrant workers were injured at work twice as often as non-migrants (Salminen, 2011). Additionally, these migrants

knew little about their workplace rights, and thus, were more likely to be taken advantage of by employers providing poor working conditions with few benefits and long hours (López-Jacob et al., 2010; Premji & Shakya, 2017). These unfavourable labour market experiences combined with the poor language and cultural knowledge of migrants, their financial circumstances, and poor access to healthcare facilities further amplified their negative health outcomes (Moyce & Schenker, 2018; Wu et al., 2005).

2.4.7 Job attitudes and behaviours

As mentioned previously, skill-discounted migrants are more likely to find themselves in jobs where they are over-qualified, underpaid, or where their skills are under-utilised on the job. This can influence their attitudes and behaviours at work. The most general outcomes of under-employment and over-qualification have been reported to be less job satisfaction and higher turnover intention (Fine & Nevo, 2008; Halvorsen et al., 2015). Migrant employment satisfaction studies have generally reported lower job satisfaction for migrant employees than for non-migrant employees (Chowhan et al., 2016; Fang et al., 2009; Kats, 1983; Kifle et al., 2016; Lee, 2005). This dissatisfaction is greater for migrants who are under-employed (Hosoda, 2016; Kats, 1983) or who perceive over-qualification on their job (Wassermann et al., 2017). Interestingly, this dissatisfaction seems to be related to the utilisation of their skills; as migrants found jobs that made better use of their skills, their satisfaction increased (Khalil et al., 2023; Kuusio et al., 2014). Apart from lower job satisfaction, migrant employees have been found to exhibit less organisational citizenship behaviours (Ang et al., 2003; Krjukova et al., 2009). In a study conducted in Singapore, Ang et al.'s (2003), study found that foreign-born employees were less likely to exhibit citizenship behaviours on the job than those who were locally-born, as foreign employees had less favourable employment relationships.

2.4.8 Other outcomes

In addition to the employment outcomes previously mentioned, skill discounting can lead to various other consequences for migrants. Some migrants have been found to 'opt out' of the labour market (Al Ariss, 2010; Campbell et al., 1991; Fuller & Martin, 2012). For example, Campbell et al.'s (1991) study presented the findings of a survey of Greek, Yugoslav, and Vietnamese migrants who had worked in the manufacturing industry in Melbourne. Despite the varying backgrounds and arrival times of the participants, the survey found that most of them had initially obtained jobs as operators, labourers, or drivers. However, once in these jobs, they reported limited job mobility, with half of them having no advancement opportunities, and another third having to leave the workforce as it was their only career option. On a more

positive note, some migrants responded to the challenges of skill discounting by starting their own business. For example, those facing obstacles such as under-employment or a lack of recognition of their qualifications, chose to establish businesses to create their own pathways to success (Al Ariss, 2010; Chrysostome, 2010; Poblete, 2018). However, the ability to pursue entrepreneurship may be constrained by financial limitations and resource availability for migrants (Al Ariss, 2010).

This literature review has so far demonstrated the broader impact of skill discounting on migrant employees showcasing the significance of this issue. However, we do not have much evidence on specific aspects of skill discounting, such as comparisons of its implications for migrants in varying sectors, and how strongly or weakly it influences migrants' employment experiences.

2.5 Approaches to analysing skill discounting

Incidences of skill discounting have been explored through quantitative, qualitative, and mixed-method approaches. These methodologies have incorporated a range of different methods to determine skill discounting mainly by focusing on the consequences of skill discounting or the reasons for it such as prejudice, or through in-depth qualitative analysis that explores the labour market experiences of migrants. These are discussed below.

2.5.1 Quantitative approaches

Quantitative approaches exploring skill discounting have mainly focused on measurable outcomes such as wage disparity, occupational mismatches, and occupational changes. These approaches often use large-scale datasets, surveys, and experimental methods to report on incidences of skill discounting.

A key method used in the literature has been the examination of wage disparities between migrants and non-migrants. The research has shown incidences of skill discounting in which migrants earn lower wages compared to native-born workers, even when they possess similar qualifications (Alboim et al., 2005; Aydemir & Skuterud, 2005; Chiswick & Miller, 2010; Ferrer & Riddell, 2008; Friedberg, 2000; Reitz, 2001).

Another common method is through examining occupational mismatches, where migrants work in jobs below their skill level. These studies have mostly looked into education-job mismatch, and compared the educational level of migrants to those required for the job in which they are employed (Dahlstedt, 2011; De Alwis et al., 2020; Green et al., 2007; Pivovarova & Powers, 2022). This method highlights the extent of skill mismatches, providing evidence of

skill discounting based on employment outcomes. Similar to wage disparity, these methods are based on employment outcomes, leaving the question of why they have not been examined.

In addition, to wage and occupational outcomes, some studies have used experimental techniques to look at employer behaviour in hiring migrants for jobs, gathering evidence for skill discounting by conducting cover letter experiments, where fictitious job applicants with the same qualifications but different ethnic or racial backgrounds, are evaluated by recruiters. Findings consistently show that migrant applicants are often screened out of jobs due to their ethnicity, suggesting the role of discrimination in skill discounting (Dietz et al., 2015; Horverak et al., 2013; Shinnaoui & Narchal, 2010; Thijssen et al., 2022; Vernby & Dancygier, 2019).

More recently, skill discounting has been determined by comparing migrants' occupations before and after migration. Research by Treuren et al. (2021a, 2021b) has shown that migrants who changed their nominated occupation, particularly when it was driven by factors such as non-recognition of qualifications or discriminatory hiring practices, were likely experiencing skill discounting. This approach, drawing on frameworks such as Alboim et al. (2005), views skill discounting as a multidimensional phenomenon and seeks to capture its various forms.

2.5.2 Qualitative approaches

The experiences of migrants in the labour market have been explored through qualitative research methods, reporting on incidences of skill discounting. Through the personal narratives of migrants, employer perspectives, and organisational practices, qualitative approaches have mainly focused on the barriers migrants face and their workplace integration experiences.

A significant number of studies have explored the labour market barriers that migrants face through interviews, considering migrants' perspectives on their employment and integration experiences (Aure, 2013; Creese & Wiebe, 2012; Currie, 2007; Ertorer et al., 2020; Fulton et al., 2016; Qureshi et al., 2013; Rajendran et al., 2017; Ressia et al., 2017a; Syed & Murray, 2009). Studies have also explored other barriers such as non-recognition of overseas qualifications (Guo, 2009; Osaze, 2017; Wagner & Childs, 2006), discrimination (Kosny et al., 2017), and the role of language (Ims et al., 2021; Syed & Murray, 2009).

Apart from focusing on barriers that reveal the factors that contribute to skill discounting, the research has also looked into workplace integration experiences of migrants in the labour market. These studies report on the incidence of skill discounting through migrants' integration experiences, such as the occupational downgrading of migrants (Fernando & Patriotta, 2020; Rajendran et al., 2017; Ressia et al., 2017a).

Some studies have also looked into migrant hiring decisions, considering the perspectives of employers. For example, through interviews with institutional administrators and employers who engage with migrants from South Asia and the former Yugoslavia, Bauder (2003a) study revealed how foreign qualifications and work experience were often dismissed, preventing migrants from accessing higher-paying, skilled positions. This study provided valuable insights into how both institutional practices and employer biases contribute to skill discounting. Similarly, Birkelund et al.'s (2020) study explored how employers' experiences with migrants influenced their hiring decisions.

2.5.3 Mixed methods

Another approach to understanding the labour market experiences of migrants and incidences of skill discounting has been through a mixed methods approach. Here, the research adopts both quantitative and qualitative methods. For example, Cameron et al.'s (2019) study used a large-scale quantitative survey to compare migrants' pre- and post-migration occupations. This survey identified the key factors involved in skill discounting, such as non-recognition of overseas qualifications and experience. The second phase, the qualitative phase, explored this issue in-depth through interviews from which insights were attained on how policymakers could better support migrants to minimise skill under-utilisation. Similarly, Tan and Cebulla (2023) conducted a quantitative analysis of a large-scale survey to examine the labour market experiences of migrants in Australia. This phase identified employment rates and skill utilisation of migrants. The survey was followed by in-depth interviews to explore the labour market outcomes of migrants. While the survey provided a broad picture of migrant employment and skill utilisation, the qualitative phase enabled an exploration of the individual experiences of labour market integration (Cameron et al., 2019).

The above section has outlined how skill discounting has been explored in the existing literature. The literature review makes it clear there has not been a clear methodology used to determine the phenomenon. The broader literature has reported on incidences of skill discounting either through one or more of the reasons why it happens, its consequences, or by focusing on the broader labour market barriers faced by migrants. Given these limitations, the current research will use Treuren et al.'s (2021a) methodology to determine skill discounting in studies 1-3. Here, a migrant is considered skill-discounted if they were obliged to find a employment in new occupation (other than their pre-migration occupation) due to any of the skill discounting reasons as outlined by Alboim et al. (2005) and the broader migrant literature. A detailed explanation on determining skill discounting is provided in each of the study.

Additionally, this research will adopt qualitative methods by focusing specifically on skill discounting to provide an in-depth understanding of the phenomenon.

2.6 Gaps in the literature

While the existing literature provides insight into the incidences, the reasons why it happens, and the consequences of skill discounting through various theoretical and empirical approaches, there remains limited understanding of its differential manifestation across a range of factors and contexts. Specifically, the following gaps in the literature have been identified through this literature review:

Limited use of a comprehensive framework in understanding the different forms of skill discounting: Although, Alboim et al. (2005) proposes a framework that suggests multiple factors or reasons for skill discounting, existing studies have not used this framework to explore all the potential dimensions of skill discounting (exemption Treuren et al., 2021a, 2021b). Most studies have tended to focus on single reasons for skill discounting such as language proficiency (Timming, 2017) or discrimination (Dietz et al., 2015), without bringing all the reasons for skill discounting under one framework. This study aims to fill this gap by using the skill discounting framework of Alboim et al. (2005) in each of the four studies of this thesis. Such a framework will provide a more complete picture of the phenomenon of skill discounting, capturing its various dimensions. This is important to understand the full scope of the issue and the different ways in which it impacts migrants. All four studies in this thesis aim to provide a comprehensive understanding of the factors involved in skill discounting.

Limited understanding of skill discounting between migrants: The literature exploring the challenges of migrants, particularly skill discounting, has treated them mostly as a homogeneous group. However, migrants are different based on sex, age, and their duration in the host country. Although there are studies that have looked into the gendered aspects of migration, research into other socio-demographic factors remains limited. The current thesis argues that labour market experiences, particularly skill discounting, differs between migrants. The study by Treuren et al. (2021a) sheds some light on this issue by identifying differences in skill discounting between male and female migrants. However, an understanding of other factors remains unexamined. Such a study would not only help in identifying the underlying mechanisms of skill discounting, it would also facilitate tailored interventions for each migrant group. Study 1 of this thesis will examine the association between a range of factors such as sex, age, time in the host country, and education levels of migrants on their skill discounting experiences.

Limited insight into employment patterns of skill-discounted migrants, particularly across different industry contexts: Although the reasons for, and consequences of, skill discounting have been widely discussed, their understanding in different contexts, particularly in various industrial contexts, are limited. We have limited information on the prevalence of skill-discounted migrants across various industries and how they find employment in them. A recent study by Treuren et al. (2021b) sheds light on the experiences of migrants in the hospitality industry and the role of skill discounting within the industry. However, an examination of the influence of skill discounting in other industries is still lacking. Understanding the influence of skill discounting within specific contexts is essential to understanding how widespread and varied the practice is across the labour market, thereby providing a wider scope of the issue. Hence, Study 2 of this thesis will examine the employment dynamics of migrants in various industries.

Lack of understanding of what could reduce the likelihood of skill discounting: The literature discusses the consequences of skill discounting; however, we have limited knowledge about what could potentially reduce skill discounting. The acquisition of a local qualification emerges as a strategic response by migrants to align themselves with local labour market dynamics (Sardana et al., 2016). While the literature widely discusses the influence of local qualifications on labour market outcomes for migrants (discussed in Chapter 5), our understanding of its particular influence on skill discounting is limited. Study 3 of this thesis will examine if having a local qualification can help migrants in reducing the likelihood of skill discounting.

Limited understanding of how skill discounting shape the employment experiences of migrants: Although the literature discusses the consequences of skill discounting and the strategies that migrant employees use to face the challenges they encounter in the labour market, we have limited understanding of the employment experiences specific to skill-discounted migrants. While all the studies in this thesis look into this aspect of skill discounting, Study 4 will specifically explore the employment journey of skill-discounted migrants by looking into their lived experiences in Australia.

2.7 Conclusion

This chapter has provided a comprehensive review of the existing literature on the topic of skill discounting among migrants, drawing upon both the skill discounting literature and broader migrant studies. Through this review, several key points have emerged.

Firstly, skill discounting has been defined and distinguished from related concepts. The reasons for skill discounting have been explored using the framework proposed by Alboim et al. (2005) and insights from the broader migrant literature. This framework will be used in this thesis to determine skill discounting.

Furthermore, the consequences of skill discounting have been discussed, highlighting the detrimental effects of the practice on migrant employee outcomes such as unemployment, under-employment, and the impact on their attitudes towards their job and their physical and psychological wellbeing. This review has underscored the urgency of addressing skill discounting to promote equitable access to employment opportunities and enhance migrants' socio-economic outcomes.

The evolution of the topic has been traced through various approaches and methodologies employed in previous studies, ranging from quantitative analyses of wage differentials to qualitative investigations of migrants' lived experiences. Recent themes in the literature, such as intersectionality and relational perspectives, have also been identified, signalling shifts towards a more nuanced understanding of migrant labour market dynamics.

In conclusion, while significant steps have been made to understand skill discounting and its implications, this chapter has identified several gaps that have paved the way for a series of research questions that will be addressed in the studies in the following chapters.

In each of the next four chapters, an extensive literature review will be undertaken that is directly relevant to the associated research questions addressed in each study. Each review will include key theories and existing literature based on the aspect of skill discounting under consideration.

Chapter 3: Examining demographic factors in skill discounting among migrants (Study 1)

This chapter investigates the influence of demographic factors on migrants' experiences of skill discounting. It starts by outlining the background and research objectives of the study. The next section reviews the literature, focusing on how demographic factors contribute to variations in skill discounting. The methodology section describes the research design, variables, and statistical analyses employed in the study, which is followed by a presentation of the findings, accompanied by a discussion. The chapter concludes with a summary and reflections on the broader significance of the research.

3.1 Introduction

While it has been well established that migrants face skill discounting in the host economy, existing studies have often highlighted the prevalence and consequences of skill discounting mainly for migrants as a generalised group (Banerjee et al., 2024; Dietz et al., 2015; Esses & Dietz, 2007; Sert, 2016; Shinnaoui & Narchal, 2010). This often overlooks the differences in their experiences, particularly their experiences of skill discounting.

Migrants are a heterogeneous group, with varying demographic backgrounds based on factors such as gender and age (Rotimi et al., 2023). Understanding these demographic differences is crucial, particularly in Australia, where the migration landscape is becoming increasingly diverse (Pham et al., 2021; Raymer et al., 2020). This diversity among migrants brings varied backgrounds that can impact their labour market experiences (Rajendran et al., 2020; Ressia et al., 2017b; Rotimi et al., 2023; Williams et al., 1997). The broader migrant literature suggests differences in employment outcomes of migrants based on factors such as sex of migrants, age, duration of stay in the host country, and their other backgrounds such as ethnicity and religion, with some experiencing more unfavourable outcomes than others (Anisef et al., 2003; Aure, 2013; Bleakley & Chin, 2010; Hawthorne & To, 2014; Lens et al., 2018; Rajendran et al., 2020; Ressia, 2013; Ressia et al., 2017b; Rotimi et al., 2023; Syed & Pio, 2010; Williams et al., 1997). However, our understanding of how these demographic differences between migrants influences their skill discounting experiences remains limited.

Therefore, this study aims to highlight how specific demographic factors such as sex, age, time in the host country, and education levels influence the experience of skill discounting among migrants. Specifically, the study will address the following research question:

How does the experience of skill discounting among migrants vary based on sex of migrants, age, time spent in the host country, and education level?

This study will focus on skilled migrants who changed their pre-migration occupation due to skill discounting. Furthermore, the study will look into the experiences of skill discounting through its extent, nature, and on the job outcomes for specific migrant groups. The on-the-job outcomes of migrants will be examined through levels of skill utilisation, work responsibility, earnings, and job satisfaction of these migrant employees.

By moving beyond treating migrants as a homogeneous group, this study advances the literature by identifying differences in skill discounting experiences between migrants based on demographic differences, and specifically, why certain groups face greater challenges than others. The study unveils the complexities of skill discounting by identifying the demographic factors that influence the likelihood and experience of skill discounting among migrants in Australia. In addition, it advances the literature on the various facets of skill discounting – the extent, the reasons for skill discounting, and the on-the-job outcomes of skill-discounted migrants once employed. Furthermore, the study offers practical insights for policymakers in addressing the challenges faced by migrants in the labour market and developing targeted interventions for migrants.

3.2 Literature review

The existing literature suggests that employment outcomes are different between migrants based on their demographic factors such as sex of migrants, age, time in the host country, and prior education levels. Based on the literature, the section below provides an understanding of the likelihood of skill discounting examined through its extent, reasons, and subsequent on the job experiences of migrants once employed.

3.2.1 Demographic difference in the extent of skill discounting

The literature demonstrates that migration results in different experiences for men and women in the labour market, with female migrants facing poorer employment outcomes than male migrants (Aure, 2013; Man, 2004; Ressia et al., 2017b; Salaff & Greve, 2006; Sethi & Williams, 2015). They are more likely to be unemployed or under-employed, over-qualified for their jobs, and occupy positions with lower work responsibility, skill utilisation, and earnings, often finding themselves channelled into unpaid domestic jobs (Akgüç & Parasnis, 2023; Aure, 2013; Ho, 2006; Man, 2004; Ressia, 2013; Ressia et al., 2017b; Salaff & Greve, 2006; Sethi & Williams, 2015; Templeton & Fuller, 2013; Treuren et al., 2021a).

Discrimination theory suggests that stereotypes and prejudices can lead to unequal treatment, with existing gender stereotypes potentially leading to perceptions that women are less capable or skilled than men, thereby furthering the barriers of access to employment opportunities (Aigner & Cain, 1977; Creese et al., 2008; Madambi, 2020). For example, Adapa et al.'s (2016) study demonstrated that gender stereotyping was a factor that hindered women from attaining senior accounting positions. Also, cultural and gender-based expectations often limit women's access to employment, with traditional roles as caregivers and family responsibilities hindering their participation in the labour market (Ressia et al., 2017b). Female migrants, especially secondary applicants accompanying primary applicants who are usually male, may face challenges in having their skills recognised and may prioritise the career progression of their partner (Ghosh, 2009; Kofman, 2000, 2004; Thobani, 2000; Webb, 2015). Migration can disrupt familial support networks, placing a strain on working mothers, particularly when childcare is not readily available (Salaff & Greve, 2003). Overall, gender-based challenges contribute to the devaluation of skills in the labour market for female migrants, making them more likely to experience skill discounting compared to their male counterparts.

Similarly, age can play a role in the likelihood of skill discounting. Research shows mixed results, with some studies suggesting that older migrants had worse employment outcomes than migrants who were younger (Anisef et al., 2003; Bleakley & Chin, 2004, 2010; Cheung et al., 2011; Rajendran et al., 2020), while others found that migrants who arrived at an older age may have better labour market success, given their better qualifications and greater work experience (Reitz, 2007). However, this study goes with the studies, suggesting that migrants who arrive at a younger age may have better labour market experiences, and hence are less likely to experience skill discounting than migrants who arrive at an older age. Australia's skilled migration system reflects this preference for younger migrants by emphasizing an upper age limit of 45 years and selecting migrants in their prime working age between 25-44 years (Rajendran et al., 2020; Richardson et al., 2004). Research based on assimilation narratives suggests that younger migrants adapt and assimilate more easily to mainstream culture, language, and norms, facilitating faster integration, enhancing career prospects, and having better settlement experiences than migrants who arrive at an older age (Anisef et al., 2003; Bleakley & Chin, 2004, 2010; Cheung et al., 2011; Nowicka, 2015b; Rajendran et al., 2020). In addition, younger migrants may be more qualified and better trained (Goodwin & O'Connor, 2012). This could possibly make them more attractive to employers looking for skilled workers. Moreover, younger migrants may also be more willing to start in entry-level positions and work

their way up. This can be beneficial for employers looking for employees who are willing to learn and grow within an organisation.

On the other hand, as age increases, the capacity for adaptation may slow down, and age-related discrimination can further hinder older migrants' labour market integration, with employers often perceiving older workers as less flexible, resistant to change, less open to new technologies, and with reduced abilities to learn (Carlsson & Eriksson, 2019; Ng & Feldman, 2012; Reitz, 2007; Schaafsma & Sweetman, 2001; Taylor, 2011; Zientara, 2009). Age-related discrimination, stereotypes, and biases also significantly impact the labour market experiences of individuals (Taylor, 2011). These stereotypes can make older migrants more likely to experience skill discounting than their younger counterparts.

The length of time migrants has spent in the host country is also likely to affect their skill discounting experience. The literature shows that migrants who have been in the country for longer periods tend to have better employment outcomes than migrants who have arrived more recently (Amuedo-Dorantes & De la Rica, 2007; Chiswick et al., 2005; Lens et al., 2018). Although migrants may initially experience downward occupational mobility compared to their pre-migration occupation, over time, they learn about the labour market, acquire more country-specific skills, learn the language and style of practice, and acquire necessary licensing/registration. They tend to assimilate to the mainstream culture and norms. As a result, their occupational status and income are found to improve with longer residency in the host economy (Chiswick et al., 2005; Lens et al., 2018). Longer residency in the host country is associated with better wages (Aydemir & Skuterud, 2008), better promotion prospects(Fang et al., 2012), and a greater likelihood of being in a paid job (Akbar, 2019). By contrast, the research suggests that new arrivals are less able to immediately use their education and skills, start in lower occupational positions, and compete with native-born workers at similar levels (Dustmann et al., 2013), thereby increasing the likelihood of skill discounting among more recent arrivals.

The level of educational attainment can also shape migrants' experiences of skill discounting. Although the research suggests that migrants with higher education levels typically undergo smoother integration into the labour market of the host country (see Zhan et al., 2021), the relationship is complex. Some studies show that migrants with a postgraduate degree may benefit from favourable policies, such as H-1B visas in the United States, better employment outcomes, and higher earnings (Dolton & Vignoles, 2000; Ferrer & Riddell, 2008; Hawthorne & To, 2014; Lianos et al., 2004). However, there have also been studies that have revealed a

prevalence of over-education among migrants with both undergraduate and postgraduate degrees (Lianos et al., 2004). Despite holding relatively high qualifications, a significant number of migrants find themselves in low-skilled jobs (Altorjai, 2013). Higher levels of education do not always guarantee protection from skill discounting, as employers may be risk-averse or unwilling to recognise foreign qualifications (Dietz et al., 2015). Nevertheless, human capital theory (Becker, 1962) suggests that individuals with higher education levels are generally more productive and have better employment outcomes than those with lower education levels (Kanas & Van Tubergen, 2009). Therefore, in theory, migrants with higher education levels should experience less skill discounting than those with lower education levels.

3.2.2 The reasons for skill discounting

The literature review chapter discussed how skill discounting occurs by drawing on the framework developed by Alboim et al. (2005). Accordingly, Alboim et al. (2005) suggested different ways in which migrants might be skill-discounted, including racial prejudice, migrants' limited proficiency in the host country language, the poorer quality of migrants' education and skills, lack of relevance of migrants' skills, and their lack of professional accreditation (Alboim et al., 2005, pp. 2-3). Additionally, insufficient local work experience also results in skill discounting (for a detailed review of these reasons, see the literature review chapter).

The previous discussion has demonstrated differences in labour market outcomes for migrants based on demographic factors such as sex of migrants, age, time in the host country, and prior education level, indicating differences in the likelihood of skill discounting between migrants. Hence, it is reasonable to suggest that the factors that contribute to a person being skill-discounted may also differ between migrants such that men and women, migrants of varying age, time in the host country, and educational levels face differences in the barriers that lead to skill discounting. For example, the above section highlighted that women and older individuals may be prone to stereotyping when it comes to evaluation of their skills (Carlsson & Eriksson, 2019; Madambi, 2020). This indicates that these migrants might be more prone to discrimination and lack of recognition of overseas qualifications and experience for these reasons. Similarly, migrants who have been in the host country for more time might have better know-how of local labour market norms and language use, and have had more opportunity to mix with the local culture (Chiswick et al., 2005; Lens et al., 2018). Hence, these migrants might have fewer language issues and experience fewer barriers. Furthermore, migrants with

higher educational levels may have better language skills and smoother integration(Zhan et al., 2021), leading to lower levels of skill discounting.

3.2.3 On the job outcomes of skill-discounted migrants

The literature review chapter demonstrated that the experience of skill discounting can lead to unfavourable labour market outcomes for migrants such as under-employment and over-qualification (Batalova et al., 2016b; Chen et al., 2010; De Jong & Madamba, 2001; Gilmore & Gilmore, 2009; Green et al., 2007; Guo, 2015; Larsen et al., 2018; Li & Campbell, 2009; Lindley, 2009; Ramboarison-Lalao et al., 2012; Reid, 2012). The jobs many migrants work in can be characterised as low-quality and involving more manual labour and less use of skills, and more likely to be part-time or temporary with lower responsibility and lower pay (Creese & Wiebe, 2012; Gilmore & Gilmore, 2009; Man, 2004; Reid et al., 2014; Schenker, 2008; Treuren et al., 2021a). Migrants in these positions are more likely to be less satisfied with their work (Hosoda, 2016; Kats, 1983; Wassermann et al., 2017).

Building on these insights, this study examines specific workplace outcomes to understand how skill discounting impacts migrants' employment experiences once employed, as established in the Continuous Survey of Australia's Migrants (CSAM) dataset. The key variables examined include skill utilisation, reflecting how well migrants, particularly skill-discounted migrants, are able to apply their skills; work responsibility, which relates to the level of tasks or responsibilities assigned to them on the job; earnings, to understand the financial impact of skill discounting; and attitude to job, which encompasses the job satisfaction levels of skill-discounted migrants.

The study suggests that demographic factors such as sex of migrants, age, time in the host country, and education level significantly influence the employment outcomes of skill-discounted migrants. As suggested earlier, female migrants ae more likely to experience skill discounting due to gender-based issues. Therefore, it is likely that skill-discounted female migrants are more likely to be in jobs with lower skill utilisation, work responsibility, earnings, and job satisfaction compared to skill-discounted male migrants. Similarly, older migrants are likely to face more skill discounting than younger migrants, indicating skill-discounted older migrants experience lower skill utilisation, responsibility levels, and earnings, and lower levels of job satisfaction compared to their younger counterparts. Migrants with shorter length of residency in the country are likely to experience more skill discounting than migrants with a lengthier period of residency. Thus, it is reasonable to assume that skill-discounted migrants with shorter length of residency in the country are more likely to be in jobs with lower skill

utilisation, work responsibility, earnings, and job satisfaction. Finally, migrants with lower educational levels may be likely to experience more skill discounting than those with higher educational levels. This indicates a greater likelihood of skill-discounted migrants with lower educational levels being in jobs with lower levels of skill utilisation, work responsibility, earnings, and job satisfaction.

3.3 Research Methods

This study undertakes a quantitative approach to examine the impact of migrants' demographic characteristics on their skill discounting experiences. Using a quantitative approach, data are analysed to identify relationships and patterns between variables (Bloomfield & Fisher, 2019; Watson, 2015). The study undertakes an analysis of the Continuous Survey of Australia's Migrants (CSAM), conducted by the Department of Home Affairs (formerly known as the Department of Immigration and Citizenship). This survey provides insight into the labour market and integration experiences of migrants in Australia. The CSAM is a representative survey of migrants arriving in Australia under the skilled or family migration streams, but excludes humanitarian entrants. The dataset covers migrants who:

- had either come to Australia on an offshore visa, or who were granted an onshore visa – in both cases in the last six months (of the survey).
- have been granted either a permanent residence visa, or a provisional visa, and are thus on the pathway to permanent residence.

Initially introduced in 2009, the CSAM consists of data collected at two points in time, 6 months and 12 months after migrant arrival on a provisional or permanent visa (Hawthorne & To, 2014). A second iteration of the survey was launched between 2013 and 2018 with a new cohort of migrants in which the data collection process was refined. Two rounds of data were collected: the first survey was conducted around 6 months after the grant of permanent residency or provisional visa (Wave 1) capturing the initial settlement experiences of migrants, and a follow-up survey was conducted 18 months after the grant of permanent residency or provisional visa (Wave 2) allowing for an analysis of labour market outcomes over time. The current study uses this dataset.

The study uses data from five cohorts collected during the period 2013-2018. Although data was collected for a sixth cohort, it was not included as only the data from first survey, (conducted six months after the grant of permanent residency or provisional visa) was available at the time of the study. The study focuses on the primary applicants, who are the main visa

applicants satisfying the primary criteria for the grant of visa under the Migration Regulations (ABS, 2009), those within the working-age population, specifically those aged between 15-65 years at the time of arrival in Australia.

For the statistical analysis, the study uses the Statistical Package for the Social Sciences (SPSS ver24) software to conduct the quantitative analysis. The data were weighted using the Wave 2 weights set by the CSAM team to adjust the sample for the different levels of response of sub-groups within the population. Weighting ensures that the sample represents the overall national migrant intake for that year. It adjusts for under-sampled groups, such as groups with lower response rates, and provides a better description of the experience of skill discounting across the migrant population. The Department of Home Affairs outlines the weighting process used in the CSAM dataset (Department of Home Affairs, 2019). Weighting the data is considered a standard technique, particularly for large datasets (Ciol et al., 2006; Korn & Graubard, 1995; Walker & Young, 2003).

This study will also look into the on-the-job outcomes of skill discounting through variables found in the CSAM data. By utilising survey data, the study will examine how demographic factors influence skill-discounted migrants in terms of their skill utilisation, work responsibility, earnings, and job satisfaction. While previous studies have focused on broader employment outcomes such as under-employment and over-qualification (Larsen et al., 2018; Reid, 2012), this study specifically investigates these variables to gain insight into the actual job experiences of skill-discounted migrants in their current roles.

3.3.1 Measuring skill discounting

The study introduces the concept of Skill Discounting (SD), evaluating whether a migrant's skills have gone unrecognised to the extent of necessitating a change in occupation. This determination is made by assessing if migrants are working in their pre-migration occupation. Here, the CSAM questionnaire asked respondents ‘are you working in your pre-migration occupation?’ If the migrant said no, the reasons for changing their nominated occupation were examined. If these reasons matched any one of the reasons stated by Alboim et al. (2005), they were deemed to have been skill-discounted. This approach has already been used in several publications (Treuren et al., 2021a, 2021b). This approach categorises migrants into distinct groups denoted by Migrant Type.

3.3.1.1 Migrant type classification

Migrant Type categorises individuals into distinct groups based on sponsorship status – either employer-sponsored or self-initiated migrants. Self-initiated migrants, arriving without employer sponsorship, compete for employment locally, facing potential skill discounting during job acquisition. In contrast, sponsored migrants arrive with a pre-arranged job, minimising the likelihood of skill discounting. This classification enables a comparison between self-initiated migrants, more susceptible to skill discounting, and sponsored migrants.

Classification of Self-Initiated Migrants:

Within the self-initiated migrant group employed, three classifications emerged:

Continuing: Migrants who secured employment in their pre-migration occupation, allowing them to continue in their previous field. Migrants who were continuing in their pre-migration occupation were not considered to be skill-discounted in this study.

Non-Skill-Discounted: Migrants who opted not to continue in their pre-migration occupation for reasons unrelated to skill discounting, such as lack of interest or location preferences.

Skill-Discounted: Migrants unable to find a job in their field due to skill discounting during recruitment, subsequently securing employment in a different occupation.

This dichotomous and objective measure of skill discounting signifies a change in occupation caused by skill discounting. However, it does not account for instances where migrants continue in a nominated occupation, but face underutilisation of their capabilities.

3.3.2 Variables

Table 3.1 provides the list of variables used in this study.

Table 3.1 List of variables

Variable name	Description	Coding
Changed Occupation	CSAM respondents were asked whether their nominated occupation matched their current occupation	Yes = 1 No = 0
Migrant Type	Migrant Type categorises respondents based on changes in their nominated occupation during migration	0 = Sponsored migrants 1 = Continued in nominated occupation 2 = Changed occupation for non-skill discounting reasons 3 = Changed occupation for skill discounting reasons
Sex	Variable is about the sex of migrants	0 = male migrants 1 = female migrants
Age	Denotes migrant age at the time of arrival. For the purpose of the analysis, migrants who arrived between age 16-65 years were considered (working age population). Age at arrival of migrants was further categorised (Chiswick & DebBurman, 2004; Takeuchi et al., 2007) into less than 25, 25-34 years, and 35-44 years (based on the CSAM classification). It was found that 3.4% of migrants were in the category 45-54 years, while 0.3% were in the category 55-64 years. Owing to the small percentage of migrants in these categories, they were brought together under the single category of 45 years or above	1 = Less than 25 years 2 = 25-34 years 3 = 35-44 years 4 = 45 years or above
Time in the host country	Time in the host country captures the number of years migrants have spent in Australia at the time of Wave 2. This variable was calculated by subtracting the survey year and the year of arrival of migrants. Then, years in the host country was split into categories (Geirsdottir et al., 2022; Van Tubergen et al., 2004): 5 years or less, 6-10 years, and 11 years or above (Van Tubergen et al., 2004). It was found that 90.5% had been in the country for 5 years or less, 9.3% has been in the country for 6-10 years, and 0.2% had been in the country for more than 11 years. Owing to the high number of people in the 5 years or less category, this category was further split to include migrants who	1 = 2 years or less 2 = 3-5 years 3 = 6 years or above

Variable name	Description	Coding
	had been in the country for (1) 2 years or less, (2) 3-5 years, (3) 6-10 years, and (4) 11 years or more. As only 0.2% had been in the country for more than 11 years, this was included in 6-10 years category. Therefore, for the analysis, time in the host country included only three categories	
Prior education level	The prior education level attained by participants was recoded as Pre-degree, Non-degree, Undergraduate degree, and Postgraduate degree. Pre-degree captures education before a degree such as secondary education. Non-degree captures certificate levels I-IV. Undergraduate captures Bachelor's degree, Graduate Certificates and Diplomas. Postgraduate captures doctoral degrees and Master's degrees	1 = Pre-degree 2 = Non-degree 3 = Undergraduate degree 4 = Postgraduate degree
Skill level	Each job held by a respondent was classified using the Australian and New Zealand Standard Classification of Occupations (2012) framework. ANZSCO assesses the skill level needed for each occupation. The highest skill level (1) denotes that the job requires the holder to have completed at least an undergraduate degree or have 5 years of minimum industry experience. The lowest skill level is 5, requiring secondary education. The job skill level was reverse coded (low-high) to maintain consistency with the other measures	1 = Skill Level 5 2 = Skill Level 4 3 = Skill Level 3 4 = Skill Level 2 5 = Skill Level 1
Work responsibility	The CSAM includes answers by respondents to the question, 'Are you now working at the same, higher, or lower responsibility compared to your pre-migration occupation?' at Wave 2	1 = Lower responsibility 2 = Same responsibility 3 = Higher responsibility
Wages	Denotes annual earnings at Wave 2	

Variable name	Description	Coding
Job satisfaction	Job satisfaction was analysed using migrants' attitudes toward their job. CSAM included responses to the question, 'What is your attitude to your main job?' and had the following choice of responses, 'Don't like the job', 'Do not really care – it is just a job', 'Job is okay – could be better', and 'Likes job'. The responses, 'not working' and 'not known', were treated as missing values	1 = Don't like the job 2 = Do not really care – it is just a job 3 = Job is okay – could be better 4 = Likes job

3.3.3 Statistical analysis

The data were analysed using chi-square and two-way analysis of variance (ANOVA) tests. A chi-square test examines the relationship between two categorical variables and determines if they are independent or significantly associated (Franke et al., 2012; McHugh, 2013). In this study, the chi-square analysis assesses whether the extent of skill discounting differed between migrants based on factors such as sex of migrants, age, time in the host country, and prior education level. Furthermore, the chi-square analysis will be used to examine if the reasons for skill discounting differed between these migrant groups.

The analysis of variance (ANOVA) test is a statistical method that compares the means of groups for a continuous dependent variable when there are three or more groups to compare (Larson, 2008; Mishra et al., 2019). When there are more than two categorical independent variables, the analysis is called a two-way ANOVA. This helps to determine whether there are significant interactions between two independent variables and the dependent variable, as well as to assess the main effects of each independent variable on the dependent variable. In this study, a two-way ANOVA will assess the relationship between various demographic factors, such as sex, age, time in the host country, and education level, and employee outcome variables such as skill utilisation, work responsibility, earnings, and job satisfaction (Treuren et al., 2021a), with separate analyses conducted for each outcome variable. The Least Significant Difference (LSD) post hoc test will also be utilised for pairwise comparisons when the groups are more than two, helping to identify groups with statistically equivalent or different means.

The analysis starts by examining the frequency of different migrant types, including sponsored, continuing, non-skill-discounted, and skill-discounted migrants across the range of demographic factors specified above. The Chi-square tests determined if the proportion of migrant types, particularly skill-discounted migrants, differed across the demographic factors by comparing the significance between each demographic category at a 0.05 level of significance.

Next, a series of chi-square tests were performed to assess whether the reasons for skill discounting varied across demographic variables, again comparing the significance of these reasons across each demographic category at the 0.05 significance level.

Finally, employee outcomes of skill discounting, skill utilisation, work responsibility, earnings, and job satisfaction are analysed using mean scores from the two-way ANOVA analysis. The results were compared across demographic categories, applying pairwise comparisons and post

hoc analysis as necessary. Each subscript letter (a, b, c, d) indicated statistically significant differences in means between the groups from the post hoc and pairwise comparison (adjustment: Bonferroni) analysis. The same subscript indicated no difference in mean, while a different subscript indicated that the differences were statistically significant, at .05 significance level.

3.4 Findings

Table 3.2 provides a descriptive overview of the distribution (%) of migrant types, including sponsored, continuing, non-skill-discounted and skill-discounted migrants across various demographic factors such as sex of migrants, age, time in the host country, and education level.

Table 3.3.2 Descriptive Overview of Migrant Types across Demographic Variables

	Migrant Type	Sponsored (%)	Continuing (%)	Non-Skill-Discounted (%)	Skill-Discounted (%)
Sex	Female	42.5a	45a	5.3a	7.3a
	Male	46.8b	39.3b	5.1a	8.9b
Total Number	135399				
Age category	Less than 25 years	29.2a	47.2a	10.7a	12.8a
	25-34 years	41.7b	45.1b	4.8b	8.4b
	35-44 years	59.8c	31.9c	2.4c	5.9c
	45 years or above	93.8d	4.6d	0.4d	1.2d
Total Number	135405				
Time in the host country category	2 years or less	43.2a	45.4a	3.9a	7.5a
	3-5 years	48.7b	36.5b	6.0b	8.8b
	6 years or above	48.1b	29.8c	9.9c	12.3c
Total Number	135406				
Education level	Pre-degree	56.6a	35.7a	3.6a	4.0a
	Non-degree	37.3b	46.5b	7.5b	8.8b
	Undergraduate	45.3c	41.2c	5.1c	8.4b
	Postgraduate	42.1d	41.9c	5.7d	10.3c
Total Number	106439				

Notes:
1. Data are weighted
2. *p<.05; **p<.005; ***p<.001
3. Each subscript letter (a, b, c, d) denotes a subset of age category, time in the host country category and prior education level category, categories whose proportions do not differ significantly from each other at the .05 level

Table 3.2 provides an overview of the various migrant categories, highlighting the differences in sponsored and continuing migrants, and migrants who changed occupation for non-skill discounting and skill discounting reasons. It was identified that a higher percentage of males were sponsored, while a higher percentage of females were continuing in their pre-migration occupation. There were no significant differences in the proportion of non-skill-discounted migrants between male and female migrants. Older migrants were more likely to be sponsored, whereas younger migrants tended to continue in their previous occupations and were more likely to change occupation due to non-skill discounting reasons. This pattern also appeared in relation to duration of stay, as longer-term migrants were more likely to be sponsored, while shorter-term migrants tended to continue in their pre-migration roles. Additionally, migrants who stayed longer were more likely to have changed their nominated occupation for non-skill discounting reasons. Education level significantly influenced migrant type, with many sponsored migrants holding pre-degree qualifications, while those with non-degree qualifications were more likely to continue in their previous roles and to change jobs for non-skill discounting reasons.

A closer examination of skill-discounted migrants identified that male migrants were more likely to be skill-discounted than female migrants. In the overall weighted sample, 8.9% of male migrants changed occupation due to skill discounting, compared to 7.3% of female migrants.

It was identified that younger migrants (aged less than 25 years) were more likely to be skill-discounted, while older migrants (aged 45 years or above) experienced the lowest levels of skill discounting. In the weighted sample, 12.8% of migrants aged less than 25 years, 8.4% of migrants aged between 25-34 years, 5.9% of migrants aged 35-44 years, and 1.2% of migrants aged 45 years or above changed occupation due to skill discounting.

Additionally, it was found that long-term migrants (migrants who had been in the country for 6 years or more) were more likely to be skill-discounted, while recent migrants who had been in the country for 2 years or less were least likely to be skill-discounted. In the overall weighted sample, 12.3% of those who had been in the country for 6 years or more, 8.8% of those who had been in the country for 3-5 years, and 7.5% of those who had been in the country for 2 years or less were skill-discounted.

It was identified that migrants with postgraduate education levels prior to migration were more likely to be skill-discounted, while migrants with pre-degree levels were least likely to be skill-

discounted. In the overall weighted sample, 10.3% of migrants with a postgraduate education, 8.4% of migrants with an undergraduate education, 8.8% of migrants with non-degree education, and 4.0% of migrants with pre-degree education were skill-discounted.

Reasons for skill discounting

Table 3.3 reports on the proportion of different skill discounting reasons experienced by migrants across the demographic variables. The table presents the demographic variables in rows such as sex, age at arrival, time in the host country, and education level, while the columns indicate the reasons for skill discounting. Each cell shows the percentage of respondents within each demographic group who reported a specific reason for skill discounting, allowing for a comparison across different groups. Statistical significance is noted, with asterisks (*) indicating the level of significance and subscripts (a, b, c) denoting groups with similar proportions.

Table 3.3 Proportion of reasons for skill discounting by demographic factors

	Skill discounting reasons	Insufficient English (%)	Insufficient Experience (%)	Overseas qualifications not recognised (%)	Lack of Australian licensing/registration (%)	Discrimination (%)	Lack of jobs/ demand for expertise (%)
Demographic variables							
Sex	Male	1.60	34.20	6.90	4.50	0.50	70.0
	Female	1.90 (NS)	35.60 (NS)	9.2***	6.0**	2.1***	63.6***
Age at arrival	Less than 25 years	1.7a	36.0a	1.7a	2.8a	0.7a	71.8a
	25-34 years	1.6a	34.8a,b	8.9b	5.3b	1.1a	67.6b
	35-44 years	2.0a	31.5b	12.6c	7.2c	0.9a	66.4b
	45 years or above	0a	25.0a,b	12.3b,c	7.7a,b,c	0.0a	60.9a,b
Time in the host country	2 years or less	2.2a	34.6a	11.0a	6.0a	1.1a	65.8a
	3-5 years	1.4b	38.5b	3.9b	3.9b	0.9a,b	69.7b
	6 years or above	0.5c	25.8c	3.1b	3.3b	0.4b	75.8c
Prior education level	Pre-degree	1.4a	35.8a	3.6a	7.4a	2.1a	67.6a
	Non-degree	1.5a	40.3a	4.9a	4.9a,b	0.0b	64.1a
	Undergraduate	1.7a	34.6a	7.8a	4.8a,b	1.0a,b	69.0a
	Postgraduate	1.5a	35.5a	7.2a	3.6b	0.8a,b	68.3a

Notes:

1. Data are weighted
2. N=11280, *p<.05; **p<.005; ***p<.001
3. Each subscript letter (a, b, c) denotes a subset of age category, time in the host country category, and prior education level category, categories whose proportions do not differ significantly from each other at the .05 significance level, NS denotes non-significance
4. Participants could report multiple reasons; hence, column totals may exceed 100%

To examine the various forms of skill discounting, a series of chi-square tests was undertaken. A statistically significant difference in skill discounting reasons was identified between male and female migrants for their occupation change. Female migrants exhibited a higher likelihood of experiencing skill discounting in several key forms compared to male migrants. They were more likely to experience skill discounting due to overseas qualifications not being recognised, lack of Australian licensing/registration, and discrimination than male migrants. On the other hand, skill discounting attributed to the lack of demand for expertise was predominantly experienced by male migrants.

The chi-square tests identified that overall, younger migrants were more affected by insufficient experience and lack of demand for expertise, while older migrants faced challenges with qualification recognition and licensing/registration. Young migrants under the age of 25 mostly experienced skill discounting due to insufficient experience, with 36.0% experiencing this form of skill discounting. Moreover, a substantial 71.8% of them faced skill discounting due to lack of demand for their expertise. On the other hand, individuals aged 34-44 faced a different set of hurdles, with 12.6% experiencing skill discounting because their qualifications were not recognised. Additionally, within this age group, 7.2% faced skill discounting due to lack of Australian licensing/registration.

