Employability Development Theory: Policy Implications for Supporting Youth at Risk of Limited Employment (YARLE)

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This thesis is dedicated to my parents, my first teachers, and to Alina, Taika and Frankie, the treasures I gained while on this research journey.

ABSTRACT

Many countries have applied various policies and programmes that aim to reduce numbers of NEETs (youth not in employment, education or training), or raise rates of low level qualification attainment among youth populations, based on the theory that doing so will ultimately lead to improved youth labour market outcomes. As well as providing the types of education and training programmes that prioritise low level qualification attainment as a key programme success measure, other types of active labour market programmes (ALMPs) are also applied widely. These other types of ALMPs are typically designed to directly and urgently focus on moving currently NEET, unemployed or underemployed target groups into employment. Furthermore, although they are not given as much attention in this research, a country's choice of programmes and policy settings that concern youth social welfare assistance, and *careers information, advice, guidance and education* (CIAGE), is also relevant to achieving the intertwined agendas of developing youth employability and improving eventual patterns of youth labour market outcomes. Collectively, the aforementioned programme types, fields of policy work and associated educational and employment-focused policy agendas are conceptualised in this research as the broadest definition of *employability policy responses.*

What is of interest as a research focus, is the workings or non-workings of some common types of employability policy responses. A more risk-targeted second interest lay in identifying and explaining the policy workings, non-workings and intervention potential to improve outcomes specifically for youth who are NEET (not in employment, education or training), or who are otherwise relatively at risk of limited employment (YARLE).

Unfortunately, many design types and instances of ALMPs, including some kinds of education and training programmes, have had a limited effect on persistently poor labour market outcomes for the at risk groups that they target. Exclusively NEET-targeted programmes, many of which prioritise low level qualification attainment, have not been effective on the whole in reducing long term patterns of limited and poor quality labour market outcomes. The term 'limited' includes reference to prolonged or frequent periods of being unemployed.

Qualification attainment is one theorised change to an individual's life context that is theoretically meant to improve their employment outcome prospects. However, this is only one change to context that interventions might focus on changing in order to improve employability and employment attainment. On its own, low level qualification attainment does not appear to be an adequate programme outcome that triggers employment outcome improvements for NEET and unqualified school leavers in particular. Thus, what is described within the research as *theory on education-employment linkages*, including theory about qualifying NEET or unqualified youth, was investigated and eventually challenged as a research conclusion.

One reason why the aforementioned types of policy responses are not leading to improved youth labour market outcomes may be that the design of such responses, and the generalised theories and assumptions that they reflect, are oversimplistic or flawed. Perhaps they do not adequately account for, or respond to the contextual factors and change mechanisms that the formation of employability, and the attainment of employment tends to depend upon. This includes assumptions and potential theoretical flaws that are reflected within the design, outcome focus and targeting of interventions at subgroups of youth who are deemed to be at risk, or already in, limited employment outcomes, compared to be their age peers overall.

Reasons and proposed indicators of being relatively at risk of long term limited employment include the widely recognised classification of being NEET, and the characteristic of having left school (or being about to leave school imminently) without qualifications. The two personal situation characteristics that are captured by the NEET acronym is indeed relevant to officially identifying at least a large proportion of the youth who are more likely to experience poorer labour market outcomes that one's similarly aged peers. However, it was concluded from the research that 'being NEET', when used on its own as an indicator of who to target and why, and as a policy explanation of what needs to be changed about the young people concerned or their world context and experiences, the effectiveness of policy responses that are based only on this theory are likely to remain typically limited.

In order to better understand what works, does not work, or might work, and why, to improve labour market outcomes among current and previously NEET young people—and among other and overlapping subgroups of youth who are at risk or disadvantaged for other reasons—it seems that more accurate and multi-faceted policy explanations are needed about *what else* individual employability and employment outcomes tend to depend upon. This includes a need to clarify other common reasons, indicators or *contexts* of employability risk or disadvantage, and to improve theory about some of the *change mechanisms* through which employment outcomes and/or the development of individual employability tend to be influenced. These kinds of clarifications are referred to in the research as theory about generalisable *employability dependencies.*

By more clearly identifying and explaining a range of seemingly *key employability dependencies*, it may be possible to improve the theory and assumptions upon which programmes and other policy responses are designed. It may accordingly be possible to improve the effectiveness of multiple types of programmes and policy settings, which come from multiple policy sectors, and which have in common that they are all theoretically meant to improve young people's employability, or their employment attainments more directly.