A significant difference in skill-discounted reasons for nominated occupation change was identified between migrants based on varying time in the host country. Those with shorter residency periods, particularly 2 years or less, were more likely to change occupation due to insufficient English proficiency, discrimination, qualifications not being recognised, and lack of Australian licensing/registration. Conversely, migrants with longer residency periods, notably 6 years or more, faced skill discounting due to the lack of demand for their expertise. Additionally, migrants with 3-5 years of residency were more prone to skill discounting due to insufficient experience.

It was also identified that migrants with pre-degree education levels were more likely to have been skill-discounted due to lack of Australian licensing/registration (7.4%) and discrimination (2.1%). The other forms of skill discounting did not show significant differences between migrants of different education levels.

On-the-job outcomes for skill-discounted migrants across demographic factors

To determine whether skill discounting has different impacts on employee outcomes such as skill utilisation, work responsibility, earnings, and job satisfaction for migrants based on their

sex, age, time in the host country, and prior education levels, a two-way ANOVA was undertaken. Table 3.4 provides the mean scores for employee outcomes (skill utilisation, work responsibility, earnings, and attitude to job) of migrants across each demographic factor and their effect. The rows categorise data by migrant type and different demographic category while the columns present the employee outcomes such as skill utilisation, work responsibility, earnings, and job satisfaction. Each cell displays the mean score of the outcomes for the corresponding groups. The subscript letters (a, b, c, d) indicate a statistically significant difference in means between groups; the same letter denotes no significant difference, while different letters indicate a statistically significant difference at the .05 level.

Table 3.4 Mean of on-the-job outcomes of skill discounting across demographic factors

	Skill utilisation (mean)	Work responsibility (mean)	Earnings (mean)	Attitude to current job (mean)
Migrant Type				
Sponsored	3.98a	2.44a	85008.86a	3.74a
Continuing	4.49b	2.32b	79761.49b	3.75b
Non-skill-discounted	3.51c	2.35c	63715.12c	3.79b
Skill-discounted	2.62d	1.74d	47997.39d	3.80c
Sex				
Male	3.61a	2.20a	75659.24a	3.71a
Female	3.85b	2.28b	65656.58b	3.83b
Skill-discounted * sex				
Skill-discounted * male	2.55a	1.68a	52589.96a	3.73a
Skill-discounted *female	2.70b	1.82b	41815.09b	3.89b
Age category				
Less than 25 years	3.62a	2.63a	53702.76a	3.75a
25-34 years	3.63b	2.21b	66330.47b	3.77b
35-44 years	3.86c	2.0c	85551.52c	3.81c
45 years or above	3.91d	1.91d	95330.68d	3.69d
Skill-discounted *age category				
Skill-discounted *age less than 25 years	2.62a,b	2.39a	44599.4a	3.77a
Skill-discounted *25-34 years	2.63a	1.56b	49037.95a	3.8a
Skill-discounted *35-44 years	2.75a	1.38b,c	52454.67a	3.86a
Skill-discounted *45 years or above	2.12b	1.12c	42959.45a	3.74a
Time category				

	Skill utilisation (mean)	Work responsibility (mean)	Earnings (mean)	Attitude to current job (mean)
2 years or less	3.89a	2.08a	79332.3a	3.75a
3-5 years	3.76b	2.35b	70580.35b	3.76a
Above 6 years	3.45c	2.33c	60344.67c	3.79b
Skill-discounted *Time in the host country				
Skill-discounted *2 years or less in the host country	2.71a	1.43a	48738.57a	3.79a
Skill-discounted *3-5 years in the host country	2.5b	1.81b	46947.79a	3.8a
Skill-discounted *more than 6 years in the host country	2.62a,b	2.1c	48080.49a	3.82a
Prior education level				
Pre-degree	3.81a	2.25a	78835.23a	3.84a
Non-degree	3.74b	2.22b	71613.73b	3.81b
Undergraduate	3.69c	2.23c	70049.06c	3.72c
Postgraduate	3.68b	2.26d	66980.39d	3.73d
Skill-discounted *prior education level				
Skill-discounted *with pre-degree	2.4a	1.54a	53776.86a	3.85a
Skill-discounted *non-degree	2.47a,b	1.69a	45865.82a	3.83a
Skill-discounted *undergraduate	2.76a,c	1.76a	47966.81a	3.76a
Skill-discounted *postgraduate	2.68a,b,c	1.83a	47602.30a	3.8a

Notes:

1. Based on estimated marginal means
2. Each subscript letter (a, b, c, d) indicates statistically significant difference in mean between the groups from post hoc and pairwise comparison (adjustment: Bonferroni) analysis. Same subscript indicates no difference in mean, different subscript indicates that the differences are statistically significant, mean difference significant at .05 level
3. Weighted data

Skill utilisation

The findings reveal that skill-discounted migrants had lower levels of skill utilisation in their job than other migrant types. Overall, sex of migrants was found to significantly influence skill utilisation, with female migrants having better skill utilisation outcomes than male migrants. It was found that skill-discounted female migrants had slightly higher skill utilisation than skill-discounted male migrants, challenging conventional gender norms in labour market participation. Although age was not a significant predictor of skill utilisation, it was identified that skill-discounted migrants of 45 years or above had the lowest levels of skill utilisation than the other skill-discounted age categories. Time in the host country significantly influenced skill utilisation. However, it was found that among skill-discounted migrants, the more recent arrivals (2 years or less) had higher levels of skill utilisation than their more established counterparts. Prior education level did not significantly predict skill utilisation overall. However, skill-discounted migrants with undergraduate education showed higher levels of skill utilisation than those with a non-degree education.

Work responsibility

Similar to skill utilisation, skill-discounted migrants tended to have lower levels of work responsibility than other migrant types. The findings reveal that sex of migrants did not influence work responsibility. However, the association of sex and skill discounting on work responsibility was significant, in that skill-discounted female migrants had jobs with higher levels of work responsibility than their male counterparts. Age played a role as well. Older skill-discounted migrants, particularly those aged 45 or above, tended to have less work responsibility than younger migrants. Time spent in the host country also made a difference. An upward trend was observed for work responsibility, with higher work responsibility for skill-discounted migrants who had been in the country for a longer time. Skill-discounted migrants who had been in the country for 6 years or above had higher levels of work responsibility, followed by those who had been in the country for 3-5 years, and the lowest levels of work responsibility for those who had been in the host country less than 2 years. In relation to education level, there was a significant link between prior education level and work responsibility, but there were no significant differences in work responsibility among skill-discounted migrants with different education levels.

Earnings

It was found that skill-discounted migrants had the lowest earnings compared to other migrant types. Sex was found to significantly influence earnings, with male migrants earning more than

female migrants. As well, the association between sex and skill discounting on earnings was significant. Despite being in jobs with higher skill utilisation and work responsibility (found in the earlier analysis), skill-discounted male migrants tended to earn more than skill-discounted female migrants. Overall, age was a significant predictor of earnings and the association between age and skill discounting on earnings was significant. However, there were no significant differences in earnings between skill-discounted migrants in the various age categories. Similarly, although the association between time in the host country and skill discounting on earnings was significant, there were no differences identified in earnings between skill-discounted migrants in the various time in the host country categories. Furthermore, there were no significant differences identified in earnings for skill-discounted migrants with different education levels.

Job satisfaction

The findings reveal that skill-discounted migrants had a better attitude to their job than other migrant types. Sex was a significant predictor of attitude to current job. In addition, the association between sex and skill discounting on attitude to job was significant. Skill-discounted female migrants, in particular, seemed to have a more positive outlook on their current job than their male counterparts. Age did not significantly influence attitude to job. There was a notable association between age and skill discounting on attitude to job. Despite this, skill-discounted migrants in different age categories had similar attitudes to their job. Time in the host country was found to significantly influence attitude to job. However, there were no differences in attitude to job between skill-discounted migrants based on their duration of stay. Overall, prior education level significantly influenced attitude to job. Also, the association between education level and skill discounting on attitude to job was significant. However, skill-discounted migrants with different education levels all had similar attitudes to their job, with no significant differences.

Appendix 1 provides a detailed explanation of the findings of this study.

3.5 Discussion and implications of the study

This study addresses the gaps in our understanding of the underlying factors that account for differences in skill discounting. By examining a range of demographic factors, the study advances the literature by revealing how these factors are associated with skill discounting. Understanding how these factors affect the experience of skill discounting among migrants is crucial for developing effective policies and support mechanisms to facilitate their integration into the workforce. The findings are from a nationally representative Australian government

database of migrant information. The key findings have revealed unexpected trends in skill discounting among migrants, challenging the traditional assumptions made about the challenges faced by migrants. These findings not only advance the current literature, but also offer practical insights. The implications of the study are discussed below under the various demographic factors: sex, age, time in the host country, and prior education level.

3.5.1 Sex

By studying the influence of sex on skill discounting, this study advances the literature by providing a positive picture for female migrants(Singh & Mutum, 2024). Contrary to the existing literature on gender stereotyping suggesting that female migrants face greater labour market challenges than male migrants (Adapa et al., 2016; Aigner & Cain, 1977; Aure, 2013; Creese et al., 2008; Ghosh, 2009; Kofman, 2000; Madambi, 2020; Man, 2004; Ressia et al., 2017b; Salaff & Greve, 2006; Sethi & Williams, 2015), the analysis found that male migrants are more prone to skill discounting, aligning with Treuren et al. (2021a) findings. Female migrants, however, experienced skill discounting more as a result of overseas qualifications not being recognised, lack of Australian licensing/ registration, and discrimination than male migrants, while male migrants were more likely to have been skill-discounted due to a lack of demand for their expertise. This aligns with the double jeopardy effect experienced by female migrants, whereby their migrant status compounds existing gender-based stereotypes (Creese et al., 2008; Kofman, 2000; Madambi, 2020) and systemic barriers, such as challenges in obtaining necessary licensing/registration and accreditation to practice their profession (Ghosh, 2009; Kofman, 2000; Syed, 2008). However, further research is needed to understand if male migrants are in jobs requiring lower levels of licensing/registration requirements and female migrants in roles requiring higher levels.

Overall, sex was a significant predictor of skill utilisation, work responsibility, earnings, and job satisfaction. Female migrants were found to be in jobs with higher levels of skill utilisation and work responsibility, suggesting a white collar job profile for women such as professionals and administrative staff, while that of male migrants was more of a blue-collar job profile such as technicians and trade workers (Ong & Shah, 2012). Female migrants even demonstrated better attitudes to their job. Similarly, skill-discounted females tended to have higher levels of skill utilisation, work responsibility, and better attitudes to their current job, but earned less than their male counterparts. This disparity in earnings highlights a persistent sex wage gap in earnings (Tijdens et al., 2012), possibly due to the higher prevalence of part-time employment for women (Ong & Shah, 2012).

The findings suggest that while male migrants are more prone to skill discounting, female migrants face significant barriers related to qualification recognition and licensing/registration. Given the rise of independent female migration (Elo et al., 2020; McAuliffe & Ruhs, 2017), there is a need for gender-responsive policies and support systems that address these disparities. Policymakers should simplify licensing/registration procedures, improve pathways for qualification recognition, and promote gender equality in the labour market, including addressing wage disparities and career advancement opportunities.

3.5.2 Age

The findings add new insight into the association between age and the skill discounting experiences of migrants. Migrants under 25 were more likely to experience skill discounting than those aged 45 and above, challenging assimilation narratives that younger migrants integrate better into the labour market (Bleakley & Chin, 2004; Cheung et al., 2011; Nowicka, 2015a; Schaafsma & Sweetman, 2001). This could be attributed to the limited work experience and lower perceived value of younger migrants by employers (Loretto et al., 2000; O'Higgins, 2017; Reitz, 2007; Yeboah, 2017). On the other hand, older migrants faced lower levels of skill discounting, possibly due to employers viewing them more favourably or feeling a moral obligation to hire older employees (Kim & Kang, 2017; Midtsundstad, 2011).

Younger migrants frequently changed occupations due to insufficient experience, while discrimination was not a significant reason for skill discounting across all age groups, challenging assumptions based on age-based stereotypes and discrimination (Posthuma & Campion, 2009; Taylor & Walker, 1998; Turek & Henkens, 2020), and suggesting low levels of age-related bias among employers. Migrants in their prime working age (25-44 years) faced lower levels of skill discounting, supporting Australia's skilled migration system, which prioritises this age group (Rajendran et al., 2020; Richardson et al., 2004).

Older migrants had higher levels of skill utilisation and earnings, reflecting the value of their experience (Bos et al., 2009; Nilsson, 2018; Traymbak & Kumar, 2018). However, their work responsibility was lower, potentially due to employers' concerns about older employees' ability to manage heavy workloads, leading them being assigned less demanding roles workload, where employers may have opted for older migrants to take on less demanding roles to avoid overburdening them (Van Dalen et al., 2010).

Further, the influence of age on the on-the experience for skill-discounted migrants had a different story and offers new insights Despite the lower levels of skill discounting among older

migrants, older skill-discounted migrants (45 years or above) exhibited lower levels of skill utilisation and work responsibility than their younger counterparts. This discrepancy suggests that while age can confer advantages in terms of skill utilisation and earnings, the intersection of age and skill discounting involves complexities that may undermine the benefits in terms of an ageing workforce.

These findings provide practical insights for policymakers and employers. Younger migrants, who are more likely to experience skill discounting, need targeted support such as job placement services, skills development, and professional networking opportunities. The lower incidence of skill discounting among migrants aged 25-44 highlights the success of Australia's migration system in prioritising this age group. Policies could further target this demographic for improved labour market outcomes. While older migrants face lower levels of skill discounting, they still need support in skill utilisation, work responsibility, and job satisfaction. Inclusive work environments and career advancement pathways for migrants of all ages are essential for their successful integration.

3.5.3 Time in the host country

The findings from the current study provide valuable insights into the relationship between migrants' time in the host country and their experiences of skill discounting. This partly challenges the common assimilation narrative that over time, migrants tend to assimilate with the norms of their host society, thereby diminishing several social and cultural labour market challenges and leading to better labour market outcomes (Alba & Nee, 2003; Amuedo-Dorantes & De la Rica, 2007; Banerjee et al., 2024; Cheung et al., 2011; Chiswick et al., 2005; Ressia et al., 2017a). Although long-term migrants were more likely to face skill discounting than recent migrants, they faced challenges due mainly to a lack of job opportunities. Although the extent of skill discounting was lower among recent migrants, they were more likely to face challenges such as sub-standard English language proficiency, insufficient experience, lack of overseas qualifications recognition, and lack of Australian licence/registration. This indicates that recent migrants face more cultural and labour market challenges and, as length of residency increases, these challenges diminish.

In terms of on-the-job outcomes or experiences, the study offers new insights into the influence of time in the host country, and outcomes such as skill utilisation, work responsibility, earnings, and job satisfaction. Time in the host country predicted better skill utilisation and work responsibility, although no significant differences in earnings were observed, challenging the assumption that earnings improve with longer residency (Chiswick et al., 2005). Recent arrivals

exhibited better skill utilisation, likely due to possessing in-demand skills, while long-term migrants displayed a better attitude toward their job, possibly due to contentment or gratitude over time. Furthermore, the study reveals new insights into the impact of skill discounting on outcomes for migrants with varying time in the host country. The study reveals that skill-discounted migrants with shorter stays in the country exhibited higher levels of skill utilisation, contradicting the notion that new arrivals tend to start in lower occupations (Dustmann et al., 2013). Additionally, no significant differences in job attitudes were observed among skill-discounted migrants across varying time durations in the host country.

The findings underscore the need for ongoing support programs for migrants in general, not only recent arrivals. These programs should address skills recognition, provide language training, and facilitate job opportunities for both new and long-term migrants. Moreover, the study highlights the need to revise migration policies and the skilled occupations list to better align with actual labour market demand.

3.5.4 Prior education level

The findings on the association between prior education levels and the experience of skill discounting offers valuable additional insights into the role of education levels in the labour market experiences of migrants. The analysis revealed that migrants with postgraduate education prior to migration faced higher levels of skill discounting, reflecting the tendency to overlook highly-skilled individuals in the employment process (Dietz et al., 2015). These findings challenge the human capital theory that posits better employment experiences with additional years of education and training (Becker, 1962). In fact, for migrants, this is not true, with migrants with higher qualifications facing greater difficulties in the job market (Banerjee et al., 2024; Farashah & Blomquist, 2022). This may be due to employers' limited understandings of, or disregard for, overseas qualifications and the mismatch between migrants' skills and the host country's labour market demands (Dean, 2018; Kustec et al., 2007; Thondhlana et al., 2016; Zorlu, 2013). Furthermore, while skill discounting was predominantly observed among migrants with postgraduate education, those with pre-degree level education were more likely to face challenges due to lacking Australian licensing/registration than those with a postgraduate education.

The findings offer new insights into the association between the prior education level of migrants and their on-the-job experiences such as skill utilisation, work responsibility, earnings, and job satisfaction. While migrants with postgraduate qualifications had higher levels of work responsibility, pre-degree migrants demonstrated better skill utilisation,

earnings, and job satisfaction. Surprisingly, there were no significant differences found in work responsibility, earnings, or satisfaction across education levels, contradicting human capital theory (Becker, 1962). However, this finding may reflect over-qualification (Cornelissen & Turcotte, 2020; Guerrero & Rothstein, 2012; Maynard et al., 2006); despite holding higher levels of responsibility, these individuals may feel that their full set of skills are not being utilised and that they are being underpaid. In addition, the findings offer new insights into the association between the educational levels of migrants and their experience of skill discounting that result in their outcomes as employees. Undergraduates demonstrated better skill utilisation than pre-degree holders and post-graduates. This could be due to the advanced knowledge attained by post-graduates where they find hard to transfer their specialised skills to job settings. On the other hand, pre-degree holders may face challenges in utilising their skills due to lack of advanced or specialised training. Consequently, the more generalised training that undergraduates may have, could have made them better suited to applying their skills effectively in a variety of employment contexts. Surprisingly, there were no differences in work responsibility, earnings, or satisfaction levels of migrants with different educational backgrounds, again contradicting human capital theory (Becker, 1962, 1975). In addition, the findings suggest further exploration and analysis to understand the underlying factors that lead to these findings. Factors such as industry, specific job roles, and country of origin could be influencing factors here.

The findings offer several practical insights for policymakers and employers. The likelihood of higher levels of skill discounting for migrants with a postgraduate education, and the lack of difference in employment outcomes for migrants with varying education levels points to the need for a more standardised approach in recognising the overseas qualifications of migrants as well as a clearer validation process. Employers should collaborate with accreditation bodies to set consistent standards and ensure the effective integration of highly-skilled migrants into the workforce. These findings also underscore the need to balance migration policies for both high- and low-skilled positions.

3.6 Summary

This study is the first detailed examination of how demographic factors influence skill discounting among migrants, providing a novel and comprehensive analysis of the underlying mechanisms of this issue. The key findings revealed significant disparities in the magnitude of skill discounting, the reasons why it happens, and the subsequent job experiences of skill-discounted migrants. The study highlighted that female migrant was less likely to be skill-

discounted than their male counterparts. However, female migrants often faced more challenges related to skill discounting than male migrants. Furthermore, skill-discounted female migrants reported higher skill utilisation, higher levels of work responsibility, and a better attitude toward their jobs, compared to males, who generally earned more. Migrants under 25 years were most likely to be skill-discounted than those aged 45 years or above. Younger migrants often encountered skill discounting due to insufficient experience, while those aged 35-44 faced issues related to unrecognised qualifications and lack of local licensing/registration. Despite lower levels of skill discounting in older migrants (45+), they had lower levels of skill utilisation and work responsibility, with varying satisfaction levels across age groups. Migrants who had been in the country for 6 years or more were more likely to be skill-discounted compared to those who had been in the country for 2 years or less, and those for 3-5 years. Recent migrants (less than 2 years) faced challenges related to language proficiency, non-recognition of overseas qualifications, and lack of licensing/registration, while long-term migrants faced skill discounting due to lack of job opportunities. Migrants who had been in the country for a shorter duration exhibited higher levels of skill utilisation, whereas those who had been in the country for a longer time reported greater satisfaction in their job. Migrants with postgraduate education levels were more likely to experience skill discounting compared to those with pre-degree, non-degree, and undergraduate education levels. Skill discounting due to lack of Australian licensing/registration was found more among those with pre-degree qualifications. Migrants with an undergraduate degree showed higher levels of skill utilisation and a better attitude to their job than migrants with no degree, with no significant differences seen in work responsibility, earnings, and satisfaction across the various education levels.

This study addresses a gap in the literature by providing insight into the demographic factors that contribute to differences in skill discounting between migrants. By identifying specific demographic factors associated with higher incidences of skill discounting, the study reveals the underlying mechanisms of this phenomenon. It highlights the need for targeted interventions that consider these demographic differences among migrants to improve their employment outcomes. Furthermore, the study points out several policy implications, such as policies being needed to support both male and female migrants, support for younger migrants, and long-term integration programs.

In conclusion, this study provides insight into the influence of demographic factors on the experience of skill discounting among migrants. By understanding these differences,

policymakers can develop more effective strategies to enhance employment outcomes and the overall integration of migrants into the labour market. The insights from this study challenge traditional assumptions about migrants' labour market experiences, and offer practical implications for creating a more supportive environment for all migrants.

Chapter 4: Refuge Industries for Skill-discounted Migrants (Study 2)

This chapter examines the role of skill discounting in migrant employment across different sectors, emphasising the concept of the refuge industry – an industry employing large numbers of skill-discounted migrants. The chapter begins with an introduction, outlining the background and aims of the study, before outlining the research questions. The chapter then provides a brief literature review, offering theoretical insight into why migrants may tend to concentrate in particular industries. This is followed by an outline of the research methods that detail the design, variables, and statistical analysis used in the study. The findings of the study and their implications are then discussed.

4.1 Introduction

The existing literature demonstrates that migrants tend to concentrate in certain sectors characterised by high demand for labour, low barriers to entry, and a greater presence of co-ethnic workers (Alberti, 2014; Buckley et al., 2016; Colic-Peisker & Tilbury, 2006; Liu, 2009; Ndiuini & Baum, 2021; Wright & Dimanche, 2023b). Industries such as hospitality and construction have been found to attract large numbers of migrants due to their accessible employment opportunities (Janta et al., 2011; Loosemore et al., 2021). However, the role of skill discounting in the employment of migrants in specific sectors is little understood. It is known that the experience of skill discounting can hinder migrants from finding employment in their intended occupations (Dietz et al., 2015), obliging them to seek jobs in alternate fields (Currie, 2007; Siar, 2013). The question then is where do skill-discounted migrants find employment?

Refuge industries are crucial in this context. Refuge industries are those that employ a disproportionate number of skill-discounted migrants, or more specifically, industries where employment rates of skill-discounted migrants exceed 150% of the industry average (Treuren et al., 2021b). These industries may often serve as a lifeline for those facing challenges such as language barriers or discrimination (Portes & Manning, 2012; Wang, 2004). For skill-discounted migrants, these sectors offer an opportunity for financial stability, as well as a platform to potentially build a career, even if the initial jobs do not fully align with their skills and experience. However, despite the vital role refuge industries can play in the integration of migrants, particularly skill-discounted migrants, our understanding of these industries remains limited. We do not know a great deal about the different sectors in which migrants find refuge

employment or how they find jobs in different industries. This study aims to address this gap through the following research question:

Which industries serve as refuge industries for skill-discounted migrants and how do they find employment in different industries?

The study will look at the numbers of skill-discounted migrants across different industries and see which industries provide refuge employment for them, the type of skill discounting experienced by migrants who found jobs across different industries, and the job search methods used to secure these jobs. Such an understanding advances the literature by broadening the scope of knowledge about refuge industries, and will contribute to the literature by identifying why and how migrants find employment in different sectors in Australia, specifically identifying the role of skill discounting in the process.

4.2 Concentration of migrants in refuge industries

Migrants tend to concentrate in certain industries, influenced by varying entry barriers and labour market dynamics. Two key theories assist in explaining this concentration: labour market segmentation theory and the ethnic enclave concept.

According to labour market segmentation theory (Doeringer & Piore, 1985; Piore, 1979), the labour market is divided into two segments. The first is the primary market which consists of capital-intensive jobs that offer high pay, job security, and career advancement. The jobs in the primary market may often require higher levels of education, skills, and experience and have stringent rules for entry, making it difficult for migrants to enter (Anderson, 1987). The second segment of the labour market is the secondary market, which is labour-intensive with low-wage, insecure jobs that require fewer skills and offer limited upward mobility, but offering jobs with lower barriers to entry for migrants (Anderson, 1987; Leontaridi, 1998). Entry into the primary labour market can be difficult for migrants as these jobs normally require specialised qualifications, experience, and licensing/registration and professional accreditation, such as in healthcare and professional fields such as engineering, which migrants may often not possess (Agyei, 2016; Bauder, 2003c; Cameron et al., 2013; Hilton, 2008; Newton et al., 2012; Qureshi et al., 2013; Ramboarison-Lalao et al., 2012; Schoenstein et al., 2016). On the other hand, jobs in the secondary market are more easily accessible for migrants as they often have lower skill requirements, little experience, and minimal formal barriers, such as the absence of strict licensing/registration or accreditation processes, such as in the hospitality and construction industries (Alberti, 2014; Alcorso, 2003; Buckley et al., 2016; Golubovskaya et

al., 2019; Janta et al., 2011; Ndiuini & Baum, 2021; Treuren et al., 2021b). For example, roles in hospitality and tourism are considered to be more labour-intensive unskilled jobs with low pay and often temporary in nature that are mostly occupied by migrants who are considered as a form of cheap labour (Sakdiyakorn et al., 2021; Wright & Dimanche, 2023b).

Another explanation for migrant concentration in certain industries can be provided by the ethnic enclave concept. Ethnic enclaves are business communities in which entities are owned by members of a particular ethnic group, employing co-ethnic workers and catering to customers from the same ethnic background (Portes & Jensen, 1989; Wilson & Portes, 1980); for example, ethnic restaurants and retail shops. Migrants who may face language barriers or challenges integrating into the mainstream labour market may often find refuge in these enclaves (Liu, 2009). While this form of concentration of migrants is entrepreneur-based, there can be concentration in particular sectors formed only through employee dominance. Accordingly, migrants may be concentrated in particular sectors based on specific skills, such as Indian IT professionals (Colic-Peisker & Tilbury, 2006). This can also be based on networks (Granovetter, 1973) between migrant employees, where an ethnic employee informs and assists other co-ethnic job seekers about employment opportunities in a particular sector (Waldinger, 1994). Consequently, these sectors have high concentrations of workers from one or two ethnic groups; for example, Italians and Irish migrants being highly concentrated in the construction sector in American cities (Schrover et al., 2007). These kinds of niches are formed through interpersonal communication. However, these jobs are most likely to be lower paying and may not require much in the way of skills and experience, and are often filled informally (Fong & Shen, 2011).

While these theories provide valuable insights, they do not fully explain why and how migrants find employment in specific industries. Specifically, the role of skill discounting in migrant employment in specific sectors remains underexplored.

4.3 Research Methods

This study takes a quantitative approach to examining the role of skill discounting in migrant employment in different sectors, specifically in identifying refuge industries for skill-discounted migrants. A quantitative approach assists with analysing data to identify relationships and patterns between variables (Bloomfield & Fisher, 2019; Watson, 2015). The study undertakes an analysis of the Continuous Survey of Australia's Migrants (CSAM), conducted by the Department of Home Affairs (formerly known as the Department of Immigration and Citizenship). This survey provides insight into the labour market and

integration experiences of migrants in Australia. CSAM is a representative survey of migrants arriving in Australia under the skilled or family migration streams, but excludes humanitarian entrants. The dataset covers migrants who:

- had either come to Australia on an offshore visa, or who were granted an onshore visa – in both cases in the last six months (of the survey).
- have been granted either a permanent residence visa, or a provisional visa, and are thereby on the path to permanent residence.

Initially introduced in 2009, the CSAM consists of data collected at two points in time, 6 months and 12 months after migrant arrival on a provisional or permanent visa(Hawthorne & To, 2014). A second iteration of the survey was launched between 2013 and 2018 with a new cohort of migrants in which the data collection process was refined. Two rounds of data were collected: the first survey was conducted around 6 months after the grant of permanent residency or provisional visa capturing the initial settlement experiences of migrants (Wave 1), and a follow-up survey was conducted 18 months after the grant of permanent residency or provisional visa (Wave 2) allowing for an analysis of labour market outcomes over time. The current study uses this dataset.

The study uses data from five cohorts collected during the period 2013-2018. Although data was collected for a sixth cohort, it was not included as only the data from first survey, (conducted six months after the grant of permanent residency or provisional visa) was available at the time of the study. The study focuses on the primary applicants, who are the main visa applicants satisfying the primary criteria for the grant of visa under the Migration Regulations (ABS, 2009) within the working-age population, specifically those aged between 15-65 years at the time of arrival in Australia.

For the statistical analysis, the study utilises the Statistical Package for the Social Sciences (SPSS ver24) software to conduct various strands of quantitative analysis. The data was weighted using the Wave 2 weights set by the CSAM team to adjust the sample for the different levels of response of sub-groups within the population. Weighting ensures that the sample represents the overall national migrant intake for that year. It adjusts for under-sampled groups, such as groups with lower response rates, and provides a better description of the experience of skill discounting across the migrant population. The Department of Home Affairs outlines the weighting process used in the CSAM dataset (Department of Home Affairs, 2019).

Weighting the data is considered a standard technique, particularly for large datasets (Ciol et al., 2006; Korn & Graubard, 1995; Walker & Young, 2003).

4.3.1 Measuring skill discounting

The study introduces the concept of Skill Discounting (SD), evaluating whether a migrant's skills have been unrecognised to the extent of necessitating a change in occupation. This determination is made by assessing if migrants are working in their pre-migration occupation. Here, the CSAM questionnaire asked respondents, 'are you working in your pre-migration occupation?' If the migrant says no, the reasons for changing their nominated occupation are examined. If these reasons match any one of the reasons stated by Alboim et al. (2005), they are deemed to have been skill-discounted. This approach has already been used in several publications (Treuren et al., 2021a, 2021b). This approach categorises migrants into distinct groups denoted by Migrant Type.

4.3.2 Migrant type classification

Migrant Type categorises individuals into distinct groups based on sponsorship status – either employer-sponsored or self-initiated migrants. Self-initiated migrants arriving without employer sponsorship, compete for employment locally, facing potential skill discounting during job acquisition. In contrast, sponsored migrants arrive with a pre-arranged job, minimising the likelihood of skill discounting. This classification enables a comparison between self-initiated migrants, more susceptible to skill discounting, and sponsored migrants.

Classification of Self-Initiated Migrants:

Within the self-initiated migrant group, three classifications emerged:

Continuing: Migrants who secured employment in their pre-migration occupation, allowing them to continue in their previous field. Migrants who continued in their pre-migration occupation are not considered to be skill-discounted in this study.

Non-Skill-Discounted: Migrants who opted not to continue in their pre-migration occupation for reasons unrelated to skill discounting, such as lack of interest or location preferences.

Skill-Discounted: Migrants unable to find a job in their field due to skill discounting during recruitment who subsequently secured employment in a different occupation.

This dichotomous and objective measure of skill discounting signifies a change in occupation caused by skill discounting. However, it does not account for instances where migrants continue in a nominated occupation, but face underutilisation of their capabilities.

4.3.3 Variables

Table 4.1 List of variables

Variable	Explanation	Coding
Changed Occupation	CSAM asked its respondents, "if nominated occupation is current occupation?"	0 = No 1 = Yes
Migrant Type	Denotes different types of migrant employees determined by their answer to the question that they had changed their nominated occupation during migration. The classification of migrants into these categories has been explained in an earlier section	0 = Sponsored 1 = Continuing migrants 2 = non-skill-discounted migrants 3 = Skill-discounted migrants
Industry (Type of Industry)	CSAM had information about the type of industry that migrants worked in Wave 2. This included: 1. Agriculture, Forestry and Fishing, 2. Mining, 3. Manufacturing, 4. Electricity, Gas, Water and Waste Services, 5. Construction, 6. Wholesale Trade, 7. Retail Trade, 8. Accommodation and Food Services, 9. Transport, Postal and Warehousing, 10. Information, 11. Media and Telecommunications, 12. Financial and Insurance Services, 13. Rental, Hiring and Real Estate Services, 14. Professional, Scientific and Technical Services, 15. Administrative and Support Services, 16. Public Administration and Safety, 17. Education and Training, 18. Health Care and Social Assistance, 19. Arts and Recreation Services, 20. Personal and community services 21. Other. 'Not known', 'Skipped by design', and 'Not working' were treated as missing values	To compare each industry to all other industries, all industries given were recoded as (0) while the specific industry in question was coded as (1). Other services were renamed as personal and community services to ensure greater clarity.
Job search methods	Job search methods included the following items: 1. Employment agencies, 2. Family and friends, 3. Approached by employer, 4. Self-employed, 5. Direct approach to employer, 6. Study placements, 7. Internet job site, 8. Other internet site, and 9. Transfer	0 = No (to the use of the particular method) 1 = Yes (to the use of the particular method)

4.3.4 Statistical Analysis

The data were analysed using chi-square tests. The chi-square test examines the relationship between two categorical variables and determines if they are independent or significantly associated (Franke et al., 2012; McHugh, 2013). This study will use chi-square tests to examine the proportion of skill-discounted migrants across different industries, the reasons for or type of skill discounting, and the job search methods of skill-discounted migrants across industries.

This analysis aims to examine if there is a significant difference in the proportion of skill-discounted migrants across each specific industry compared to all other industries, as well as variations in their reasons for skill discounting and the job search methods. The presence of significant differences was indicated by 'p' values given in the table (*p<.05; ** P<.005; ***p<.001) highlighting which factor differed by industry employed in compared to all other industries. Furthermore, the studies use the classification of industries as per the CSAM data which is based on the classification of industries in the Australia and New Zealand Standard Industrial Classification.

The study defined 'a refuge industry as employing at least 150% of the all-industry average proportion of skill discounting'. This classification is based on the definition provided by Treuren et al. (2021b). To determine this threshold, a cross-tabulation analysis was conducted to determine the industry average of employment of skill-discounted migrants. This was found to be 8.4%. Accordingly, an industry is considered a refuge industry if it employs at least 150% of 8.4 which is 12.6% of skill-discounted migrants.

The study will first analyse the proportion of skill-discounted migrants in each industry, comparing this proportion to that of all other industries. If an industry employs more than 12.6% (explained above) of skill-discounted migrants, it will be classified as a refuge industry. The next step will be to look into the proportion of skill discounting reasons experienced by migrants who found employment in each sector to that of skill-discounted migrants now working in all other industries. Finally, the analysis will explore the proportion of ways in which skill-discounted migrants found employment in each sector, comparing these job search methods used by skill-discounted migrants employed in all other sectors.

4.4 Findings

To identify a refuge industry, the proportion of skill-discounted migrants employed in each industry was compared to that of all other industries. Table 4.2 provides a set of descriptive statistics on the proportion of skill-discounted migrants in each industry to that of all other industries. These differences in the proportion of skill-discounted migrants were statistically significant (p<.001) for each specific industry compared to all other industries. The results for each industry are show below in Table 4.2.

Table 4.2 Proportion of employment of skill-discounted migrants by industry

Type of industry		Skill-discounted (%) in each industry compared to all other industries	
		Within each specific industry (%)	Other industries (%)
1	Agriculture, Forestry and Fishing	6.8	8.3
2	Mining	3	8.5
3	Manufacturing	10.3	8.2
4	Electricity, Gas, Water and Waste Services	10.3	8.3
5	Construction	5.1	8.6
6	Wholesale Trade	15.1	8.2
7	Retail Trade	23.1	7.4
8	Accommodation and Food Services	9.9	8.2
9	Transport, Postal and Warehousing	22.2	7.9
10	Information Media and Telecommunications	7.9	8.3
11	Financial and Insurance Services	10.1	8.2
12	Rental, Hiring and Real Estate Services	15.1	8.3
13	Professional, Scientific and Technical Services	3.4	9.1
14	Administrative and Support Services	20.4	8.2
15	Public Administration and Safety	12.9	8.3
16	Education and Training	7.7	8.4
17	Health Care and Social Assistance	4.2	9.2
18	Arts and recreation services	9.9	8.3
19	Personal and community services	6.4	8.4
	Industry average	**8.4**	

Notes:

1. Data is weighted; N=10,837
2. The difference in the proportion between each specific industry to that of all other industries was statistically significant at Sig level p<.001

Identification of refuge industries

Table 4.2 presents the proportion of skill-discounted migrants employed in each industry, revealing that the overall average employment rate of skill-discounted migrants across all industries is 8.4%. Furthermore, to classify an industry as a *refuge industry*, it must employ at least 150% of the industry average proportion of skill-discounted migrants employed (8.4), which is 12.6%. Therefore, any industry employing more than 12.6% of skill-discounted migrants qualifies as a refuge industry. Table 4.3 reports the industries that serve as a refuge for skill-discounted migrants.

Table 4.3 Refuge industries for skill-discounted migrants

Refuge industry (Employing more than 150% of the industry average of skill-discounted migrants,12.6%)	**% Of skill-discounted migrants employed**
Retail Trade	23.1
Transport, Postal and Warehousing	22.2
Administrative and Support Services	20.4
Wholesale Trade	15.1
Rental, Hiring and Real Estate Services	15.1
Public Administration and Safety	12.9

The findings show that certain industries serve as refuge industries for skill-discounted migrants. Notably, retail trade (23.1%) and transport, postal, and warehousing (22.2%) have the highest concentration of skill-discounted migrants. Administrative and support services also employ a substantial percentage of skill-discounted migrants. Sectors such as wholesale trade (15.1%) and rental, hiring, and real estate (15.1%) exceed the industry average. Even public administration and safety, although closer to the industry average, can still be considered a refuge industry with 12.9% of skill-discounted migrants.

The findings reveal that industries such as electricity, gas, water, and waste services; accommodation and food services; and financial and insurance services cannot be considered as refuge industries for skill-discounted migrants. However, these industries still employed higher levels than all other industry average proportions of employment of skill-discounted migrants. On the other hand, industries such as professional, scientific, and technical services and the healthcare and social assistance sectors, showed a lower employment rate of skill-discounted migrants (below 5%).

Skill discounting reasons experienced by migrants who found employment in various industries

This section discusses the findings on the reasons for skill discounting experienced by migrants who found employment in specific industries compared to that experienced by migrants employed in all other industries. This allowed for a comparison of the percentage of each reason for skill discounting for each specific industry compared to all other industries. By doing so, the specific factors that drive migrants toward particular sectors can be revealed. Table 4.4 provides the details of the reasons for skill discounting experienced by migrants who found employment in different sectors.

Table 4.4 Skill discounting reasons experienced by migrants who found employment in different sectors

Industry	Insufficient English (%)	Insufficient experience (%)	Overseas qualifications not recognised (%)	Lack of Australian licensing/registration (%)	Discrimination (%)	Lack of jobs/ demand expertise (%)
Agriculture, forestry and fishing	+ (6.2)	- (14.8)	+ (17.3)	NS	NS	NS
Mining	NS	NS	NS	NS	NS	NS
Manufacturing	+ (2.4)	+ (39.7)	NS	NS	NS	NS
Electricity, gas, water and waste services	NS	NS	NS	+ (13.2)	NS	NS
Construction	+ (4.6)	+ (43.1)	NS	+ (7.4)	NS	- (58.8)
Wholesale trade	NS	NS	NS	NS	NS	NS
Retail trade	- (0.5)	+ (38.8)	NS	+ (5.9)	NS	- (65.2)
Accommodation and food services	+ (2.6)	NS	NS	NS	+ (1.8)	- (65.2)
Transport, postal and warehousing	+ (3.0)	NS	NS	- (2.4)	NS	NS
Information, media and telecommunications	NS	+ (44.2)	+ (10.4)	NS	- (0.0)	NS
Financial and insurance services	- (0.0)	NS	- (5.2)	- (2.9)	NS	+ (73.4)
Rental, hiring and real estate	NS	- (24.7)	+ (15.8)	NS	NS	NS

Industry	Insufficient English (%)	Insufficient experience (%)	Overseas qualifications not recognised (%)	Lack of Australian licensing/registration (%)	Discrimination (%)	Lack of jobs/ demand expertise (%)
Professional, scientific and technical services	NS	- (19.2)	NS	- (1.8)	- (0.0)	+ (81.0)
Administrative and support services	NS	NS	NS	- (1.7)	NS	NS
Education and training	+ (3.7)	- (27.1)	+ (11.1)	+ (7.9)	+ (1.9)	NS
Healthcare and social assistance	NS	NS	NS	+ (7.4)	+ (2.0)	- (64.0)
Public administration and safety	NS	NS	NS	NS	NS	+ (78.4)
Arts and recreation services	NS	- (15.1)	- (0.0)	- (0.0)	+ (3.3)	+ (89.1)
Personal and community services	NS	NS	NS	NS	NS	NS

Notes:

1. Data are weighted
2. The results represent the proportion of each reason experienced by migrants employed in each industry compared to all other industries
3. N = 11,280; Significance level is calculated at .001, .05, and .005 levels
4. + indicates significantly higher proportion compared to all other industries
5. - indicates significantly lower proportion compared to all other industries
6. NS indicates non-significant (no difference) in results
7. the value given in () in each column is the percentage of those who experienced the particular reason for skill discounting

The above Table 4.4 reveals that the skill discounting types experienced by migrants who are now working in specific industries differed to those experienced by skill-discounted migrants employed in all other industries. It was found that skill-discounted migrants working in sectors such as agriculture, forestry, and fishing; manufacturing and construction; transport, postal, and warehousing; education and training; and accommodation and food services were more likely to have experienced skill discounting due to **lack of language proficiency.** This suggests that these sectors appeared to offer roles where language proficiency was less important or where migrants' language skills were more adequately accepted. While insufficient English was a significant factor driving migrants to change their nominated occupation, these sectors present fewer barriers related to language proficiency.

Migrants who found employment in sectors such as manufacturing and construction, and information, media, and telecommunications, and in refuge industries such as retail were more likely to have experienced skill discounting due to **insufficient experience**. Migrants who found jobs in the manufacturing sector were less likely to have faced skill discounting due to insufficient experience. This indicates a potentially less stringent approach to experience requirements. It could also be because these sectors were more accepting of the experience that migrants had, or they may have had less demanding role specifications.

The **lack of recognition of overseas qualifications** was mostly experienced by skill-discounted migrants currently employed in agriculture, forestry, and fishing; information, media, and telecommunications; and education and training; and refuge industries such as rental, hiring, and real estate, and less by migrants who are now in arts and recreation services.

Migrants who found jobs in electricity, gas, water, and waste services; construction; education and training; and healthcare and social assistance, and in refuge industries such as the retail trade were more likely to have experienced skill discounting due to **lack of Australian licensing/registration.** This could be due to roles in these sectors not requiring licensing/registration. For example, the healthcare and social assistance sector, although often regarded as an industry with strict regulations and accreditation requirements to practice one's profession, also provides roles such as care workers that do not require any licensing/registration (McGregor, 2007).

Migrants who found jobs in accommodation and food services; education and training; healthcare and social assistance; and arts and recreation services were more likely to have been

skill-discounted due to **discrimination**. None of the refuge industries employed migrants who had faced skill discounting due to discrimination.

It was found that skill-discounted migrants who had experienced **lack of demand for expertise** were employed in professional, scientific, and technical services; financial and insurance services; and arts and recreational services, and in the refuge sector public administration and safety. This suggests that these industries have demand for employees, suggesting more opportunities for skill-discounted migrants.

Job search methods of skill-discounted migrants in each industry

To determine how skill-discounted migrants found employment in each industry, a chi-square test was conducted. This analysis compared the job search methods used by skill-discounted migrants within specific industries to those employed in all other industries, aiming to identify any statistically significant differences in the adoption of these methods. The presence of significant differences was indicated by 'p' values *p-.05, **p<.005, ***p<.001, highlighting which job search methods were more or less prevalent in particular industries compared to others.

Table 4.5 Job search methods of skill-discounted migrants across different industries

Industries	Employment agencies (%)	Family and friends (%)	Approached by employer (%)	Self-employed (%)	Direct approach to employer (%)	Study placements (%)	Internet job site (%)	Other Internet site (%)	Transfer (%)
Agriculture, forestry and fishing	NS	+ 31.9	NS	+ 9.7	- 0.0	+ 11.1	- 18.1	NS	- 0.0
Mining	+ 13.2	NS	NS	- 0	- 0	NS	- 23.1	NS	+ 18.7
Manufacturing	NS	NS	- 3.4	NS	- 3.7	NS	+ 38.6	NS	NS
Electricity, gas, water and waste services	- 2.0	NS	NS	- 0	NS	NS	- 20.3	+18.2	+ 21.8
Construction	- 3.9	- 13.8	- 1.6	NS	NS	NS	+ 42.3	+ 12.2	NS
Wholesale trade	- 3.5	- 7.7	+ 9	- 0.6	NS	- 0	+ 42.8	NS	+ 13.8
Retail trade	NS	NS	- 3.8	NS	NS	NS	+ 39.3	NS	- 4.3
Accommodation and food services	NS	NS	+ 6.9	- 2.0	NS	NS	+ 38.1	- 7.1	NS
Transport, postal and warehousing	NS	+ 30.7	NS	NS	NS	- 0.4	NS	NS	- 4.5
Information, media and telecommunications	NS	NS	NS	- 1	NS	NS	+ 43.7	NS	- 2
Financial and insurance services	NS	- 17	+ 7.3	+ 5.2	NS	+ 2.3	- 27.9	NS	NS
Rental, hiring and real estate	NS	+ 30.5	NS	NS	+ 14.1	NS	- 26.2	NS	- 0
Professional, scientific and technical services	+ 9.9	NS	+ 7.4	- 0	- 2.8	+ 2.8	+ 40.3	NS	+ 8.9
Administrative and support services	NS	NS	NS	-1	+11.3	NS	NS	-4.4	-3.1

Industries	Employment agencies (%)	Family and friends (%)	Approached by employer (%)	Self-employed (%)	Direct approach to employer (%)	Study placements (%)	Internet job site (%)	Other Internet site (%)	Transfer (%)
Education and training	NS	- 17.1	NS	+7.5	+14.6	+3.0	-27.6	NS	+8.6
Healthcare	+ 9.1	NS	NS	+ 4.8	NS	- 0	- 27.9	NS	NS
Public administration and safety	- 2.8	+ 26.3	NS	NS	NS	NS	NS	NS	NS
Arts and recreation services	NS	+ 57.1	- 0	N	NS	NS	- 10.7	NS	NS
Personal and community services	NS	NS	- 1.9	- 0	- 0	NS	NS	+ 15.5	NS

Notes:

1. Data are weighted
2. N = 9,558-9,560; Significance level is calculated at .001, .05, and .005 levels
3. > indicates significantly higher proportion compared to all other industries
4. - indicates significantly lower proportion compared to all other industries
5. NS indicates non-significant (no difference) in results
6. the value given in () in each column is the percentage of the specific job search method used by skill-discounted migrants to find job in the particular industry

As reported in Table 4.5, skill-discounted migrants used a variety of job search methods, and the prominence of each method varied across industries.

Migrants in professional, scientific, and technical services were more likely to use **employment agencies** than in most other sectors, with a significant 9.9% relying on agencies to find jobs. In mining, employment agencies also played a key role. Healthcare and social assistance saw a higher use of employment agencies as well, with 9.9% of migrants using this method, which was considerably higher than in industries such as retail or construction where agencies were less prominent. Notably, skill-discounted migrants who found employment in refuge industries did not use this method.

Family and friends played a significant role in sectors such as agriculture, forestry, and fishing, where this was the most common method for securing employment. This reliance on personal connections was similarly strong in arts and recreational services, with over half of migrants finding jobs through family and friends. The transport, postal, and warehousing industry (a refuge industry) also saw a heavy reliance on family and friends, where 30.7% of migrants used this method. In contrast, sectors such as wholesale trade, which is a refuge industry, and education and training showed a far lower reliance on family and friends compared to other industries.

Self-employment was more common in certain sectors, particularly in agriculture, forestry, and fishing, where skill-discounted migrants were more likely to be self-employed than in other industries. The education and training sector also saw higher rates of self-employment, with 7.5% of migrants running their own businesses, compared to lower rates in sectors like manufacturing and retail. Healthcare and social assistance similarly had a notable proportion of self-employed migrants (4.8%). However, self-employment was largely absent in refuge industries such as administrative and support services and public administration and safety.

Directly approaching employers was a key method in certain industries. Skill-discounted migrants who found jobs in refuge industries such as administrative and support services were more likely to have used direct employer approaches than those in other industries, making it a distinctive strategy for this sector. In education and training, 14.6% of migrants secured jobs by directly approaching employers, a higher rate than in most industries. This method was also used by migrants in accommodation and food services, although less often than in administrative services. On the other hand, industries such as mining and electricity, gas, water,

and waste services saw very little use of direct approaches, where transfers and agencies played a more significant role.

Study placements were more commonly used in some industries than others. In agriculture, forestry, and fishing, study placements were a key method for securing employment, whereas they were largely absent in industries such as mining and transport. Migrants in financial and insurance services also showed a higher use of study placements, as did those in education and training, where this method was more prevalent than in other industries. In professional, scientific, and technical services, study placements were less frequently used, but still contributed to job searches compared to all other industries.

Internet job sites were heavily utilised by skill-discounted migrants in industries such as manufacturing, where it was the most common method for finding jobs. The retail trade industry (a refuge industry) also saw high use of Internet job sites, making it the primary method for job searches in that sector. Similarly, the information, media, and telecommunications sector had a significant proportion of migrants, 43.7%, who used Internet job sites to find work. In accommodation and food services, 38.1% of migrants relied on Internet platforms, while in sectors such as construction and the wholesale trade, online job sites remained important but were supplemented by other methods such as transfers. However, in industries such as public administration and safety, and agriculture, forestry, and fishing, the use of Internet job sites was noticeably lower than in other industries.

Transfers were a dominant method for migrants in industries like mining and electricity, and gas, water, and waste services, where job mobility and internal transfers were more common than in other industries. Transfers were also a notable method for migrants in professional, scientific, and technical services and education and training, where 8.9% of migrants found jobs through this method, higher than the average across industries. By contrast, transfers were virtually absent in industries like agriculture, forestry, and fishing and administrative and support services.

Across all industries, the job search methods used by skill-discounted migrants varied widely, reflecting the specific opportunities and constraints present in each sector. Family and friends were key in some industries, while Internet job sites dominated others, and direct employer approaches, transfers, and employment agencies played varying roles depending on the industry.

Appendix 2 provides a detailed explanation of the findings of study 2.

4.5 Discussion and implications of the study

The current study examined the role of skill discounting in the employment of migrants in specific industries, emphasising the concept of the refuge industry. The study uncovers the reasons for skill discounting experienced by migrants who found jobs in different industries and the job search methods used by migrants to find these jobs. The study advances the literature by broadening the scope of knowledge on refuge industries, and providing a detailed analysis of the factors and processes involved in migrant employment within different industries, offering practical insights.

The study advances the literature by confirming the evidence for refuge industries for skill-discounted migrants and broadening its scope beyond the hospitality industry (Treuren et al., 2021b). While the existing literature observes that migrant employees are more likely to be prevalent in precarious industries such as agriculture, construction and manufacturing, and hospitality (Tham & Fudge, 2019), the current findings suggest a different pattern, providing new insights. industries such as retail trade; wholesale trade; transport, postal, and warehousing; administrative and support services; public administration and safety; rental, hiring, and real estate emerged as refuge industries for skill-discounted migrants. This study also extends the ethnic enclave and occupational niche concepts (Liu, 2009; Portes & Jensen, 1989; Wilson & Portes, 1980) by revealing how industries outside ethnic enclaves, such as public administration and safety, wholesale trade, and administrative support services serve as a refuge for migrants facing skill discounting.

Furthermore, revealing how skill-discounted migrants found employment in various industries, including in refuge industries, offers new insights into the employment patterns of skill-discounted migrants. Most of these migrants who found employment in refuge and other industries had faced skill discounting for various reasons. In the retail sector, for example, skill-discounted migrants faced skill discounting due to insufficient experience and the lack of Australian licensing/ registration. The retail industry, characterised by part-time and casual positions with relatively low barriers to entry (Campbell & Chalmers, 2008; Clibborn & Wright, 2018; Tham et al., 2016), became another refuge sector for these individuals, who primarily secured these jobs through Internet job sites. The findings offer new insights into Internet job sites being a popular method of finding jobs (Adu-Darkoh, 2014; Greve et al., 2007) in refuge industries including wholesale trade and in other industries such as accommodation and food services; information, media, and telecommunications; and

professional, scientific, and technical services, but not the construction industry (Adu-Darkoh, 2014).

Moreover, migrants who found jobs in transport and warehousing faced skill discounting due to insufficient English and relied on family and friends to find jobs. Insufficient English was also a reason for skill discounting faced by migrants who found jobs in agriculture, forestry, and fishing; accommodation and food services; and manufacturing and the construction industry, aligning to the existing literature on the roles within these industries having less demand for skills and qualifications (Buckley et al., 2016; Janta et al., 2011; Loosemore et al., 2021; Tham et al., 2016; Tham & Fudge, 2019), making them easily accessible for skill-discounted migrants.

The public administration and safety sector offered new insights as a refuge industry. These migrants faced skill discounting mainly due to a lack of job opportunities. This suggests a broader role scope within these industries offering a wide variety of job opportunities for people with diverse skills (see Australian Public Service websites for job descriptions). Like those in the transport and warehousing industry, these migrants also relied on friends to find these jobs. This trend suggests that even in government-related industries, where one might expect more formal hiring practices (Lang, 2021), personal networks remain a key source for migrants. Policymakers could work to create more transparency and accessibility to job openings in these industries. This could include providing more incentives to employers to advertise positions on public job boards or through employment services that are equally accessible to migrants.

It is also essential to note that not all industries were found to be refuge industries for skill-discounted migrants. The hospitality and construction industry, often associated with low barriers to entry and secondary labour market attributes (Buckley et al., 2016; Doeringer & Piore, 1985; Golubovskaya et al., 2019; Janta et al., 2011; Loosemore et al., 2021; Rotimi et al., 2023; Sakdiyakorn et al., 2021; Tham et al., 2016; Treuren et al., 2021b; Wright & Dimanche, 2023a), and hospitality which had been identified as a refuge industry in a previous study (Treuren et al., 2021b), were absent from the list of refuge industries in this study. One possible explanation for this could be the requirements of trades or architectural certification needed for certain roles within this industry that migrants may not possess or could not transfer to Australia (Buckley et al., 2016). However, hospitality and other industries such as electricity, gas, water, and waste services and financial and insurance services were notable for employing skill-discounted migrants at higher than industry-average rates, although not to the extent of being classified as refuge industries. Furthermore, industries such as professional, scientific,

and technical services and healthcare and social assistance showed a lower rate of skill-discounted migrants (below 5%), aligning with the concept of the primary market in labour market segmentation theory (Doeringer & Piore, 1985; Piore, 1979), where roles in these industries have stringent professional accreditation requirements and specific skills that are challenging to transfer across nations (Agyei, 2016; Groutsis, 2003; Hall & Sadouzai, 2010; Newton et al., 2012; Schoenstein et al., 2016). Moreover, a report by (Mackey et al., 2022) found that these industries tended to employ highly skilled migrants in managerial positions which further differentiated them from industries more commonly associated with skill discounting.

Interestingly, analysis of skill-discounted migrants employed in the education and training sector provides new insights. The existing literature tends to focus on precarious and low-skilled industries such as construction and hospitality when discussing employment opportunities for skill-discounted migrants (Aerne & Trampusch, 2023; Alberti, 2014; McNamara et al., 2011). This has often lead to overlooking industries such as education and training which are considered to offer roles with high skill requirements (Agyei, 2016). Although not identified as a refuge sector, the presence of skill-discounted migrants who have faced barriers due to insufficient English, overseas qualifications not being recognised, the lack of Australian licensing/registration, and discrimination within education and training might be indicative of roles within the sector that do not require high levels of skill, such as support staff roles.

The process of finding jobs across industries also offers new insights. While the literature suggests that migrants may lack familiarity with formal job search avenues such as recruitment agencies, and typically rely on co-migrants or family for job placements (Mahuteau & Junankar, 2008; McGregor, 2007; Winterheller & Hirt, 2017), this is not fully supported. Skill-discounted migrants did use family and friends in some industries, but also used social media platforms such as Internet job sites and informal channels such as directly approaching the employer across different industries, highlighting distinct hiring practices across industries and use of different methods to find employment (Shuva, 2022). Employment agencies were predominantly used in industries like mining, and electricity, gas, water, and waste services, as well as professional, scientific, and technical services, reflecting the regulated nature of these industries (Behtoui, 2008).

In most of the refuge industries, lower usage of employment agencies was noted, aligning with the idea that migrants may be unfamiliar with these formal job search avenues (McGregor,

2007). Policies could aim at making these methods more attractive for skill-discounted migrants not only in refuge industries, but also in other industries. Government can support employment agencies that specialise in assisting migrants by providing them with funding and resources to expand their services.

The study adds to the literature by suggesting that self-employment is a potential job search method that migrants, particularly skill-discounted migrants can use to overcome employment barriers (Al Ariss, 2010). However, the study identified that this method was only used by skill-discounted migrants to find jobs in the agriculture, forestry, and fishing sector. The lower popularity of this method confirms the lack of finance or resources to start a business (Al Ariss, 2010). Initiatives that provide opportunities for self-employment can be provided through access to capital, training, and regulatory guidance, thereby helping migrants explore entrepreneurial opportunities.

Policymakers can use insights from this study to create supportive policies for skill-discounted migrants seeking employment in refuge industries. This may involve implementing incentives, such as subsidies or tax breaks, for employers in these industries to promote workforce diversity. However, policymakers and employers should ensure these industries provide stable working conditions and fair wages rather than perpetuating precarious employment. Additionally, policymakers could establish programs to assist migrants to secure jobs within their professional fields, helping them avoid the need to seek refuge in less personally relevant industries. By equipping migrants with the necessary skills, their employability in their areas of expertise can be significantly enhanced. Moreover, regulations in industries with lower employment rates for skill-discounted migrants could be reviewed and potentially relaxed. Employers should also be encouraged to adopt inclusive hiring practices and provide training programs that enhance migrants' skills, thereby facilitating their upward mobility within the workforce.

4.6 Conclusion

The current study offers insight into the role of skill discounting in the employment of migrants across various industries, emphasising ‘refuge industries’ that employ a higher proportion of skill-discounted migrants. The study identified that industries such as the retail trade; transport, postal, and warehousing; rental, hiring, and real estate services; administrative and support services; and public administration and safety were major refuge industries for skill-discounted migrants. Contrary to previous findings, the hospitality, accommodation, and food services industry was not found to be a major refuge for skill-discounted migrants; however, this sector

did employ more than the industry average of skill-discounted migrants. In addition, industries such as the electricity, gas, water, and waste services and the financial and insurance services industry were notable for employing skill-discounted migrants at higher than industry-average rates, although not to the extent of being classified as refuge industries. On the other hand, industries like professional, scientific, and technical services and the healthcare and social assistance sector showed lower employment rates of skill-discounted migrants, likely due to stringent accreditation requirements and specific skill demands.

Furthermore, the study looked into the reasons for skill discounting that lead these migrants to change their pre-migration occupation and find jobs in their current sector of employment. Language proficiency, lack of experience, accreditation and licensing/registration difficulties, and lack of job opportunities were significant reasons. However, these reasons varied across industries, indicating where these barriers had less impact. A new insight was identified in the education and training sector where most of the reasons for skill discounting, such as insufficient English and experience and the lack of Australian licensing/registration had little impact, as skill-discounted migrants who experienced these reasons found jobs in this sector. This could also indicate that the roles in this sector required lower levels of skills and experience.

The study also explored the diverse job search methods of skill-discounted migrants currently employed in different industries. Unlike the notion that skill-discounted migrants were more likely to use their family and friends to find jobs, the study identified that job search methods varied across industries highlighting the unique characteristics and hiring practices in each sector. Searching Internet job sites was a widely used method across many industries, family and friends in less formal recruitment industries such as agriculture, arts, and recreational services, while employment agencies played a crucial role in industries requiring specialised skills. Self-employment was widely used in the agriculture sector, reflecting opportunities for autonomy and flexibility.

Several implications became apparent in this research. The study highlights the need for developing fair and inclusive labour market practices tailored for each sector. Providing flexible visa options, checking working conditions, and career progression of skill-discounted migrants would enhance their employment opportunities. For organisations, understanding the factors contributing to skill discounting would inform targeted recruitment and training and retention strategies, providing industry-specific training which could improve the potential of migrant employees. Also, initiatives to facilitate mentorship and self-employment would

empower migrants to overcome labour market challenges and contribute effectively to the economy.

In conclusion, the study advances the literature by not only confirming the evidence for refuge industries for skill-discounted migrants, but also providing a detailed analysis of the factors and processes involved in migrant employment within different industries. In general, while refuge industries may provide initial employment opportunities, they may not be a long-term career option for skill-discounted migrants. Therefore, it is essential to develop pathways that allow skill-discounted migrants to move from refuge industries to industries or roles where their skills can be utilised, thereby reducing the incidence of skill discounting over time. The insights provided have significant implications for both policy and practice, aiming to create a more equitable and efficient labour market for skill-discounted migrants.

Chapter 5: Local Qualifications and the Likelihood of Skill Discounting among Migrant Employees (Study 3)

This chapter examines the influence of local qualifications on the experience of skill discounting among migrants, specifically assessing whether local qualifications assist in reducing this phenomenon. The chapter begins with an introduction outlining the background, significance, and aims of the study, leading to the research question. The literature review highlights existing but inconclusive studies on the relationship between qualification attainment and the labour market. The methodology section details the research design, how skill discounting was determined, the variables used, and the statistical analyses undertaken. The chapter presents findings that demonstrate variations in the reasons for, and the extent and consequences of, skill discounting for migrants based on their local qualifications. A discussion of these findings addresses their implications, and finally, the chapter concludes with a summary of the study's key insights.

5.1 Introduction

The acquisition of local qualifications has been considered a strategic response by migrants to align themselves with local labour market dynamics (Rajendran et al., 2020; Sardana et al., 2016; Tan & Cebulla, 2023). In Australia, where the skilled migration program attracts highly qualified individuals, many face the reality of under-utilisation of skills due to the limited recognition of their overseas qualifications (Cameron et al., 2019; Kozanoglu et al., 2021; Treuren et al., 2021a). In response, migrants often pursue local qualifications, hoping to enhance their employability to overcome labour market challenges (Fuller & Martin, 2012; Stangej et al., 2019). However, recent discussions among business and unions have raised concerns about the country's chronic work shortages, which are being exacerbated by complex and costly qualification systems (ABC news, 2024).

While local qualifications are often viewed as a potential solution to labour market challenges, the actual outcomes for migrants are mixed. On one hand, local qualifications provide credentials that are more familiar for employers and offer an opportunity to gain local experience and enhance their employment prospects (Chen & Skuterud, 2018; Owusu & Sweetman, 2015; Rajendran et al., 2020). On the other hand, many migrants do not acquire favourable employment outcomes, despite gaining local qualifications (Hawthorne, 2010a; Tan & Cebulla, 2023). The question remains whether these qualifications genuinely help migrants reduce their labour market challenges, particularly the issue of skill discounting.

This study aims to address this gap by examining the following research question:

Do local qualifications help migrants reduce the experience of skill discounting?

Specifically, the study will examine whether local qualifications truly reduce the likelihood of skill discounting, its underlying reasons, and how they impact migrants' subsequent on the job experiences, including skill utilisation, work responsibility, earnings, and satisfaction. The study will compare the likelihood of skill discounting between migrants with and without local qualifications in Australia, and will examine different dimensions of local qualifications such as the level and field of these qualifications.

This study will provide better insight into the literature by examining how local qualifications influence the experience of skill discounting among migrants in Australia and their subsequent impact on employment experiences. By shedding light on these dynamics, the research will contribute to a deeper understanding of the role local qualifications play in shaping migrants' labour market experiences. In light of the current discussions surrounding the country's qualifications system and ongoing worker shortages (ABC news, 2024), this research offers timely insights for policymakers, educational institutions, and businesses to better understand how local qualifications influence employment outcomes for migrants and to develop more effective strategies to support their integration into the workforce.

5.2 Literature Review

5.2.1 Local qualifications and migrant labour market integration

This section provides insight into the impact of local qualifications on the employment outcomes of migrants, incorporating insights from the literature into international students. International students represent a specific subset of migrants who, upon completing their courses, have the option to navigate a two-step migration pathway for permanent residency (Hawthorne, 2010a).

The literature reveals mixed results on the influence of local qualifications on the employment outcomes of skilled migrants (Blackmore et al., 2017; Chen & Skuterud, 2018; Hawthorne, 2010a). On the positive side, a recent report by NCVER (2024) identified that 73.0% of those who undertook a vocational education and training (VET) course in Australia improved their employment status after completion of their qualification. In addition, Rajendran et al.'s (2020) study reported favourable outcomes for migrants holding local Australian qualifications. Their study found an upward career mobility for migrants and a positive shift in their job satisfaction compared to their pre-migration levels. Similarly, Chen and Skuterud (2018) compared the

labour market performance of former international students (FIS) with Canadian-born and educated counterparts (CBE), as well as foreign-born and educated (FBE) individuals. Their findings indicate that FISs exhibited higher levels of labour market success than FBE migrants, although they still lagged behind CBE graduates. Additionally, Owusu and Sweetman (2015)study revealed that host country training (Canadian in the study) was a significant factor in obtaining jobs matching qualifications for migrants. In New Zealand, Tharmaseelan et al.'s (2010) study reported that post-migration success was determined by acculturation and education in the host country. Similarly, in Sweden, it was reported that locally acquired education provides migrants with an advantage in the labour market (Bevelander, 2000), which is supported by similar findings by Dahlstedt and Bevelander (2010).

Conversely, the literature also highlights less favourable outcomes for migrants with local qualifications. Recent discussions in Australia raise concerns that the country's worker shortages are exacerbated by the costly and confusing qualifications system, advocating for a more streamlined approach to skills recognition (ABC news, 2024). Blackmore et al.'s (2017) study found that 18 months after graduating, only two individuals managed to secure full-time accounting positions at a major multinational company in Australia. One found a full-time accounting position in a small accounting firm owned by a Chinese company in Australia. Eight graduates stayed in Australia, but were not engaged in full-time accounting roles, and two decided to return to China as they believed their prospects of finding employment in China were more favourable than the domestic graduates. Their study also revealed a strong association between the language proficiency (in their case, English language proficiency) and employment outcomes of international graduates (Blackmore et al., 2017). Additionally, Hawthorne (2010a) identified that former international students and migrants who entered as offshore migrants had a comparable labour force participation rate in Australia. However, based on the duration of their course, such as a two-year course, or in fields that were over-subscribed, these international students turned migrants had poorer outcomes than migrants who had been recruited offshore. Similarly, Tan and Cebulla (2023) examination of the association between the acquisition of local Australian qualifications and labour market outcomes revealed only marginal short-term returns for these efforts. The study suggests that the relationship between local qualifications and immediate employment success may be more nuanced than previously assumed. Also, while the NCVER (2024) found positive outcomes for VET qualified migrants, they also reported that despite their training, migrants faced a lack of available jobs and issues related to their visas while looking for jobs in Australia.

The above literature provides insight into the role of local qualifications in the labour market outcomes of migrants. However, the findings are inconclusive, with some studies showing positive outcomes for those who had obtained local qualifications, with others showcasing not such favourable outcomes. Hence, more research with a larger sample is essential to examine this phenomenon. In particular, the role of local qualifications in the experience of skill discounting has not been examined.

5.2.2 Local qualifications and skill discounting: An assimilation theory perspective

Assimilation theory posits that migrants undergo a process of integration into the host society over time (Gordon, 1964; Park & Burgess, 1924). This theoretical framework suggests that as migrants engage with the host culture, institutions, and norms, they gradually adopt these elements, leading to a convergence with the host country culture (Rumbaut, 2015). Key elements included in the theory are cultural assimilation, involving the adoption of traits and behaviours of the dominant society; structural assimilation, integrating individuals into social and economic institutions; and marital assimilation, examining intermarriage between individuals from different cultural backgrounds (Gordon, 1964). Several studies have utilised the concept of assimilation theory to examine the labour market experiences of migrants (Akresh, 2008; Chiswick et al., 2005; Ressia et al., 2017a).

Local qualifications serve as a tangible manifestation of this assimilation process, suggesting that by achieving credentials within the local context, migrants align themselves with the educational and societal norms prevalent in their new environment (Stangej et al., 2019; Xiaoying & Abbott, 2006).

One significant reason for skill discounting is the lack of language proficiency of migrants (Chiswick & Miller, 2007; Dustmann & Fabbri, 2003; Kossoudji, 1988; Leslie & Lindley, 2001). Acquiring local qualifications helps migrants develop linguistic skills and familiarity with local language use (Belkhodja & Esses, 2013; Xiaoying & Abbott, 2006). Employers often equate local education as the achievement of higher communication skills, an acceptance of societal values, and a capacity to align with organisational culture and client needs (Almeida & Fernando, 2017). Engaging in classroom settings with local students also facilitates the development of communication skills, enabling migrants to familiarise themselves with the nuances of the local language. Consequently, local qualifications may help mitigate skill discounting stemming from inadequate proficiency in the host country language.

The literature identified that the quality of education, particularly from developing countries, was a reason for skill discounting leading to unequal labour market outcomes for migrants (Argue & Velema, 2022; Chiswick & Miller, 2010; Friedberg, 2000; Li & Sweetman, 2014; Sweetman, 2004; Zeng & Xie, 2004). Local qualifications can help migrants overcome this perception by demonstrating they possess skills at a level consistent with local standards. This alignment reduces assumptions about inferior skill quality. Also, as local qualifications adhere to the standards set by the host country's skills assessment frameworks, they are more likely to be recognised and accredited by professional associations, thereby facilitating smoother entry into the labour market.

Moreover, migrants often face the challenge of their skills not being directly relevant to the jobs available in the host country labour market (Chiswick et al., 2003; Dean, 2018; Friedberg, 2000; Thondhlana et al., 2016; Zorlu, 2013). By pursuing local qualifications, migrants gain new skills that are pertinent to the local economy, enhancing their employability. This proactive approach allows migrants to secure qualifications that are in high demand within the job market, increasing their chances of obtaining relevant employment.

Furthermore, the non-recognition of home country experience, coupled with insufficient local work experience, contributes to skill discounting (Almeida & Fernando, 2017; Aydemir & Skuterud, 2004; Cameron et al., 2019; Colic-Peisker, 2011). Pursuing local qualifications provides migrants with opportunities to gain field-specific experience through internships, making them more competitive in the job market (Blackmore et al., 2017; Trlin, 2012). This local experience not only signifies familiarity with local professional terminology and environments, but also facilitates understanding of the cultural nuances of the workplace (Belkhodja & Esses, 2013).

While local qualifications bring potential benefits to overcome some of the reasons for skill discounting, it is essential to recognise they may not entirely reduce discrimination against migrants based on their looks, religion, and other cultural factors. However, a study by Stangej et al. (2019) found that local education can serve as a sign of social integration into the labour market, potentially reducing prejudice against migrants. The acquisition of a local qualification demonstrates that migrants can fit in with locals by mixing in classes and, in a practical sense, potentially reducing discrimination linked to accents and language skills of migrants.

Given these benefits, it follows that migrants possessing local qualifications are likely to experience lower levels of skill discounting than their counterparts without such credentials.

However, the pivotal question remains: do migrants with local qualifications indeed experience reduced skill discounting? Using the CSAM dataset, this study aims to examine this question by comparing the experiences of migrants with local qualifications to those without, and examining different dimensions of skill discounting such as level and field of local qualifications.

5.3 Research Methods

This study undertakes a quantitative approach to examine the impact of the different demographic factors of migrants on their skill discounting experience. A quantitative approach helps in analysing data to identify relationships and patterns between variables (Bloomfield & Fisher, 2019; Watson, 2015). The study undertakes an analysis of the Continuous Survey of Australia's Migrants (CSAM), conducted by the Department of Home Affairs (formerly known as the Department of Immigration and Citizenship). This survey provides insights into the labour market and integration experiences of migrants in Australia. The CSAM is a representative survey of migrants arriving in Australia under the skilled or family migration streams, but excludes humanitarian entrants. The dataset covers migrants who:

- had either come to Australia on an offshore visa, or who were granted an onshore visa – in both cases, in the last six months (of the survey).
- have been granted either a permanent residence visa, or a provisional visa, and are thus on the pathway to permanent residence.

Initially introduced in 2009, the CSAM consists of data collected at two points in time, 6 months and 12 months after migrant arrival on a provisional or permanent visa (Hawthorne & To, 2014). A second iteration of the survey was launched between 2013 and 2018 with a new cohort of migrants in which the data collection process was refined. Two rounds of data were collected: the first survey was conducted around 6 months after the grant of permanent residency or provisional visa (Wave 1) capturing the initial settlement experiences of migrants, and a follow-up survey was conducted 18 months after the grant of permanent residency or provisional visa (Wave 2) allowing for an analysis of labour market outcomes over time. The current study uses this dataset.

The study uses data from five cohorts collected during the period 2013-2018. Although data was collected for a sixth cohort, it was not included as only the data from first survey, (conducted six months after the grant of permanent residency or provisional visa) was available at the time of the study. The study focuses on the primary applicants, who are the main visa

applicants satisfying the primary criteria for the grant of visa under the Migration Regulations (ABS, 2009) within the working-age population, specifically those aged between 15-65 years at the time of arrival in Australia.

For the statistical analysis, the study utilised the Statistical Package for the Social Sciences (SPSS ver24) software to conduct various quantitative analyses. The data were weighted using the Wave 2 weights set by the CSAM team to adjust the sample for the different levels of response of sub-groups within the population. Weighting ensures that the sample represents the overall national migrant intake for that year. It adjusts for under-sampled groups, such as those with lower response rates and provides a better description of the experience of skill discounting across the migrant population. The Department of Home Affairs outlines the weighting process used in the CSAM dataset (Department of Home Affairs, 2019). Weighting the data is considered a standard technique, particularly for large datasets (Ciol et al., 2006; Korn & Graubard, 1995; Walker & Young, 2003).

This study aims to provide a comprehensive understanding of skill discounting by examining its extent, the types, and the reasons for skill discounting experienced by migrants, and the resulting on the job outcomes. Using survey data, the research will examine how local qualifications will influence skill-discounted migrants in terms of their skill utilisation, work responsibility, earnings, and job satisfaction. While previous studies have focused on broader employment outcomes like under-employment and over-qualification, this study specifically investigates these variables to gain insight into the actual job experiences of skill-discounted migrants in their current roles.

5.3.1 Measuring Skill Discounting

The study introduces the concept of Skill Discounting (SD), evaluating whether migrants' skills were unrecognised to the extent of necessitating a change in occupation. This determination is made by assessing if migrants are working in their pre-migration occupation. Here, the CSAM questionnaire included the question, ‘are you working in your pre-migration occupation?’ If the migrant said no, the reasons for changing nominated occupation were examined. If these reasons matched any one of the reasons stated by Alboim et al. (2005), they were deemed to have been skill-discounted. This approach has already been used in several publications (Treuren et al., 2021a, 2021b). This approach categorises migrants into distinct groups denoted by Migrant Type.

Migrant type classification

Migrant Type categorises individuals into distinct groups based on sponsorship status – either employer-sponsored or self-initiated migrants. Self-initiated migrants arriving without employer sponsorship compete for employment locally, facing potential skill discounting during job acquisition. In contrast, sponsored migrants arrive with a pre-arranged job, minimising the likelihood of skill discounting. This classification enables a comparison between self-initiated migrants, more susceptible to skill discounting, and sponsored migrants.

Classification of Self-Initiated Migrants:

Within the self-initiated employed migrant group, three classifications emerged:

Continuing: Migrants who secured employment in their pre-migration occupation, allowing them to continue in their previous field. Migrants who are continuing in their pre-migration occupation were not considered to be skill-discounted in this study.

Non-Skill-Discounted: Migrants who opted not to continue in their pre-migration occupation for reasons unrelated to skill discounting, such as lack of interest or location preferences.

Skill-Discounted: Migrants unable to find a job in their field due to skill discounting during recruitment, subsequently securing employment in a different occupation.

This dichotomous and objective measure of skill discounting signified a change in occupation caused by skill discounting. However, it did not account for instances where migrants continued in a nominated occupation, but faced under-utilisation of their capabilities.

5.3.2 Variables

Table 5.1 provides the details of the variables used in this study.

Table 5.1 List of variables

Variable name	Description	Coding
Changed Occupation	CSAM respondents were asked whether their nominated occupation matched their current occupation	1 = Yes 0 = No
Migrant Type	Migrant Type categorises respondents based on changes in their nominated occupation during migration	0 = Sponsored migrants 1 = Continuing migrants 2 = Non-skill-discounted migrants 3 = Skill-discounted migrants
Localqual_status	The variable local qualification status was derived from two variables: (1) w1_australian_qual_pa : at w1, CSAM asked its respondents, 'Do you have an Australian qualification'? with answers 'yes' or 'no'. It was identified that 51.7 % had a local qualification at w1 and 47.7% did not have a local qualification at w1. (2) w2_australian_qual_pa: at w2, CSAM asked its respondents, 'Do you have an Australian qualification since w1'? with answers, 'yes' or 'no'. It was identified that 12.9% of migrants had a local qualification since w1 and 86.8% did not have a local qualification	0 = No, local qualification 1 = Yes, local qualification
Localqual_level	The highest local qualification attained by the principal applicant was asked. This included Pre-degree, Non-degree, Undergraduate and Postgraduate level qualifications. Qualifications at the school level or certificate programs were categorised as non-university level qualifications and qualifications such as undergraduate and postgraduate qualifications grouped as university level qualifications	0 = non-university level 1 = University level

Variable name	Description	Coding
Localqual_field	Data on the field of local qualifications attained by migrants at both wave 1 and wave 2 included Natural and Physical Sciences, Information Technology, Engineering and Related Technologies, Architecture and Building, Agriculture, Environmental and Related Studies, Health, Education, Management and Commerce, Society and Culture, Food, Hospitality, and Mixed Field Programs. The data for wave 1 and wave 2 were combined and recoded. Mixed Field programs, not applicable, and not known were excluded from the analysis	1 = Science & Engineering 2 = Health 3 = Social Sciences 4 = Hospitality
Skill level (w2_skill_pa)	Each job held by a respondent was classified using the Australian and New Zealand Standard Classification of Occupations (2012) framework. ANZSCO assesses the skill level needed for each occupation. The highest skill level (1) denotes that the job requires the holder to have completed at least an undergraduate degree or have 5 years of minimum industry experience. The lowest skill level is 5, requiring secondary education. The job skill level was reverse coded (low-high), to maintain consistency with other measures	1 = Skill Level 5 2 = Skill Level 4 3 = Skill Level 3 4 = Skill Level 2 5 = Skill Level 1
Work responsibility (w2_occ_samelev_pa)	Respondents were asked, 'Are you now working at the same, higher, or lower responsibility compared to your pre-migration occupation?'	1 = Lower responsibility 2 = Same responsibility 3 = Higher responsibility
Wages (w2_ earnings_ pa)	Denotes annual earnings of participants	
Job satisfaction	Respondents were asked, 'What is your attitude to your main job?' The responses, 'not working' and 'not known', were treated as missing values	1 = Don't like the job 2 = Do not really care – it is just a job 3 = Job is okay – could be better 4 = Likes job

5.3.3 Statistical Analysis

This study performs a chi-square, independent sample t-test and analysis of co-variance test to examine the influence of local qualifications on the experience of skill discounting.

A chi-square test is undertaken to explore the relationship between categorical variables (Franke et al., 2012; McHugh, 2013), specifically examining the association between local qualification status, level, and field and skill discounting among migrants, along with reasons for skill discounting. This analysis will reveal if there are significant differences in the proportion of skill-discounted migrants based on their qualification status, level, and field, and also if there are any significant differences in the reasons for skill discounting in relation to level of qualifications.

To determine the impact of skill discounting on employee outcomes, such as skill utilisation, work responsibility, earnings, and job satisfaction, an independent T-test will be conducted to compare these outcomes between migrants with and without local qualifications (Mishra et al., 2019). For independent variables with more than two categories, such as field of local qualifications, a one-way ANOVA will be applied, followed by a post hoc LSD test to identify specific group differences.

The analysis will begin by comparing the proportion of skill-discounted migrants across different qualifications dimensions, including those with and without local qualifications, between migrants holding university and non-university qualifications, and across different fields of these qualifications. A series of chi-square tests will be conducted to see whether reasons for skill discounting varied based on qualifications dimensions by comparing the proportion of reported reasons among the different qualification dimensions. Finally, the mean of the on-the-job experiences of skill discounting, such as skill utilisation, work responsibility, earnings, and job satisfaction will be compared for skill-discounted migrants according to their qualification dimensions.

5.4 Findings

The analysis provides significant insights into skill-discounted migrants based on their local qualifications, the level of these qualifications, and the fields of study. It was identified that *skill-discounted migrants were most likely to hold a local qualification, have a university level qualification, with a local qualification in the field of Social Sciences.* In the weighted sample, only 39.9% of migrants without a local qualification were skill-discounted, while 69.1% of migrants with a local qualification were skill-discounted. Furthermore, it was found that 71.8%

of migrants who had university level qualifications were skill-discounted, while only 28.2% of migrants with non-university level qualifications were skill-discounted. In addition, while examining the fields of these qualifications, it was found that migrants with local qualifications in the Social Sciences (45.0%) were mostly skill-discounted followed by migrants with local qualifications in Science and Engineering (25.6%), Health (19.33%), and Hospitality (10.2%). Table 5.2 reports on this.

Table 5.2 Proportion of skill-discounted migrants by qualification dimensions

Local qualification dimensions	Skill-discounted (%)
Local qualification status	
With a local qualification	69.10
Without a local qualification	30.90
Total (N)	11,225
Level of qualification	
University-level qualification	71.80
Non-university level qualification	28.20
Total (N)	5,940
Field of qualification	
Science & Engineering	25.60
Health	19.30
Social Sciences	45.00
Hospitality	10.20
Total (N)	6,630

A series of chi-square tests was conducted to examine the *factors involved in the skill discounting experience* based on local qualification status, and level and field of qualifications, for skill-discounted migrants. These tests compared the proportion of reasons for skill discounting experienced by migrants based on their local qualification's dimensions. The presence of significant differences is indicated by 'p' values given in the table (*p<.05; ** P<.005; ***p<.001), while the subscript letters denote the proportions of the fields of local qualifications that differ significantly from each other. The results are reported in Table 5.3.

Table 5.3 Reasons for skill discounting by local qualification status, level, and field (in %)

	Skill discounting reasons (%)					
	Insufficient English	**Insufficient experience**	**Overseas qualifications not recognised**	**Lack of Australian licensing/ registration**	**Discrimination**	**Lack of jobs/ demand for expertise**
Local qualification status						
No, local qual	3.0	36.2	12	6.8	1	63.3
Yes, local qual	1.1***	34.1*	5.6***	4.1***	0.9	70.6***
N	11,226	11,225	11,226	11,226	11,225	11,225
Level of local qualification						
Non-university level	0.5	35.0	7.4	4.5	2.4	71.4
University-level	1.2*	35.7	7.9	6.0*	0.2***	67.1**
N	5,940	5,940	5,940	5,941	5,941	5,940
Field of local qualification						
Science & Engineering	0.5a	34.7a	7a	3.6a	3.2a	69.7a
Health	2.5b	35.7a	8.8a	6.3b	1.4b	64.2b
Social Sciences	1.6b	35.8a	7.2a	4.8b	0.1c	71.0a,c
Hospitality	4.1c	28.6b	3.6b	5.8b	0.3c	74.5c
N	6,630	6,631	6,631	6,630	6,631	6,630

Notes:

1. Data are weighted
2. N is the total number of valid cases for each skill discounting reason across qualification dimensions
3. Sig level: ***p<.001, **p<.005, *p<.05
4. Each subscript letter (a, b, c) denotes a subset of local qualification field categories whose proportions do not differ significantly from each other at the .05 level

As can be seen in Table 5.3, migrants with and without local qualifications have statistically significant different skill discounting reasons for changing their nominated occupation. The data suggests that for migrants both with and without local qualifications, the primary skill discounting reason for changing occupation was lack of demand for their expertise with 70.6% and 63.3% respectively citing this. Additionally, insufficient experience was a significant barrier for both groups (34.1% and 36.2% respectively), followed by overseas qualifications not being recognised (5.6% and 12.0% respectively), and lack of Australian licencing/registration (4.1% and 6.8% respectively).

Interestingly, while there were more skill-discounted migrants among those with local qualifications, a higher proportion of migrants without local qualifications experienced most of the skill discounting related reasons than migrants with local qualifications. Specifically, migrants without local qualifications were significantly more likely to report insufficient experience, lack of overseas qualifications not being recognised, lack of Australian licensing/registration, and insufficient English than migrants with local qualifications. On the other hand, migrants with local qualifications were notably more likely to experience a lack of demand for their expertise.

The analysis also revealed a statistically significant difference between migrants with non-university level qualifications and migrants with university level qualifications in their skill discounting reasons for changing occupations. Chi-square analysis revealed that migrants with non-university level qualifications were more likely to face a lack of demand for their expertise and discrimination compared to those with university-level qualifications. However, migrants with university-level qualifications reported more issues with obtaining Australian licensing/registration and insufficient English proficiency. No significant differences were found in the following skill discounting reasons: insufficient experience and overseas qualifications not being recognised between migrants with non-university level qualifications and migrants with university-level qualifications.

Delving into the field of the local qualification, a statistically significant difference was identified for skill discounting reasons for occupation change between the groups. A higher proportion of migrants with local qualifications in Hospitality cited a lack of demand for their expertise and insufficient English as the reasons for skill discounting, while insufficient experience was less prevalent compared to migrants with local qualifications in other fields. Migrants with local qualifications in the health sector faced challenges related to overseas qualifications not being recognised and obtaining Australian licensing/registration.

Discrimination was more commonly reported by migrants with local qualifications in the health sector.

The findings in Table 5.4 further illustrate the varying skill discounting outcomes such as skill utilisation, work responsibility, earnings, and job satisfaction based on qualification status, level, and field.

Table 5.4 On-the-job outcomes of skill discounting for migrants based on local qualification status, level, and field

Dependent variable	Category	Skill utilisation (Mean)	Work responsibility (Mean)	Earnings (Mean)	Job satisfaction (Mean)
Local qual status	No, local qual	2.81	1.24	49864.94	3.78
	Yes, local qual	2.64***	1.77***	47842.52***	3.76 (NS)
Qualification level	Non-university	2.75	1.54	47831	3.72
	University-level	2.61***	1.52 (NS)	49465.89***	3.74 (NS)
Field of qualification^	Science & Engineering	2.73	1.55a	48119.58a	3.76a
	Health	2.6	1.63b	45981.61b	3.81b
	Social Sciences	2.63	1.55a	49659.78c	3.74a
	Hospitality	2.91	1.64b	51381.29c	3.81b

Notes:

1. Data are weighted
2. N is the total number of valid cases for each skill discounting reason across qualification dimensions
3. ^ denotes the results of one-way ANOVA
4. Significance level (sig) = ***Sig at <.001, ** Sig at <.005, * Sig at <.05
5. The subscripts (a, b) indicate means that differ from each other for each field if in the local qualification category. Same subscript denotes no significant difference while different subscript denotes means that are significantly different from each other, based on LSD post hoc test results

The analysis revealed that skill-discounted migrants without local qualifications (M=2.81) and those with non-university level qualifications (M=2.75) tended to exhibit higher skill utilisation, while the field of qualification also played a role in determining skill utilisation, with migrants with local qualifications in Hospitality (M=2.91) showing the highest mean skill utilisation among the observed fields.

The findings also suggest that migrants with local qualifications generally perceived higher work responsibility (M=1.77) compared to those without local qualifications (M=1.24). However, the level of qualification (non-university vs. university) did not appear to influence work responsibility significantly. Additionally, while the field of qualification did have an effect on work responsibility, there were no significant differences observed between the

different fields, indicating some degree of homogeneity in perceived work responsibility across these areas. It was identified that migrants with local qualifications in Hospitality had a high mean work responsibility (M=1.64, SD=0.81), followed by Health (M=1.63, SD=0.83), Science and Engineering (M=1.55, SD=.77), and Social Sciences/Arts (1.55, SD=0.80). The LSD post hoc test identified that there were no significant differences in work responsibility between migrants with local qualifications in Science and Engineering and Social Sciences/Arts (MD=.01, SE=.03, p>.05, 95% CI: .05, -.06) and migrants with local qualifications in Health and Hospitality (MD=.02, SE=.04, p>.05, 95% CI: .07, -.10).

The analysis also identified that migrants without local qualifications tended to have higher earnings (M=49864.94) than those with local qualifications (M=47842.52). Additionally, migrants with university-level qualifications (M=49465.89) generally earned more than those with non-university level qualifications (M=47831). The field of qualification also played a role in determining earnings, with Hospitality showing the highest mean earnings (M=51381.29) among the observed fields. However, an LSD post hoc test showed no significant differences in earnings between migrants with local qualifications in Social Sciences/Arts and Hospitality, indicating some degree of similarity in earnings across these fields.

Furthermore, it was found that skill-discounted migrants with and without local qualifications and those with university and non-university level qualifications had similar levels of satisfaction on the job. It was also identified that skill-discounted migrants with qualifications in Health and Hospitality were more satisfied on the job than those with local qualifications in Science and Engineering and the Social Sciences. The results of the post hoc test are given in Table 5.5. Appendix 3 provides a detailed explanation of the findings of this study.

Table 5.5 Post hoc test results for analysis of field of qualification

	BField of local qualification (Column I)	BField of local qualification (Column J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Skill level	**Science and Engineering**	Health	.125	0.054	0.02	0.02	0.23
		Social Sciences/Arts	.097	0.044	0.03	0.01	0.18
		Hospitality	-.180	0.066	0.01	-0.31	-0.05
	Health	Social Sciences/Arts	-0.028	0.049	**0.56**	-0.12	0.07
		Hospitality	-.306	0.069	<.001	-0.44	-0.17
	Social Sciences/Arts	Hospitality	-.277	0.062	<.001	-0.4	-0.16
Work responsibility level	**Science and Engineering**	Health	-.078	0.034	0.02	-0.14	-0.01
		Social Sciences/Arts	-0.006	0.028	**0.84**	-0.06	0.05
		Hospitality	-.094	0.042	0.03	-0.18	-0.01
	Health	Social Sciences/Arts	.072	0.03	0.02	0.01	0.13
		Hospitality	-0.016	0.043	**0.71**	-0.1	0.07
	Social Sciences/Arts	Hospitality	-.088	0.039	0.02	-0.16	-0.01

	BField of local qualification (Column I)	BField of local qualification (Column J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
Earnings	**Science and Engineering**	Health	2137.97	797.5	0.01	574.7	3701.26
		Social Sciences/Arts	-1540.19	655.6	0.02	-2826	-254.89
		Hospitality	-3261.71	974.6	<.001	-5172	-1351.05
	Health	Social Sciences/Arts	-3678.16	718.1	<.001	-5086	-2270.39
		Hospitality	-5399.68	1018	<.001	-7395	-3404.57
	Social Sciences/Arts	Hospitality	-1721.51	910.9	0.06	-3507	64.14
Attitude to current job	**Science and Engineering**	Health	-.055	0.019	0	-0.09	-0.02
		Social Sciences/Arts	0.016	0.016	**0.31**	-0.01	0.05
		Hospitality	-.052	0.024	0.03	-0.1	-0.01
	Health	Social Sciences/Arts	.071	0.017	<.001	0.04	0.1
		Hospitality	0.003	0.025	**0.91**	-0.05	0.05
	Social Sciences/Arts	Hospitality	-.068	0.022	0	-0.11	-0.02

5.5 Discussion and implications

This study examined whether obtaining a local qualification diminished the likelihood of skill discounting and its consequences for migrants. The study compared the skill discounting experience between migrants with local qualifications and those without. It also delved into how the level and field of these qualifications impacted the skill discounting experience, while also considering the role of gender dynamics. The study advances the literature with new insights and challenging perspectives on possessing local qualifications and its influence on the skill discounting experience.