A key research contribution is the development of the concept of *youth at risk of limited employment (YARLE),* as a more expanded and multi-faceted definition, and accompanying evidence-based explanation about which youth are typically at risk of limited employment outcomes, and why. Furthermore, the research offers a multi-faceted account of a range of key factors that employability development, and eventual employment outcomes tend to depend upon; especially the outcome type of the initial attainment of a job with a new employer. Many employability development disadvantages are identifiable from birth or childhood, whereas most of the prevalent NEET-focused types of interventions are not activated until after approximately age 15 or 16.

Policy explanations about what works as employability development and employment intervention, for which youth, and under what circumstances appeared to be limited before the research was undertaken. The limited effectiveness of related types of policy responses in improving eventual and long term youth labour market outcomes, particularly those that are NEET-targeted, indicated that better evidence and explanation was required to inform the review and development of such policy responses. Accordingly, existing evidence was synthesised, and theories were progressively reviewed and developed, to answer the following research question, including explaining policy implications and applications of the research answers:

> What key dependencies shape the nature and extent of individual *employability*, which is taken as employment abilities, intentions and outcome likelihoods or prospects, and what explains why some youth are at risk of limited employment relative to their peers?

The research question was answered by synthesising existing theory and evidence and generating a comprehensive *theory of employability,* one designed to serve efforts to improve government responses towards developing youth employment capability and labour market outcomes. The work brought disconnected theories and associated evidence together. It considered key factors relevant to improving employment outcomes and capability from early childhood to adulthood involving multiple policy sectors. The synthesis produced a theoretical explanation of individual employability, its development, and contexts of risk or disadvantage, beyond 'being NEET' as one risk characteristic. The development of the theory enabled an elaboration of specific policy implications for identifying risks, needs, or opportunities, or for improving youth employability, especially to address disadvantage and potentially improve labour market outcomes for YARLE.

Overall, some key employability dependencies that deserve more explicit policy attention and further research include: *non-cognitive skills*, *work experience,* some intergenerational disadvantages, and challenges regarding the *signalling* of individual employability (especially to potential employers in relation to particular jobs). The terms non-cognitive skills and soft skills

conceptually overlap with many other terms, and skill or trait measures. Many of the semantically overlapping terms, including some that have emerged from academic literature and some from policy practice, and associated outcome evidence about such skills, were extensively unpacked within the research as a major research contribution. This includes a synthesis of evidence which has linked measures of non-cognitive skills or traits to labour market outcomes, including some evidence which has linked later life labour market outcomes to skill or trait measures that were taken years earlier during childhood.

The research contributes to policy practice by synthesising a multi-disciplinary range of existing empirical evidence, supplementing explanation by reviewing established theories in academic literature, and by eliciting and critiquing the theories, strategies, outcome expectations and generalised assumptions that are reflected within common types of policy responses.

The research design is reflective of a *realist approach* to evidence synthesis and theory development. The design is focused on eliciting, building and critiquing theories as the basis, or potential future basis, for policies or programme designs. Literature searches and selections were accordingly driven by the aim of synthesising and translating the *policy and policy outcome relevance* of the findings, conclusions and theories that were located in existing literature. The research design is also reflective of a *scoping review,* in the sense that emphasis also went towards clarifying some concept definition problems, which seemed to be hindering the potential to conduct more narrowly scoped future evidence syntheses, and to subsequently further clarify employability's dependencies, outcomes and policy implications.