One might assume a local qualification to be a tangible manifestation of the assimilation of migrants into the labour market leading to better employment outcomes, as suggested by assimilation theory (Park & Burgess, 1924; Rumbaut, 2015; Stangej et al., 2019). Surprisingly, however, this study found that a significantly higher proportion of migrants who experienced skill discounting had local qualifications. This challenges the existing literature that found better employment prospects for those migrants with host country qualifications (Bevelander, 2000; Blackmore et al., 2017; Chen & Skuterud, 2018; Dahlstedt & Bevelander, 2010; Owusu & Sweetman, 2015; Rajendran et al., 2020; Tharmaseelan et al., 2010). It also prompts a re-evaluation of the assimilation narratives, suggesting that the attainment of local qualifications does not always translate into better labour market experiences for migrants (Hawthorne, 2010a; Tan & Cebulla, 2022). A positive note of the finding that migrants without local qualifications faced less skill discounting indicates that Australian employers may not be demanding locally acquired qualifications or experience (Singh, 2023; Harrap et al, 2021).

Despite having local qualifications, these migrants were found to face a lack of demand for their expertise, as reported in a recent study by the National Centre for Vocational Education Research (NCVER, 2024), a factor that significantly contributed to their skill discounting experience. As suggested in a report by the ABC (2023), this lack of demand for expertise calls for a deeper look into Australia's migration system in relation to the effectiveness of the skills shortage list, which does not match job market demands. Furthermore, the study adds to the literature by examining the type of skill discounting experienced by migrants, providing insight into the role of local qualifications in the process. It was found that migrants without local qualifications faced challenges due to insufficient English, non-recognition of overseas qualifications, discrimination, and insufficient experience. This indicates that although migrants with local qualifications were more prone to experiencing skill discounting, some of the skill discounting factors could be reduced by obtaining local qualifications. The findings

suggest that local qualifications can be considered a means for migrants to develop linguistic skills and familiarity with the local language (Belkhodja & Esses, 2013; Xiaoying & Abbott, 2006), an opportunity to obtain field-specific work experience through internships, (Blackmore et al., 2017; Trlin, 2012), and can serve as a sign of social integration into the labour market, thereby reducing prejudice against migrants (Stangej et al., 2019).

Interestingly, skill-discounted migrants without local qualifications were in jobs with higher levels of skill utilisation and higher earnings compared to skill-discounted migrants with local qualifications, further questioning the perceived benefits of acquiring local qualifications. This further confirms that for skill-discounted migrants who are employed, a local qualification does not guarantee a job where they have better skill utilisation, higher earnings, or better working conditions.

Furthermore, the study looked into the level of qualifications, revealing that migrants with university-level qualifications were more likely to experience skill discounting. This finding contradicts the human capital assumption that additional education leads to better labour market outcomes (Becker, 1962, 1975). In fact, the current study suggests that the more skilled the migrant, the more likely they are to face adverse labour market experiences (Dietz, 2015). However, despite this, skill-discounted migrants with university level qualifications had better earnings than migrants with non-university level qualifications.

The findings of the study offer new insights into the role of field of local qualifications in the skill discounting experience. It was found that migrants with local qualifications in the field of Social Sciences were more likely to face skill discounting than in other fields. One possible explanation for this could be the diversity of the occupations in this field, and graduates taking longer to settle into jobs compared to graduates in other fields such as Science and Engineering and Health (Lyonette et al., 2017; Sweetman et al., 2015). Furthermore, migrants with local qualifications in Health mostly reported skill discounting due to lack of overseas qualifications not being recognised, lack of Australian licensing/registration, and discrimination. These findings align with the broader understanding that fields such as Health are highly regulated, making it difficult for migrants with local qualifications in these sectors to enter these fields (Boyd & Schellenberg, 2007; Girard & Bauder, 2007). The findings also question the policy options in general. As Reitz suggests, ‘If immigrant skills are less transferable, then the policy options may be either to select those immigrants whose skills are most transferable, such as those in scientific and technical fields as opposed to those in social or cultural fields, or to bring about labour market changes to increase transferability’(Reitz, 2007, p. 58).

Apart from policymakers, the findings of the study inform employers about establishing internship and mentoring programs for migrants undertaking a local qualification. These programs provide migrants with opportunities to gain practical work experience and develop professional networks. As a result, such programs can bridge the gap between academic qualifications and workplace requirements.

Educational institutions also play a vital role in skill recognition of migrants. They can facilitate career guidance services to support migrant students. This should include information on job market trends, skills development opportunities, and pathways to professional accreditation. This can help migrants make informed decisions about their qualifications and career choices. Also, there have been concerns about the growing private training sector that offers courses, but which has suffered from inadequate oversight and quality control (Hawthorne, 2010b). Additionally, educational institutions should collaborate with industry partners. This facilitates the alignment of the content of the curriculum with industry needs, thereby ensuring that migrant students acquire relevant skills and knowledge that are in demand in the local labour market. Furthermore, policymakers, employers, and educational institutions must collaborate in order to understand the skill requirements of the nation and to support migrants to achieve these skill sets, thereby enhancing their employment prospects and integration into the host country. Moreover, migrants themselves should take an active role in understanding the labour market, staying informed about its demands, and carefully selecting the right field of study and institution to align with those demands.

To sum up this discussion, the findings of this study challenge the assumptions of assimilation theory, which posit that obtaining local qualifications facilitates better labour market outcomes for migrants (Park & Burgess, 1924). In contrast to this theory, this study reveals that migrants with local qualifications experience more skill discounting than those without, suggesting that local credentials do not always translate to better employment opportunities. This finding also questions human capital theory (Becker, 1962) that posits that higher education leads to better job prospects. Instead, the study suggests that even highly educated migrants, such as those with university-level qualifications, face barriers in utilising their skills. Gender dynamics further complicates these theories. Gender stereotyping theories and studies have often portrayed women as facing more labour market challenges. While the findings of the study partially support this, female migrants, particularly those with local qualifications, were more likely to face skill discounting due to insufficient experience, lack of Australian licensing/registration, and discrimination. It was also found that, in general, female migrants

with and without local qualifications were less prone to skill discounting and were more satisfied on the job. These insights offer new understandings about skill discounting, local qualifications, and the labour market integration of migrants.

5.6 Conclusion

The current study sheds light on the influence of local qualifications on the skill discounting experiences of migrants. The findings challenged the assimilation narratives by revealing that having local qualifications does not always help migrants to overcome the challenges of skill discounting and to find favourable labour market outcomes. However, local qualifications do help migrants to overcome some forms of skill discounting, despite still facing significant challenges due to lack of job opportunities.

The study also highlights the importance of considering a range of different dimensions, such as the levels of local qualifications and field of study in bringing out a comprehensive understanding of the role of local qualifications in the experience of skill discounting. Migrants with university-level qualifications, for example, may face different challenges compared to those with non-university qualifications. Also, migrants in certain fields may encounter unique challenges in the labour market.

The practical implications arising from this study extend to policymakers, employers, educational institutions, and migrant support organisations. Initiatives aimed at better aligning migrant skills with the needs of the labour market, such as identifying skill shortages and providing relevant training, are important.

In conclusion, while this study provides valuable insight into the labour market experiences of migrants with local qualifications, it also underscores the need for further research to delve deeper into the specific dimensions of local qualifications and to explore additional factors that influence skill discounting.

Chapter 6: Employment trajectories of skill-discounted migrant employees (Study 4)

This chapter explores the employment journey of skill-discounted migrant employees. The chapter begins with an introduction outlining the background, significance, and aims of the study, leading to the research question for the study. Following this is a brief literature review on the existing research that has looked more broadly at migrants' employment experiences and their coping strategies to the barriers they face. Then, the chapter outlines the methodology used for the study including the source of the data, how the data were collected, the analysis methods, and the credibility of the study. The chapter then presents the findings of the study, after which a discussion of the findings is provided with an emphasis on its implications. Finally, the chapter concludes with a brief summary of the study findings and the insights it offers.

6.1 Introduction

Skill discounting is regarded as a significant challenge and prevalent phenomenon for migrants (Lens, 2021; Tian et al., 2018; Treuren et al., 2021a), often hindering them from attaining jobs matching their full abilities and skills (Anisef et al., 2003; Crea-Arsenio et al., 2022; De Alwis et al., 2020; Dietz et al., 2015; MacKenzie & Forde, 2009; Picot & Hou, 2003; Reitz, 2001; Salaff et al., 2002; Somerville & Walsworth, 2009; Syed, 2008). The question is how do these migrants navigate their employment journey in the face of these experiences? Several studies have focused on the responses of migrants to their labour market experiences (Malik et al., 2017; Pearson et al., 2012; Zikic et al., 2010). These studies reveal the strategies migrants adopt in coping with these labour market experiences, such as their psychological responses to under-employment (Pearson et al., 2012) and different modes of engagement to cope with the barriers they face in the labour market(Al Ariss, 2010).

While these studies provide valuable insight into migrants' responses and their coping strategies, they do not fully capture or provide a comprehensive understanding specific to the employment journey of skill-discounted migrants. This is significant as their employment journey may be different from other migrant responses. For example, migrants who faced skill discounting and were obliged to find jobs that did not match their skill levels might employ distinct strategies that went beyond the existing typologies of maintenance, transformation, and/or entrepreneurship (Al Ariss, 2010). Although the broader migrant literature includes qualitative studies conducted to understand the labour market challenges encountered by migrants in the host economy (Currie, 2007; Landolt & Thieme, 2018; Rajendran et al., 2017;

Syed & Murray, 2009), the literature that delves into the nuanced experiences of skill-discounted migrants navigating their employment journey through reflecting on their own experiences, is limited. While the previous studies in this thesis have been quantitative in nature, focusing on statistical analysis to examine skill discounting, such approaches alone may not provide the depth required to understand this complex phenomenon. A qualitative study would provide an in-depth understanding of the phenomenon of skill discounting (Creswell & Poth, 2016) by exploring how migrants navigate, potentially providing new insights that quantitative studies might have missed. Furthermore, a qualitative study would capture the personal experiences and meanings that individuals attach to their situations (Creswell & Poth, 2016). In this regard, the study asks:

How do skill-discounted migrant employees navigate their employment journey in Australia?

Drawing on insights from Alboim et al.'s (2005) study regarding the reasons for skill discounting, this study begins by exploring the challenges that migrant employees face while looking for a job in Australia, and the immediate employment outcomes for migrants. Subsequently, the study explores how these migrant employees approach their employment options, finally elucidating their reflections on their job outcomes (at the time of the interview) and their perceptions of skill utilisation in their respective positions.

Studying the employment journey of migrants not only helps in identifying the specific challenges they face in accessing employment opportunities, it may also provide an insight into alternative courses of action they can employ to reduce the influence of skill discounting. Furthermore, understanding the employment journey of skill-discounted migrants is significant for developing targeted interventions and policies to reduce its adverse effects and facilitating the full integration of migrants into the host society.

Through 38 semi-structured interviews, this study developed three employment pathways for skill-discounted migrants: the desired job pathway, the deviated job pathway, and the distaste job pathway. These pathways were based on the perception of skill utilisation in the current job of migrants (at the time of the interview) which, in turn, was based on the skill discounting experiences of migrants leading to different job positions and job strategies by migrants. Specifically, the study identified a link between the initial employment experiences of migrants and their subsequent job strategies which, in turn, shaped their perceptions of employment outcomes on the job. The study identified that migrants' labour market experiences were a journey that included several challenges starting from looking for a job, their responses and

outlook to such challenges, overcoming obstacles, which lead to different outcomes – some possibly finding desired outcomes, although for some, these outcomes may not have been what were initially expected, while for some being far distant from what they wanted. Furthermore, it was found that the influence of skill discounting was not the same for all migrants; for some, skill discounting had a stronger influence on their subsequent employment experiences, while for others, it had a weaker influence.

6.2 Literature review

As this thesis has extensively discussed what discounting is, how it occurs, and its consequences in the literature review chapter, this section synthesizes the patterns and typologies in the existing literature with regards to various responses of migrants to their labour market experiences.

The existing research on migrant responses to their labour market experiences can be broadly classified into two streams: 1) studies that offer typologies based on the psychological and professional responses to under-employment or barriers in the labour market, and 2) studies that focus on strategic responses migrants deploy to navigate the barriers in the labour market.

The first type of studies focusses on the ways in which migrants mentally and professionally adjust to the barriers and employment outcomes such as under-employment. For example, Pearson et al.'s (2012) study shed light on migrants' psychological responses to under-employment based on professional identity and dissonance. This typology delineates four psychological responses—satisficing, striving, struggling, and succeeding. Satisficing denoted migrants who were not employed in skilled jobs, but were still content. Striving responses denoted migrants who were in skilled jobs but felt high dissonance. These migrants wanted to develop their careers further. Migrants who reported their response as struggling did not have a sense of professional identity on the job and were highly dissonant. Finally, the succeeding psychological response is when migrants relate to a high sense of professional identity and their dissonance is very low. Similarly, Zikic et al.'s (2010) study identified three career orientations—embracing, adaptive, and resisting, highlighting varied patterns of motivation, identity, and coping strategies among migrants. Migrants in the embracing orientation have a healthy will to succeed in the labour market. The adaptive orientation is where migrants adapt to fit into the host country's labour market. Finally, migrants in the resisting orientation consider obstacles to be challenging to overcome. Aten et al.'s (2016) study identified three cognitive mobility frames used by migrants to navigate career options and obstacles. One is the migrant mobility frame that prioritises adaptation and attachment to the host country,

accepting challenging occupational barriers, and accepting available jobs, often resulting in the under-utilisation of their skills. Second is the mobile professional mobility frame. This frame focuses on seizing opportunities, achieving professional success, and only accepting roles that match one's skill levels. Third is the migrant professional mobility frame. This frame balances integration and acknowledges the time required to overcome contextual barriers, often resulting in the under-utilisation of their talent. These typologies provide varied migrant responses, from accepting their situation (satisficing, adaptive, mobility frame), to actively seeking opportunities (striving, embracing, mobile professional mobility frame), or feeling discouraged or stuck (struggling, resisting).

The second stream of studies explored the strategic actions that migrants take in facing the challenges of the labour market. In this regard, Al Ariss (2010) identified four modes of engagement that migrants employ to navigate structural barriers: maintenance, transformation, entrepreneurship, and opt-out. In the maintenance mode, migrants accept the employment challenges and 'worked within them'. For example, some migrants hide their religious identity that prevents them from accessing job opportunities. In the transformation mode, migrants transform the barriers they face during employment. For example, migrants change their name or try to gain citizenship, thereby enhancing their job prospects. Migrants in the entrepreneurship mode attempt to avoid the barriers in the labour market by establishing their own business. Finally, some migrants avoid the obstacles by opting out, meaning they are pushed out of existing structures. Each mode reflects distinct approaches to career development, highlighting the diverse tactics migrants adopt in response to challenges. Similarly, Malik et al.'s (2017) study proposes a four-phase transition cycle consisting of preparation, encounter, adjustment, and stabilisation for migrants entering the host country. Their findings indicate that despite thorough preparation, migrants may encounter stress, anxiety, and new expectations due to unfamiliar work roles and cultural differences. Their study mentions that in order to adapt and pursue personal development, migrants may employ various strategies such as seeking information, building relationships, and engaging in formal and informal networking. A study by Fuller and Martin (2012) provides a typology to understand the diverse pathways migrants adopt in the pursuit of employment. They outline six employment trajectories of migrants—delayed integration, redirection, study, exclusion, self-employment, and partial integration.

Parallel research work has observed the employment trajectories of migrants. Studies such as Chiswick et al. (2005) found a 'U-shaped pattern' for the migrant employment journey. The

path indicates an initial decline in occupational status for migrants from what they held pre-migration. However, with additional training and networking, potential improvement was identified, suggesting a U-shaped employment journey, a universal pattern for migrants. For example, Simón et al.'s (2014) study provide evidence suggesting that initial downgrading might hinder migrants' employment progression due to broader national-level or organisational-level factors.

More recent work has adopted multi-level approaches to understanding the acculturation and coping strategies of migrants. This study highlights how personal strategies, organisational dynamics, and broader societal contexts shape the migrant experience.

While these studies offer valuable insights into the employment pathways and strategies of migrants, there remains a gap in understanding the pathways of migrants specific to their skill discounting experience. Also, studies that link challenges in the labour market to migrants' responses and coping strategies and their evaluation of employment outcomes remain limited. This points to the need for further exploration of the employment trajectories of skill-discounted migrants.

6.3 Research Methods

This study undertakes a qualitative analysis to explore how skill-discounted migrants approach their employment journey in Australia, providing a rich, in-depth understanding of their personal experiences and the meanings they attribute to these experiences (Creswell & Poth, 2016; Seidman, 2006). The study provides rich detailed data on the processes involved in the experience of skill discounting; how migrants perceive their experiences, the strategies they use to reduce the influence of skill discounting, and their experiences on the job (for example, Creese & Wiebe, 2012).

6.3.1 Data Sources

The phenomenon of skill discounting presents a major challenge for migrants. Therefore, theoretical sampling of migrants was considered appropriate as participants who fit the study could be selected, thereby providing rich information about the concept (Sandhu et al., 2019).

A total of 38 migrants who were currently residing and employed in Australia were interviewed. The participants included skilled migrants who were former international students and those who arrived as permanent residents under the skilled migration program.

While there may be distinctions between international students-turned-migrants and permanent residents in terms of their initial visa status upon entry into Australia, both groups represent

skilled migrants who contribute to the country's workforce (Hawthorne, 2018; Ziguras & Law, 2006). Despite their different pathways to residency, international students are potential skilled migrants who often possess skills relevant to Australia's labour market needs (Hawthorne, 2018). For example, the majority of permanent skilled migrants are recruited on-shore, meaning they are made up mostly of former international students (Hawthorne, 2015). As such, their experiences in seeking and securing employment, as well as their contributions to the economy are largely aligned, albeit with anticipated diversities. Therefore, while acknowledging the procedural differences in their migration journeys, the overarching goal of attracting skilled individuals to contribute to Australia's workforce remains consistent across both groups. Furthermore, although the primary purpose of the current study is not to compare the employment experiences of the two groups, the inclusion of international students-turned-migrants and permanent residents might enrich the study by providing diverse perspectives, enabling a comprehensive analysis, and informing policy implications.

Screening criteria were used to select the participants to enable an in-depth exploration of the phenomenon and to ensure that participants were suitable for the study. Only those participants who were residing in Australia and were employed (at the time of the study) were included.

Participants were recruited using four different strategies. First, the alumni dataset of a leading hospitality institution in South Australia was used to recruit participants. The institution sent out an invitation email to its alumni to participate in the study. Second, through social networks, a popular community organisation was approached to recruit more participants. The community organisation emailed its members requesting participation in the study. Third, posters were placed in local churches, temples, and various ethnic/migrant supermarkets, where migrants often frequent, inviting people to participate in the study. Finally, snowball sampling was used, where the initial group of participants were asked to suggest further migrants who might take part in the study, a common strategy used in qualitative research (e.g. Al Ariss, 2010; Turchick Hakak & Al Ariss, 2013) .

The participants consisted of 38 skilled migrants, with 19 being former international students and 19 migrants who came as permanent residents to Australia. They were mostly from Asian countries such as India (28), Vietnam (4), Malaysia (2), Indonesia (2), Singapore (1), and the Philippines (1). A majority of the participants had a masters, bachelor, or diploma level qualification. A majority had a wide range of experience before arriving in Australia such as managerial experience, production engineering, lecturing, and experience in the hospitality

field. However, a few (7 out of 38) had no previous work experience. Details of each participant is given in Table 6.1.

Table 6.1 Demographic details of the participants

ID	Highest qualification at the time of interview	Overseas Experience
SM01	Master in marketing, diploma in Engineering	Marketing field technical manager, supervisory positions
SM02	Diploma in hotel management	Manager hospitality (managed two bars and hotels)
SM03	Master of social work	Only placement experience, accreditation from Australian social worker assessment
SM04	Mechanical engineering	Production engineer
SM05	Engineer in biotechnology	Logistic field in UAE, quality assurance field
SM06	Bachelor in civil engineering	Quality assurance engineer facility management
SM07	Science graduate	Banking investigations and compliance antimony laundering investigations
SM08	Diploma in tool and dye making	Toolmaker and tool designer
SM09	Electronics and telecommunications	Telecommunications project
SM10	Master in social work	Social worker
SM11	Master in technology management, Bachelor in information technology	Lecturer in information technology
SM12	Diploma in computer web design and computer gaming	Teacher, student counsellor
SM13	Engineer, Master in business administration	Business development space
SM14	Master of computer applications	Software engineer in MNC
SM15	Diploma in electronics	Service engineer; assembly technician
SM16	Diploma in instrumentation	Engineering background
SM17	Bachelor of education	Teacher
SM18	Graduate in mathematics	Banking and financial services
SM19	Master in social work	Social worker
SM20	Certificate III, Diploma in restaurant management	No work experience
SM21	Master in hospitality management	Marketing executive; worked in banquets and functions

ID	Highest qualification at the time of interview	Overseas Experience
SM22	Master in business administration in international hotels and restaurants	Accounting, finance department, academic liaison
SM23	Master in hospitality management	Leadership position in hospitality
SM24	Master in hospitality management	Worked in hospitality sector, French educated
SM25	Master in international hospitality management	Worked in Dubai hotels for 3 years
SM26	Master in international hospitality management	Lecturer in hospitality courses
SM27	Diploma in culinary science	No experience
SM28	Master in international hospitality management	Experience working in hospitality previously worked in airlines
SM29	Master in international hospitality management	Front office manager
SM30	Master in business administration in international hotels and restaurants	Experience working in hospitality
SM31	Bachelor in business restaurant management	No work experience
SM32	Master of commerce, marketing; Bachelor in business restaurant management	No work experience
SM33	Bachelor of business international hotel management	No work experience
SM34	Bachelor of event and convention management	No work experience
SM35	Master in international hospitality management	Sales manager in international hospitality chain
SM36	Master in international hospitality management	Hotel industry
SM37	Master in international hospitality management	No work experience
SM38	Master in international hospitality management	Experience in airline, hotel experience

6.3.2 Procedure

The prospective participants who responded to the invitation email were sent an information sheet (Appendix 4: sent to the alumni group of the hospitality institution; Appendix 5: sent out by ethnic community organisations to its members) that described the details of the study. The information sheet further ensured the confidentiality of the interviews and that the participants would remain non-identifiable, unless otherwise required by law. The participants who wished to participate were asked to indicate a convenient time and medium (telephone or face-to-face) for the interview.

Prior to the interviews, participants were also given a consent form (Appendix 6), stating that the participants were provided with the information sheet and that they could withdraw their participation in the study at any time without consequence. Moreover, the consent form ensured that participants would take part in the interview of their own free will. Participants were also given the option of choosing whether or not the interview would be audio-recorded.

Semi-structured interviews were conducted with 38 migrant employees in Australia. The first set of questions involved the background of the migrants and collected information about their educational qualifications, work experience, date of arrival in Australia, and current visa status. This was followed by questions that explored the job seeking experience of the participants in Australia. Participants were asked if they had faced any difficulties in finding a job matching their skills. Probes (from the skill discounting literature) were used to explore if there were incidences of skill discounting. The final set of questions focused on their current job. Participants were asked to describe their current or ongoing job in Australia, and the opportunities they had to utilise their skills on the job. Participants were also asked to describe why they thought this was the case. Finally, participants were asked to describe their feelings about their job. The participants recruited from the alumni group of the hospitality institution were asked question about their qualifications attained from the hospitality institution (Appendix 7). In contrast, participants from ethnic organisation were asked about their broader academic background, including their training and experience. Appendix 8 provides the interview protocol for the migrants

6.3.3 Data analysis

Before the analysis, the audio-recorded interviews were transcribed. The analysis involved thematic analysis using the Gioia approach (Gioia et al., 2012; Moffitt et al., 2020; Omorede & Axelsson, 2022). The Gioia approach is primarily considered to be an inductive approach (Gioia, 2021; Gioia et al., 2012, 2013) , a robust methodology, and an informant-centred

approach that emphasises the experiences and interpretations of the respondents themselves. In the context of a study that looks into the experiences of migrants, this method ensures that their voices and perspectives are given priority. This approach enables a deep understanding of how migrants perceive and form meaning about their employment experiences. Importantly, Gioia's approach provides a multifaceted view, by focusing on first- and second-order data, thereby providing a comprehensive understanding of the various factors influencing migrants' employment experiences. This ensures that the analysis is grounded in the informants' interpretations and avoids theoretical assumptions, enabling respect for migrants' ways of understanding. As such, it avoids theoretical arrogance (the researcher's tendency to impose their own understandings on the respondents), making it a valuable and ethical framework for exploring the employment challenges and successes of migrants (Gioia, 2021).

Data analysis began with the evaluation of the transcripts of each interview and engagement in a process of open coding, where systematic examination of the data was undertaken to identify patterns, themes, and concepts. The study utilised NVivo software for data management. NVivo facilitated the organisation of rich detailed transcripts of the interviews, allowing an exploration of the complex experiences of skill-discounted migrants in a structured and rigorous manner(Jackson & Bazeley, 2019). This iterative analysis process generated new insights and understandings that emerged directly from the data itself. While the Gioia approach may also involve some deductive elements, such as repeatedly going back and forth between the data during the analysis, and drawing on the existing literature to inform the analysis (Sandhu & Kulik, 2019), the primary emphasis was on allowing the data to speak for itself.

Data analysis included three major steps.

Identifying first-order codes: Segments of the transcripts were coded based on the words used by the participants. Coding was undertaken manually for each transcript, and as meaningful segments emerged, new codes were assigned. The first-order codes remained close to the participants' words as far as possible. Some examples of first-order codes included, 'demand for local experience', 'employed at entry level positions within my field', 'job was a foot into the industry', 'helped pay bills', 'worked hard', 'undertook short courses', and 'feel full utilisation of skills'. At this stage, similar codes emerged and these similarities created more specific codes (e.g., previous experience not considered, lack of relevant industry experience). The first-order codes related to a wide range of phenomena such as the challenges migrants faced during their job search in Australia, the jobs they took up, how they saw these jobs, and what they felt about their current job at the time of the interview.

Identifying second-order categories: The first-order codes were then organised into second-order conceptual categories. Similar first-order codes were identified and were grouped under broader headings. In this regard, several categories emerged.

The first four categories encompassed the entry challenges migrant employees faced while looking for a job in Australia. For example, the codes that represented what participants said about their lack of industry experience and lack of local work experience were categorised as 'lack of experience'. Similarly, actual language barriers of migrants and employers' perceptions of migrants' language barriers were categorised as 'lack of language proficiency'. A brief overview of each of these categories is given in Table 6.2.

Third-order aggregate dimensions: In the third step, the second-order categories were further integrated to form third-order dimensions. For example, the second order category explaining the entry challenges of migrants looking for a job, such as 'lack of work experience', 'lack of language proficiency', 'employer attitude', and 'situational challenges', and the category 'initial job placements' captured the situations that migrants face when they enter the Australian labour market. Hence, these categories were aggregated to form the third-order dimension, 'initial employment experience'. Similarly, categories such as 'job outlook' and 'individual agencies' were grouped together to form the aggregate dimension, 'subsequent job strategy'. Furthermore, the perception of skill utilisation was aggregated to form the dimension, 'evaluation of employment outcome'.

Figure 1 is a data structure that demonstrates how the data from the interview transcripts were organised into three progressively overarching concepts.

Table 6.2 Overview of second-order categories

Second-order categories	Explanation	Examples from transcripts of participants
Lack of work experience	Work experience played an important role during the job search process for migrants and was manifested by poor recognition of migrants' previous international experience (with a demand for local experience), and migrants themselves lacking relevant industry experience	"For rejecting they 90% of time they [employers] said they have candidates with local experience. And they don't write it on advertisement saying candidate only having local experience should apply for this job" (#SM10)
Lack of language proficiency	It was found that language difficulties could be a barrier for migrants in obtaining a job matching their skill levels. Two codes emerged under this category. Language as a challenge encompassed both the employers' perceptions of a migrant's inability to communicate in English, and a migrant's actual limited proficiency in the English language	"I think at the same time as well you could see the Australian students being placed in front office because it was naturally assumed [by employers] that they were better at English (#SM31). "As a professional it is very hard to understand, the Australian accent is very different from the accent we used back in India. It is different you know ... it takes a while to understand that … I personally had some difficult times, you know even after I started working with other local staff, local people, understanding their accent, and the way they talk, communicate with you. Initially that was a problem"(#SM10)
Employer attitudes	Two codes emerged under the category of employer attitudes. One, employers' ignorance in assessing the skills of migrants; and two, discriminatory attitudes of employers due to a migrant's ethnicity or skin colour	"Maybe the employers here are not sure or confident about the migrants and probably they would not be willing to experiment with migrants" (SM13). "And then we, the international students trying to seek jobs, we were all considered like, the children of lesser gods, because we were considered like, oh, we don't know what your skills are, and we don't know if we can trust your skills" (SM27)

Second-order categories	Explanation	Examples from transcripts of participants
Discrimination	Migrants often find it difficult to obtain a job due to their different background and ethnicity. Some participants mentioned that they felt discriminated against while applying for a job. Discrimination was often experienced in subtle ways, making it hard to identify	"There were some shops in a plaza. It's like they were advertising for people with the exact skill that I had but they didn't seem that open when I actually applied for it … I think it was more a body language thing; you see it enough to know that that's the case" (#SM22). "I had a feeling that, it could be something to do with, for example - the colour of the skin or something being from India, see being from India most of the people got an idea that it is a third world country, nothing much happens over there, and whenever you see something from India the first thing come to our mind is all the street-side food and all" (#SM02)
Situational challenges	Situational challenges include those that were beyond the control of individual migrants and employers. The codes include lack of job opportunity and visa as a barrier	"There has to be some skill shortage, otherwise government won't say that there is a skill shortage. But we don't know where the shortage and there is no information about who has that shortage" (#SM16) "I don't have permanent resident status, so that's why it's hard to get a job that is related to your work experience" (#SM21)
Initial job placement	Under this category, first-order codes describing the types of jobs migrants initially secured due to the challenges they faced during their job search were grouped. These codes included "work in entry positions within field", "work in related positions within field", "it is just survival jobs", and "working low positions outside the field". Migrants often found themselves in roles that may not have fully utilised their qualifications or skills, reflecting the limitations imposed by entry barriers	"... so what I did was to find accounting related jobs rather than accounting itself and that itself wasn't easy" (#SM22). "I was pretty sure what I am expecting, I just wanted enough money to run my bills, some expenses and that was pretty clear and I wasn't looking for something very much because I knew it wasn't the time" (#SM28). "I have to do lot of data entries and quality check have to do. There is not lot of manual jobs just little bit but that's what I'm doing compared to ... you can just imagine what I was doing and what I am doing now" (#SM04)

Second-order categories	Explanation	Examples from transcripts of participants
Job outlook	Migrants' perceptions of their initial job situations were grouped under this category. First-order codes such as "growth opportunity" and "job as a means of survival" captured how migrants viewed their job. Some saw their jobs as stepping stones for career advancement, while others viewed them solely as a means to support themselves financially	"Well, as an F&B attendant, it's a whole new learning. My goal was front office – I don't know F&B but it is always good to learn more about the food and learn about what's a different way of cooking, so it's always been a learning …" (#SM29) "I got my first job in a factory ... in a production line, as a normal worker ... if you are using your muscle power, you can earn, if you are looking for certificate, you can't survive with that … our consideration is not graduation or certificate, we need to look after the family, that's the priority" (#SM09)
Individual agencies	This category encompasses the strategies and tactics employed by migrants in their job roles. First-order codes like "working hard" and "undertaking short courses" were grouped together under this category. Migrants used various approaches to prove their abilities and enhance their employability	"Showed them I could do it – ran the F&B – train other people" (#SM31). "I came to know there is there is lot of short courses ... So, I started to study Disability, Disability in certificate III, and I completed that in three to six months, then after that immediately I got job in same profession" (#SM01). "I am doing a volunteer work as well" (#SM10)
Perceptions of skill utilisation	Migrants' perceptions of how their skills were utilized in their current job roles were grouped under this category. First-order codes such as "I feel full utilization of skills" and "I feel my skills are not utilised at all" reflected the varying degrees of migrants' feelings regarding the application of their qualifications and expertise in their current job (at the time of the interview)	"... now I'm sitting in positions where I can use my skills – position where I can say, yes, I have done my hard work and I've caught the fruit out of it" (#SM25). "No not full my ability ... limited way. My field is marketing that is entirely different from which I'm doing right now, but still can somehow utilise my old experience" (#SM01). "Not even 10% (skill utilisation) to be honest. Here it is as I said am just implementing someone else is already made a decision … as a social worker, … I will be making plans for, I will be making arrangements for solving a person's issue, all issue" (#SM10)

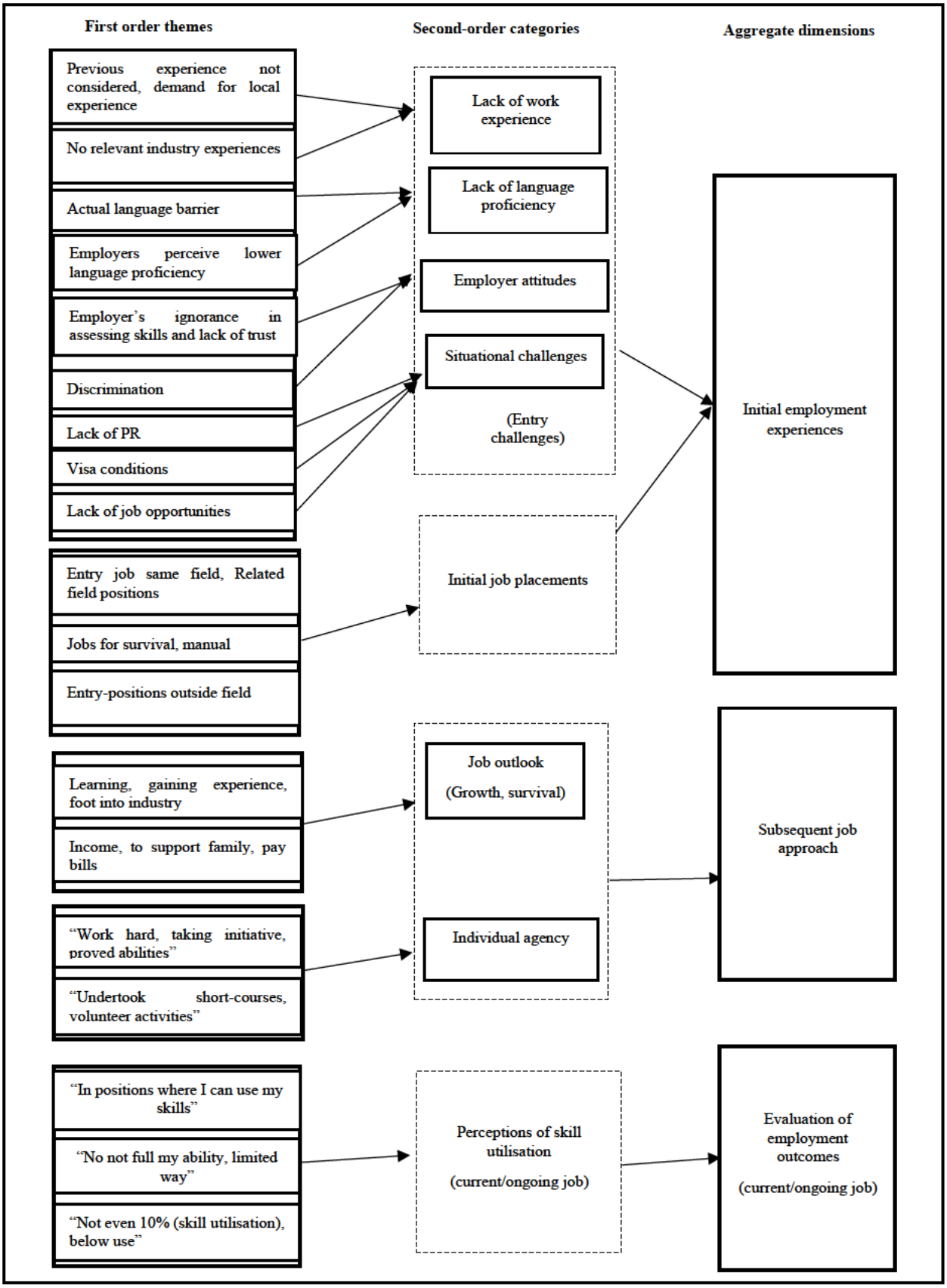


Figure 6.1 Data structure

6.3.4 Credibility

To establish the validity and credibility of the research findings, it was imperative to ensure its trustworthiness. The ability of a qualitative study to generate meaning and transferability in similar contexts is crucial (Golafshani, 2003; Ressia, 2013). In this particular study, there were in-depth discussions and meaningful interactions between the researcher and the participants. The primary objective was to capture and represent the participants' authentic perspectives faithfully, and their views were accurately documented in the written account of the study. The information was methodologically coded into themes (Ressia, 2013). A sample of the interviews was coded by my supervisor and I to help familiarise me with the process and to ensure alignment of the coding. I also revisited and refined the coding to ensure a thorough and accurate analysis of the data. To enhance the dependability of the study, regular meetings were held with the supervisors to discuss and verify the interpretations and decisions made during the data analysis. Additionally, I have provided thick descriptions of the research context, data collection, and analysis process. This allows the reader to assess the transferability of the findings to similar settings or populations. The participants' voices were given top priority.

Ensuring the trustworthiness of the study was essential to establishing the validity and credibility of the findings. The quality of a qualitative study depends on its ability to generate meaning and its transferability into similar contexts (Golafshani, 2003; Ressia, 2013). The current study involved in-depth discussions and meaningful interactions between the researcher and the participants. The primary aim was to capture and faithfully represent the authentic perspectives of the participants, ensuring that their views were accurately documented in the written account of the study.

6.4 Findings

As the data were analysed, three main dimensions became apparent for the employment journey of skill-discounted migrants. The first dimension explores the initial employment experiences of migrants. This dimension captures the challenges (a detailed explanation of these challenges is provided in Appendix 9) migrants faced while looking for a job, which was a common experience for all the participants. In addition, this dimension explains the initial job placements, thereafter which differed between migrants. The next two dimensions explain the trajectory migrants take after these initial experiences. Here, the study explains their subsequent job strategies and evaluation of their employment outcomes in their current job.

Given these themes and dimensions, the study identified that the employment journey of skill-discounted migrants could be classified into three pathways: desired job, deviated job, and

distaste job pathways. These pathways are based on these migrants' perceptions of their skill utilisation, which was based on their job strategies which, in turn, was shaped by their initial job experiences. Thus, these pathways highlight the interconnection between the initial jobs of skill-discounted migrants and their subsequent job strategies, and the evaluation of their job outcomes, providing a full picture of the employment journey of skill-discounted migrants.

Desired job pathway

The desired job pathway describes the employment route of skill-discounted migrant employees who found positive employment outcomes in the Australian labour market despite their initial challenges. This pathway includes migrant employees who progressed with their career to attain their desired job where they were most able to utilise their skills. Owing to their experiences of skill discounting, individuals in this group initially took up entry-level positions, but within their field of study.

As outlined previously, the initial employment experience of migrant employees in Australia often included incidences of skill discounting. Accompanied by these skill discounting factors were different job situations, such as only being able to apply for an entry-level position within their field of study which required only minimal qualifications and work experience. It should be noted that most of the participants had trained for, and had prior experience in managerial positions, thus making them quite overqualified for such entry-level jobs. An example of this is SM27, who was a Master's student in International Hospitality:

> *"In spite of having completed a bachelor degree in hotel management, in spite of having worked in past at hotels, and even having been a lecturer myself in a university teaching hospitality, I came to Adelaide and the only job that I could find, initially was in a chicken shop where I had to sell different products of ready to cook chicken" (#SM27).*

Some migrants saw entry-level positions as a foot-in-the-door to a particular industry and an opportunity to learn and gain local experience. In this sense, they perceived these jobs as an opportunity for growth. Such a growth mindset (Dweck, 2013) entails the conviction that individual attributes, including individual abilities, traits, and intelligence are not fixed but can be cultivated and enhanced through effort, perseverance, and learning(Burnette et al., 2022; Dweck, 2016; Dweck, 2013). This represents a positive outlook about their job situation, and participants with such an outlook described their initial job positions in the following ways:

> *"Well, as an F&B [Food and Beverage] attendant, it's a whole new learning. My goal was to work in the front office, and I don't know F&B. But it is always good to learn more about the food and learn about different ways of cooking" (#SM29).*

> *"I kind of knew that you had to start somewhere and you probably you have to start from scratch, even though I have done the same job in Dubai and India. Just to get my foot in" (#SM25).*

As such, migrant employees with a growth mindset employed a range of tactics such as working hard, learning, proving their abilities to their employers, and taking initiative on the job.

> *"I showed them I could do it – run F&B – train other people and then from there on I guess it was easier. It got easier for me because I got to know the managers, they all got to know me and then decided to give me the opportunity that I wanted. Then when I went for my placement for my second year, they offered me a team leader position with the company" (#SM31).*

As a result of their growth mindset and tactics, some migrant employees ended up in positions where they perceived full or near-full utilisation of their skills and were happy. Full utilisation of skills is when employees perceive that their abilities, knowledge, experience, training, and all other work-related skills are fully engaged on the job. This finding showcases the positives of having a growth mindset that views setbacks as valuable learning experiences, motivating them to increase their efforts and bounce back resiliently(Ng, 2018; O'Rourke et al., 2014; Schroder et al., 2014). A higher proportion of migrants who were former international students appeared to fall into the desired job pathway than migrants who arrived as permanent residents:

> *"All my education and my skills, my experience in event service, I totally get to utilise all I've got from the past and now I've got new skills in AV-audio visual and marketing as well" (#SM33).*

The findings reveal that the influence of skill discounting was minimal in the desired pathway. The initial employment experience showed several instances of skill discounting; however, the influence of skill discounting reduced as employees developed a growth mindset and applied strategies such as hard work and showing initiative on the job. As a result, these migrant employees found themselves in positions where they perceived full or near-full utilisation of

their skills, indicating minimal influence of skill discounting. This finding aligns to the classic assimilation model which suggests that over time, migrants may assimilate into mainstream society and will experience upward employment mobility.

Deviated job pathway

The second employment pathway identified in this study is the deviated pathway as it describes the flexible approach developed by migrant employees who faced initial skill discounting challenges by modifying their skills for the Australian labour market, or altering their career of focus to one that would have higher job opportunities. However, these migrant employees self-reported a sense of incomplete utilisation of their skills. Nevertheless, even partial utilisation of their skills afforded these migrants fulfilment of their goals with overall positive outcomes.

The findings reveal that an initial challenging experience during the job search process could drive migrants to accept survival jobs with minimal skill and educational requirements(Creese & Wiebe, 2012; Reid et al., 2014). The major reason cited for the acceptance of such jobs was the necessity for a stable income. This was the situation for most of the migrants who arrived as permanent residents. For example, SM05 is an engineer in biotechnology who migrated under the occupation listing of Quality Assurance. However, an inability to find a career-relevant job pushed him to work in a part-time job in a laundry:

> *"We all came here to survive, for the survival you need money, for that you have to compromise our choices, otherwise we have to leave Australia so, initially I was working in laundry, just as a part time, it was also not related to my field, all part of survival" (#SM05).*

SM08 migrated to Australia with a diploma in Tool and Dye Making, 3D Modelling, and Tool Design. He also came with significant work experience as a toolmaker and a tool designer in India, Saudi Arabia, and Malaysia. However, his initial job circumstances required him to work in a survival job:

> *"My first job was as a press operator which is a basic, very low skill job which requires no skills. Just attend to the machine and press a button. Then after that I got a job with Woolworths as a pick-up packer at their distribution centre in Gepps cross where I was again in a labour-intensive job with no skill required" (#SM08).*

Other than survival jobs, some migrant employees took entry-level positions outside their field of expertise. These jobs had a higher likelihood of being longer term and often also required more skills and qualifications than survival jobs.

SM26 had a Masters in her field of international hospitality with significant industry-relevant experience. However, her inability to progress past an entry-level position within this field in Australia frustrated her and lead her to search for job opportunities in different fields. She eventually secured a government job in a hospital where she utilised many (although not all) of her previously developed skills, with scope for further career growth.

Similarly, SM23 also had a Master's degree in international hospitality with experience in the industry. He too decided to leave his entry-level job in hospitality for a higher-paying job in an energy company. He felt that some of his skills (especially in leadership) were under-utilised; however, he earns nearly double what he did in hospitality and has the flexibility to work on special projects:

> *"I often pick up special projects to push myself to my full potential so I can, you know, stretch my limits" (#SM23).*

One of the participants was a mechanical engineer with 17 years of experience as a production manager in India and the Middle East. Upon moving to Australia, he remained unemployed for several months and was eventually forced to accept a data entry job:

> *"I have to do lot of data entry and quality checking. There are not a lot of manual jobs just little bit but that's preferable to what I was doing" (#SM04).*

It was also identified that some migrants who were working in survival jobs could move to other job situations such as working in entry-level roles outside their field. For example, SM13's employment history demonstrates this link as he was initially a production engineer with an MBA in marketing with 15 years of experience in business development. However, the challenge of finding a job within his industry drove him to work in door-to-door sales as it was easier to acquire a job. He currently works in the call centre division of an energy company, which is an entry-level position outside his field.

The migrant employees in the deviated pathway have a different job strategy to those in the desired pathway, as they reported seeing their job as a means of survival rather than as a growth opportunity:

> *"I got my first job in a factory production line. It is not in my field. When I joined that company, I met electrical engineers, mechanical engineers they are working on the same platform as me, then when we talk they said forget about your certificate ... if you are using your muscle power, you can earn, if you are looking for using your certificate, you can't survive with that ... Our consideration is not graduation or certificate, we need to look after the family, that's the priority" (#SM09).*

Migrant employees searching for survival jobs employed strategies that would enhance their prospects of getting into better job positions or into stable government jobs. One such strategy was to undertake short courses in Australia to acquire new skills, the completion of which would provide them with a job based on their newly learned skills. Examples of such short courses are a Certificate III in Disability and Aged Care, leading to the acquisition of jobs such as carers or support workers; and Certificate III in Sterilisation, which facilitates the acquisition of jobs in hospitals and other government jobs. Migrants may consider these jobs as better than picking up survival jobs that are mere manual positions. SM01, who had a Master's in business administration, shared his experience of undertaking a short course in Australia:

> *"I came to know about short courses available in Australia ... three months, six-month period courses, so I choose one of the course to do to get job in a quicker way. So, I started to study Certificate III in Disability, and I completed that in 6 months, then after that immediately I got a job in disability" (#SM01).*

Moreover, some migrants also chose to volunteer for activities that would provide them with an understanding of Australian work culture that would add to their resume:

> *"I am doing volunteer work as well, so I can learn about different areas in social work field. I will be up to date with my experience" (#SM10).*

However, there were some challenges with these strategies. Participants mentioned that gaining volunteering experience in one's field was sometimes difficult as some organisations were reluctant to accept volunteers because their company had strict confidentiality requirements. Some participants also thought that doing a course in their field or related fields in Australia would give them better job prospects. However, many courses were expensive, so the lack of a guaranteed job discouraged some migrants from undertaking these courses.

Migrant employees in the deviated job pathway reported being in jobs which involved only partial utilisation of their skills; however, they still had an overall positive outlook. These migrants were happy that they were able to work in a job they had trained for. Some of them mentioned that although their initial experience on the job was difficult, they competently adapted themselves to suit the workplace. For example, SM12 had worked as a computer teacher and a front office manager in India. In Australia, she was unable to find a job in either of these positions. She did a Certificate III in Aged Care and is currently working as a support worker. When asked if she felt that she was utilising all her abilities on the job, she said:

> *"I can't say no because as a front office manager you utilise team spirit and communication skills-those type of skills am still using … but then when I consider the IT skills, like technical things, I don't use them much" (#SM12).*

SM08 is another example as he has diplomas in tool- and dye-making as well as in 3D modelling, mould injection, and tool design. He is currently working as a team leader in a machine design company. He has not undertaken any courses in Australia, and describes his opportunity to fully utilise skills on the job as partial:

> *"[I utilise] my understanding of engineering, yes. But it's not what I have been trained to do … I get to bring in skills like people management, negotiation or my understanding of steel" (#SM08).*

Some migrants hoped to move back to their original field of work in the future while others had become resigned to reality and accepted their current job as 'being sufficient'.

Most migrants who fell under the deviated job pathway came as permanent residents. In general, they responded to challenges in finding a job by taking survival jobs or searching for entry jobs outside their initial field of expertise. For some migrants, by accepting survival jobs, they then went on to acquire entry-level positions in other industries. Migrants who undertook short courses and acquired new skills in Australia could more easily obtain a job because of their newly acquired skills.

The analysis also identified one migrant who had undertaken a short course in Australia; however, he was not currently employed in a job related to the short course. SM14 was a software engineer in India. Having coming to Australia, he did a short course Certificate III in Aged Care. After working as a support worker in an aged care facility, he quit the job. Later, he wanted to do a course in Computer Numerical Control (CNC) machining as he came to

know that the job opportunities were quite good in this field. However, he could not do this course in Australia, so he returned to India and completed the course. On his return to Australia, he struggled to get a job in the CNC field. After much effort, he is currently working as a trade assistant within the CNC field in an engineering company. SM14's original field was as a software engineer, but he deviated to CNC machining as he thought that some of his skills would be utilised.

The influence of skill discounting was more visible in the deviated job pathway than in the desired job pathway. The challenges of skill discounting were high in the employment entry experience of both the desired job and the deviated pathway. However, the influence of skill discounting was less evident in the desired job pathway as migrants perceived full skill utilisation compared to the deviated job pathway. This pathway does not align to either classic assimilation theory that posits upward career mobility for migrants, or segmented assimilation theory that suggests a permanent downward career mobility for migrants. Instead, it represents a unique trajectory where migrants navigate their employment journey by adapting to their circumstances and making strategic decisions to address challenges such as skill discounting.

Distaste job pathway

The distaste job pathway delineates the experiences of migrant employees who encounter significant challenges in securing positions that align with their skills and aspirations. Similar to those in the deviated pathway, migrant employees in this category perceived their current employment as a means of survival. However, they did not actively pursue career strategies such as short courses or volunteer activities to enhance their job prospects. Instead, they often found themselves in entry-level positions outside their field without a clear path for skill utilisation or career advancement. For example, SM13, SM15, SM23, and SM26 were migrants who were in entry positions outside of their field and did not adopt any career strategies.

A notable distinction between migrants in the distaste job pathway and those in the deviated job pathway lies in their perception of skill utilisation in their current job. Migrants in the distaste job pathway often felt their skills were under-utilised or becoming obsolete due to lack of use.

SM10 had a Master of Social Work and experience outside of Australia in this field. Having completed a Certificate III in Disability in Australia, he was finally working as a disability support worker. When asked if he felt he utilised his full potential at work, he replied:

> *"Not even 10% to be honest. Here I am just implementing someone else's decision … [whereas] as a social worker I used to make plans for, make arrangements for solving a person's issue …" (#SM10).*

Some of these migrant employees reported that their skills had become obsolete due to lack of use. For example, SM16 migrated with a background in electronics as well as a Diploma in Mechanical Engineering in Instrumentation. However, he was working as a support worker in a disability centre at the time of the interview, and so felt that:

> *"No, I'm actually not at all using any of my abilities. So even my language skills I am losing slowly … my knowledge is at a stand-still there [in the current job] … it's all declining and the more I am out of the job, the more [difficult it is] to update my skills" (#SM16).*

This sense of frustration stems from the discrepancy between migrants' professional qualifications and the nature of their current job responsibilities. Furthermore, while some migrant employees in the distaste pathway expressed gratitude for having a source of income, others harboured feelings of resentment toward their current job situation. They felt trapped in a cycle of survival, yearning for opportunities that better aligned with their professional aspirations and qualifications.

> *"I am feeling very frustrated because I feel like I'm currently in a survival mode but I will be grateful if I get something related to my field" (#SM13).*

However, with the few migrants who experienced resentment, it was identified as a transient feeling that settled over time. The majority tried to remain positive and found different ways to appreciate their job: for example, some participants mentioned feeling much more relaxed in their current job than in their previous position in their home country where their responsibilities and stress levels were higher.

Overall, most of the participants in the distaste pathway were migrants who came as permanent residents. An exceptional case was also identified during the analysis. #SM36 was a former international student who had completed a Masters in International Hospitality Management. At the time of his interview, he was working full time in a student accommodation company. This participant did not sense the full utilisation of his skills because of his manager's approach.

> *"She clipped my wings. So I can't fly as much as I could. There are a lot of things I wish to do for the company. There were times where it's,*

it's really frustrating that a lot of things that I can actually make decision. But she wants me to go through her to get the approval before I do certain things. As to opposed to some of my colleagues, they have empowerment to do things where I don't have the empowerment to do certain things" (#SM36).

In the above case, the participant did not sense using his abilities to the full, but not because of the position. In fact, the position demanded his skills and abilities; however, the manager's approach was an issue that blocked the utilisation of his skills.

When compared across the three groups, the influence of skill discounting was mostly visible in the distaste pathway where the participants sensed a lack of utilisation of their skills. This finding provides evidence for the segmented assimilation model which suggests that migrants may have downward occupational mobility and may be trapped in it for lengthy periods. Figure 6.2 provides a pictorial representation of the three employment pathways identified for skill-discounted migrants based on the aggregate dimensions.

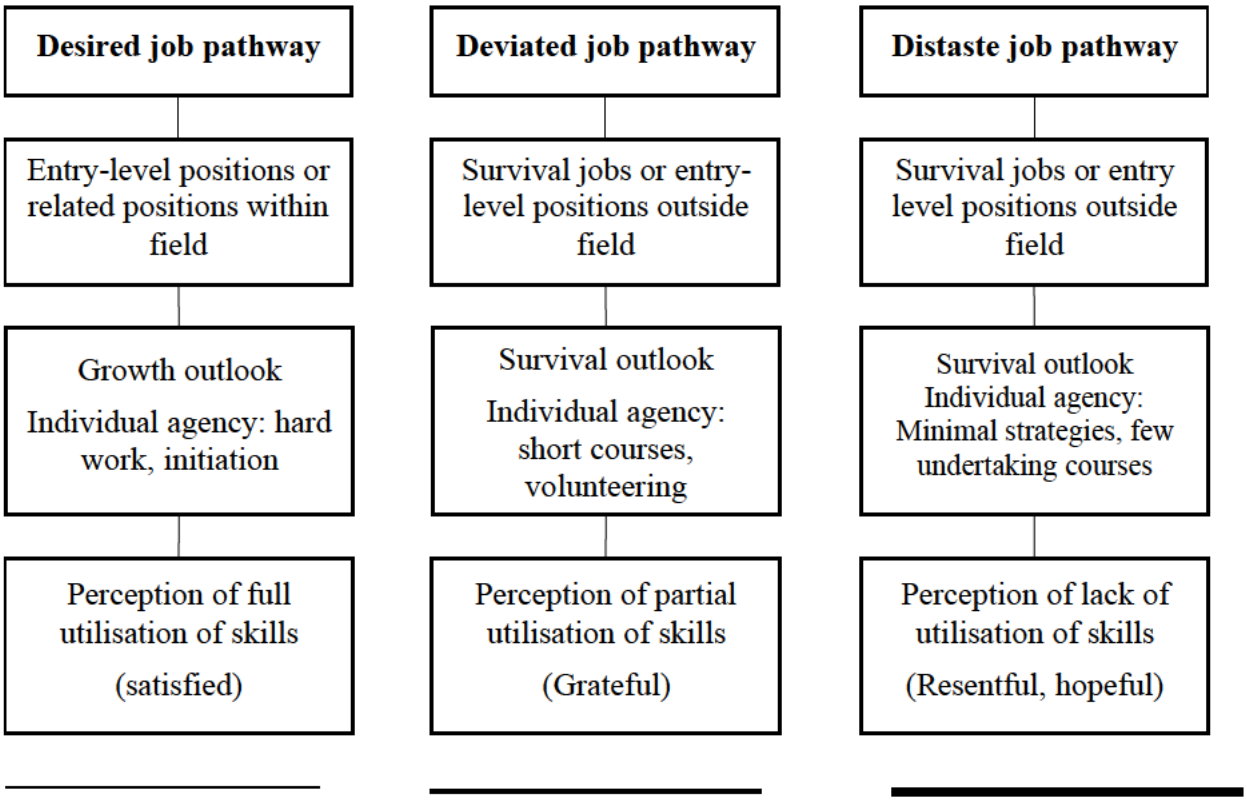


Figure 6.2 Employment trajectories of skill-discounted migrants

Note: the weight of the lines under the table denotes the influence of skill discounting on each pathway. Darker lines indicate stronger influence while lighter lines indicate weaker influence.

6.5 Discussion and implications

The significance of this study lies in its focus on the employment journey of skill-discounted migrants in Australia. The findings provide a picture of migrants' experiences in looking for a job, the job positions they initially held, and their actions and experiences on the job. The study establishes that the challenges of skill discounting is a common experience for migrants. However, its influence is not uniform for all migrants.

The main contribution of this study lies in the identification of three employment pathways for skill-discounted migrants. The desired, deviated, and distaste job pathways showcase the interconnectedness of migrants' initial employment experiences such as the challenges they faced in the labour market, the subsequent job strategies they used, and their perceptions of their current employment outcomes, which are all under-explored areas. Consistent with the existing literature, the challenges of skill devaluation were a common experience for migrants which accompanied job outcomes such as entry-level positions and survival jobs that can be considered as unfavourable (Almeida & Fernando, 2017; Banerjee et al., 2024; Creese & Wiebe, 2012; Dietz et al., 2015; Reid, 2012; Reid et al., 2014; Ressia et al., 2017a; Shinnaoui & Narchal, 2010; Usanova et al., 2023). However, unlike previous research that has attributed skill discounting to only unfavourable labour market experiences (Dietz et al., 2015; Shinnaoui & Narchal, 2010), the current study provides insight into alternate courses of action that migrants can employ to minimise the influence of skill discounting on their employment outcomes. The desired job pathway highlights the importance of securing a job in one's own field, even entry-level positions, to help migrants achieve what they desire. It can be seen that in this pathway, the influence of skill discounting on subsequent employment outcomes was minimal. This pathway aligns to the classic assimilation model that suggests migrants' further investment in training and their hard work would improve their employment prospects and facilitate the attainment of satisfactory job outcomes (Chiswick et al., 2005; Gordon, 1964; Karimi & Wilkes, 2023; Park & Burgess, 1924; Rumbaut, 2015). Similarly, the deviated job pathway showcased that obtaining in-demand skills in the host economy can help these migrants secure employment where they can utilise these newly acquired skills. This pathway cannot be directly aligned to the classic assimilation model. This finding suggests a unique trajectory for skill-discounted migrants where migrant employment integration looks like more of a 'fragmented' trajectory (Triandafyllidou, 2019, p. 7) involving identifying job opportunities and undertaking additional studies (Fuller & Martin, 2012). Conversely, the influence of skill discounting was mostly visible in the distaste job pathway where the

participants sensed no utilisation of their skills. Migrants in this pathway saw their jobs solely as a means of survival (Creese & Wiebe, 2012; Reid et al., 2014), with the majority not employing any strategies to advance their career options. Even among those who pursued short courses and secured jobs that utilised their newly acquired skills, there was a pervasive sense of dissatisfaction as these roles were not what they had initially intended upon arrival. This pathway provides evidence for the segmented assimilation model that suggests that migrants may have downward occupational mobility and may be trapped in this for lengthy periods (Portes & Zhou, 1993; Ressia et al., 2017a; Simón et al., 2014). The identification of these pathways not only assists us to better understand the responses of migrants to the challenges of the labour market, it adds to the literature that explores the integration journeys of migrants into the host country labour market (Al Ariss, 2010; Aten et al., 2016; Fuller & Martin, 2012; Malik et al., 2017; Pearson et al., 2012; Zikic et al., 2010). The current study provides a unique framework that explores the interconnections between the challenges migrants face, their available employment options, their strategies for navigating these options, and their perceptions of their employment outcomes.

Another significant highlight of this study would be the positives of having a growth mindset, where migrants saw their role as a learning opportunity and put in hard work and initiative (Dweck, 2016; O'Rourke et al., 2014), finally helping them to achieve what they desired. Furthermore, it showcased that strategies such as undertaking short courses and volunteering activities (Fuller & Martin, 2012) may help migrants attain an outcome for which they are grateful, despite not being what they had initially expected.

Furthermore, the identification of challenges in looking for a job was consistent with the multiple reasons for skill discounting outlined by Alboim et al. (2005) and other researchers (Al Achkar et al., 2023; Alboim et al., 2005; Dietz et al., 2015; Esses & Dietz, 2007; Manoharan et al., 2021; Treuren et al., 2021a). A significant contribution of the study lies in the identification of an additional reason, which is migrant visa conditions. Migrants found it challenging to obtain a job matching their skills, despite having the relevant skills, due to their lack of permanent residency. Additionally, the findings reveal a two-way direction for many of the factors that lead to skill discounting. For example, the factor, lack of work experience, can be explained in two ways: firstly, employers not recognising the overseas acquired experience of migrants, and secondly, migrants themselves lacking relevant industry experience. Similarly, the language proficiency of migrants had a dual aspect. Firstly, employers perceiving lower language proficiency for migrants, and secondly, migrants themselves possessing lower

language skills. The identification of these factors and sub-factors not only adds to the existing literature, but they also provide evidence that the reasons for skill discounting need not always be employer- or professional association-driven (Dietz et al., 2015; Salaff et al., 2002). This highlights that migrants themselves and broader structural factors that are beyond the control of migrants and recruiters can play a role. Furthermore, some modifications to the existing factors were also identified. In a summary provided by Alboim et al. (2005) for the reasons for skill discounting, they mentioned that migrants' skills could become less relevant in the host economy. A slight modification to this factor was identified in this study. It was found that migrants' skills could not gain recognition as there were few job opportunities available in the labour market, which was consistent with the latest news article that highlighted the broken state of the system, pointing out to the outdated skilled occupations list that does not address current and future skill needs of Australia (ABC, 2023).

Although not the primary purpose of the study, the data analysis enabled a comparison of the employment experiences of two groups of skilled migrants: migrants who came as permanent residents and those who were former international students. It can be said that migrants who were former international students were primarily in the desired job pathway, highlighting the role of having a local qualification in the host economy (Jackson, 2017; Singh & Mutum, 2024).

The following sub-sections add to the discussion by outlining the theoretical and practical contributions of the study.

The findings of the study have implications for migrants, employers/recruiters, and policymakers. For migrants, the study can guide them in how to manage their employment journey, despite the challenges they will face. It shows how they can move forward with their career despite the challenges, and highlights the need for having a growth mindset to attain desired outcomes. The study shows that migrants' journeys can be 'fragmented' with many challenges, looking for job opportunities, and may even deviate from what they had initially expected. The study offers a realistic picture of what to expect in the host economy, particularly during their entry into the labour market.

For employers and recruiters, the study emphasises the need to understand migrants' perceptions of their employment outcomes. The migrants in the distaste job pathway were frustrated and not happy about their employment outcomes. For these migrant employees, employers can provide programs that would make their work feel more meaningful.

Furthermore, the study highlights the employer's role in offering support to migrants, particularly those in the deviated and distaste pathways, to effectively integrate them into the labour market. Moreover, the study suggests that recruiters develop adequate tools for a standard evaluation of migrants' skills to avoid poor evaluation due to ignorance, bias, or discrimination. Despite having skills and experience, many migrants tend to be represented in roles that rarely require their skills and experience, at least initially.

Academic institutions may also play an important role in the recognition of migrants' skills, particularly international students. They should consider the previous experience of these students while providing internships or placement opportunities. Additionally, promoting programs that would enhance their social contact with the locals need to be considered.

Policymakers also need to assess and update the current labour force requirements of the economy so that a realistic picture of available job opportunities are apparent to migrants. The study also suggests policy revisions to assist migrants with adequate employment resources and support in obtaining a job matching their skills. The study also points to the need for adaptation programs to enhance the employability of migrants. These programs can be offered before migration (or soon after migration), thereby helping to cushion migrants' post-migration experiences. These programs should be a means for migrants to understand the workplace culture of the new economy, and should also consider providing some local workplace experience for migrants either through volunteering activities or placements.

6.6 Conclusion

The current study has shed light on the multifaceted experiences of migrant employees in the Australian labour market who face skill discounting. The findings of this study have revealed that migrants experience skill discounting in diverse ways. Skill discounting is a dynamic process influenced by various factors, including individual skills, employer perceptions, and factors beyond individual and employer control such as visa restrictions. As a consequence, this can manifest as migrants ending up in positions that do not align with their education and skills.

The study revealed that skill-discounted migrants adopted various employment pathways. Three different pathways emerged in this study: the desired job pathway, the deviated job pathway, and the distaste job pathway. These pathways reflect how migrants adapt and respond to their skill discounting experiences. The study showcased that there are alternative routes that skill-discounted migrants can employ.

The research has also demonstrated a clear link between migrants' initial employment experiences (including skill discounting) and their subsequent job strategies. This connection, in turn, shapes their perceptions of skill utilisation on the job. Skill discounting experiences often lead to migrants either actively seeking opportunities to utilise their skills or unwillingly accepting roles where their skills are under-utilised. Consequently, these experiences have profound implications for their overall perceptions of their employment experiences in Australia and their overall wellbeing.

In sum, this study highlights the complexity of skill discounting experiences among migrant employees in the Australian labour market. It also highlights that apart from challenges in accessing employment opportunities, migrants could adopt alternate pathways. Furthermore, the study highlights the significance of a growth mindset for migrants, and provides them with a realistic picture of what to expect in the host labour market as they enter. The findings underscore the need for policy interventions and workplace initiatives that address the challenges faced by skill-discounted migrants to support their ability to fully utilise their skills and qualifications. By understanding the diverse pathways and experiences of migrants in response to skill discounting, policymakers and employers can work towards creating more inclusive and equitable labour market opportunities for all.

Chapter 7: Conclusion

This chapter presents a consolidation of the findings and discussion of the studies conducted in this thesis. The chapter begins with a revisiting of the research purpose and objectives of the thesis, and an introduction to the four studies conducted. The chapter then presents the overall implications of the study, followed by the key findings from each study and their implications. The limitations of the overall thesis are presented followed by the limitations and future research areas for each study in the thesis. Finally, this chapter provides some concluding remarks.

7.1 Revisiting the purpose

The overarching aim of this research was to examine what factors influence the experiences of skill discounting among migrant employees and how these experiences shaped their employment patterns and trajectories to reveal the underlying mechanisms and implications of skill discounting for migrant employees and their employment experiences. This was achieved through four studies:

Study 1 examined the demographic factors in skill discounting among migrants and addressed the following research question:

How does the experience of skill discounting among migrants vary based on sex, age, time spent in the host country, and education level?

The research question was examined by focusing on the extent of skill discounting between migrant groups, the type of, and reasons for, skill discounting experienced by them and their on-the-job outcomes once employed.

Study 2 looked at refuge industries for skill-discounted migrants and addressed the following research question:

What industries serve as refuge industries for skill-discounted migrants and how do they find employment in different industries?

This was examined by exploring which industries served as refuge industries for skill-discounted migrants, the type of skill discounting experienced by migrants who found jobs in different industries, and the job search strategies employed by them to find jobs across industries.

Study 3 focused on the role of local qualifications in the likelihood of skill discounting for migrant employees. The study addressed the following research question:

Do local qualifications help reduce skill discounting for migrants?

Study 3 examined the research question by focusing on the extent of skill discounting among migrants with and without local qualifications, their level of qualifications, the field of their local qualifications, the type of skill discounting experienced by them, and their on-the-job outcomes once employed along these qualification's dimensions.

Study 4 explored the employment trajectories of skill-discounted migrants and addressed the question*:*

How do skill-discounted migrants navigate the employment journey?

The research question was explored through interviews on the lived experiences of migrant employees in Australia, focusing on their employment experiences.

Studies 1-3 used quantitative methods while Study 4 was qualitative in nature. The key discussion points from each study are provided below.

7.2 Key points from each study

7.2.1 Study 1: Examining demographic factors in skill discounting among migrants

Study 1 advances the literature by providing insights into the factors that contribute to differences in skill discounting among migrants. It found that the skill discounting experience differed between migrants, with male, younger, longer-resident, and higher-qualified migrants more likely to experience skill discounting. These findings challenge the traditional assumptions regarding the labour market experiences of different migrant groups. The study portrays female migrants positively (Singh & Mutum, 2024) as they faced lower levels of skill discounting than male migrants. This finding challenges the traditional assumptions and the literature on gender stereotyping of women migrants facing greater challenges in the labour market than male migrants (Adapa et al., 2016; Aigner & Cain, 1977; Creese et al., 2008; Madambi, 2020). However, in examining the forms of skill discounting, the analysis revealed that female migrants were more likely to have been skill-discounted due to overseas qualifications not being recognised, lack of Australian licensing/registration, and discrimination than male migrants, while male migrants were more likely to have been skill-discounted due to the lack of demand for their expertise. This aligns with the double jeopardy effect experienced by female migrants, whereby their migrant status compounds existing gender-based stereotypes (Creese et al., 2008; Kofman, 2000; Madambi, 2020) and systemic barriers such as challenges in obtaining necessary licensing/registration and accreditations to practice their profession (Ghosh, 2009; Kofman, 2000; Syed, 2008). The findings that female migrants had better skill utilisation and work responsibility challenges the existing literature

based on gender stereotyping, and the conventional perception that male migrants are better positioned in the labour market (Aigner & Cain, 1977; Aure, 2013; Ghosh, 2009; Kofman, 2000; Madambi, 2020; Man, 2004; Ressia et al., 2017b; Salaff & Greve, 2003, 2006; Sethi & Williams, 2015; Webb, 2015). However the finding that male migrants earned more highlights persistent gender disparities in earnings (Tijdens et al., 2012). Additionally, the findings challenge existing assumptions based on assimilation narratives about the labour market integration of young migrants that they better assimilate into the labour market due to factors such as language acquisition skills and adaptability (Bleakley & Chin, 2004; Cheung et al., 2011; Nowicka, 2015a; Schaafsma & Sweetman, 2001). They also challenge the existing literature based on age-based stereotypes and discrimination theories that suggest less favourable outcomes for older migrants (Posthuma & Campion, 2009; Taylor & Walker, 1998; Turek & Henkens, 2020).

The study also challenges assimilation narratives which suggest that skill discounting diminishes over time as migrants assimilate into the host society (Alba & Nee, 2003; Amuedo-Dorantes & De la Rica, 2007; Ressia et al., 2017a). Surprisingly, it was identified that those migrants who had been in the host country for a longer duration were more skill-discounted. This finding is contrary to the general notion that over time, migrants tend to assimilate into the norms of their host society, thereby diminishing several social and cultural labour market challenges (Cheung et al., 2011; Chiswick et al., 2005). The findings on the association of prior education level and the experience of skill discounting offers valuable additional insights into the role of education levels in the labour market experiences of migrants. The analysis revealed that migrants with postgraduate education prior to migration, faced higher skill discounting, reflecting a tendency to overlook highly-skilled individuals in the employment process(Dietz et al., 2015). This finding challenges human capital theory that posits better employment experiences with additional years of education and training(Becker, 1962). Furthermore, this study offers new insights into the different types of skill discounting, and employee outcomes of skill discounting for migrants, particularly based on age, time in the host country, and education levels.

Table 7.1 presents the findings of Study 1.

Table 7.1 Findings of Study 1

Demographic factors	Extent	Reasons	On the job outcomes (skill utilisation, work responsibility, earnings, and job satisfaction)
Sex	Male migrants more likely to be skill-discounted than female migrants	Skill discounting due to lack of recognition of qualifications, lack of Australian licensing/registration, and discrimination mostly experienced by female migrants than male migrants. Male migrants most likely to experience lack of job opportunities than female migrants	Both female migrants and skill-discounted females have higher skill utilisation, work responsibility, and better attitudes to current job, while males, including skill-discounted males, earned more
Age at arrival	Migrants aged less than 25 years were most likely to be skill-discounted, followed by migrants aged 25-34 years, migrants aged 35-44 years and migrants aged 45 years or above	Skill discounting due to insufficient experience was mostly faced by younger migrants (aged less than 25 years). Migrants aged 34-44 years faced skill discounting due to their qualifications not being recognised and lack of Australian licensing/registration. Interestingly, Australian employers did not discriminate against migrants based on age	While older migrants had higher skill utilisation and earnings, older skill-discounted migrants (45 years or above) exhibited lower skill utilisation and work responsibility than their skill-discounted younger counterparts. No significant difference was identified for earnings and job satisfaction among skill-discounted migrants of different ages
Time in the host country	Migrants who had been in the country for 6 years or longer were more likely to face skill discounting than those who had been in the country for 3-5 years and 2 years or less	Skill discounting due to insufficient English, overseas qualifications not being recognised, lack of Australian licensing/registration mostly experienced by recent migrants (2 years or less). Skill discounting due to lack of job opportunities mostly experienced by migrants who had been in the country for 6 years or longer	Both migrants who had been in the country for a shorter duration and skill-discounted migrants in the country for shorter durations exhibited higher skill utilisation. Work responsibility was higher for skill-discounted migrants who had been in the country for longer. No differences in earnings and job satisfaction levels were found for skill-discounted migrants across different time in the host country category

Demographic factors	Extent	Reasons	On the job outcomes (skill utilisation, work responsibility, earnings, and job satisfaction)
Prior education	Migrants with postgraduate qualifications most likely to be skill-discounted than those with pre-degree, non-degree, and undergraduate degree	Skill discounting due to lack of Australian licensing/registration was mostly experienced by migrants with pre-degree education than those with postgraduate education	Migrants with pre-degree education had higher skill utilisation and earnings, and better satisfaction on the job. Skill-discounted undergraduates demonstrated better skill utilisation. No differences in work responsibility, earnings, and most of the satisfaction variables were observed between migrants with varying education levels

7.2.2 Study 2: Refuge industries for skill-discounted migrants

The findings of Study 2 offer new insights into the role of skill discounting in migrant employment across industries. The study advances the literature by confirming the evidence for refuge industries for skill-discounted migrants and broadening its scope beyond the hospitality industry (Treuren et al., 2021b). The study found industries beyond agriculture, construction, manufacturing, and accommodation to be employers of migrants (Buckley et al., 2016; Janta et al., 2011; Loosemore et al., 2021; Tham et al., 2016; Tham & Fudge, 2019). The study identified wholesale trade; retail trade; transport, postal, and warehousing; rental, hiring, and real estate services; administrative and support services; and public administration and safety to provide shelter employment for migrants, particularly skill-discounted migrants. Although previous research suggested the hospitality and construction industries as providing more opportunities for migrants in unskilled jobs who had little experience (Golubovskaya et al., 2019; Janta et al., 2011; Loosemore et al., 2021), these industries were not identified as refuge industries for skill-discounted migrants. Moreover, this study extends upon the ethnic enclave and occupational niche concepts (Liu, 2009; Portes & Jensen, 1989; Wilson & Portes, 1980) by revealing how industries outside of ethnic enclaves, such as public administration and safety, wholesale trade, and administrative support services serve as a refuge for migrants facing skill discounting.

The study also offers new insights into the type of skill discounting experienced by migrants who are currently employed in different industries. For example, migrants employed in industries such as agriculture, forestry, and fishing; retail trade; information, media, and telecommunications; and education and training had faced skill discounting due to having insufficient English. Thus, these industries provide opportunities for skill-discounted migrants to find employment despite their language barriers and lack of experience. However, this also indicates a potential disadvantage in terms of accessing roles that require higher levels of English proficiency or experience. The study also provides new insights into the skill discounting reasons experienced by those migrants who found jobs in refuge industries. Those who found jobs in the retail industry were more likely to have experienced skill discounting due to lack of sufficient experience and lack of Australian licencing/registration. Those employed in transport, postal, and warehousing were more likely to have experienced skill discounting due to insufficient English and were less likely to have been skill-discounted due to lack of Australian licensing/registration. Migrants who found jobs in rental, hiring, and real estate were more likely to have experienced skill discounting due to non-recognition of

overseas qualifications and less likely to have experienced insufficient experience as a reason for skill discounting. Additionally, those who found jobs in administrative and support services were less likely to have experienced skill discounting due to lack of Australian licensing/registration. Meanwhile, those who were employed in public administration and safety were more likely to be skill-discounted due to discrimination. No significant differences in the reasons for skill discounting were identified for those who found employment in the wholesale sector.

The study also offers new insights into the job search methods used by skill-discounted migrants across different industries. Although the existing literature suggests that migrants may lack familiarity with formal job search avenues such as recruitment agencies and newspaper advertisements (McGregor, 2007), and consequently, may predominantly rely on co-migrants or family members to find jobs (Mahuteau & Junankar, 2008; Winterheller & Hirt, 2017), this was not fully supported in this study. Skill-discounted migrants did use family and friends; however, they also used social media platforms such as Internet job sites and informal channels such as directly approaching employers across different industries, revealing the unique characteristics, hiring practices, and opportunities within different industries. Furthermore, in most of the refuge industries, lower use of employment agencies to find jobs was identified. This aligns with the general notion that migrants may lack familiarity with formal job search avenues such as recruitment agencies and newspaper advertisements (McGregor, 2007).

Table 7.2 provides the findings of Study 2.

Table 7.2 Findings of Study 2

Aspects	Industry-wise
Refuge industry	Study identified wholesale trade; retail trade; transport, postal and warehousing; rental, hiring and real estate services; administrative and support services; and public administration and safety as providing refuge employment for skill-discounted migrants
Reasons for skill discounting experienced by skill-discounted migrants who found employment across industries (compared to all other industries):	
Lack of language proficiency	Skill-discounted migrants working in industries such as agriculture, forestry and fishing; manufacturing and construction; transport, postal and warehousing; education and training; and accommodation and food services were more likely to have experienced skill discounting due to lack of language proficiency
Insufficient experience	Migrants employed in industries such as agriculture, forestry and fishing; manufacturing and construction; retail trade; and information, media and telecommunications were more likely to have experienced skill discounting due to insufficient experience
Lack of recognition of overseas qualifications	Found mostly in skill-discounted migrants employed in information, media and telecommunications; rental, hiring and real estate; and education and training and less by migrants now in arts and recreation services
Lack of Australian licensing/registration	Migrants who found jobs in electricity, gas, water and waste services; retail trade; and healthcare and social assistance were more likely to have experienced skill discounting due to lack of Australian licensing/registration
Discrimination	Less significant
Lack of demand of expertise	Found mostly in rental, hiring and real estate; professional, scientific and technical services; public administration and safety; financial and insurance services; and arts and recreational services
Job search methods	
Employment agencies	Used mostly in mining; electricity, gas, water and waste services; professional, scientific and technical services; and healthcare and social assistance. However, this method was less likely to be adopted by skill-discounted migrants employed in construction; wholesale trade; and public administration and safety
Family and friends	Used to find jobs by skill-discounted migrants in agriculture, forestry and fishing; transport, postal and warehousing; accommodation and food services; rental, hiring and real estate; public administration and safety; and arts and recreational services. This method was less likely to be used by skill-discounted migrants who found jobs in construction; wholesale trade; financial and insurance services; and, the education and training sector

Aspects	Industry-wise
Approached by employer	Skill-discounted migrants who found jobs in wholesale trade; accommodation and food services; financial and insurance services; and professional, scientific and technical services were more likely to have been approached by an employer. However, this method was less common for skill-discounted migrants who found jobs in manufacturing; construction; retail trade; arts and recreational services; and personal and community services
Self-employed	Skill-discounted migrants who found jobs in the agriculture sector; financial and insurance services; education and training; and healthcare and social assistance were more likely to be self-employed compared to in all other industries. Being self-employed was less likely for skill-discounted migrants who were in mining; electricity, gas, water and waste services; wholesale trade; accommodation and food services; information, media and telecommunications; professional, scientific and technical services; administrative and support services; and personal and community services
Direct approach to employer	More likely to be used by skill-discounted migrants who found jobs in rental, hiring and real estate; administrative and support services; and education and training, while this method was less likely to be used by skill-discounted migrants who found jobs in agriculture, forestry and fishing; mining; manufacturing; electricity, gas, water and waste services; and professional, scientific and technical services
Study placements	Study placements were more likely to be a job search method for skill-discounted migrants employed in agriculture, forestry and fishing; financial and insurance services; professional, scientific and technical services; and education and training
Internet job sites	This was a popular job search method adopted by skill-discounted migrants to find job in a wide range of industries such as manufacturing; construction; wholesale trade; retail trade; accommodation and food services; information, media and telecommunications; and professional, scientific and technical services. However, this method was less likely to be used by skill-discounted migrants who found jobs in agriculture, forestry and fishing; mining; financial and insurance services; rental, hiring and real estate services; the education and training sector; the healthcare and social assistance sector; and arts and recreational services

7.2.3 Study 3: Local qualifications and the experience of skill discounting

Study 3 advances the literature with new insights and challenging perspectives on possessing local qualifications and its influence on the experience of skill discounting. This study found that a significantly higher proportion of migrants who experienced skill discounting had local qualifications. This challenges the existing literature that found better employment prospects for migrants with host country qualifications (Bevelander, 2000; Blackmore et al., 2017; Chen & Skuterud, 2018; Dahlstedt & Bevelander, 2010; Owusu & Sweetman, 2015; Rajendran et al., 2020; Tharmaseelan et al., 2010). The findings also prompt a re-evaluation of assimilation narratives, suggesting that the attainment of local qualifications does not always translate into better labour market experiences for migrants (Hawthorne, 2010a; Tan & Cebulla, 2022).

The study also adds to the literature by examining the type of skill discounting experienced by migrants, providing insight into the role of local qualifications in the process. It was found that migrants without local qualifications faced challenges due to insufficient English language skills, non-recognition of overseas qualifications, discrimination, and insufficient experience. Interestingly, skill-discounted migrants without local qualifications were in jobs with higher skill utilisation and higher earnings compared to skill-discounted migrants with local qualifications, further raising questions about the perceived benefits of acquiring local qualifications. This further confirms that for skill-discounted migrants who are employed, a local qualification does not guarantee a job in which they experience better skill utilisation, higher earnings, or better working conditions.

The study also looked into the level of qualification and revealed that migrants with university-level qualifications were more likely to experience skill discounting. This finding contradicts the human capital assumption that additional education leads to better labour market outcomes (Becker, 1962, 1975). In fact, the current study suggests that the more skilled the migrant, the more they are likely to face adverse labour market experiences (Dietz, 2015). However, despite this, skill-discounted migrants with university level qualifications had better earnings than migrants with non-university level qualifications. The findings offer new insights into the role of the field of local qualifications in the experience of skill discounting. It was found that migrants with local qualifications in the field of Social Sciences were more likely to face skill discounting than in other fields.

Table 7.3 presents the findings of Study 3.

Table 7.3 Findings of Study 3

Experience of skill discounting examined through extent, reasons, and employee outcomes	Findings for local qualifications
Extent	Identified that skill-discounted migrants were most likely to hold a local qualification, have a university-level qualification, with local qualifications in the field of Social Sciences
Reasons	Migrants without local qualifications were significantly more likely to report insufficient experience, lack of overseas qualifications not being recognised, lack of Australian licensing/registration, and insufficient English than migrants with local qualifications. On the other hand, migrants with local qualifications were notably more likely to experience a lack of demand for their expertise Migrants with non-university level qualifications were more likely to face a lack of demand for their expertise and discrimination than those with university-level qualifications. However, migrants with university-level qualifications reported more issues with obtaining Australian licensing/registration and insufficient English proficiency. No significant differences were found in the following reasons for skill discounting: insufficient experience and overseas qualifications not being recognised between migrants with non-university level qualifications and migrants with university-level qualifications. A higher proportion of migrants with local qualifications in hospitality cited a lack of demand for their expertise and insufficient English as the reason for skill discounting, while insufficient experience was less prevalent compared to migrants with local qualifications in other fields. Migrants with local qualifications in the health sector faced challenges related to overseas qualifications not being recognised and obtaining Australian licensing/ registration. Discrimination was more commonly reported by migrants with local qualifications in the health sector
On-the-job outcomes:	

Experience of skill discounting examined through extent, reasons, and employee outcomes	Findings for local qualifications
Skill utilisation	The analysis revealed that skill-discounted migrants without local qualifications and those with non-university level qualifications tended to exhibit higher skill utilisation, while the field of qualification also played a role in determining skill utilisation, with migrants with local qualifications in hospitality showing the highest mean skill utilisation among the observed fields
Work responsibility	Migrants with local qualifications generally perceived higher work responsibility compared to those without local qualifications. However, the level of qualification (non-university vs. university) did not appear to influence work responsibility significantly. Migrants with local qualification in Hospitality had high mean work responsibility, followed by Health and by Science and Engineering, and Social Sciences/Arts. There were no significant differences in work responsibility between migrants with local qualifications in Science and Engineering and Social Sciences/Arts and migrants with local qualifications in Health and Hospitality
Earnings	Migrants without local qualifications tended to have higher earnings compared to those with local qualifications. Additionally, migrants with university-level qualifications generally earned more than those with non-university level qualifications. The field of qualification also played a role in determining earnings, with Hospitality showing the highest mean earnings among the observed fields. There were no significant differences in earnings between migrants with local qualifications in Social Sciences/Arts and Hospitality, indicating some degree of similarity in earnings across these fields
Job satisfaction	It was found that skill-discounted migrants with and without local qualifications and those with university and non-university level qualifications had similar satisfaction levels on the job. It was also identified that skill-discounted migrants with qualifications in Health and Hospitality were more satisfied on the job than those with local qualifications in Science and Engineering and Social Sciences

7.2.4 Study 4: The employment trajectories of skill-discounted migrants

Study 4 offers new insights into the employment journey of skill-discounted migrants. The study advances the literature by identifying three employment pathways for skill-discounted migrants. The desired, deviated, and distaste job pathways showcase the interconnectedness of migrants' initial employment experiences, such as the challenges they face in the labour market, their subsequent job strategies, and their perceptions of their current employment outcomes which are under-explored topics. Consistent with the existing literature, the challenges of skill devaluation were a common experience for migrants, accompanying job situations such as entry positions and survival jobs, that were considered as not being favourable (Almeida & Fernando, 2017; Creese & Wiebe, 2012; Dietz et al., 2015; Reid, 2012; Reid et al., 2014; Ressia et al., 2017a; Shinnaoui & Narchal, 2010). However, unlike previous research that has attributed skill discounting to only unfavourable labour market experiences, this study provides insight into alternate courses of action that migrants can take to minimise the influence of skill discounting on their employment outcomes. Another significant highlight of this study is the positive impact of having a growth mindset, where migrants saw their role as a learning opportunity and put in hard work and initiative (Dweck, 2016; O'Rourke et al., 2014), finally helping them achieve their desired outcomes. Furthermore, the study showcased that strategies such as undertaking short courses and volunteering activities (Fuller & Martin, 2012) may help migrants attain outcomes for which they are grateful, despite not being what they had initially expected.

Table 7.4 provides the findings of Study 4.

Table 7.4 Findings of Study 4

Employment pathways of skill-discounted migrants	
Desired	Migrants face challenges during their job search and are placed in entry-level positions within their industry or related field. They view their job as a growth opportunity and apply individual agency such as hard work and initiative. Migrants perceive full or almost full utilisation of their skills in their current job, experience upward career mobility, and feel happy about their achievements. This aligns with the classic assimilation model
Deviated	Migrants face challenges during their job search and end up in jobs outside of their field or in survival jobs. They see their job as a means of survival without growth opportunities. Adopt individual agency such as learning new skills through short courses or volunteer activities to progress towards finding a job that utilises their newly acquired skills. Experience partial utilisation of skills. Unique trajectory
Distaste	Migrants face similar job search challenges to other pathways, ending up in jobs outside of their field or in survival jobs. They view their job as a means of survival rather than as a growth prospect. Some acquire new skills in Australia, while others do not. Perceive under-utilisation of their skills and experience frustration and unhappiness about their employment outcomes. Aligns with the segmented assimilation model

7.3 Theoretical implications

The overarching purpose of this thesis has been to examine the multiple aspects of skill discounting – the underlying mechanisms of migrant employment in Australia. The four studies in the thesis confirm that skill discounting is a persistent issue that negatively impacts the full integration of migrants into the labour market (Lens, 2021; Tian et al., 2018; Treuren et al., 2021a). However, the studies highlight that multiple 2.3 of the phenomenon such as demographic factors, industry context, local qualifications, and how migrants navigated the labour market played a significant role in the experience of skill discounting and the impact it had on their trajectories. The studies highlight that the experience of skill discounting was not the same for all migrants. For instance, female migrants generally faced lower levels of skill discounting than male migrants. Migrants with local qualifications in specific fields and at different levels of education had better outcomes than other fields and levels of qualification. Some skill-discounted migrants experienced upward mobility in their careers, finding opportunities to utilise their skills and advance professionally. Others, however, felt stuck in roles that did not match their qualifications or aspirations. These findings offer new insight into

the barriers that migrants face in the host country labour market. While existing studies indicate unfavourable outcomes and experiences for all migrants in general (Alboim et al., 2005; Almeida et al., 2012; Esses & Dietz, 2007; Pieroni et al., 2022; Reid, 2012; Shinnaoui & Narchal, 2010; Xie, 2024), this thesis does not treat migrants as a homogeneous group. It identifies that the magnitude and influence of these barriers are not the same for all migrants, and highlights that a one-size-fits-all approach will not be effective in addressing the issue of skill discounting. Instead, nuanced and targeted strategies are required.

A major finding of this thesis is that a majority of the migrants in the four studies reported a lack of demand for their expertise or a lack of opportunities as their main skill discounting reasons. This was experienced by most of them irrespective of sex, age, duration of stay, educational levels, or despite having local qualifications. This finding points to a discrepancy between the skills shortage list and labour market requirements. The main purpose of the skills shortage list in countries such as Australia is to alleviate skill shortages in the country by attracting skilled migrants who can fill these specific roles (Harrap et al., 2022; Rajendran et al., 2017; Rajendran et al., 2020). However, the findings indicate a potential mismatch between policy frameworks and actual employment practices. This repeats the concerns raised by researchers who have mentioned that although the skills shortage list is designed to align market demands with migration, it fails to meet the actual labour market needs or preferences of employers (ABC, 2023; Groutsis, 2003; Somerville & Walsworth, 2010). This calls for updating of the skills shortage list (ABC, 2023). However, employers may also play a role in this regard. While developing the skills shortage list, employer feedback and preferences should be ascertained to ensure that prioritised qualifications and skills align with labour market needs. Furthermore, employer awareness programmes to reduce bias against foreign qualifications and better information to evaluate the skills of migrants can be provided.