The potential to practically apply the research outputs of employability theory, and supporting literature syntheses, to the purposes of policy evaluation or design was demonstrated by including a standalone report that was later produced for New Zealand policy makers. The report drew upon the research outputs that had been produced earlier on. It focused on reviewing what works to improve outcomes for YARLE or NEET youth, and evaluated potential flaws and opportunities for improving New Zealand's suite of education and employment-focused policy responses; particularly as relevant to improving outcomes for NEET and other YARLE subgroups. As is demonstrated by the narrative in the New Zealand report, and as was further validated by additional evidence that was reviewed and cited within the report, the research conclusions about key employability dependencies, the associated YARLE concept, and conclusions about policy effectiveness or 'workability', are valuable contributions that can practically be applied to policy evaluation and development purposes.

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1. INTRODUCTION

1.1 A FIRST LOOK AT EMPLOYABILITY DEVELOPMENT

One of the purposes of secondary and tertiary education and training is to develop employment-relevant capabilities. It is implied that doing so is also a means of improving likelihoods regarding the nature and extent of young people's eventual employment outcomes. However, assumed interrelationships between education and employment are not clear-cut. After having invested in education and even after seeing some forms of education outcome improvements, youth employment outcomes remain a concern for most OECD countries. According to the OECD (2016, p. 14):

> Young people today struggle in the labour market in spite of being the most highly educated generation in history. Unemployment is generally higher among young people than prime age adults, and those who do work tend to have poorer-quality jobs and are much more likely to be on temporary contracts or to earn low wages than older workers.

Along with the mainstream and targeted responses that comprise a country's education system and policy settings, active labour market programmes (ALMPs) and career support services are among the wider range of programme types meant to support policy intentions to improve young people's employability and eventual labour market outcomes. Furthermore, qualification systems can also be conceptually counted as employability-focused policy activity. Qualification systems and outputs typically exist to formally recognise individuals' employment-relevant abilities or knowledge (and potentially other knowledge) and to *signal* such information to interested third parties, which includes employers.

All of the aforementioned programme types, systems and associated policy agendas share a common focus on influencing one or more types of outcomes, namely: employability development, employability recognition or measurement, and labour market outcomes. They may not look like one 'family' of programmes at first glance and come from multiple policy workstreams. They can vary in terms of what their purposes are said to be, or what measures of employment or other types of *employability outcomes*[1] they are meant to activate, and over what timeframes. What matters is that they are all meant to somehow help youth to become employable, get jobs, remain employable or progress into better jobs. Thus, they are collectively treated in this research as *employability policy responses.*

Even after helping youth to become employable and get hired in the first place, there are additional policy concerns about how long or consistently youth *stay* employed, and whether they eventually progress into better paid or otherwise better quality terms of employment. Lack of eventual job progression or work 'quality' are sometimes discussed as *labour market mobility* concerns. An overarching policy concern is that particular groups of young people persistently

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[1] Words are sometimes italicised in the thesis to highlight terms and concepts that are significant to the development of employability theory.

remain in *limited employment,* which often includes frequent or long periods of unemployment, underemployment, and very low paid , often short term work (Keep & James, 2012; Keep & Mayhew, 2014; Maguire, 2015; Mascherini & European Foundation for the Improvement of Living and Working Conditions, 2012; OECD, 2016; Pacheco & van der Westhuizen, 2016; Tertiary Education Commission, 2011).

Ubiquitous policy responses aimed at the so-called NEET problem (of youth not being in employment, education or training) indicate which youth become identified and targeted as those thought to be at greater risk of limited employment. Internationally, numerous programmes exclusively target youth who are currently NEET, or will soon leave school with no qualifications (being one indicator of prolonged NEET status). Some but not all of these youth personally receive welfare support at the same time. NEET-targeted programmes often involve a strategy of moving such youth into education and training.

A secondary school low level, or equivalent level, of qualification attainment is commonly prioritised as a theorised key programme success indicator within NEET-targeted programmes. I refer to these types of risk-targeted and qualification-focused programmes for youth as *second chance programmes*. They theoretically act as a second chance to gain foundation level qualifications after having left school without any. In theory, low level qualification attainment is meant to improve the employment prospects of otherwise NEET and unqualified youth, during or after having left secondary school. It is also meant to improve the readiness or capability of these youth to then staircase into higher levels of tertiary study and qualification attainment, as another means of theoretically increasing their long-run employment prospects.