Study 1 and 3 challenge assumptions about additional education and higher education providing better integration experiences for migrants (Becker, 1975; Dolton & Vignoles, 2000). They offer a more complex view of migrants' labour market integration. Policymakers and educational institutions can work to ensure that migrants graduating from Australian universities receive relevant guidance and support for building their career. Policymakers should also update information about labour market demand for employees so that migrants are aware of the scope of a given course in the labour market and their potential employment prospects.

The findings of Study 3 and 4 offer two different insights into the role of local qualifications. Study 3 identified that skill discounting was experienced primarily by those with local qualifications, while Study 4, which explored the employment experiences of skill-discounted migrants, found that most of the migrants who were in the desired job pathway (where they perceived full utilisation of their skills) were those who had attained local qualifications as international students, although some exceptions were found. Therefore, although Study 3 challenges the existing literature on the positive outcomes associated with gaining local qualifications (Bevelander, 2000; Blackmore et al., 2017; Chen & Skuterud, 2018; Dahlstedt & Bevelander, 2010; Owusu & Sweetman, 2015; Rajendran et al., 2020; Tharmaseelan et al., 2010), Study 4 supports the findings in the literature. One reason for this could be the inclusion of graduates from hospitality programs. Hospitality is regarded as an industry with diverse roles requiring varying skill levels. Hence, migrants who held local qualifications in hospitality might have had better opportunities to move upwards and find appropriate positions.

7.4 Policy implications

Policymakers can play a crucial role in addressing the issue of skill discounting by considering the following courses of action:

Update and revise the skilled occupations list: Given the research findings that many migrants in almost all studies faced skill discounting due to a lack of demand for their expertise or a lack of job opportunities, policymakers should consider updating the skilled occupations list to reflect current labour market realities. Revision of the skilled occupations list ensures that requisite skills align with actual labour market needs, reducing the mismatch between migrants' skills and available opportunities.

Streamline the process for the recognition of migrants' qualifications: Policymakers should consider streamlining the process for recognising overseas qualifications and licensing/registration of migrants, particularly in fields such as the Social Sciences. They could even simplify the accreditation process in industries such as healthcare or in professional fields such as engineering. This would be a way for policymakers to improve pathways for migrants to gain recognition of their qualifications faster and more equitably.

Introduce more low-skill visa categories: The findings highlight that skill-discounted migrants are employed in jobs where their skills are less utilised, have lower levels of work responsibility, and lower earnings. This implies that there are worker shortages for certain unskilled positions, particularly in retail or the construction industry. Policymakers should

consider expanding visa options for low-skill migrants to address these shortages. This would provide a clearer pathway for migrants to work in industries where demand for labour exists and help them avoid the frustration of skill discounting, by knowing in advance what types of jobs they are likely to obtain.

Targeted support for migrant groups: Study 1 highlighted that different migrant groups experienced skill discounting in different ways, with some groups facing greater difficulties than others. Policies should consider targeted support for these groups. For example, female migrants faced more skill discounting than male migrants. However, despite the lower likelihood of skill discounting experiences for female migrants, they faced challenges with lack of Australian licensing/registration. Similarly, longer term migrants faced higher levels of skill discounting. Thus, policymakers should consider addressing migrant group-specific challenges and offer continuous career support and networking opportunities for these groups.

Incentivise local training programs: Migrants can be given training programs to bridge gaps in areas such as language proficiency and local work experience. Offering subsidised short courses or certification programs can help migrants overcome the factors involved in skill discounting.

7.5 Implications for employers

Employers can take the following practical steps to reduce the impact of skill discounting for migrant employees.

Foster inclusive hiring and recruitment: Employers should focus on fostering more inclusive recruitment practices based on the merit of individual applicants. Industries should encourage recruiting through formal channels so that job information is transparent and accessible to all potential employees, including migrants, on an equal basis. In addition, simplifying the hiring process and actively reaching out to migrant communities through targeted recruitment campaigns could improve diversity and help businesses tap into a wider pool of talent.

Flexible licensing requirements and support for accreditation and licensing/registration requirements: One key finding is that migrants often face skill discounting due to a lack of professional accreditation or required licensing/registration. Employers in industries requiring licenses or certifications could collaborate with local authorities to simplify or arrange a more flexible licensing/registration process. Employers could even support migrants, particularly skill-discounted migrants, to obtain these necessary accreditations so they can practice their

profession at a higher level. Employers could offer financial assistance, sponsor certification programs, and empower or motivate migrants to upskill and better use their talents.

Recognise the potential of migrants: One of the studies highlighted that several industries including the retail trade, and the transport, postal, and warehousing sector provided refuge employment for skill-discounted migrants. Although these are critical employment points for migrants, they may not be aligned to their skills. Employers should recognise these migrants as a valuable talent pool. They could create pathways for these migrants to advance to better positions that align to their skills and expertise, thereby creating a more satisfied workforce.

Promote Growth Mindset Initiatives: Encourage a workplace culture that values learning and development. Offering training, mentoring, and opportunities for upskilling can enable skill-discounted migrants to advance in their careers, despite their initial challenges.

7.6 Implication for educational institutions

Educational institutions also play an important role in improving the experiences of skill discounting among migrants:

Design local qualifications to meet labour market demands: Educational institutions should design local qualifications to make them more closely aligned with the demands of the labour market. They could engage with employers from key industries, including refuge industries, in curriculum development to ensure that the skills obtained through these programs are better recognised.

Recognise prior skills and learning: Educational institutions should create better systems to recognise the prior education and skills of migrants. Recognising these prior learnings can help reduce unnecessary duplication of training, and facilitate a smoother and quicker transition to their professions.

Provide more soft skills programs: Education providers could expand language proficiency courses and job-specific soft skills training to help migrants meet the cultural and linguistic expectations of the workplace.

7.7 Implications for migrants

The studies in this thesis also offer several implications for migrants themselves.

What to expect: By providing information on the magnitude of skill discounting among migrants, these four studies can help them set realistic expectations and prepare accordingly. In this way, migrants can conduct a self-assessment to understand which skills are transferable

and valued in the Australian job market. Migrants could also engage in continuous professional development to bridge any gaps between their current skills and industry standards. They could also try gaining credential evaluation from authorised and recognised agencies so that Australian employers have a clearer understanding of the value of overseas qualifications and skills. Furthermore, the research portrayed a positive picture for female migrants with less likelihood of skill discounting than for male migrants. This is encouraging for female migrants seeking employment in the labour market.

Consider alternative pathways: Migrants should be encouraged to view non-traditional career paths as learning opportunities. Undertaking short courses, volunteering, or accepting initially 'deviated' roles can eventually lead to desired outcomes, as seen in Study 4.

Identifying barriers in advance: Each study in this thesis identified various reasons for skill discounting, including differences in accreditation, lack of work experience, language barriers, and so on. Being aware of these reasons enables migrants to address them directly. For instance, they could familiarise themselves, even before coming to Australia, with the accreditation process, obtaining licenses, and pursuing any necessary certifications. This highlights the need for gaining local work experience through internships or volunteer work to build a relevant professional profile.

Growth mindset and skills development: Migrants need to adopt a growth mindset as this can empower them to be proactive, take the initiative, and view career setbacks as temporary. They could even consider taking additional skills development opportunities to improve their long-term employability.

Active job search: Migrants should make use of the different job search methods, including Internet platforms and directly approaching employers, rather than depending solely on family and friends, as this has been effective in different industries.

While the studies in the thesis offer valuable insight into skill discounting and its implications for migrants, the overall thesis comes with several limitations.

7.8 Aligning study findings with the United Nations Sustainable Development Goals (SDGs)

The findings of this align with several United Nations Sustainable Development Goals (SDGs, particularly those focussed on economic growth, decent work, reduced inequalities. The current research highlights how skill discounting impacts the employment experiences of migrants and

identifies the barriers that prevent their full skill utilisation. Achieving these challenges contributes to achieving the following SDG's:

1. SDG 8: Decent work and economic growth

   Target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

   This research reveals that skill discounting influences migrant's employment experiences, they are often in positions with reduced skill utilisation, work responsibility and earnings. Overcoming skill discounting through better credential recognition, targeted employment support, and workplace integration policies can enhance migrant's access to **decent and meaningful employment**, ultimately driving economic growth.

2. SDG 10: Reduced inequalities

   Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

   Target 10.3: Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

   Target 10.7: Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.

   The study highlights how demographic factors (sex, age, and time in the country) influence the likelihood of skill discounting and the issue of discrimination. Recognising these disparities and policies to address discriminatory behaviour can help reduce employment inequalities and promote fair treatment in the labour market.

7.9 Transferability of the findings

The findings of this study on skill discounting among migrants in Australia have broader implications that extend beyond the specific national context. The experiences of skill-discounted migrants in Australia might share similarities with those other migrant-receiving countries, such as Canada, New Zealand and the United Kingdom. These nations also have points-based migration system that prioritise skilled migration but often fail to ensure that migrants can fully utilise their skills and qualifications upon arrival (Bauder, 2003a; Coates &

Carr, 2005; Dimanche & Perzyna, 2024; Skeldon, 2009). Research from these contexts indicates that migrants frequently face credential recognition challenges, discrimination and employment in lower-skilled roles (Akbar, 2019; Kim et al., 2016). These parallel studies indicate that the findings from the current research may be applicable in other migrant receiving countries with similar migration and labour market structures.

Also, the current findings may be transferred to migrants entering on other categories such as skilled migrants entering through partner visas, humanitarian entrants, including refugees and asylum seekers. Although those who enter on humanitarian basis hold qualifications and experience, they might face greater difficulty in obtaining credential recognition, face language barriers, have limited professional networks and may be in situations of prolonged unemployment or under-employment due to their refugee status (Andersson, 2021; Colic-Peisker & Tilbury, 2007).

Additionally, apart from international migration, the study's findings may also have implications for internal migrants, where rural-urban migration may result in similar patterns of skill underutilisation. For example, rural-urban migrants in China are found to experience barriers in economically, socially and culturally integrating into the Chines cities, often dialect of the host economy, cultural and social adaptation and financial resources playing a significant role (Wang & Fan, 2012). These challenges mirror the challenges faced by international migrants in Australia, thus suggesting transferability of the findings to internal migration.

Despite these commonalities, the study's findings may not be directly transferable to countries with different labour market dynamics. For example, in countries such as Gulf Cooperation Council (Saudi Arabia, United Arab Emirates, Bahrain), Southeast Asian countries (Malaysia, Thailand) where migration policies do not prioritise skilled migration, the nature of skill discounting may differ significantly.

7.10 Limitations and future research directions

The quantitative studies (Studies 1-3) used a conservative measure to determine skill discounting. This measure did not capture the issue of whether those migrants who were sponsored or continuing in their pre-migration occupation still encountered skill discounting. Also, this measure looked into migrant employee perspectives to understand why employers discounted their skills. Nonetheless, the study effectively managed this limitation by analysing results from a weighted sample and delving into various types of skill discounting (Treuren et al., 2021a).

Another issue was that these studies used a dataset collected during the period 2013-2018. The labour market, migration policies, and industry demands may have significantly changed since the dataset was collected; therefore, the findings may not accurately reflect the current employment landscape or the latest challenges faced by migrants, particularly in response to recent global events such as the COVID-19 pandemic.

The next section provides the limitations and future research directions specific to each study in this thesis.

7.10.1 Study 1

This study found several unexpected trends in skill discounting, and challenged traditional assumptions regarding sex, age, time in the host country, and education levels. However, it is conceivable that these factors may interact in complex ways, suggesting that no single factor alone determines the labour market experiences of migrants. Labour market institutions and the attitudes of locals may also play a role (Lee et al., 2022).

The study's cross-sectional design limited its ability to capture changes over time in skill discounting experiences among migrants. A longitudinal study could provide insights into how skill discounting evolves. By analysing the same individuals over time, researchers could examine the factors that influence changes in skill discounting, such as increases in age or time in the host country, language acquisition, or evolving labour market conditions. Furthermore, a longitudinal study could reveal the long-term impacts of skill discounting on migrants' economic integration and their overall wellbeing.

Further studies need to focus on the intersection of different factors such as sex and age on skill discounting and its outcomes. Additionally, researchers could explore additional factors that might influence skill discounting, expanding the scope beyond those considered in this study. It would also be beneficial to see if migrants continuing in their pre-migration occupation still faced skill discounting. Future studies could incorporate employer perspectives offering a more comprehensive understanding of the factors influencing skill discounting.

In addition, while the study provides insight into the demographic factors associated with skill discounting, we need more qualitative research to add depth to the findings. For example, studies exploring how and why male migrants experience more labour market challenges, how societal expectations and perceptions of masculinity influence their experiences in negotiating skills recognition and employment opportunities, and why younger migrants experience more skill discounting. These types of studies are needed and could explore factors such as lack of

work experience and employer perceptions of reliability. Such studies may offer more contextually rich explanations for the patterns observed in this study.

Finally, one potential limitation of this study is the relatively small representation of participants aged 45 years or above, and those who have been in the country for more than 6 years, who make up only 3.7% and 9.5% of the sample, respectively. This limited sample size may affect the generalisability of the findings to older age groups and longer-term residents, particularly in understanding the unique experiences of skill discounting among migrants in these categories. However, despite this under-representation, including these participants remains valuable as it ensures the inclusion of a diverse range of perspectives and allows for a broader understanding of skill discounting across different age and time in host country groups. Future research could benefit from a larger, more balanced inclusion of these two groups to better capture their unique experiences with skill discounting and provide more comprehensive insights into the challenges faced by older and longer-term migrants.

7.10.2 Study 2

Study 2 investigated the industries that had higher proportions of skill-discounted migrants and identified certain industries as refuge industries for the skill-discounted. However, the study did not examine why these industries had a higher prevalence of skill-discounted migrants than others; for example, why public administration and safety had a higher prevalence. Furthermore, this study did not differentiate skill-discounted migrants who changed their nominated occupation to find jobs in other industries from those who changed their nominated occupation, but were still employed within their pre-migration industry; for example, a skill-discounted migrant doctor could be either employed in a position outside the healthcare industry or may be working within the healthcare sector as a care worker, although not as a doctor. The current data does not enable this differentiation.

Additionally, the study identified different reasons for skill discounting experienced by migrants employed in different industries. While these findings provide insight into the challenges that migrants faced in the labour market, and the roles taken up by migrants in various industries despite these challenges, they did not examine the kind of roles these migrants were in. Future studies could look into the nature of these roles.

Future research can also build on this study by adopting qualitative studies exploring the specific characteristics of refuge industries that make them more accessible to skill-discounted migrants. Additionally, longitudinal studies could examine how migrants' careers progress in

these industries and whether they eventually move into roles that better match their skills and qualifications. Researchers could delve into the experiences of specific migrant groups such as sponsored migrants and continuing migrants in various industries, asking questions such as 'Do sponsored migrants face skill discounting or are those migrants who stay in their pre-migration occupation employed in jobs that match their skills and abilities?' Researchers could also consider intersecting factors such as sex and ethnicity to provide a more comprehensive understanding of the experiences of diverse migrant populations.

7.10.3 Study 3

A key limitation of this study is that it did not directly test the assimilation narratives, despite referencing assimilation theory. Instead, the study used local qualifications as a tangible manifestation of assimilation into the labour market. This approach, while useful for examining the role of local qualifications, did not fully capture the broader social, cultural, and economic dimensions of assimilation. Future research could undertake a more comprehensive examination of the assimilation process in the experience of skill discounting, beyond the acquisition of local qualifications.

Also, the study did not account for the quality or reputation of educational qualifications where local qualifications were obtained. The perceived value of local qualifications may vary depending on the quality of the educational institution. For example, the qualifications from reputed or highly-rated universities may carry more weight in the labour market. This study did not account for this difference, overlooking how different qualifications may impact migrants' skill discounting experiences and employment outcomes.

Furthermore, the study grouped educational qualifications into broad categories such as university level and non-university level qualifications. This approach did not consider the specific impacts that different levels of educational attainment (for example, masters or bachelors) can have on labour market outcomes. Future research should differentiate between levels to provide more insight.

Finally, the fields of study were treated broadly in the analysis. However, as a starting point, these insights are relevant. Each occupation within a broad field such as Social Sciences or Health can have varying impacts on skill discounting. Future research should examine specific occupations within these fields to understand their unique effects on labour market outcomes.

7.10.4 Study 4

Study 4 was conducted on a small scale and lacks generalisability beyond the participant group. Although the study included participants who arrived as permanent residents and former international students, the majority were recruited from the field of hospitality and were migrants from India. Hospitality fields have many entry-level positions, which could have acted as a foot in the door for many of these migrants to attain a desired job matching their skills (Treuren et al., 2021b). The findings of this study may not apply to other graduates in different fields. Furthermore, those who came as permanent migrants were primarily from India. Therefore, the study findings may not apply to other source country migrants. Moreover, as the sample size was small, the findings may not apply to other migrants from India who were not part of the study.

The study also included former international students as skilled migrants. Although migrants who arrived as permanent residents and international students are similar as a source of skilled employees, match the skills of the host country, and are employed in Australia, their visa status might have a different impact on their experiences. As depicted in the study, former international students who were on a pathway to permanent residency faced additional challenges due to their visa status. Thus, comparing these two groups separately could have provided a different perspective.

Furthermore, the study examined migrants' perceptions of their current job. Time might have played a role which was not taken account of in the interviews. Most of the migrants had moved from their initial job situations at the time of the interview. The movement to other jobs might have brought different perceptions of skill utilisation. If interviewed during their initial job, most migrants might have sensed a stronger influence of skill discounting on their job outcomes.

As well, the study captured the experiences of those migrants who were currently employed in Australia. Migrants who remain unemployed may have a different story.

Further studies could delve into the employment journey of different groups of skill-discounted migrants – former international students, and those with temporary residence, in various fields, and from different ethnicities. Future research could also examine the role of the growth mindset for skill-discounted migrants. It may also be worth looking at how migrants feel at different points in time – as they face skill discounting, while in their first job, and when they move jobs.

7.11 Concluding remarks

This thesis significantly advances the understanding of the phenomenon of skill discounting among migrants in Australia by providing empirical evidence on its various dimensions and implications. The research highlights the complexity of skill discounting. It also demonstrates that a one-size-fits-all approach is inadequate. Instead, nuanced and targeted strategies are required to address the unique challenges faced by different migrant groups.

Policymakers should consider the findings of each study to develop fair and inclusive labour market practices. Initiatives to reduce the reasons for skill discounting, standardise accreditation procedures, update the skilled occupations list, and consider low-skill visas should be enacted. Additionally, support services and programs tailored to the specific needs of skill-discounted migrants would enhance their employability and career progression.

For migrants, understanding the factors involved in, and the consequences of, skill discounting would help them to better navigate the labour market. By setting realistic expectations, engaging in professional development, and developing better know-how of the labour market and the industries within, migrants can reduce the adverse influence of skill discounting and pursue more fulfilling career paths.

Overall, this research highlights the importance of addressing skill discounting among migrants in Australia and offers valuable insights to improve policies and practices. By recognising the diverse experiences of migrants and implementing targeted strategies, policymakers, employers, and migrants themselves can work together to reduce skill discounting and promote the full integration of skilled migrants into the Australian labour market.

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Appendix 1: Results of Study 1

Extent and reasons for skill discounting based on demographic factors

Sex

Female participants were more likely to face skill discounting due to overseas qualifications not being recognised (9.2% for females versus 6.9% for males, χ^2 (1, 11280)=17.04, p<.001)), lack of Australian licensing/registration (6.0% for females versus 4.5% for males, (1, 11280)=10.57, p<.001)), and discrimination (2.1% for females versus 0.5% for males, χ^2 (1, 11281)=63.69, p<.001)). On the other hand, skill discounting attributed to a lack of demand for expertise was predominantly experienced by male migrants, with 70.4% compared to 63.6% for females χ^2 (1, 11279)=50.37, p<.001).

Table A1.0.1 Proportion of skill-discounted migrants and skill discounting reason by sex

Table	Male	Female	Total
Skill-discounted (%)	8.9	7.3***	
Skill-discounted (in numbers)	7,992	3,289	11,281
Total by sex	90,183	45,216	135,399
Skill discounting reasons (%)			
Insufficient English	1.6	1.9	
Insufficient Experience	34.2	35.6	
Overseas qualifications not recognised	6.9	9.2***	
Lack of Australian licensing/registration	4.5	6.0**	
Discrimination	0.5	2.1***	
Lack of jobs/demand of expertise	70.4	63.6***	
			11,280

Notes:
1. Data are weighted
2. *p<.05; **p<.005; ***p<.001
3. Participants could report multiple reasons; hence, column totals may exceed 100%

Age

As can be seen in Table 6, migrants who arrived at a younger age, specifically those under 25 years, were at heightened risk of skill discounting due to insufficient experience (36.0% compared to 31.5% for migrants aged 35-44 years, χ^2 (3, 11280) =11.81, p<.05)), and lack of demand for expertise (71.8% compared to 67.6% for migrants aged 25-34 years and 66.4% for migrants aged 35-44 years, χ^2 (3, 11280) =22.59, p<.001)). Additionally, individuals aged 34-44 years faced a higher likelihood of skill discounting because of qualifications not being recognised (12.6% compared to 1.7% for those under 25 years and 8.9% for those aged 25-34 years, χ^2 (3, 11279) =218.00, p<.001)). This age group also experienced skill discounting due

to the lack of Australian licensing/registration (7.2% compared to 2.8% for migrants under 25 years and 5.3% for those aged 25-34 years, χ^2 (3, 11280) =49.40, p<.001).

Table A1.0.2 Proportion of skill-discounted migrants and skill discounting reasons by age category

	Less than 25 years	25-34 years	35-44 years	45 years & above	Total
Skill-discounted (%)	12.8	8.4	5.9	1.2	
Skill-discounted (number)	2,856	6,753	1,607	64	11,280
Total by age	22,266	80,489	27,433	5,217	135,405
Skill discounting reasons:					
Insufficient English	1.7a	1.6a	2.0a	0a	
Insufficient Experience	36.0a	34.8a,b	31.5b	25.0a,b	
Overseas qualifications not recognised	1.7a	8.9b	12.6c	12.3b,c	
Lack of Australian licensing/registration	2.8a	5.3b	7.2c	7.7a,b,c	
Discrimination	0.7a	1.1a	0.9a	0.0a	
Lack of jobs/demand for expertise	71.8a	67.6b	66.4b	60.9a,b	
Total					11,280

Notes:
1. *p<.05; **p<.005; ***p<.001
2. Data are weighted
3. Participants could report multiple reasons; hence, column totals may exceed 100%
4. Each subscript letter (a, b, c) denotes a subset of age category, categories whose proportions do not differ significantly from each other at the .05 level

Time in the host country

As can be seen in Table 8, a series of chi-square tests was undertaken to identify the forms of skill discounting if the reasons for changing occupation differed by time in the host country. Regarding the duration of residency in the host country, migrants who had been in the country for 2 years or less were more prone to skill discounting due to insufficient English proficiency (2.2% compared to 1.4% for those resident for 3-5 years and 0.5% for those resident for 6 years or more, χ^2 (2, 11280) =24.11, p<.001)), and discrimination (1.1% compared to 0.4% of those who had been in the country for 6 years and more, χ^2 (2, 11281) =7.69, p<.05)). Meanwhile,

migrants with 3-5 years of residency were more likely to experience skill discounting due to insufficient experience (38.5% compared to 34.6% for those with 2 years or less and 25.8% for those with 6 years and more, χ^2 (2, 11280) =77.78, p<.001)). Additionally, those with shorter residency periods were more susceptible to skill discounting due to qualifications not being recognised (11.0% for 2 years or less compared to 3.9% for 3-5 years and 3.1% for 6 years or more, χ^2 (2, 11280) =215.20, p<.001), and the lack of Australian licensing/registration (6.0% for 2 years or less compared to 3.9% for 3-5 years and 3.3% for 6 years or more, χ^2 (2, 11281) =33.49, p<.001)). On the other hand, migrants who had been in the country for 6 years or more were more likely to face skill discounting due to the lack of demand for expertise (75.8% compared to 65.8% for 2 years or less and 69.7% for 3-5 years, χ^2 (2, 11279) =61.23, p<.001)).

Table A1.0.3 Proportion of skill-discounted migrants and skill discounting reasons by time in the host country

	2 years or less	3-5 years	6 years & above	Total
Skill-discounted (%)	7.5	8.8	12.3	
Skill-discounted (in numbers)	6,068	3,637	1,576	11,281
Total time in the host country category	81,058	41,489	12,859	135,406
Skill discounting reasons				
Insufficient English	2.2a	1.4b	0.5c	
Insufficient Experience	34.6a	38.5b	25.8c	
Overseas qualifications not recognised	11.0a	3.9b	3.1b	
Lack of Australian licensing/registration	6.0a	3.9b	3.3b	
Discrimination	1.1a	0.9a,b	0.4b	
Lack of jobs/demand of expertise	65.8a	69.7b	75.8c	
Total				11,280

Notes:
1. Each subscript letter (a, b, c) denotes a subset of time in the host country category whose column proportions did not differ significantly from each other at the .05 level
2. Data are weighted
3. Participants could report multiple reasons; hence, column totals may exceed 100%

Prior education level

It was identified that migrants with pre-degree education levels were more likely to have been skill-discounted due to lack of Australian licensing/registration (7.4% compared to 3.6% for postgraduate-educated migrants, χ^2(3, 7857)=1047, p<.05)). Similarly, those with pre-degree

education levels were more likely to experience skill discounting due to discrimination (2.1% compared to 0.0% for those with non-degree education levels, χ^2 (3, 7858)=9.49, p<.05).

Table A1.0.4 Proportion of skill-discounted migrants and skill discounting reasons by education level

	Pre-degree	Non-degree	Under-graduate	Post-graduate	Total
Skill-discounted (%)	4.0	8.8	8.4	10.3	
Skill-discounted (in numbers)	122	589	5,534	3,154	9,399
Total by education level	3,035	6,697	66,060	30,647	106,439
Skill discounting reasons					
Insufficient English	1.4a	1.5a	1.7a	1.5a	
Insufficient Experience	35.8a	40.3a	34.6a	35.5a	
Overseas qualifications not recognised	3.6a	4.9a	7.8a	7.2a	
Lack of Australian licensing/registration	7.4a	4.9a,b	4.8a,b	3.6b	
Discrimination	2.1a	0.0b	1.0a,b	0.8a,b	
Lack of jobs/demand of expertise	67.6a	64.1a	69.0a	68.3a	
Total					11,280

Notes:
1. Each subscript letter (a, b, c) denotes a subset of prior education level category whose column proportions do not differ significantly from each other at the .05 level
2. Data are weighted
3. Participants could report multiple reasons; hence, column total may exceed 100%

The on the job outcomes of skill-discounted migrants were examined using two-way ANOVA. Separate analyses were carried out for each of the on the job outcomes such as skill utilisation, work responsibility, earnings, and satisfaction variables.

Skill utilisation

It was identified that migrant type was a significant predictor of skill utilisation F(3, 117633.67)=225.20, p<.001. The LSD post hoc test identified that skill-discounted migrants had lower levels of skill utilisation (M=2.62, SE=.04, 95% CI: 2.54, 2.690) than sponsored migrants (M=3.98, SE=.02, 95% CI: 3.93, 4.02), continuing migrants (M=4.49, SE=.03, 95% CI: 4.43, 4.55), and non-skill-discounted migrants (M=3.51, SE=.04, 95% CI: 3.44, 3.58).

Overall, sex was a significant predictor of skill utilisation F(1, 117633.67)=36.35, p<.001). Pairwise comparison revealed a significant difference in skill utilisation between male and female migrants (MD=.25, SE=.03, 955 CI; .19, .31, p<.001). Female migrants had higher skill utilisation (M=3.85, SE=.02, 95% CI: 3.81, 3.90) than male migrants (M=3.61, SE=.02, 95%

CI: 3.57, 3.65). The association between sex and migrant type on skill utilisation was significant F(3, 117633.67)=3.81, p<.05). Skill-discounted female migrants had slightly higher skill utilisation (M=2.70, SE=.06, 95% CI:2.59, 2.82) than skill-discounted male migrants (M=2.55, SE=.05, 95% CI:2.46, 2.64). Pairwise comparison revealed that this difference was significant (Mean difference (MD)=.16, Standard error (SE)=.08, 95% Confidence Interval (CI): .01, .30, p<.05).

Overall, age was not a significant predictor of skill utilisation F(3,117633.67)=1.21, p>.05). The LSD post hoc test identified that migrants aged less than 25 years had lower levels of skill utilisation (M=3.62, SE=.02, 95% CI: 3.58, 3.66) than migrants in the 25-34 years category (M=3.63, SE=.02, 95% CI:3.59, 3.67), migrants in the 35-44 years category (M=3.86, SE=.04, 95% CI: 3.79, 3.93), and migrants aged 45 years or above (M=3.91, SE=.07, 95% CI: 3.77, .4.05). The association between age and migrant type on skill utilisation was significant F(9, 117633.67)=24.44, p<.001). Pairwise comparison identified that skill-discounted migrants aged 45 years or above had the lower levels of skill utilisation (M=2.12, SE=.18, 95% CI:1.76, 2.48) than skill-discounted migrants in the 25-34 years category (M=2.63, SE=.06, 95% CI:2.52, 2.75) and skill-discounted migrants in the 35-44 years category (M=2.75, SE=.09, 95% CI:2.57, 2.93). There were no significant differences identified in skill utilisation between skill-discounted migrants in the other age categories.

Overall, time in the host country was a significant predictor of skill utilisation F(2, 117633.67)=17.48, p<.001). The LSD post hoc test identified that migrants who had been in the country for 2 years or less had higher skill utilisation (M=3.90, SE=.02, 95% CI: 3.85, 3.93) than migrants who had been in the country for 3-5 years (M=3.76, SE=.02, 95% CI: 3.71, 3.800) and migrants who had been in the country for 6 years or above (M=3.45, SE=.04, 95% CI: 3.38, 3.53). The association between time in the host country and migrant type on skill utilisation was significant F(6, 117633.67)=8.95, p<.001). Pairwise comparison identified that skill-discounted migrants who had been in the country for 3-5 years had lower skill utilisation (M=2.50, SE=.06, 95% CI:2.37, 2.620) than skill-discounted migrants who had been in the country for 2 years or less (M=2.71, SE=.05, 95% CI:2.62, 2.80). This difference was statistically significant (MD=.22, SE=.08, 95% CI:-.03, -.40, p<05).

Overall, prior education level was not a significant predictor of skill utilisation F(3, 117633.67)=1.46, p>.05). The LSD post hoc test identified that migrants with pre-degree education had higher levels of skill utilisation (M=3.81, SE=.05, 95% CUI:3.70, 3.91) than migrants with non-degree education (M=3.74, SE=.04, 95% CI:3.68, 3.81), migrants with

undergraduate education (M=3.69, SE=.02, 95% CI:3.65, 3.74), and migrants with postgraduate education (M=3.68, SE=.02, 95% CI:3.64, 3.72). There were no significant differences in skill utilisation identified between migrants with undergraduate education and migrants with postgraduate education levels (MD=.01, SE=.01, 95% CI:-.01, .02, p>.05). The association between prior education and migrant type on skill utilisation was significant F(9, 117633.67)=3.84, p<.001). It was identified that skill-discounted migrants with undergraduate education had higher levels of skill utilisation (M=2.76, SE=.05, 95% CI:2.66, 2.86) than skill-discounted migrants with non-degree education (M=2.47, SE=.10, 95% CI:2.28, 2.66). Pairwise comparison revealed that skill-discounted migrants with pre-degree education had similar skill utilisation (M=2.40, SE=.15, 95% CI:2.12, 2.68) to that of skill-discounted migrants with non-degree education (M=2.47), skill-discounted migrants with undergraduate education (M=2.76), and skill-discounted migrants with postgraduate education (M=2.68, SE=.05, 95% CI:2.58, 2.77).

Job outcomes of migrants based on demographic factors

Skill utilisation

It was identified that migrant type was a significant predictor of skill utilisation F(3, 117633.67)=225.20, p<.001. The LSD post hoc test identified that skill-discounted migrants had lower levels of skill utilisation (M=2.62, SE=.04, 95% CI: 2.54, 2.690 than sponsored migrants (M=3.98, SE=.02, 95% CI: 3.93, 4.02), continuing migrants (M=4.49, SE=.03, 95% CI: 4.43, 4.55), and non-skill-discounted migrants (M=3.51, SE=.04, 95% CI: 3.44, 3.58).

Overall, sex was a significant predictor of skill utilisation F(1, 117633.67)=36.35, p<.001). Pairwise comparison revealed a significant difference in skill utilisation between male and female migrants (MD=.25, SE=.03, 955 CI; .19, .31, p<.001). Female migrants had higher levels of skill utilisation (M=3.85, SE=.02, 95% CI: 3.81, 3.90) than male migrants (M=3.61, SE=.02, 95% CI: 3.57, 3.65). The association between sex and migrant type on skill utilisation was significant F(3, 117633.67)=3.81, p<.05). Skill-discounted female migrants had slightly higher levels of skill utilisation (M=2.70, SE=.06, 95% CI:2.59, 2.82) than skill-discounted male migrants (M=2.55, SE=.05, 95% CI:2.46, 2.64). Pairwise comparison revealed that this difference was significant (Mean difference (MD)=.16, Standard error (SE)=.08, 95% Confidence Interval (CI): .01, .30, p<.05).

Overall, age was not a significant predictor of skill utilisation F(3,117633.67)=1.21, p>.05). The LSD post hoc test identified that migrants aged less than 25 years had lower levels of skill

utilisation (M=3.62, SE=.02, 95% CI: 3.58, 3.66) than migrants in the 25-34 years category (M=3.63, SE=.02, 95% CI:3.59, 3.67), migrants in the 35-44 years category (M=3.86, SE=.04, 95% CI: 3.79, 3.93), and migrants aged 45 years or above (M=3.91, SE=.07, 95% CI: 3.77, .4.05). The association between age and migrant type on skill utilisation was significant F(9, 117633.67)=24.44, p<.001). Pairwise comparison identified that skill-discounted migrants aged 45 years or above had lower levels of skill utilisation (M=2.12, SE=.18, 95% CI:1.76, 2.48) than skill-discounted migrants in the 25-34 years category (M=2.63, SE=.06, 95% CI:2.52, 2.75), and skill-discounted migrants in the 35-44 years category (M=2.75, SE=.09, 95% CI:2.57, 2.93). There were no significant differences identified in skill utilisation between skill-discounted migrants in the other age categories.

Overall, time in the host country was a significant predictor of skill utilisation F(2, 117633.67)=17.48, p<.001). The LSD post hoc test identified that migrants who had been in the country for 2 years or less had higher levels of skill utilisation (M=3.90, SE=.02, 95% Ci: 3.85, 3.93) than migrants who had been in the country for 3-5 years (M=3.76, SE=.02, 95% CI: 3.71, 3.800), and migrants who had been in the country for 6 years or above (M=3.45, SE=.04, 95% CI: 3.38, 3.53). The association between time in the host country and migrant type on skill utilisation was significant F(6, 117633.67)=8.95, p<.001). Pairwise comparison identified that skill-discounted migrants who had been in the country for 3-5 years had lower levels of skill utilisation (M=2.50, SE=.06, 95% CI:2.37, 2.620) than skill-discounted migrants who had been in the country for 2 years or less (M=2.71, SE=.05, 95% CI:2.62, 2.80). This difference was statistically significant (MD=.22, SE=.08, 95% CI:-.03, -.40, p<05).

Overall, prior education level was not a significant predictor of skill utilisation F(3, 117633.67)=1.46, p>.05). The LSD post hoc test identified that migrants with pre-degree education had higher levels of skill utilisation (M=3.81, SE=.05, 95% CUI:3.70, 3.91) than migrants with non-degree education (M=3.74, SE=.04, 95% CI:3.68, 3.81), migrants with undergraduate education (M=3.69, SE=.02, 95% CI:3.65, 3.74), and migrants with postgraduate education (M=3.68, SE=.02, 95% CI:3.64, 3.72). There were no significant differences in skill utilisation identified between migrants with undergraduate education and migrants with postgraduate education levels (MD=.01, SE=.01, 95% CI:-.01, .02, p>.05). The association between prior education and migrant type on skill utilisation was significant F(9, 117633.67)=3.84, p<.001). It was identified that skill-discounted migrants with undergraduate education had higher levels of skill utilisation (M=2.76, SE=.05, 95% CI:2.66, 2.86) than skill-discounted migrants with non-degree education (M=2.47, SE=.10, 95% CI:2.28, 2.66).

Pairwise comparison revealed that skill-discounted migrants with pre-degree education had similar levels of skill utilisation (M=2.40, SE=.15, 95% CI:2.12, 2.68) to that of skill-discounted migrants with non-degree education (M=2.47), skill-discounted migrants with undergraduate education (M=2.76), and skill-discounted migrants with postgraduate education (M=2.68, SE=.05, 95% CI:2.58, 2.77).

Work responsibility

It was identified that migrant type was a significant predictor of work responsibility level F(3, 42541.72)=85.14, p<.001). The LSD post hoc test demonstrated that skill-discounted migrants had lower levels of work responsibility (M=1.74, SE=.03, 95% CI: 1.69, 1.790) than sponsored migrants (M=2.44, SE=.02, 95% CI:2.41, 2.47), continuing migrants (M=2.32, SE=.02, 95% CI:2.28, 2.36), and non-skill-discounted migrants (M=2.35, SE=.03, 95% Ci:2.30, 2.40).

Overall, sex was not a significant predictor of work responsibility F(1, 42541.72)=1.22, p>.05). Female migrants had higher levels of work responsibility (M=2.28, SE=.02, 95% CI:2.25, 2.31) than male migrants (M=2.20, SE=.01, 95% CI:2.17, 2.23). The association between sex and migrant type on levels of work responsibility was significant F(3, 42541.72)=3.04, p<.05). It was identified that skill-discounted female migrants were in jobs with higher levels of responsibility (M=1.82, SE=.04, 95% CI:1.74, 1.890) than skill-discounted male migrants (M=1.68, SE=.03, 95% CI:1.61, 1.75), with the difference being statistically significant (MD=.14, SE=.05, 95% CI:.04, .24, p<.05).

Overall, age was a significant predictor of levels of work responsibility F(3, 42541.72)=69.75, p<.001). The LSD post hoc test identified that migrants aged 45 years or above had lower levels of work responsibility (M=1.91, SE=.05, 95% CI:1.82, 2.00) than migrants aged less than 25 years (M=2.63, SE=.02, 95% CI:2.60, 2.67), migrants in the 25-34 years category (M=2.21, SE=.01, 95% CI:2.18, 2.240), and migrants in the 35-44 years category (M=2.00, SE=.02, 95% Ci:1.96, 2.04). The association between age and migrant type on levels of work responsibility was significant (F(9, 42541.72)=12.11, p<.001). Skill-discounted migrants in the 45 years or above category had lower levels of work responsibility (M=1.12, SE=.12, 95% CI:.88, 1.36) than skill-discounted migrants in the less than 25 years category (2.39, SE=.04, 95% CI:2.31, 2.46). There were no significant differences identified between skill-discounted migrants in the 45 years or above category and skill-discounted migrants in the 35-44 years category (MD=.26, SE=.14, 95% CI:.10,- .62).

Overall, time in the host country was a significant predictor of levels of work responsibility F(2, 42541.72)=7.81,p<.001). The LSD post hoc test identified that migrants who had been in the host country for 2 years or less had lower levels of work responsibility (M=2.08, SE=.02, 95% cI:2.05, 2.11) than migrants who had been in the host country for 3-5 years (M=2.35, SE=.02, 95% CI:2.32, 2.38), and migrants who had been in the host country for 6 years or above (M=2.33, SE=.03, 95% CI:2.28, 2.38). The association between time in the host country and migrant type on levels of work responsibility was significant (6, 42541.72)=13.29, p<.001). Pairwise comparison revealed that skill-discounted migrants who had been in the country for 2 years or less had lower levels of work responsibility (M=1.43, SE=.03, 95% CI:1.37, 1.89) than skill-discounted migrants who had been in the country for 3-5 years (M=1.81, SE=.04, 95% CI:1.98, 2.22), and skill-discounted migrants who had been in the country for 6 years or above (M=2.10, SE=.06, 95% cI:1.98, 2.22).

Overall, prior education level was not a significant predictor of levels of work responsibility F(3, 42541.72)=2.26, p>.05). The LSD post hoc test demonstrated that migrants with postgraduate education had higher levels of work responsibility (M=2.26, SE=.01, 95% CI:2.23, 2.29) than migrants with pre-degree education (M=2.25, SE=.04, 95% CI:2.18, 2.32), migrants with non-degree education (M=2.22, SE=.03, 95% CI:2.17, 2.27), and migrants with undergraduate education (M=2.23, SE=.02, 95% CI:2.20, 2.26). The association between prior education level and migrant type on levels of work responsibility was significant F(9, 42541.72)=5.31, p<.001). Pairwise comparison revealed no significant differences in levels of work responsibility between skill-discounted migrants with pre-degree education (M=1.54, SE=.11, 95%CI:1.33, 1.75), skill-discounted migrants with non-degree education (M=1.69, SE=.06, 95%CI:1.56, 1.81), skill-discounted migrants with undergraduate education (M=1.76, SE=.04, 95% CI:1.69, 1.82), and skill-discounted migrants with postgraduate education (M=1.83, SE=.04, 95% CI:1.76, 1.90).

Earnings

The LSD post hoc test demonstrated that different migrant types had different earnings on the job F(3, 1.67E+14)=52.53, p<.001). Skill-discounted migrants had the lowest earnings on the job (M=47997.39, SE=1600.70, 95% CI: 44860.03, 51134.75). It was identified that sponsored migrants had higher mean earnings (M=85008.86, SE=825.67, 95% CI:83390.55, 86627.17) than continuing migrants (M=79761.49, SE=1412.77, 95% CI: 76992.47, 82530.50), and non-skill-discounted migrants (M=63715.12, SE=1601.08, 95% CI: 60577.02, 66853.22). Table E2 provides the mean estimate of different migrant type on earnings.

Overall, sex was a significant predictor of earnings F(1, 1.67E+14)=15.99, p<.001). Male migrants had higher mean earnings (M=75659.24, SE=894.91, 95% CI: 73905.24, 77413.25) than female migrants (M=65656.58, SE=987.58, 95% CI: 63720.94, 67592.22). Pairwise comparison revealed that this difference was statistically significant (MD=10002.66, SE=1332.73, 95% CI: 7390.53, 12614.79, p<.001). Table E1 provides the results of the test of between subject effects of sex on earnings.

The interaction effect of migrant type and sex was also significant F(1.67E+14, 3)=3.50, p<.05). It was found that skill-discounted male migrants had higher mean earnings (M=52589.96, SE=1985.87, 95% CI: 48697.67, 56482.24) than skill-discounted female migrants (M=41815.09, SE=2637.66, 95% CI: 36645.30, 46984.87). Pairwise comparison revealed that this difference was significant (MD=10774.87, SE=3301.65, 95% CI: 4303.66, 17246.08, p<.005). Table E2 provides the mean estimates of different migrant type on earnings.

Overall, age at arrival was a significant predictor of earnings F(3, 1.67E+14)=26.90, p<.001). The LSD post hoc test revealed a significant difference in earnings between all age groups. Migrants aged less than 25 years had lower mean earnings (M=53702.76, SE=949.02, 95% CI: 51842.68, 55562.84) than migrants aged 25-34 years (M=66330.47, SE=849.18, 95% CI: 64666.09, 67994.86), and migrants aged 35-44 years (M=85551.52, SE=1429.70, 95% CI: 82749.32, 88353.72). Migrants aged 45 years or above had the highest mean earnings (M=95330.68, SE=3175.65, 95% CI: 89106.44, 101554.91). The interaction effect between migrant type and age at arrival was found to be significant F(1.67E+14, 9)=5.12, p<.001. Table E1 provides the results of the test of between subject effects of age at arrival and the interaction between age at arrival and migrant type on earnings. Pairwise comparison revealed that skill-discounted migrants in all age categories had similar earnings with skill-discounted migrants aged less than 25 years with mean earnings of 44599.40 (SE=1871.82, 40930.64, 95% CI: 40930.64, 48268.15), skill-discounted migrants from 25-35 with M=49037.95 (SE=2361.29, 44409.84, 53666.05), skill-discounted migrants from 35-44 with M=52454.67 (SE=4042.59, 95% CI: 44531.24, 60378.10), and skill-discounted migrants from 45 years or above with M=42959.45 (SE=8703.00, 95% CI: 25901.66, 60017.25). Table E2 provides the mean estimates of the different age categories on earnings.

Overall, time in the host country was a significant predictor of earnings F(2, 1.67E+14)=13.66, p<.001). Migrants who had been in the country for 2 years or less had higher earnings (M=79332.30, SE=1010.62, 95% CI: 77351.50, 81313.11) than migrants who had been in the country for 3-5 years (M=70580.35, SE=951.31, 95% CI: 68715.78, 72444.91). Migrants who

had been in the country for 6 years or above had the lowest mean earnings on the job (M=60344.67, SE=1551.55, 95% CI: 57303.65, 63385.69). The LSD post hoc test demonstrated that this difference was significant. The interaction effect between time in the host country and migrant type was significant F(1.67E+14, 6)=9.99, p<.001). Table E1 provides the results of between subject effect of time in the host country and its interaction with migrant type on earnings. Pairwise comparison revealed that skill-discounted migrants at varying times in the host country all had similar earnings on the job. Table E2 provides the mean estimate of time in the host country on earnings.

Overall, prior education level of migrants was not a significant predictor of earnings F(3, 1.67E+14)=0.72, p>.05). Migrants with a postgraduate degree had lower earnings (M=66980.39, SE=890.15, 95% CI: 65235.70, 68725.08) than those who had pre-degree education (M=78835.23, SE=2214.86, 95% CI: 74494.12, 83176.34), those who had non-degree education (M=71613.73, SE=1544.38, 95% CI: 68586.76, 74640.70), and those who were undergraduates (M=70049.06, SE=944.57, 95% CI: 68197.72, 71900.40). The LSD post hoc test demonstrated that this difference was significant. The interaction between migrant type and prior education on earnings was not significant F(9, 1.67E+14)=1.42, p>.05). Pairwise comparison revealed no significant differences in earnings for migrants based on their prior education level.

Job satisfaction

The LSD post hoc test demonstrated that different migrant types had different attitudes to their current job F(3, 24505.32)=3.31, p<.05). Skill-discounted migrants had a better attitude to their current job (M=3.80, SE=.02, 95% CI: 3.77, 3.83) than sponsored migrants (M=3.74, SE=.01, 95% CI: 3.72, 3.76), continuing migrants (M=3.75, SE=.02, 95%CI: 3.72, 3.78), and non-skill-discounted migrants (M=3.79, SE=0.02, 95% CI:3.76, 3.83). No significant differences were identified in attitude to current job between continuing and non-skill-discounted migrants (MD=.01, Se=.01, 95% CI: .01, .02, p>.05).

Overall, sex was a significant predictor of attitude to current job F(1, 24505.32)=27.34, p<.001. Female migrants had a better attitude to current job (M=3.83, SE=.01, 95% CI:3.80, 3.85) than male migrants (M=3.71, SE=0.01, 95% CI: 3.69, 3.73). Pairwise comparison revealed that this difference was significant (MD=.11, SE=.02, 95% CI:.08, .14, p<.001). The interaction effect of sex and migrant type on attitude to job was significant F(3, 24505.32)=3.46, p<.05). Pairwise comparison revealed a significant difference in attitude to current job between skill-discounted male and female migrants (MD=.16, SE=.03, 95% CI: .09, .22, p<.001). Skill-discounted

female migrants had a better attitude to current job (M=3.89, SE=.03, 95% CI: 3.83, 3.94) than skill-discounted male migrants (MD=3.73, SE=.02, 95% CI: 3.69, 3.77).

Overall, age at arrival was not a significant predictor of attitude to current job F(3, 24505.32)(=1.99, p>0.05). The LSD post hoc test revealed a significant difference in attitude to job between all age groups. Migrants aged 35-44 years had a better attitude to current job (M=3.82, SE=.02, 95% CI:3.78, 3.85) followed by migrants in the age category 25-34 years (M=3.77, SE=.01, 95% CI:3.76, 3.79), migrants in the age category less than 25 years (M=3.75, SE=.01, 95% CI:3.73, 3.77), and migrants in the age category 45 years or above (M=3.67, SE=0.04, 95%CI: 3.62, 3.76). The association between age at arrival and migrant type on attitude to current job was significant F(9, 24505.32)=3.01, p<.005). Pairwise comparison revealed no significant differences in attitude to current job between skill-discounted migrants in different age categories. Skill-discounted migrants aged less than 25 years (M=3.77, SE=.03, 95% CI: 3.72, 3.820), skill-discounted migrants aged 25-34 years (M=3.80, SE=0.02, 95% CI: 3.76, 3.84), skill-discounted migrants aged 34-44 years (M=3.86, SE=.04, 95% CI: 3.78, 3.94), and skill-discounted migrants 45 years or above (M=3.74, Se=.10, 95% CI: 3.55, 3.930) all had similar attitudes to their current job.

Overall, time in the host country was a significant predictor of attitude to current job F(2, 24505.32)=3.02, p<.05). The LSD post hoc test revealed a significant difference in attitude to current job between migrants who had been in the host country for varying lengths of time. Migrants who had been in the host country for 6 years or above had a better attitude to current job (M=3.79, SE=0.02, 95 CI: 3.76, 3.82) than migrants who had been in the host country for 2 years or less (M=3.75, SE=.01, 95%ci: 3.73, 3.78) and migrants who had been in the host country for 3-5 years (M=3.76, SE=.01, 95 CI: 3.74, 3.78). No significant differences were identified between those who had been in the host country for 2 years or less and 3-5 years (MD=.00, SE=.004, 95% CI: -.01,.01, p>.05). The association between time in the host country and migrant type on attitude to current job was not significant F(6, 24505.323)=2.04, p>.05). However, pairwise comparison revealed no significant differences in attitude to current job between skill-discounted migrants who had been in the country for varying lengths of time. Skill-discounted migrants who had been in the host country for 2 years or less (M=3.80, SE=0.02, 95% CI: 3.74, 3.83), who had been in the country for 3-5 years (M=3.80, SXE=.03, 95%CI: 3.74, 3.85), and skill-discounted migrants 6 years or above (M=3.82, SE=.04, 95% CI: 3.75, 3.890) all had similar attitudes to their current job.

Overall, prior education level was a significant predictor of attitude to current job $F(3, 24505.32)=8.48$, $p<.001$). The LSD post hoc test identified significant differences in attitude to current job based on prior education levels of migrants. Migrants with pre-degree level education had a better attitude to current job (M=3.84, SE=.03, 95%CI: 3.79, 3.89) than migrants with non-degree education (M=3.81, SE=.02, 95% CI: 3.77, 3.84), migrants with undergraduate level education (M=3.72, Se=.01, 95% CI: 3.69, 3.740), and migrants with postgraduate education level (M=3.73, SE=.01, 95% CI: 3.71, 3.75). The association between prior education level and migrant type on attitude to current job was significant $F(6, 24505.32)=2.04$, $p<.05$). Pairwise comparison revealed no significant differences in attitude to current job between skill-discounted migrants based on their prior education level. Skill-discounted migrants with pre-degree education (M=3.85, SE=.07, 95%CI:3.72, 3.98), skill-discounted migrants with non-degree education (M=3.83, SE=.04, 95% CI:3.76, 3.91), skill-discounted migrants with undergraduate education (M=3.76, SE=.03, 95% CI: 3.71, 3.81), and skill-discounted migrants with postgraduate education (M=3.80, SE=.02, 95% CI: 3.76, 3.840) all had similar attitudes to their current job.

Appendix 2: Results of Study 2

Below is a detailed explanation of the proportion of skill-discounted migrants in each industry compared to all other industries.

Agriculture, forestry, and fishing

The analysis indicated that the agriculture, forestry, and fishing industry had a lower proportion of skill-discounted migrants (6.8%) than other industries (8.3%). The chi-square analysis indicated that this difference was statistically significant (3, 135406) =508.08, p<.001). The proportion of skill-discounted migrants employed in this industry was also less (6.8%) than the industry average of 8.4%. Furthermore, the study defined ‘a refuge industry as employing at least 150% of the all-industry average proportion of skill discounting (8.4%), amounting to 12.6%. In this regard, it was found that the agriculture, forestry, and fishing industry was not a refuge industry for skill-discounted migrants. The industry had only 6.8% skill-discounted migrants.

Mining

The analysis indicated that the mining industry had a lower proportion of skill-discounted migrants (3.0%) than other industries (8.5%) (3, 135406)=784.78, p<.001). This proportion of skill-discounted migrants employed in this industry is less (3.0%) than the industry average of 8.4%. Furthermore, the mining industry does not qualify as a refuge industry as it employs only 3.0% skill-discounted migrants, while to qualify as a refuge industry would have needed 12.6% skill-discounted migrants employed.

Manufacturing

The manufacturing industry employed more skill-discounted migrants (10.3%) than all other industries (8.2%). A chi-square analysis indicated that this difference was statistically significant (3, 135405)=533.28, p<.001). This proportion of 10.3% is more than the industry average of 8.4%. Also, the manufacturing industry cannot be considered a refuge industry as it employs only 10.3% skill-discounted migrants (less than 12.6%).

Electricity, gas, water, and waste services

It was found that the electricity, gas, water, and waste services industry employed more skill-discounted migrants (10.3%) than all other industries (8.3%) (3,135406)=15.03, p=<.005). The industry employs more skill-discounted migrants than the industry average. Furthermore, the industry cannot be considered a refuge industry as it employed only 10.3% skill-discounted migrants, while a refuge industry employs 12.6% skill-discounted migrants.

Construction

The analysis indicated that the construction industry had a lower proportion of skill-discounted migrants (5.1%) than other industries (8.6%) (3, 135406)=422.45, p<.001). This was proportion was less than the industry average employment of skill-discounted migrants. Also, construction industry cannot be classified a refuge industry as it employed less than 12.6% of skill-discounted migrants.

Wholesale trade

The analysis found that the wholesale trade industry employs a higher proportion of skill-discounted migrants (15.1%) compared to all other industries (8.2%). This difference was statistically significant (3, 135406)=335.21, p<.001). This proportion of skill-discounted migrants in the wholesale trade was more than the industry average. Furthermore, this industry is a refuge industry for this group as it employed more than 12.6% skill-discounted migrants.

Accommodation and food services

The accommodation & food services sector employs more skill-discounted migrants (9.9%) than other industries (8.2%). This difference was statistically significant (3, 135405)=3938.60, p<.001). This proportion was also higher than the industry average. However, this sector cannot be considered a refuge industry as it employs only 9.9% skill-discounted migrants (less than 12.6%).

Retail industry

The findings reveal that the retail trade employs more skill-discounted migrants (23.1%) compared to all other industries (7.4%). Chi-square analysis indicated that this difference was statistically significant (3, 135406)=3014.17, p<.001). The industry not only employs more skill-discounted migrants, it can also be considered as a refuge industry, as it employs more than 12.6% skill-discounted migrants.

Transport, postal, and warehousing

It was found that the transport, postal, and warehousing sector had a higher proportion of skill-discounted migrants (22.2%) compared to skill-discounted migrants in all other industries (7.9%) (3, 135406)=1494.70, p<.001). The industry employed more skill-discounted migrants than the industry average. Also, this sector is a refuge industry as it employs 22.2% skill-discounted migrants, which is more than 150% of the all-industry average.

Information, media, and telecommunications

The findings reveal that the information, media, and telecommunications industry employs a lower proportion of skill-discounted migrants (7.9%) compared to all other industries (8.3%). This difference was statistically significant (3, 135406)=1353.33, p<.001). The industry employed a lower proportion of skill-discounted migrants than the industry average. Also, this industry cannot be considered a refuge industry for skill-discounted migrants as it employs less than 12.6% (the all-industry average).

Financial and insurance services

It was found that the financial and insurance services industry employs a higher proportion of skill-discounted migrants (10.1%) compared to all other industries (8.2%). Chi-square analysis indicated that this difference was statistically significant (3, 135407)=785.39, p<.001). The industry employed more skill-discounted migrants than the industry average. However, this industry cannot be considered a refuge industry as it employed less than 12.6% skill-discounted migrants.

Professional, scientific, and technical services

The findings reveal that the professional, scientific, and insurance services sector employed fewer skill-discounted migrants (3.4%) compared to all other industries (9.1%). This difference was statistically significant (3, 135406)=3343.71, p<.001). This proportion is lower than the industry average, and so the sector cannot be considered a refuge industry, as it employs fewer skill-discounted migrants than 150% of the all-industry average (less than 12.6%).

Rental, hiring, and real estate

The findings reveal that the rental, hiring, and real estate sector employed a higher proportion of skill-discounted migrants (15.1%) compared to other industries (8.3%) (3, 135405)=177.10, p<.001). This proportion is higher than the industry average of 8.4%. Also, the sector is a refuge industry for skill-discounted migrants as it employs 15.1% skill-discounted migrants, which is more than the refuge industry criteria of 12.6%

Administrative and support services

The analysis found that the administrative and support services industry employed a higher proportion of skill-discounted migrants (20.4%) compared to all other industries (8.2%). This difference was statistically significant (3, 135407)=413.19, p<.001). This proportion is more than the industry average of 8.4%. This is a refuge industry for skill-discounted migrants as it employs more skill-discounted migrants than required to be considered as a refuge industry (12.6%).

Education and training

It was found that the education and training sector employed fewer skill-discounted migrants (7.7%) compared to all other industries (8.4%). This difference was statistically significant (3, 135405)=208.22, p<.001). The proportion of 7.7% is less than the industry average of skill-discounted employed. Furthermore, the sector cannot be considered a refuge industry for skill-discounted migrants as it employs 7.7% of skill-discounted migrants (less than 12.6%).

Healthcare and social assistance

It was found that the healthcare and social assistance sector employed fewer skill-discounted migrants compared to other industries. Skill-discounted migrants represented 9.2% of the total migrant employment in all other industries, while skill-discounted migrants represented only 4.2% in the healthcare and social assistance sector. This difference was statistically significant (3, 135406)=4870, p<.001). The proportion of skill-discounted migrants in the sector was also less than the industry average. It was found that the sector was not a refuge industry for skill-discounted migrants, as it had only 4.2% skill-discounted migrants.

Public administration and safety

It was found that that the public administration and safety sector employed more skill-discounted migrants (12.9%) than other industries (8.3%). This difference was statistically significant (3, 135407)=161.20, p<.001). This proportion is not only higher than the industry average, the sector can be considered a refuge industry, as it employed 12.9% skill-discounted migrants which is slightly higher than the 12.6% required to qualify as a refuge industry.

Arts and recreation services

The arts and recreation services sector employs a higher proportion of skill-discounted migrants (9.9%) compared to all other industries (8.3%). This difference was statistically significant (3, 135407) =200.92, p<.001). The proportion is higher than the industry average. However, it cannot be considered a refuge industry for skill-discounted migrants.

Personal and community services

The findings reveal that the personal and community services sector employed a lower proportion of skill-discounted migrants (6.4%) compared to all other industries (8.4%). This difference was statistically significant (3, 135406)=837.77, p<.001). This proportion is lower than the industry average. Also, this sector cannot be considered a refuge industry as it employs less than 12.6% skill-discounted migrants.

Table A2.1 Summary of Refuge industry (employing more than 150% of the industry average of 12.6%)

Refuge Industry	%
Retail Trade	23.1
Transport, Postal and Warehousing	22.2
Administrative and Support Services	20.4
Rental, Hiring and Real Estate Services	15.1
Wholesale Trade	15.1
Public Administration and Safety	12.9
More than industry average (8.4%) and less than to 150% of industry average	
Electricity, Gas, Water and Waste Services	10.3
Financial and Insurance Services	10.1
Accommodation and Food Services	9.9
Arts and recreation services	9.9
Less than industry average	
Information Media and Telecommunications	7.9
Education and training	7.7
Manufacturing and construction	7.5
Agriculture, Forestry and Fishing	6.8
Personal and Community Services	6.4
Health Care and Social Assistance	4.2
Professional, Scientific and Technical Services	3.4
Mining	3.0

Skill discounting reasons that lead migrants to find jobs in their current sector

Within agriculture, forestry, and fishing

It was found that skill-discounted migrants who were employed in agriculture, forestry, and fishing were more likely to have been skill-discounted due to insufficient English (6.2% compared to 1.7% in all other industries (1, 11280)=9.93, p<.005), and non-recognition of overseas qualifications (17.3% compared to 7.5% in all other industries) (1, 11281)=10.84, p<.001), and were less likely to have been skill-discounted due to insufficient experience (14.8% compared to 34.7% in all other industries) (1, 11281)=14.11, p<.001). This indicates that despite these barriers, migrants were more adaptable or found fewer obstacles in transitioning to agricultural roles. It may also indicate that barriers related to language and credential recognition may play a less restrictive role, or migrant skills may be in higher demand in the agriculture, forestry, and fishing industry compared to all other industries.

Table A2.2: Reasons for skill discounting for migrants in agriculture, forestry and fishing

	Agriculture, forestry, and fishing	Other Industries
Skill discounting reasons		
Insufficient English	6.2	1.7**
Insufficient Experience	14.8	34.7***
Overseas qualifications not recognised	17.3	7.5***
Lack of Australian licensing/registration	8.6	4.9
Discrimination	0	1
Lack of jobs/demand for expertise	72.5	68.4

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Mining

The findings reveal that skill-discounted migrants who found jobs in the mining industry, compared to those who found jobs in other industries, had changed their occupation due to similar skill discounting reasons. No statistically significant differences were found in the reasons between those employed in mining and in other industries. This similarity suggests that the skill discounting reasons were equally significant in prompting migrants to change their nominated occupations, regardless of whether they entered the mining industry or opted for other industries.

Table A2.3 Reasons for skill discounting for migrants in mining

	Mining	Other Industries
Skill discounting reasons		
Insufficient English	0	1.7
Insufficient Experience	27.9	34.7
Overseas qualifications not recognised	10	7.6
Lack of Australian licensing/registration	1.8	5
Discrimination	1.8	0.9
Lack of jobs/demand for expertise	60.4	68.5

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Manufacturing

Most of the reasons for skill discounting experienced by migrants now employed in the manufacturing industry were similar to those of skill-discounted migrants employed in all other industries. However, skill-discounted migrants employed in the manufacturing industry were less likely to have changed their nominated occupation due to insufficient experience (34.3% compared to 37.7% in all other industries) (1, 11281)=4.56, p<.05) and discrimination (0.3% in manufacturing compared to 1.0% in all other industries) (1, 11280)=4.68, p<.05).

Table A2.4 Reasons for skill discounting for migrants in manufacturing

	Manufacturing	Other Industries
Skill discounting reasons		
Insufficient English	1.1	1.7
Insufficient Experience	37.7	34.3*
Overseas qualifications not recognised	7.1	7.7
Lack of Australian licensing/registration	3.7	5.1
Discrimination	0.3	1.0*
Lack of jobs/demand for expertise	70.9	68.2
Notes: 1. Data are weighted 2. *p<.05, **p<.005, ***p<.001 3. N=11,280		

Electricity, gas, water, and waste services

It was found that skill-discounted migrants employed in electricity, gas, water, and waste services were more likely to have experienced skill discounting due to lack of Australian licensing/registration (13.2% compared to 4.8% in all other industries (1, 11281)=25.52, p<.001). Despite the barrier of local licensing/registration, there were opportunities for migrants to transition into roles in electricity, gas, water, and waste services. Other skill discounting reasons did not significantly vary between skill-discounted migrants in this industry and those in other industries.

Table A2.5 Reasons for skill discounting for migrants in electricity, gas, water, and waste services

	Electricity, gas, water, and waste services	Other Industries
Skill discounting reasons		
Insufficient English	0	1.7

Insufficient Experience	31	34.7
Overseas qualifications not recognised	7.5	7.6
Lack of Australian licensing/registration	13.2	4.8***
Discrimination	0.6	1
Lack of jobs/demand for expertise	74.1	68.4
Notes: 1. Data are weighted 2. *p<.05, **p<.005, ***p<.001 3. N=11,280		

Construction

The findings reveal that skill-discounted migrants employed in construction were more likely to have experienced skill discounting due to insufficient English (4.6% compared to 1.5% in all other industries) (1, 11280)=30.46, p<.001), insufficient experience (43.1% compared to 34.2% in all other industries) (1, 11280)=190.06, p<.001), and lack of Australian licensing/registration (7.4% compared to 4.8% in all other industries) (1, 11280)=7.69, p<.05) than those employed in all other industries. They were less likely to have been skill-discounted due to lack of job opportunities (58.8% compared to 68.9% in all other industries) (1, 11279)=25.78, p<.001).

Table A2.6 Reasons for skill discounting for migrants in construction

	Construction	**Other Industries**
Skill discounting reasons		
Insufficient English	4.6	1.5***
Insufficient Experience	43.1	34.2***
Overseas qualifications not recognised	8.0	7.6
Lack of Australian licensing/registration	7.4	4.8*
Discrimination	1.4	0.9
Lack of jobs/demand for expertise	58.8	68.9***
Notes: **1.** Data are weighted **2.** *p<.05, **p<.005, ***p<.001 3. N=11,280		

Wholesale trade

There were no significant differences in skill discounting reasons between skill-discounted migrants employed in the wholesale trade and those in other industries. This finding indicates that the skill discounting reasons that lead migrants to take up jobs in the wholesale trade were similar to those that lead these migrants to take up jobs in other industries.

Table A2.7 Reasons for skill discounting for migrants in wholesale trade

	Wholesale trade	Other Industries
Skill discounting reasons		
Insufficient English	1.2	1.7
Insufficient Experience	34.7	34.6
Overseas qualifications not recognised	5.8	7.7
Lack of Australian licensing/registration	3	5
Discrimination	1	0
Lack of jobs/demand for expertise	66.3	68.5

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Retail trade

The findings identified that skill-discounted migrants who found jobs in the retail trade had mostly experienced skill discounting due to insufficient experience (38.8% compared to 33.8% in all other industries) (1, 11280)=16.55, p<.001) and lack of Australian licensing/registration (5.9% compared to 4.8% in all other industries) (1,11281)=4.04, p<.05). On the other hand, skill-discounted migrants employed in this sector were less likely to have faced skill discounting due to insufficient English (0.5% compared to 1.9% in all other industries) (1, 11280)=17.63, p<.001) and lack of demand for expertise (65.2% compared to 69.0% in all other industries) (1, 11280)=9.99, p<.005).

Table A2.8 Reasons for skill discounting for migrants in retail trade

	Retail trade	Other Industries
Skill discounting reasons		
Insufficient English	0.5	1.9***
Insufficient Experience	38.8	33.8***
Overseas qualifications not recognised	7	7.7
Lack of Australian licensing/registration	5.9	4.8*
Discrimination	1.3	0.9
Lack of jobs/demand for expertise	65.2	69.0**

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Accommodation and food services

Skill-discounted migrants in accommodation and food services were more likely to have been skill-discounted because of insufficient English (2.6% compared to 1.6% in all other industries) (1, 11280)=6.81, p<.05) and discrimination (1.8% compared to 0.8% in all other industries) (1, 11280)=10.16, p<.005). They were less likely to have been skill-discounted due to lack of demand for expertise (65.2% compared to 68.8% in all other industries) (1, 11280)=6.82, p<.005). This suggests that accommodation and food services have more inclusive workplace cultures.

Table A2.9 Reasons for skill discounting for migrants in accommodation & food services

	Accommodation & Food services	Other Industries
Skill discounting reasons		
Insufficient English	2.6*	1.6
Insufficient Experience	35.7	34.5
Overseas qualifications not recognised	6.6	7.7
Lack of Australian licensing/registration	4.8	5
Discrimination	1.8**	0.8
Lack of jobs/demand for expertise	65.2*	68.8

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Transport, postal, and warehousing

The findings reveal that skill-discounted migrants who found jobs in the transport, postal, and warehousing industry were more likely to have experienced skill discounting due to insufficient English (3.0% compared to 1.6% in all other industries) (1,11280)=1054, p=.001). Furthermore, these skill-discounted migrants were less likely to have experienced skill discounting due to lack of Australian licensing/registration (2.4%) compared to skill-discounted migrants employed in other industries (5.2%). This difference was statistically significant (1,11281)=13.98, p<.001).

Table A2.10 Reasons for skill discounting for migrants in transport, postal and warehousing

	Transport, postal, warehousing	Other Industries
Skill discounting reasons		
Insufficient English	3	1.6**
Insufficient Experience	36.9	34.4
Overseas qualifications not recognised	7.6	7.2
Lack of Australian licensing/registration	2.4	5.2***
Discrimination	0.3	1
Lack of jobs/demand for expertise	66.7	68.6

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Information, media, and telecommunications

The findings reveal that skill-discounted migrants employed in information, media, and telecommunications were more likely to have experienced skill discounting due to insufficient experience (44.2% compared to 34.2% in all other industries) (1, 11280)=19.02, p<.001) and overseas qualifications not being recognised (10.4% compared to 7.5% in all other industries) (1, 11280)=5.22, p<.05). Furthermore, those who found jobs in this industry were less likely to have been skill-discounted due to discrimination (0.0% compared to 1.0% in all other industries) (1, 11280)=4.52, p<.05).

Table A2.11 Reasons for skill discounting for migrants in information, media, telecommunications

	Information, media, telecommunications	Other Industries
Skill discounting reasons		
Insufficient English	1.8	1.7
Insufficient Experience	44.2	34.2***
Overseas qualifications not recognised	10.4	7.5*
Lack of Australian licensing/registration	5.3	4.9
Discrimination	0	1.0*
Lack of jobs/demand for expertise	64.9	68.6

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Financial and insurance services

It was found that skill-discounted migrants employed in financial and insurance services were most likely to have experienced skill discounting due to lack of demand for expertise (73.4%

compared to 68.1% in all other industries) (1, 11280)=8.87, p<.05). They were less likely to have experienced skill discounting due to insufficient English (0.0% compared to 1.8% in all other industries) (1, 11280)=13.35, p<.001), overseas qualifications not being recognised (5.2% compared to 7.8% in all other industries) (1,11280)=6.36, p<.05), and lack of Australian licensing/registration (2.9% compared to 5.1% in all other industries) (1, 11280)=7.17, p<.05).

Table A2.12 Reasons for skill discounting for migrants in financial and insurance services

	Financial and insurance services	**Other Industries**
Skill discounting reasons		
Insufficient English	0	1.8***
Insufficient Experience	36.5	34.5
Overseas qualifications not recognised	5.2	7.8*
Lack of Australian licensing/registration	2.9	5.1*
Discrimination	0.4	1
Lack of jobs/demand for expertise	73.4	68.1**

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Rental, hiring, and real estate

The findings reveal that skill-discounted migrants who found jobs in the rental, hiring, and real estate sector were more likely to experience skill discounting due to overseas qualifications not being recognised (15.8% compared to 7.5% in all other industries) (1, 11280)=15.39, p<.001). However, these migrants were less likely to have experienced skill discounting due to insufficient experience (24.7% compared to 34.7% in all other industries) (1, 11281)=6.96, p<.05).

Table A2.13 Reasons for skill discounting for migrants in rental, hiring and real estate

	Rental, hiring, and real estate	Other Industries
Skill discounting reasons		
Insufficient English	2.5	1.7
Insufficient Experience	24.7	34.7*
Overseas qualifications not recognised	15.8	7.5***
Lack of Australian licensing/registration	5.7	4.9
Discrimination	0.6	1
Lack of jobs/demand for expertise	70.9	68.4

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Professional, scientific, and technical services

Skill-discounted migrants employed in professional, scientific, and technical services were more likely to have been skill-discounted because of lack of demand for expertise (81.0% compared to 67.6% in all other industries) (1, 11280)=51.83, p<.001). They were less likely to have been skill-discounted due to insufficient experience (19.2% compared to 35.6% in all other industries) (1, 11280)=74.80, p<.001), lack of Australian licensing/registration (1.8% compared to 5.2% in all other industries) (1, 11280)=15.11, p<.001), and discrimination (0.0% compared to 1.0% in all other industries) (1, 11280)=6.80, p<.05).

Table A2.14 Reasons for skill discounting for migrants in professional, scientific and technical services

	Professional, scientific and technical services	**Other Industries**
Skill discounting reasons		
Insufficient English	1.5	1.7
Insufficient Experience	19.2	35.6***
Overseas qualifications not recognised	8.1	7.6
Lack of Australian licensing/registration	1.8	5.2***
Discrimination	0.0	1.0*
Lack of jobs/demand for expertise	81.0	67.6***

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,281

Arts and recreation services

The analysis found that skill-discounted migrants who are currently employed in arts and recreational services were more likely to have changed their nominated occupation to find roles in their current sector due to skill discounting reasons such as discrimination (3.3% compared to 0.9% in all other industries) (1, 11281)=7.22, p<.05) and lack of demand for expertise (89.1% compared to 68.2% in all other industries) (1, 11280)=23.71, p<.001). They were less likely to have been skill-discounted due to insufficient experience (15.1% compared to 34.8% in all other industries) (1, 11280)=20.16, p<.001), overseas qualifications not being recognised (0.0% compared to 7.7% in all other industries) (1, 11280)=9.90, p<.005), and lack of Australian licensing/registration (0.0% compared to 5.0% in all other industries) (1, 11279)=6.27, p<.05).

Table A2.15 Reasons for skill discounting for migrants in arts and recreation services

	Arts and recreation services	**Other Industries**
Skill discounting reasons		
Insufficient English	0	1.7
Insufficient Experience	15.1	34.8***
Overseas qualifications not recognised	0	7.7**
Lack of Australian licensing/registration	0	5.0*
Discrimination	3.3	0.9*
Lack of jobs/demand for expertise	89.1	68.2***

Notes:

1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Administrative and support services

It was found that skill-discounted migrants who found jobs in administrative and support services were more likely to have changed their nominated occupation due to similar skill discounting reasons to those of skill-discounted migrants who found jobs in other industries. Furthermore, skill-discounted migrants employed in this sector were less likely to have experienced skill discounting due to lack of Australian licensing/registration (1.7% compared to 5.1% in all other industries) (1, 11280)=8.54, p<.005).

Table A2.16 Reasons for skill discounting for migrants in administrative and support services

	Administrative and support services	Other Industries
Skill discounting reasons		
Insufficient English	1.1	1.7
Insufficient Experience	35.3	34.6
Overseas qualifications not recognised	5.8	7.7
Lack of Australian licensing/registration	1.7	5.1**
Discrimination	0	1
Lack of jobs/demand for expertise	73.1	68.3

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Education and training

Skill-discounted migrants in the education and training industry were more likely to have been skill-discounted because of insufficient English (3.7% compared to 1.5% in all other industries) (1, 11280)=20.51, p<.001), overseas qualifications not being recognised (11.1% compared to 7.4% in all other industries) (1, 11280)=13.88, p<.001), lack of Australian licensing/registration (7.9% compared to 4.8% in all other industries) (1, 11281)=14.52, p<.001), and discrimination (1.9% compared to 0.9% in all other industries) (1, 11280)=7.27, p<.05). They were less likely to have been skill-discounted due to insufficient experience (27.1% compared to 35.1% in all other industries) (1, 11280)=19.71, p<.001).

Table A2.17 Reasons for skill discounting for migrants in education

	Education	**Other Industries**
Skill discounting reasons		
Insufficient English	3.7	1.5***
Insufficient Experience	27.1	35.1***
Overseas qualifications not recognised	11.1	7.4***
Lack of Australian licensing/registration	7.9	4.8***
Discrimination	1.9	0.9*
Lack of jobs/demand for expertise	66.9	68.5

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Healthcare and social assistance

When compared to skill-discounted migrants in other industries, skill-discounted migrants working in healthcare and social assistance were more likely to have been skill-discounted because of lack of Australian licensing/registration (12.7% compared to 4.7% in all other industries) (1, 11280)=12.81, p<.001) and discrimination (2.0% compared to 0.9% in all other industries) (1, 11280)=11.69, p<.001). They were less likely to have been skill-discounted due to lack of demand for expertise (64.0% compared to 68.9% in all other industries) (1, 11280)=9.45, p<.005).

Table A2.18 Reasons for skill discounting for migrants in healthcare and social assistance

	Healthcare & Social assistance	**Other Industries**
Skill discounting reasons		
Insufficient English	1.2	1.7
Insufficient Experience	32.2	34.8
Overseas qualifications not recognised	7.7	7.6
Lack of Australian licensing/registration	7.4***	4.7
Discrimination	2.0***	0.9
Lack of jobs/demand for expertise	64.0**	68.9
Notes: 1. Data are weighted 2. *p<.05, **p<.005, ***p<.001 3. N=11,280		

Public administration and safety

The findings reveal that, overall, skill-discounted migrants who found jobs in public administration and safety were more likely to have experienced skill discounting due to lack of demand for expertise (78.4% compared to 68.2% in all other industries) (1, 11281)=12.07, p<.001).

Table A2.19 Reasons for skill discounting for migrants in public administration and safety

	Public administration and safety	Other Industries
Skill discounting reasons		
Insufficient English	1.2	1.7
Insufficient Experience	32.9	34.6
Overseas qualifications not recognised	8.3	7.6
Lack of Australian licensing/registration	6.3	4.9
Discrimination	1	0
Lack of jobs/demand for expertise	78.4	68.2***

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,281

Arts and recreation services

The analysis found that skill-discounted migrants who are currently employed in arts and recreational services were more likely to have changed their nominated occupation to find roles in their current sector due to skill discounting reasons such as discrimination (3.3% compared to 0.9% in all other industries) (1, 11281)=7.22, p<.05) and lack of demand for expertise (89.1% compared to 68.2% in all other industries) (1, 11280)=23.71, p<.001). They were less likely to have been skill-discounted due to insufficient experience (15.1% compared to 34.8% in all other industries) (1, 11280)=20.16, p<.001), overseas qualifications not being recognised (0.0% compared to 7.7% in all other industries) (1, 11280)=9.90, p<.005), and lack of Australian licensing/registration (0.0% compared to 5.0% in all other industries) (1, 11279)=6.27, p<.05).

Table A2.20 Reasons for skill discounting for migrants in arts and recreation services

	Arts and recreation services	Other Industries
Skill discounting reasons		
Insufficient English	0	1.7
Insufficient Experience	15.1	34.8***

Overseas qualifications not recognised	0	7.7**
Lack of Australian licensing/registration	0	5.0*
Discrimination	3.3	0.9*
Lack of jobs/demand for expertise	89.1	68.2***

Notes:
4. Data are weighted
5. *p<.05, **p<.005, ***p<.001
6. N=11,280

Personal and community services

It was found that skill-discounted migrants who found jobs in personal and community services experienced skill discounting in similar ways to skill discounting experienced in other industries.

Table A2.21 Reasons for skill discounting for migrants in personal and community services

	Personal and community services	Other Industries
Skill discounting reasons		
Insufficient English	3.3	1.6
Insufficient Experience	38.6	34.5
Overseas qualifications not recognised	7.1	7.6
Lack of Australian licensing/registration	5.4	4.9
Discrimination	1.2	0.9
Lack of jobs/demand for expertise	73	68.3

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N=11,280

Job search methods of skill-discounted migrants in each industry

It was found that skill-discounted migrants found jobs in their current sector using a range of different job search methods. These methods were found to very across different industries.

Agriculture, forestry, and fishing

Skill-discounted migrants who found jobs in agriculture, forestry, and fishing predominantly relied on family and friends to find jobs (31.9% compared to 20.1% in all other industries) ($1, 9559)=6.17$, $p<.05$), followed by the use of study placements (11.1% compared to 1.3% in all other industries) ($1, 9559)=52.44$, $p<.001$), and were self-employed (9.7% compared to 3.2% in all other industries) ($1, 9558)=9.83$, $p<.005$) in this sector compared to skill-discounted migrants who used these methods in all other industries. Additionally, skill-discounted migrants were less likely to have used Internet job sites (18.1% compared to 34.8% in all other industries) ($1, 9559)=8.83$, $p<.005$) to find jobs in this sector compared to their counterparts in all other industries. The use of methods such as direct approach to employers (0.0% compared to 7.2% in all other industries) ($1, 9559)=5.57$, $p<.05$) and employment through transfers (0.0% compared to 6.7% in all other industries) ($1, 9559)=5.14$, $p<.05$) were absent among skill-discounted migrants who found jobs in this sector, unlike in other industries where these methods were well utilised by skill-discounted migrants to find jobs.

Table A2.22 Proportion of skill-discounted migrants finding jobs using different job search methods in agriculture, forestry, and fishing

	Employment agency	Family and friends	Approached by employer	Self employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Agriculture, forestry, and fishing	4.1	31.9	2.8	9.7	0.0	11.1	18.1	11.1	0.0
Other industries	7.1	20.1*	5.4	3.2**	7.2*	1.3***	34.8**	9.2	6.7*
N	9559	9559	9559	9558	9559	9559	9559	9559	9559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Mining

Skill-discounted migrants who found jobs in the mining industry were more likely to have used transfers from other jobs (18.7% compared to 6.5% in all other industries) (1, 9558)=21.74, p<.001), and employment agencies (13.2% compared to 7.1% in all other industries) (1, 9559)=5.10, p<.05) to secure employment compared to their counterparts in other industries. Internet job sites were also a crucial method for these migrants, although the use of this method was lower in mining (23.1%) than across other industries (34.8%) (1, 9559)=5.44, p<.05). Notably, directly approaching employers (0.0% compared to 7.2% in all other industries) (1, 9559)=7.06, p<.05) was virtually absent among skill-discounted migrants in the mining sector, unlike in other industries where these methods were more common for finding jobs.

Table A2.23 Proportion of skill-discounted migrants finding jobs using different job search methods in mining

	Employment agency	Family and friends	Approached by employer	Self employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Mining	13.2	26.4	7.7	0	0	0	23.1	12	18.7
Other industries	7.1*	20.2	5.4	3.3	7.2**	1.4	34.8*	9.2	6.5***
N	9,559	9,559	9,559	9,559	9,559	9,559	9,559	9,560	9,558

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001; N is the total count within each job search methods

Manufacturing

Skill-discounted migrants who found jobs in the manufacturing industry were most likely to have found these jobs through Internet job sites (38.6% compared to 34.3% in all other industries) (1, 9559)=6.37, p<.05). They were less likely to have found a job by being approached by an employer (3.4% compared to 5.6% in all other industries) (1, 95459)=7.10, p<.05), or by directly approaching an employer (3.7% compared to 7.5% in all other industries) (1, 9559)=15.73, p<.001).

Table A2.24 Proportion of skill-discounted migrants finding jobs using different job search methods in manufacturing

	Employment agency	Family and friends	Approached by employer	Self employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Manufacturing	7.5	17.9	3.4	3.9	3.7	1.9	38.6	10.0	7.1
Other industries	7.1	20.5	5.6*	3.2	7.5***	1.3	34.3*	9.2	6.6
N	9,560	9,559	9,559	9,560	9,559	9,559	9,559	9,559	9,558

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001; N is the total count within each job search methods

Construction

Skill-discounted migrants who found jobs in the construction industry were most likely to have found these jobs through Internet job sites (42.3% compared to 34.2% in all other industries) (1, 9558)=13.32, p<.001), and other Internet sites (12.2% compared to 9.1% in all other industries) (1, 9559)=5.37, p<.05). They were less likely to have found these jobs through an employment agency (3.9% compared to 7.3% in all other industries) (1, 9559)=8.34, p<.005), through family and friends (13.8% compared to 20.6% in all other industries) (1, 9558)=13.22, p<.001), and by being approached by an employer (1.6% compared to 5.6% in all other industries) (1, 9559)=14.35, p<.001)

Table A2.25 Proportion of skill-discounted migrants finding jobs using different job search methods in construction

	Employment agency	Family and friends	Approached by employer	Self employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Construction	3.9	13.8	1.6	2.2	6.5	1.0	42.3	12.2	6.9
Other industries	7.3**	20.6***	5.6***	3.3	7.2	1.4	34.2***	9.1*	6.6
N	9,560	9,559	9,559	9,559	9,559	9,559	9,558	9,559	9,559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Electricity, gas, water, and waste services

Skill-discounted migrants who found jobs in electricity, gas, water, and waste services mainly found jobs in this sector through job transfers (18.7% compared to 6.5% in all other industries) (1, 9558)=55.70, p<.001) and on other Internet sites (18.2% compared to 9.1% in all other industries) (1, 9559)=14.49, p<.001). Internet job sites were widely used by skill-discounted migrants to secure jobs in this sector; however, this was lower (23.1%) compared to skill-discounted migrants' use in other industries (34.8%). Furthermore, use of an employment agency (2.0% compared to 7.2% in all other industries) (1, 9559)= 5.90, p<.05), being self-employed (0.0% compared to 3.3% in all other industries) (1,9560)=5.02, p<.05), and Internet job sites (20.3% compared to 34.9% in all other industries) (1, 9560)=13.74, p<.001) were used less among migrants employed in this sector

Table A2.26 Proportion of skill-discounted migrants finding jobs using different job search methods in electricity, gas and waste services

	Employment agency	Family and friends	Approached by employer	Self employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Electricity, gas, water, and waste services	2.0	18.9	6.8	0	4.1	0	20.3	18.2	21.8
Other industries	7.2*	20.3	5.4	3.3*	7.2	1.4	34.9*	9.1***	6.4***
N	9,559	9,559	9,559	9,559	9,559	9,559	9,559	9,560	9,558

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Wholesale trade

Skill-discounted migrants who found jobs in the wholesale trade predominantly used Internet job sites (42.8% compared to 34.4% in all other industries) (1, 9558)=9.35, p<.005), employment through transfers (13.8% compared to 6.4% in all other industries) (1, 9560)=26.87, p<.001), and being approached by an employer (9.0% compared to 5.3% in all other industries) (1, 9559)=8.31, p<.005) to find jobs in this sector compared to their counterparts in all other industries. Although skill-discounted migrants employed in this sector used family and friends (7.7%) to find these jobs, this was lower compared to those used by skill-discounted migrants in all other industries (20.7%) (1, 9559)=31.20, p<.001). The use of an employment agency (3.5% compared to 7.2% in all other industries) (1, 9560)=6.31, p<.05), being self-employed (0.6% compared to 3.3% in all other industries) (1, 9558)=6.86, p<.05), and employment through study placements (0.0% compared to 1.4% in all other industries) (1, 9558)=4.36, p<.05) in this sector were comparatively lower compared to skill-discounted migrants using these employment methods in all other industries.

Table A2.27 Proportion of skill-discounted migrants finding jobs using different job search methods in wholesale trade

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Wholesale trade	3.5	7.7	9	0.6	7.4	0	42.8	6.4	13.8
Other industries	*7.2**	20.7***	5.3**	3.3*	7.1	1.4*	34.4**	9.4	6.4***
N	9,560	9,559	9,559	9,558	9,559	9,558	9,558	9,560	9,560

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Retail trade

Skill-discounted migrants who found jobs in the retail industry mainly found these jobs through Internet job sites (39.3% compared to 33.8% in all other industries) (1, 9560)=16.97, p<.001) compared to their counterparts in all other industries. They were less likely to have been approached by an employer (3.8% compared to all other industries) (1, 9559)=8.80, p<.005) or found their job through a transfer (4.3% compared to 7.1% in all other industries) (1, 9559)=16, p<.001)

Table A2.28 Proportion of skill-discounted migrants finding jobs using different job search methods in retail trade

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Retail trade	6.9	20.2	3.8	3.6	7.5	1.1	39.3	8.3	4.3
Other industries	7.2	20.2	5.7**	3.2	7.1	1.4	33.8***	9.4	7.1***
N	9,559	9,559	9,559	9,559	9,559	9,559	9,560	9,559	9,559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Accommodation and food services

Skill-discounted migrants in accommodation and food services were more likely to have found a job through Internet job sites (38.1% compared to 34.2% in all other industries) (1, 9558)=6.08, p<.05) as well as through direct approaches by employers (6.9% compared to 5.2% in all other industries) (1, 9559)=5.12, p<.05). They were less likely to be self-employed (2.0% compared to 3.4% in all other industries) (1, 9558)=5.61, p<.05) and to use other Internet sites (7.1% compared to 9.5% in all other industries) (1, 9559)=6.18, p<.05).

Table A2.29 Proportion of skill-discounted migrants finding jobs using different job search methods in accommodation and food services

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Accommodation and food	7.3	18.9	6.9	2.0	7.6	1.5	38.1	7.1	7.6
Other industries	7.1	20.4	5.2*	3.4*	7.1	1.3	34.2*	9.5*	6.5
N	9,560	9,559	9,559	9,559	9,559	9,559	9,560	9,559	9,559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Transport, postal, warehouse

Skill-discounted migrants who found jobs in the transport, postal, and warehouse sector found their jobs primarily through family and friends (30.7%) compared to skill-discounted migrants in other industries (19.4%) (1, 9559)=54.21, p<.001). They were less likely to have found jobs through transfers (4.5% compared to 6.8% in all other industries) (1, 9558)=5.64, p<.05), and study placements (0.4% compared to 1.4% in all other industries) (1, 9559)=5.18, p<.05).

Table A2.30 Proportion of skill-discounted migrants finding jobs using different job search methods in transport, postal and warehousing

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Transport, postal, warehouse	6.6	30.7	6.8	2.5	8.7	0.4	31.7	7.8	4.5
Other industries	7.2	19.4***	5.3	3.3	7	1.4*	34.9	9.4	6.8*
N	9,558	9,559	9,558	9,559	9,559	9,559	9,558	9,560	9,558

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Information, media, telecommunications

Skill-discounted migrants who found jobs in the information, media, and telecommunications sector were more likely to have found jobs in this sector through Internet job sites (43.7%) than skill-discounted migrants in other industries (34.3%) (1, 9559)=14.86, p<.001). Furthermore, these skill-discounted migrants were less likely to have been self-employed (1.0% compared to 3.3% in all other industries) (1, 9559)=6.32, p<.05), and employed through transfers (2.0% compared to 6.8% in all other industries) (1, 9559)=13.76, p<.001).

Proportion of skill-discounted migrants finding jobs using different job search methods in information, media and telecommunications

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Information, Media telecommunications	5.9	18.5	7.4	1	7.9	1.8	43.7	8.7	2
Other industries	7.2	20.3	5.3	3.3*	7.1	1.3	34.3***	9.3	6.8***
N	9,559	9,558	9,558	9,559	9,559	9,558	9,559	9,559	9,559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Financial and insurance services

Skill-discounted migrants who found jobs in financial and insurance services were more likely to have been approached by an employer (7.3% compared to 5.2% in all other industries) (1, 9559)=4.61, p<.05), self-employed (5.2% compared to 3.1% in all other industries) (1, 9560)=7.89, p=.005), or used their study placements (2.3% compared to 1.3% in all other industries) (1, 9559)=4.27, p<.05). Furthermore, these migrants were less likely to have found jobs through family and friends (17.0% compared to 20.5% in all other industries) (1, 9559)=4.38, p<.05) and Internet job sites (27.9% compared to 35.1% in all other

industries) (1, 9558)=13.13, p<.001).

Table A2.31 Proportion of skill-discounted migrants finding jobs using different job search methods in financial and insurance services

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Financial and insurance services	8.2	17	7.3	5.2	6.3	2.3	27.9	10.8	6.3
Other industries	7	20.5*	5.2*	3.1*	7.2	1.3*	35.1***	9.1	6.6
N	9,558	9,559	9,559	9,560	9,559	9,559	9,558	9,559	9,558

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Rental, hiring, and real estate sector

Skill-discounted migrants who found jobs in the rental, hiring, and real estate sector were more likely to have found jobs in this sector through family and friends (30.5% compared to 20.1% in all other industries) (1, 9559)=9.34, p<.005) and by directly approaching an employer (14.1% compared to 7.0% in all other industries) (1, 9559)=10.51, p=.001). Although these migrants had a higher use of Internet job sites (26.2%) to find jobs in this sector, the proportion was lower compared to those used by skill-discounted migrants in other industries (34.8%) (1, 9559)=4.48, p<.05). Also, they were less likely to have found jobs in this sector through job transfers (0.0% compared to 6.7% in all other industries) (1, 9559)=10.13, p=.001).

Table A2.32 Proportion of skill-discounted migrants finding jobs using different job search methods in rental, hiring and real estate

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Rental, hiring, and real estate	9.2	30.5	3.5	2.1	14.1	0	26.2	10.6	0
Other industries	7.1	20.1**	5.4	3.2	7.0**	1.4	34.8*	9.2	6.7*
N	9,560	9,559	9,559	9,559	9,559	9,559	9,559	9,559	9,559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Professional, scientific, technical services

Overall, skill-discounted migrants in professional, scientific, and technical services were more likely to have used an employment agency (9.9% compared to 7.0% in all other industries) (1, 9559)=6.41, p<.05), Internet job sites (40.3% compared to 34.3% in all other industries) (1, 9559)=8.11, p<.005), and methods such as being approached by an employer (7.4% compared to 5.3% in all other industries) (1, 9559)=4.75, p<.05), study placements (2.8% compared to 1.3% in all other industries) (1, 9559)=9.06, p<.005), and job transfers (8.9% compared to 6.5% in all other industries) (1, 9559)=4.93, p<.05) than skill-discounted migrants in other industries. They were less likely to have found these jobs by directly approaching an employer (2.8% compared to 7.4% in all other industries) (1, 9559)=16.26, p<.001) or by being self-employed (0.0% compared to 3.4% in all other industries) (1, 9559)=19.04, p<.001).

Table A2.33 Proportion of skill-discounted migrants finding jobs using different job search methods in professional, scientific and technical services

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Professional, scientific, & technical services	9.9*	17.8	7.4*	0.0***	2.8***	2.8**	40.3**	8	8.9*
Other industries	7	20.4	5.3	3.4	7.4	1.3	34.3	9.3	6.5
N	9559	9558	9559	9559	9559	9559	9559	9558	9559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Administrative and support services

Skill-discounted migrants who found jobs in administrative and support services were most likely to have directly approached an employer (11.3% compared to 7.0% in all other industries) (1, 9559)=7.78, p=.005) to find a job than skill-discounted migrants in other industries. They were less likely to be self-employed (1.0% compared to 3.3% in all other industries) (1, 9559)=4.71, p<.05), and to have found jobs through other Internet sites (4.4% compared to 9.4% in all other industries (1, 9559)=8.36, p<.005), and job transfers (3.1% compared to 6.7% in all other industries) (1, 9559)=6.13, p<.05) compared to skill-discounted migrants using these methods in all other industries.

Table A2.34 Proportion of skill-discounted migrants finding jobs using different job search methods in administrative and support services

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Administrative and support services	6.8	18.8	4.8	1	11.3	1	33.4	4.4	3.1
Other industries	7.1	20.3	5.4	3.3*	7.0**	1.3	34.7	9.4**	6.7*
N	9,558	9,559	9,558	9,559	9,559	9,559	9,559	9,559	9,559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Public administration and safety

Skill-discounted migrants who found jobs in public administration and safety were more likely to have found jobs through family and friends (26.3% compared to 20.1% in all other industries) (1, 9559)=4.96, p<.05). They were less likely to have found these jobs through employment agencies (2.8% compared to 7.2% in all other industries) (1, 9559) =6.11, p<.05).

Table A2.35 Proportion of skill-discounted migrants finding jobs using different job search methods in public administration and safety

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Public administration and safety	2.8	26.3	2.3	0.9	7	0	36.6	8.5	5.6
Other industries	7.2*	20.1*	5.4	3.3	7.1	1.4	34.6	9.3	6.6
N	9,559	9,559	9,559	9,559	9,559	9,559	9,559	9,559	9,559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Education and training

It was found that skill-discounted migrants who found jobs in the education and training industry were more likely to have been self-employed (7.5% compared to 2.9% in all other industries) (1, 9559)=38.54, p<.001), directly approached by an employer (14.6% compared to 6.6% in all other industries) (1, 9559)=56.78, p<.001), through study placements (3.0% compared to 1.2% in all other industries) (1, 9559)=14.35, p<.001), and through job transfers (8.9% compared to 6.5% in all other industries) (1, 9559)=4.20, p<.05) compared to skill-discounted migrants in other industries (2.9% and 6.6% respectively). Skill-discounted migrants in the sector were less likely to have used family and friends (17.1% compared to 20.5% in all other industries) (1, 9559)=4.07, p<.05) and Internet job sites (27.6% compared to 35.2% in all other industries) (1, 9559)=14.76, p<.001).

Table A2.36 Proportion of skill-discounted migrants finding jobs using different job search methods in education and training

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct Approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Education and training	9.0	17.1	4.0	7.5	14.6	3.0	27.6	7.3	8.6
Other industries	*7.0*	20.5*	5.5	2.9***	6.6***	1.2***	35.2***	9.4	6.5*
N	9,560	9,559	9,559	9,559	9,559	9,559	9,560	9,559	9,559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Healthcare and social assistance

Skill-discounted migrants in the healthcare and social assistance industry were more likely to have found these jobs through employment agencies (9.1% compared to 6.9% in all other industries) (1, 9559)=5.10, p<.05), and were more likely to be self-employed (4.8% compared to 3.1% in all other industries) (1, 9559)=6.81, p<.05). These migrants showed a lower reliance on Internet job sites (27.9% compared to 35.3% in all other industries) (1, 9558)=17.16, p<.001), and were less likely to have obtained their job through study placements (0.0% compared to 1.5% in all other industries) (1, 9559)=11.70, p<.001) compared to migrants in other industries (35.3%).

Table A2.37 Proportion of skill-discounted migrants finding jobs using different job search methods in healthcare and social assistance

	Employment Agency	Family and friends	Direct Approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Healthcare & Social Assistance	9.1	20.0	5.1	4.8	8.1	0.0	27.9	9.9	7.3
Other industries	*6.9**	20.3	5.4	3.1*	7.0	1.5***	35.3***	9.2	6.5
N	9,560	9,559	9,559	9,559	9,559	9,559	9,560	9,559	9,559

Notes:
1. Data are weighted
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Arts and recreational services

Skill-discounted migrants who found jobs in arts and recreational services predominantly found these jobs through family and friends (57.1%) compared to skill-discounted migrants who used these methods in all other industries (19.8%) (1, 9559)=95.67, p<.001). These skill-discounted migrants were less likely to have been approached by an employer (0.0% compared to 5.4% in all other industries) (1, 9559)=6.44, p<.05), or to have found their job through Internet job sites (10.7% compared to 34.9% in all other industries) (1, 9559)=28.69, p<.001).

Table A2.38 Proportion of skill-discounted migrants finding jobs using different job search methods in arts and recreational services

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Arts and recreational services	10.7	57.1	0	0	8.9	0	10.7	4.5	7.1
Other industries	7.1	19.8***	5.4*	3.3	7.1	1.4	34.9***	9.3	6.6
N	9,559	9,559	9,559	9,559	9,559	9,559	9,559	9,559	9,559

Notes:
1. Data are weighted\
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Personal and Community Services

Skill-discounted migrants who found jobs in personal and community services predominantly used other Internet sites (15.5% compared to 9.1% in all other industries) (1, 9559)=9.91, p<.005) and employment agencies (17.0% compared to 6.9% in all other industries) (1, 9559)=30.97, p<.001) to find jobs in this sector. Conversely, skill-discounted migrants being approached by an employer (1.9% compared to 5.5% in all other industries) (1, 9560)=4.95, p<.05), being self-employed (0.0% compared to 3.3% in all other industries) (1, 9559)=7.03, p<.05), and having directly approached an employer (0.0% compared to 7.3% in all other industries) (1, 9559)=16.18, p<.001) were lower or absent in the sector compared to other industries. Also, the use of Internet job sites was lower (28.2% compared to 34.8% in all other industries) (1, 9559)=3.92, p=0.5).

Table A2.39 Proportion of skill-discounted migrants finding jobs using different job search methods in personal and community services

	Employment Agency	Family and friends	Direct approach by employer	Self-employed	Direct approach to employer	Study placements	Internet job site	Other Internet site	Transfer
Personal and community services	17	23.8	1.9	0	0	0	28.2	15.5	4.8
Other industry	6.9***	20.2	5.5*	3.3*	7.3***	1.4	34.8	9.1**	6.7
N	9,559	9,559	9,560	9,559	9,559	9,559	9,559	9,559	9,560

Notes:
1. Data are weighted\
2. *p<.05, **p<.005, ***p<.001
3. N is the total count within each job search methods

Appendix 3: Results of Study 3

Within the skill-discounted migrant cohort, it was identified that 36.2% of migrants without local qualifications were more likely to report insufficient experience, while 34.1% of migrants with local qualifications reported this (χ^2 (1, 11225)=4.46, p<.05). Also, 12.0% of migrants without local qualifications reported overseas qualifications not being recognised compared to 5.6% of migrants with local qualifications reporting this factor (χ^2 (1, 11226) =140.49, p<.001). It was also identified that 6.8% of migrants without local qualifications stated a lack of Australian licensing/registration (χ^2(1, 11226)=36.91, p<.001) and 3.0% insufficient English (χ^2 (1, 11226)=51.56, p<.001) compared to 4.1% and 1.1%, respectively, of migrants with local qualifications reporting these reasons. However, 70.6% of migrants with local qualifications reported experiencing lack of demand for expertise while 63.3% of migrants without local qualifications experienced this (χ^2 (1, 11225)=59.72, p<.001).

Among skill-discounted migrants, 71.4% of migrants with non-university level qualifications were more likely to face a lack of demand for expertise (χ^2 (1, 5940)=10.39, p<.001) and 2.4% discrimination (χ^2 (1, 5941)=72.04, p<.001) than migrants with university-level qualifications (67.1% and 0.2% respectively). However, 6.0% of migrants with university-level qualifications reported a lack of Australian licensing/registration (χ^2 (1, 5941)=5.06, p<.05) and 1.2% reporting skill discounting due to insufficient English (χ^2 (1, 5940)=6.62, p<.05) than migrants with non-university level qualifications (4.5% and 0.5% respectively). No significant differences were found in the skill discounting reasons of insufficient experience and overseas qualifications not being recognised between migrants with non-university level qualifications and migrants with university-level qualifications.

Among skill-discounted migrants, it was identified that migrants with local qualifications in Hospitality (74.5%) were more likely to report a lack of demand for expertise than migrants with local qualifications in Social Sciences (71.0%), in Science and Engineering (69.7%), and Health (64.2%). This difference was statistically significant (χ^2 (3, 6630)=27.82, p<.001). Overseas qualifications not being recognised (χ^2 (3, 6631)=18.87, p<.001) and a lack of Australian licensing/registration (χ^2 (3, 6630)=12.46, p<.05) were more of an issue for migrants with local qualifications in Health (8.8%) than in other industries. Insufficient English was an issue mostly for migrants with local qualifications in Hospitality (4.1%) than in other industries (0.5% in Science and Engineering, 2.5% in Health, and 1.6% in Social Sciences/Arts) (χ^2(3, 6630)=42.74, p<.001). Furthermore, discrimination was cited mostly by migrants with local

qualifications in Health (3.2.%) than other industries (χ^2 (3, 6631)=94.06, p<.001). Insufficient experience was a less given reason in Hospitality (28.6%) than in other industries (χ^2 (3, 6631)=13.18, p<.005).

Skill utilisation

An independent samples t-test was conducted to compare mean skill utilisation between migrants with and without local qualifications. The analysis revealed that migrants without local qualifications (M = 2.81) had a significantly higher mean skill utilisation than migrants with local qualifications (M = 2.64), t-test yielded a highly significant mean difference (t (11148) = 5.61, p < .001).

A t-test was conducted to compare skill utilisation between migrants with non-university level and university-level qualifications. The results indicated a statistically significant difference between the two groups (t (5904) = 3.253, p =.001). Migrants with non-university level qualifications (M = 2.75, SD = 1.51) scored significantly higher than those with university-level qualifications (M = 2.61, SD = 1.48).

A one-way ANOVA was conducted to see if the skill utilisation of skill-discounted migrants having local qualifications in a range of fields differed. The ANOVA revealed a significant effect of field of qualification on skill utilisation (3, 13911.83)=8.44, p<.001). It was identified that migrants with local qualifications in Hospitality had high mean skill utilisation (M=2.91, SD=1.48), followed by Science and Engineering (M=2.73, SD=1.49), Social Science/Arts (2.63, SD=1.43), and Health (M=2.60, SD=1.42). The LSD post hoc test was conducted to examine pairwise comparison for different fields of qualifications. It was identified that there were no significant differences in skill utilisation between migrants with local qualifications in Health and Social Science/Arts (MD=.03, SE=.05, p>.05, 95% CI: .07, -.12).

The results revealed a statistically significant difference in work responsibility levels between migrants with and without local qualifications (t = -31.65, df = 8654, p < .001). Migrants with local qualifications had higher work responsibility (M=1.77) than migrants without local qualifications (M=1.24) with a 95% CI [-0.559, -0.494].

The results revealed no statistically significant differences in work responsibility levels between participants with non-university level qualifications (M = 1.54, SD = 0.80) and those with university-level qualifications (M = 1.52, SD = 0.78), t(4582) = 3.398, p = .45(two-tailed).

A one-way ANOVA was conducted to see if the work responsibility levels of skill-discounted migrants having local qualifications in a range of fields differed. The ANOVA revealed a significant effect of field of qualification on work responsibility levels (3, 3262.17)=3.63, p<.05). It was identified that migrants with local qualifications in Hospitality had high mean work responsibility levels (M=1.64, SD=0.81), followed by Health (M=1.63, SD=0.83), Science and Engineering (M=1.55, SD=.77), and Social Science/Arts (1.55, SD=0.80). The LSD post hoc test was conducted to examine pairwise differences between different fields of local qualifications. It was identified that there were no significant differences in work responsibility levels between migrants with local qualifications in Science and Engineering and Social Science/Arts (MD=.01, SE=.03, p>.05, 95% CI: .05, -.06), and migrants with local qualifications in Health and Hospitality (MD=.02, SE=.04, p>.05, 95% CI: .07,-.10).

Earnings

The analysis identified that migrants without local qualifications tended to have higher earnings (M=49864.94) than those with local qualifications (M=47842.52). Additionally, migrants with university-level qualifications (M=49465.89) generally earned more than those with non-university level qualifications (M=47831). The field of qualification also played a role in determining earnings, with Hospitality showing the highest mean earnings (M=51381.29) among the observed fields. However, there were no significant differences in earnings between migrants with local qualifications in Social Science/Arts and Hospitality, indicating some degree of similarity in earnings across these fields.

Migrants without local qualifications had higher earnings (M=49864.94) than migrants with local qualifications (M=47842.52). This difference was statistically significant ($t = 4.71$, $df = 9823$, $p < .001$).

An independent samples t-test was conducted to examine the differences in earnings between migrants with non-university level qualifications and those with university-level qualifications. The analysis revealed a statistically significant difference in earnings between the two groups, $t(5256) = -2.66$, $p = .008$ (two-tailed), Cohen's $d = -0.022$, when assuming equal variance. Migrants with university-level qualifications ($M = \$49,465.89$, $SD = \$20,084.20$) had significantly higher earnings than those with non-university level qualifications ($M = \$47,831.89$, $SD = \$20,323.67$).

A one-way ANOVA was conducted to see if earnings of skill-discounted migrants with local qualifications in a range of fields differed. The ANOVA revealed a significant effect of field of

qualification on earnings (3, 2.369E+12)=12.76, p<.001). It was identified that migrants with local qualifications in Hospitality had high mean earnings (M=51381.29, SD=18949.61), followed by Social Science/Arts (M=49659.78, SD=20786.68), Science and Engineering (M=48119.58, SD=20712.47) and Health (M=45981.61, SD=18320.41). The LSD post hoc test was conducted to examine pairwise differences between different fields of local qualifications. It was identified that there were no significant differences in earnings between migrants with local qualifications in Social Science/Arts and Hospitality (MD=.1721.51, SE=910.88, p>.05, 95% CI: 0.-64.14, 3507.17).

Job satisfaction

It was found that skill-discounted migrants with and without local qualifications and those with university and non-university level qualifications had similar satisfaction on the job. Furthermore, it was identified that skill-discounted migrants with qualifications in Health and Hospitality were more satisfied on the job than those with local qualifications in Science and Engineering and Social Science.

The results revealed no statistically significant differences in attitudes to current job between migrants with and without local qualifications (t = 1.80, df = 9491, p = .07). Migrants without local qualifications (M=3.78) and migrants with local qualifications (M=3.76) showed similar attitudes to their current job.

A t-test was conducted to assess the difference in attitude toward the current job between migrants with non-university level qualifications and those with university-level qualifications. The analysis revealed no statistically significant differences between the two groups, t(5074) = -1.68, p = .09 (two-tailed). Migrants with non-university level qualifications (M=3.72, SD=.53) and migrants with university-level qualifications (M=3.74, SD=.49) had similar attitudes to their current job.

A one-way ANOVA was conducted to see if the attitude to current job of skill-discounted migrants having local qualifications in a range of fields differed. The ANOVA revealed a significant effect of field of qualification on attitude to current job (3, 1243.94)=7.47, p<.001). It was identified that migrants with local qualifications in Hospitality (M=3.81, SD=0.40) and Health (M=3.81, SD=.51) had a better attitude to current job, followed by Science and Engineering (M=3.76, SD=.49), and Social Science/Arts (M=3.74, SD=.46). The LSD post hoc test was conducted to examine pairwise differences between different fields of local qualifications. It was identified that there were no significant differences in attitude to current

job between migrants with local qualifications in Science and Engineering and Social Science/Arts (MD=..02, SE=.02, p>.05, 95% CI: -.01, .05) and migrants with local qualifications in Health and Hospitality (MD=00, SE=.03, p>.05, 95% CI: .05,-.05).

Appendix 4: Information sheet for skilled migrants who came as international students

Thank you for your interest in our research on the skill discounting of international students in the hospitality industry.

For many international students and migrants finding a suitable job that fully uses their skills has been a challenge. This is a challenge because of the experience of skill discounting – sometimes employers do not fully recognise a migrant's skills, knowledge and experience. Moreover, while employers evaluate the skills of migrants several factors such as migrant's language skill, their ethnicity, quality and relevance of formal education and work experience all come under consideration.

Although we know that skill discounting is experienced mainly by migrant employees, we would like to know a migrant employees view of skill discounting and how it impacts their motivation, feelings and engagement at work. This would give a better insight on skill discounting experience of migrants in hospitality industry in Australia, a topic which is not much explored in Australian context.

Interviews

We would like to talk with you about your experience of skill discounting as employees in hospitality industry.

Your interview will provide us better insights on skill discounting and how it impacts work-related attitudes and behaviours.

We would like to speak with you for an hour, either face-to-face or by phone which is convenient to you and at a time and place convenient to you.

We will – but only with your permission – need to record the conversation.

In recognition of your time, after the interview, we will give you a $50 Coles Myer Card as an incentive.

Entirely confidential

Everything you say during the interview is confidential. We have designed the interviews and analysis process so that everything anyone says is confidential.

During the interview

It is possible that the discussion may lead to distressing memories or feelings. If at any point you feel uncomfortable or the interview raises distressing memories or feelings, you can stop the interview. If you would you need to discuss the difficult emotional issues raised by the interview with a trained counsellor, we encourage you to contact Lifeline at 13-11-14 (24 hours). If you need translation services, call the Translating and Interpreting Service on 131-450 in the language required and ask to be put through to Lifeline at 13-11-14.

What will happen to my interviews?

- We will record your interview and have the file transcribed. The recording and transcription will be kept in a locked cabinet on campus for a period of five years. You can have the recording and transcription deleted by emailing Vidya Vishnu at vidya.vishnu@mymail.unisa.edu.au
- The interviews, transcripts and analysis are strictly confidential and will only be seen by the research team and by the people involved in transcription. No individual will be identified in any way in relation to these interviews
- Your participation in this research is voluntary and you have the right to withdraw from the interview at any time.
- Participants also can choose to omit or not respond to questions and choose to omit or ask to delete any data supplied.
- All records containing personal information will remain confidential and no form of information which could lead to identification of any individual will be released, unless required by law.
- Subject to receiving ethics approval, this data may potentially be used for future research projects and/or databases. Data may be used for various reports, conference presentations, journal manuscripts, book chapters, in conjunction with data collected elsewhere.
- Participation or non-participation will not affect your status either now or in the future.
- This project has been approved by UniSA's Human Research Ethics Committee. If you have any ethical concerns about the project or questions about your rights as a participant please contact the Executive Officer of the Committee, Ms. Vicki Allen, on 8302 3118 or via email (vicki.allen@unisa.edu.au)

Obtaining the findings of this study

If you would like to receive a summary of the research findings, please contact Vidya Vishnu at *vidya.vishnu@mymail.unisa.edu.au* (08 8302 7026)

Want more information about this project?

Please contact Vidya Vishnu at *vidya.vishnu@mymail.unisa.edu.au* (08 8302 7026) or Gerry Treuren, at *gerry.treuren@unisa.edu.au* (08 8302 0640)

Yours sincerely

Vidya Vishnu
PhD Student
Centre for Workplace Excellence
School of Management
UniSA Business School

Appendix 5: Information sheet for skilled migrants who came as permanent residents



University of
South Australia

Date

Thank you for your interest in our research on the skill discounting of migrant employees in Australia

For many migrants finding a suitable job that fully uses their skills has been a challenge. This is a challenge because of the experience of skill discounting – sometimes employers do not fully recognise a migrant's skills, knowledge and experience. Moreover, while employers evaluate the skills of migrants several factors such as migrant's language skill, their ethnicity, quality and relevance of formal education and work experience all come under consideration.

Although we know that skill discounting is experienced mainly by migrant employees, we would like a migrant employee's view of skill discounting and how it impacts their motivation, feelings and engagement at work. This would give a better insight on skill discounting experience of migrants in Australia, a topic which is not much explored in the Australian context.

Interviews

We would like to talk with you about your experience of skill discounting as employees in Australian workforce.

Your interview will provide us better insights on skill discounting and how it impacts work-related attitudes and behaviours.

We would like to speak with you for an hour, face-to-face at a time and place convenient to you.

We will – but only with your permission – need to record the conversation.

Entirely confidential

Everything you say during the interview is confidential. We have designed the interviews and analysis process so that everything anyone says is confidential.

During the interview

It is possible that the discussion may lead to distressing memories or feelings. If at any point you feel uncomfortable or the interview raises distressing memories or feelings, you can stop the interview. If you would you need to discuss the difficult emotional issues raised by the interview with a trained counsellor, we encourage you to contact Lifeline at 13-11-14 (24 hours). If you need translation services, call the Translating and Interpreting Service on 131-450 in the language required and ask to be put through to Lifeline at 13-11-14.

What will happen to my interviews?

- We will record your interview and have the file transcribed. The recording and transcription will be kept in a locked cabinet on campus for a period of five years. You can have the recording and transcription deleted by emailing Vidya Vishnu at vidya.vishnu@mymail.unisa.edu.au
- The interviews, transcripts and analysis are strictly confidential and will only be seen by the research team (research student and supervisors) and by the people involved in transcription. No individual will be identified in any way in relation to these interviews
- Your participation in this research is voluntary and you have the right to withdraw from the interview at any time.
- Participants also can choose to omit or not respond to questions and choose to omit or ask to delete any data supplied.
- All records containing personal information will remain confidential and no form of information which could lead to identification of any individual will be released, unless required by law.
- Subject to receiving ethics approval, this data may potentially be used for future research projects and/or databases. Data may be used for various reports, conference presentations, journal manuscripts, book chapters, in conjunction with data collected elsewhere.
- Participation or non-participation will not affect your status either now or in the future.
- This project has been approved by UniSA's Human Research Ethics Committee. If you have any ethical concerns about the project or questions about your rights as a participant please contact the Executive Officer of the Committee, Ms. Vicki Allen, on 8302 3118 or via email (vicki.allen@unisa.edu.au)

Obtaining the findings of this study

If you would like to receive a summary of the research findings, please contact Vidya Vishnu at *vidya.vishnu@mymail.unisa.edu.au* (08 8302 7026)

Want more information about this project?

Please contact Vidya Vishnu at *vidya.vishnu@mymail.unisa.edu.au* (08 8302 7026) or Gerry Treuren, at *gerry.treuren@unisa.edu.au* (08 8302 0640)

Yours sincerely

Vidya Vishnu
PhD Student
Centre for Workplace Excellence
School of Management
UniSA Business School

Appendix 6: Consent form

UniSA | Research and Innovation Services thics Committee

CONSENT FORM CONSENT FORM

This project has been approved by the University of South Australia's Human Research Ethics Committee. If you have any ethical concerns about the project or questions about your rights as a participant please contact the Executive Officer of this Committee, Tel: +61 8 8302 3118; Email: humanethics@unisa.edu.au

SECTION 1: CONTACT AND PROJECT DETAILS	
Researcher's Full Name:	
Contact Details:	
Supervisor's Full Name:	
Contact Details:	
Protocol Number:	
Project Title:	

SECTION 2: CERTIFICATION

Participant Certification

In signing this form, I confirm that:

- I have read the Participant Information Sheet and the nature and purpose of the research project has been explained to me. I understand and agree to take part.
- I understand the purpose of the research project and my involvement in it.
- I understand that I may withdraw from the research project at any stage and that this will not affect my status now or in the future.
- I understand that while information gained during the study may be published, I will not be identified and my personal results will remain confidential, unless required by law
- I agree that my anonymous results may be used for future research, subject to ethics approval.
- I understand that I will be audiotaped during the interview.
- I understand that the tape will be will be kept in a locked cabinet on campus for a period of five years. You can have the recording and transcription deleted by emailing Vidya Vishnu at [redacted]
- I understand the statement in the information sheet concerning the $50 Coles Myer voucher.

Participant Signature	*Printed Name*	*Date*

Researcher Certification

I have explained the study to subject and consider that he/she understands what is involved.

Researcher Signature	*Printed Name*	*Date*

Appendix 7: Interview protocol for skilled migrants who came as international students

Interview protocol

Interviewee:

Interviewer:

Date of interview:

Location: (Phone)

The employee engagement of migrants: The impact of skill discounting

Interviewers to work through the following checklist:

1. Confirm that the interviewee has read the information sheet (Y/N)

2. Confirm that the interviewee has read the consent form and is happy to participate (Y/N)

3. Confirm that the interviewee is willing to be recorded according to the terms of the information sheet (Y/N)

Screening questions

1) Country of origin

2) Current visa status

3) Year of arrival in Australia and visa category of arrival

4) Current employment status. Tell me about your job. Where do you work? What are you doing? Full or part-time? Casual?

5) What did you study at LCB? What are you trained to become?

When did you graduate?

6) Have you undertaken additional study since then?

Interview Protocol (Interviewer prompts are prefixed by '-')

Work motivations

7) Could you please think of the reasons for accepting this job?

Probes:

-Do you think you accepted thinking that :

- This job would help you get PR
- This job would enable you to provide for yourself and family comfortably (moral obligation)
- This job would earn you an income (survival means)
- This job would help build networks (for integration and self-help)

-This job corresponds to the social status of the job you had back in your home country (social distinction)

- This is the best job you could find at the time and you look to get a more suitable job

-This job is an opportunity to develop yourself

-Simply because you feel good to be employed

8) Given your answers which of the reason would best describe you? (–why?)

Skill discounting experience

9) Could you please describe your experience of seeking employment in Australia?

10) Did you have any difficult or unpleasant episodes trying to get a job? (-please describe)

11) Have you had any difficulty in finding a job that matches your skills? (-Can you please elaborate?)

Probes:

-Did you experience:

- Discrimination?
    - Language barriers/employers perceive language inability
    - Lack of local experience

- Your prior experience and qualifications were not fully recognised by the recruiter or government agency?

- Do you think your current job uses your abilities fully? (-why?)

- If respondent says they do not really use their skills, ask why…

12) Do you think you had to compromise your choices of job preferences? -Can you please elaborate?

Basic psychological needs

Autonomy

13) Do you feel in your work you get to make the necessary decisions? (-describe) (-Could you please think of any situation where you thought you could make the decision but were unable to do so?)

14) Do you think if you were in some other position you would have got better opportunities to make decisions? (-Can you please elaborate?)

15) Do you feel you are able to use all your knowledge and skills and experience in your work?

16) How often do you get challenging/exciting tasks at work?

Competence

17) Do you feel that your co-workers treat you as a respected colleague? (-If yes, can you elaborate? If no, can you tell me more about it?)

18) How often do you get challenging/exciting tasks at work?

Relatedness

19) Do you feel that your co-workers treat you as a respected colleague? (-If yes, can you elaborate? If no, can you tell me more about it?)

Type of motivation

Controlled

20) Can I ask you what keeps you driving at work?

Probes:

(introjected)

-Is it guilt/shame if you don't work?

(extrinsic)

-Is it money, rewards or punishments?

Autonomous

(identified)

-Is it that this work is important to you to develop your career?

(integrated)

-Have you felt that you are working because the values associated to your work are important to you? (-why?)

(intrinsic)

-Have you felt that you are working because you are happy and enjoy the work you do? (-Why?)

21) Having given your answers, which of the said answers would describe you (your reason for working) the most?

Fairness

22) Overall, do you think you have been treated fairly while looking for a job? (-please elaborate)

23) Overall, do you think you have been treated fairly while working in Australia? (-please elaborate)

Gratitude

24) Given your experiences in finding this job, how do you feel about having this job? (-describe)

Resentment

Probes:

- Do you feel thankful
- Do you feel angry and frustrated?

Employee engagement

25) Thinking about your current job, how would you describe your enthusiasm and energy at work? (vigour)

26) Do you often get feel absorbed by your work, and lose track of time? (-When? -Why?

27) Given all the things you do, how important is doing your job well?

Comparing rate of upward development

28) Do you think you can develop your career in your current job?

Relative rate of career progression

29) Do you think other people in your workplace might get better treatment than you in the future?

General

30) If I ask you to describe the first image or picture that comes to your mind when you think of your current job-what would it be? (-can you elaborate why you thought of this image?)

31) Is there anything else that you would like to tell me?

Appendix 8: Interview protocol for skilled migrants who came as permanent residents

Interview protocol

Interviewee:

Interviewer:

Date of interview:

Location: (Phone)

The employee engagement of migrants: The impact of skill discounting

Interviewers to work through the following checklist:

1. Confirm that the interviewee has read the information sheet (Y/N)

2. Confirm that the interviewee has read the consent form and is happy to participate (Y/N)

3. Confirm that the interviewee is willing to be recorded according to the terms of the information sheet (Y/N)

Background questions

1) Country of origin

2) Current visa status

3) Year of arrival in Australia and visa category of arrival

4) Could you please tell me about your skill background- Academic background? Field of training? (soft skills) Skills obtained? What field/area is your previous experience in?

4) Current employment status. Tell me about your job. Where do you work? What are you doing? Full or part-time? Casual?

5) Have you undertaken any study in Australia? If yes, can you tell me more about it -What did you study? why?

Work motivations

7) Could you please think of the reasons for accepting this job?

Probes:

-Do you think you accepted thinking that :

- This job would help you get PR

- This job would enable you to provide for yourself and family comfortably (moral obligation)

- This job would earn you an income (survival means)
- This job would help build networks (for integration and self-help)
-This job corresponds to the social status of the job you had back in your home country (social distinction)
- This is the best job you could find at the time and you look to get a more suitable job
-This job is an opportunity to develop yourself
-Simply because you feel good to be employed
8) Given your answers which of the reason would best describe you? (–why?)

Skill discounting experience

9) Could you please describe your experience of seeking employment in Australia?
10) Did you have any difficult or unpleasant episodes trying to get a job? (-please describe)
11) Have you had any difficulty in finding a job that matches your skills? (-Can you please elaborate?)

Probes:

-Did you experience:
- Discrimination?
    - Language barriers/employers perceive language inability
    - Lack of local experience
- Your prior experience and qualifications were not fully recognised by the recruiter or government agency?
- Do you think your current job uses your abilities fully? (-why?)
- If respondent says they do not really use their skills, ask why…

12) Do you think you had to compromise your choices of job preferences? -Can you please elaborate?

Basic psychological needs

Autonomy

13) Do you feel in your work you get to make the necessary decisions? (-describe) (-Could you please think of any situation where you thought you could make the decision but were unable to do so?)
14) Do you think if you were in some other position you would have got better opportunities to make decisions? (-Can you please elaborate?)
15) Do you feel you are able to use all your knowledge and skills and experience in your work?
16) How often do you get challenging/exciting tasks at work?

Competence

17) Do you feel that your co-workers treat you as a respected colleague? (-If yes, can you elaborate? If no, can you tell me more about it?)

18) How often do you get challenging/exciting tasks at work?

Relatedness

19) Do you feel that your co-workers treat you as a respected colleague? (-If yes, can you elaborate? If no, can you tell me more about it?)

Type of motivation

Controlled

20) Can I ask you what keeps you driving at work?

Probes:

(introjected)

-Is it guilt/shame if you don't work?

(extrinsic)

-Is it money, rewards or punishments?

Autonomous

(identified)

-Is it that this work is important to you to develop your career?

(integrated)

-Have you felt that you are working because the values associated to your work are important to you? (-why?)

(intrinsic)

-Have you felt that you are working because you are happy and enjoy the work you do? (-Why?)

21) Having given your answers, which of the said answers would describe you (your reason for working) the most?

Fairness

22) Overall, do you think you have been treated fairly while looking for a job? (-please elaborate)

23) Overall, do you think you have been treated fairly while working in Australia? (-please elaborate)

Gratitude

24) Given your experiences in finding this job, how do you feel about having this job? (-describe)

Resentment

Probes:

- Do you feel thankful
- Do you feel angry and frustrated?

Employee engagement

25) Thinking about your current job, how would you describe your enthusiasm and energy at work? (vigour)

26) Do you often get feel absorbed by your work, and lose track of time? (-When? -Why?

27) Given all the things you do, how important is doing your job well?

Comparing rate of upward development

28) Do you think you can develop your career in your current job?

Relative rate of career progression

29) Do you think other people in your workplace might get better treatment than you in the future?

General

30) If I ask you to describe the first image or picture that comes to your mind when you think of your current job-what would it be? (-can you elaborate why you thought of this image?)

31) Is there anything else that you would like to tell me?

Appendix 9: Results of employment challenges from Study 4

Challenges

Almost all the participants described their job-seeking experiences in Australia as frustrating, exhausting, and as a struggle. The majority of the migrants had a tertiary qualification, a Bachelor's or Master's degree with years of experience in their field. However, they found it hard to obtain a job commensurate to their skills. Many of the migrants, particularly those who had arrived as permanent residents, acknowledged the unfortunate situation of their skills being highly valued during the migration process, but inadequately valued in the labour market.

Participants mentioned different ways of skill discounting they faced during their job search process in Australia. In this regard, the study extends the literature in a number of ways. A key contribution lies in the identification of the unexamined role of migrant visa status in skill discounting. The study also offers empirical evidence supporting other forms of skill discounting as outlined by Alboim et al. (2005) and within the broader migration literature.

Four different categories were identified under the dimension of challenges faced by migrant employees. These are discussed below:

1. Lack of work experience

Work experience played an important role during the job search process for migrants and was manifested by poor recognition of migrants' previous international experience (with a demand for local experience), and lack of industry experience.

Several participants in our study mentioned that employers did not consider the experience they had gained outside of Australia. Moreover, the participants mentioned that what the employers looked for was 'Australian experience'. This was a common challenge for migrants and also presented a vicious cycle: migrants could not gain employment in their field without local experience; however, they were often unable to gain local experience without being offered a job opportunity. One of our participants shared his frustration:

"For rejecting they 90% of time they [employers] said they have candidates with local experience. And they don't write it on advertisement saying candidate only having local experience should apply for this job" (#SM 10).

A participant who graduated with a Master's degree in Hospitality with a strong history of work experience in his field had a similar experience:

"What your previous education is, in spite of what work experience you have behind you, it really did not count. What counted was how much of Australian experience have you got, that's all that it boiled down to" (#SM26).

One of our participants also expressed the thought that the devaluation of prior work experience was sometimes perpetrated by the recruiter or career team of training institutions, rather than just the employer:

"Well, … to be honest, ['Teaching Institution A] or the career team did not understand or was not able to differentiate students who had and who did not have experience and they would take one approach for everyone and treat everyone as a no experience … it was so difficult trying to explain to them [Teaching Institution A], listen, you can't … give me a job of a porter, I have done those tasks [entry-level position] a long time back and that's what was offered to me" (#SM 29).

The lack of relevant industry experience (whether international or local) was a challenge for a few participants. Two participants, SM 27 and SM20, admitted they did not have any industry-level experience back home:

"I applied for the food and beverage attendant [position] in Adelaide, which would not require much criteria [job requirements] to meet, but it's also quite tough because I don't have any experience in the industry as well [compared to job candidates with prior experience]" (#SM20).

Also, one of our participants mentioned that she migrated soon after her graduation in Master of Social Work, leaving her with no work experience in her field (#SM 03):

"In some cases, they [recruiters] were asking for six or seven years of experience. I just finished master's graduation and just after finishing masters how can I claim for six or seven years' experience" (#SM03).

Another work experience issue that came up during the analysis was a mismatch in the educational qualifications possessed and the actual work experience that a migrant had. We had two participants, whose academic backgrounds were different from what their work experience was. For example, one of our participants was a science graduate. However, his real-world experience of more than 10 years was in the banking sector, an accepted practice in India. However, he was unable to work in a job in banking as a qualification in commerce or accounting was a prerequisite in Australia. This shows that skill devaluation due to work experience issues can be due to more nuanced reasons.

2. Lack of language proficiency

It was found that language difficulties could be a barrier for migrants in obtaining a job matching their skill levels. Two themes emerged under this category. Language as a challenge encompassed both the employers' perceptions of a migrant's inability to communicate in English and a migrant's actual limited proficiency in the English language.

Participants mentioned that employers often perceived that they were less proficient in the English language than local employees. A participant mentioned an incident where international students were placed in positions requiring less verbal communication, while local students were allocated to positions requiring more verbal communication:

"I think at the same time as well you could see the Australian students being placed in front office because it was naturally assumed [by employers] that they were better at English … (#SM31).

One other participant mentioned how he was not selected for a job position as employers were concerned about his accent, leading him to believe that this meant employers perceived an accent as a shortcoming in an employee's language proficiency:

"… so I got the comments like we got two candidates and the only concern about you is the accent, I told them there is nothing to do with the accent, I am capable to do the work am capable to deliver things"(#SM 06).

The actual inability to proficiently communicate in English was also a barrier for some of our participants. SM27 had a diploma in culinary studies from a hospitality institution; however, her job-seeking experience was challenging in Australia:

"I feel like it's a bit challenging. When I first came here I struggled with my English … I think the more I can speak well, the more I get the opportunity to work in Australia" (#SM27).

A lack of adequate familiarity with the Australian English accent of employers was also a challenge faced by some participants in both migrant groups. The issues with accent exhibited a dual nature: one, employers did not consider migrant applicants due to their accent, and two, some migrant employees had trouble understanding the accent of employers.

"As a professional it is very hard to understand, the Australian accent is very different from the accent we used back in India. It is different you know … it takes a while to understand that … I personally had some difficult times, you know even after I started working with other local staff, local people, understanding their accent, and the way they talk, communicate with you. Initially that was a problem" (#SM10).

3. Employer attitudes

Two themes emerged under the employer attitude category. One, employers' ignorance in assessing the skills of migrants, and two, the discriminatory attitudes of employers.

Employer's ignorance in assessing skills of migrant employees

Employers often had an inadequate level of information about migrants' capabilities and the true value of their skills. Migrants identified this as a barrier to securing a job, especially those who had arrived as permanent resident migrants. Despite their skills being assessed as suitable

by the government bodies that approved their visa, the participants felt that employment agencies did not place the same high value on migrants' skills. Some migrants had obtained formal registration from their work associations, but were still unable to find a job in their field. One such migrant described his experience with the employer assessing their skills during recruitment:

"Their [the employing agency's] comment is that assessment by a government body is for visa purpose, but it does not automatically consider us as suitable for the employers. They say, 'that' is for government-oriented migration programs and we can't do anything about that … so unfortunately your application is rejected" (#SM 09).

One reason for this could be that employers have less confidence and are less capable of evaluating migrants' skills obtained outside of Australia. As one participant said:

"Maybe the employers here are not sure or confident about the migrants and probably they would not be willing to experiment with migrants" (#SM 13).

However, none of the migrants who were former international students reported that employers had less knowledge in assessing their skills. This could be because these participants had obtained a qualification in Australia from leading hospitality institutions. However, participants felt that employers had less confidence in their abilities than they did in those of local students:

"And then we, the international students trying to seek jobs, we were all considered like, the children of lesser gods, because we were considered like, oh, we don't know what your skills are, and we don't know if we can trust your skills" (SM27).

Discrimination

Migrants often find it difficult to obtain a job due to their different background and ethnicity. Some participants mentioned they felt discriminated against when applying for a job. Discrimination was often experienced in subtle ways, making it hard to identify:

"There were some shops in a plaza. It's like they were advertising for people with the exact skill that I had but they didn't seem that open when I actually applied for it … I think it was more a body language thing; you see it enough to know that that's the case" (#SM22).

SM02 described a situation where he was told by the recruiter that the recruitment process had been halted momentarily as they did not require an employee for the position. However, later when the participant checked through his network, he came to know that the position had been filled by another applicant. This lead the participant to assume it was discriminatory behaviour:

"I had a feeling that, it could be something to do with, for example - the colour of the skin or something being from India, see being from India most of the people got an idea that it is a

third world country, nothing much happens over there, and whenever you see something from India the first thing come to our mind is all the street-side food and all" (#SM 02).

4. Situational challenges

Situational challenges include those challenges that were beyond the control of individual migrants and employers. This included themes such as lack of job opportunities and visa conditions as a barrier.

Lack of job opportunities

Some participants mentioned they were unable to find job opportunities in their field in the local labour market even though their occupation was listed on the skills shortage list website. Other participants reported there were few jobs in the local market, compounded with an oversupply of candidates, leading to poor recognition and utilisation of their skills:

"I think there was an oversupply of candidates and there were less jobs which meant that, you know, if there's employment options opening up there are like 200 - 300 resumes" (SM22).

"The job availability status is very low in Adelaide considering we have [only] five or six, five-star hotels … people are very consistent and steady in the workplaces so that doesn't give many opportunities for a senior level. There are many ground level opportunities, but at senior level there are way less chances" (SM28).

Similarly, #SM16 and #SM08 mentioned they could not identify where in Australia the skill shortages were in their field:

"There has to be some skill shortage, otherwise government won't say that there is a skill shortage. But we don't know where the shortage and there is no information about who has that shortage" (#SM16).

"It is not [just] lack of opportunity, but non-existence of opportunity" (#SM08).

Visa conditions as a barrier

Another theme that emerged in our analysis of the job search experience of migrants was the type of visa held by the migrants. Two themes were identified in this regard: the lack of permanent residency and the conditions of the visa.

Lack of permanent residency was a barrier for some migrants, particularly those who came as international students, as it often prevented them from obtaining a job in their field of expertise. When employers evaluated migrants' skills, the lack of permanent residency status posed a significant challenge in obtaining jobs, even if the migrant had other strongly-valued skills:

"First of all, because I was on a student visa, I was allowed to work, only a certain number of hours, but even if I – during semester three, or even at the completion of my course, even if I wanted to apply for a full-time job, I technically had to be a citizen or a permanent resident.

Without that, there was absolutely, and like, I can highlight that in bold, there was absolutely no scope for any of these graduates to find a full-time job, without being a permanent resident, or, rather a full-time permanent ongoing job" (#SM26).

"I don't have permanent resident status, so that's why it's hard to get a job that is related to your work experience" (#SM21).

"I'm not lucky enough to be born here or to get a permanent residence" (#SM33).

Similarly, visa restrictions sometimes prevented the migrants from securing a job outside of South Australia. Some migrants who had permanent residency mentioned that state-sponsored visa holders must stay in the state where the migrant first landed for a minimum period of 2 years, which prevented them from applying for jobs in their desired career elsewhere in Australia where job opportunities were higher. SM05 was looking for a job in quality assurance in South Australia where there were no positions available, but his inability to move prevented him from finding more vacancies:

"Some cities like Adelaide and Perth have no vacancy in Quality Assurance, and my [visa] was 198 visa, a state-sponsored visa meant I had to stay here for at least 2 years" (#SM05)