Disappointingly, second chance programmes work to reduce the official number of youth who are NEET at a given snapshot in time but their effectiveness in then helping relevant youth to gain and sustain improved labour market outcomes appears to be limited. Gaining a low level qualification, as a prioritised NEET programme strategy and outcome focus, does not tend to trigger labour market outcomes that bring these youth into line with the labour market outcomes experienced by their peers who left school with qualifications, and who transitioned quickly from school to work and/or higher levels of tertiary study. This generalisation is that low level qualification attainments, via *second chance* education sector programmes, do not work on average to improve subsequent labour market outcomes. There are, however, notable exceptions of programme instances that have worked better than most. The exceptions deserve further investigation to help ascertain what does work for NEET youth, and why, how or under what conditions. Empirical evidence, including international meta-analyses of outcomes from these programme types, and from other *active labour market programme* (ALMP) types, are reported within the thesis.

Even for youth who leave secondary school with basic qualifications, and who then gain a *university level* qualification, the theorised links between attaining even university level qualifications and better paid or more secure types of employment at the higher end of the labour market appears to be a flawed and problematic overgeneralisation (for evidence related to this point see Keep & James, 2010a, 2012; Keep & Mayhew, 2014; Tumen et al., 2015).[2] While, on average, those with university level qualifications are more likely to attain better paid and more secure types of employment than those who compete for jobs with low or no qualifications, there is also the problem of potentially oversupplying a particular labour market with university qualified job competitors (Phillip Brown & Lauder, 2012; Lauder et al., 2012).

There is clearly a need to review and refine what I will refer to as *education-employment interrelationship theory.* I use this phrase to represent theory and policy outcome expectations about: participation in education and training programmes, qualification attainment and the reporting of attainments to others (including to youth and their potential future employers). This phrase also applies to the nature and extent of individual employability being changeable via education (intervention), and known and proposed links between educational measures of outcomes and later labour market outcomes. In particular, overgeneralised theory about *low level* qualification attainment leading to improved labour market outcomes for those who left school unqualified (as is the outcome focus of many NEET-targeted programmes), does not seem to be an effective response to a probable range of employability barriers. Nor to any change mechanisms or opportunities regarding the youth concerned.

Many young people remain or repeatedly return to the NEET classification status over years-long periods. They continually revert to dependence on welfare or other forms of government support, including repeatedly becoming the target of various active labour market programmes (ALMPs). The bulk of ALMPs target adults and/or youth only after they officially become unemployed, underemployed, or NEET. Internationally, and on the whole, ALMPs have been found to return mixed and often disappointing results, in terms of improving labour market outcomes as the end goal (regarding evidence on outcome trends see: Heckman, Lalonde, & Smith, 1999; Kluve et al., 2019; Martin & Grubb, 2001; OECD, 2016, 2019). It should be noted, however, that some ALMPs—including some instances of *second chance training* programmes—have been found to have positive long term impacts on labour market outcomes, while evaluations of their short or medium term impacts were less positive (Card et al., 2010; Kluve et al., 2019; Vooren et al., 2018).

As an intervention timing consideration, most OECD countries do not start to officially identify and engage youth in interventions that are said to be for NEETs until after young people reach

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[2] This claim is mainly in relation to comparing the labour market outcomes of university qualifiied youth with their age peers who do not gain such qualificiations within the same labour market contexts. Or by comparing the incomes and tertiary education debts incurred over time by university graduates, vocational tertiary level graduates, and/or age peers overall.

approximately age 15. This age is roughly when youth start to be included in official NEET head counts.[3] The life status of being NEET is thereby relied upon as a key measure of being at risk of limited or poor employment outcomes, and as a key trigger for the timing of intervention. However, some risk indicators and disadvantages that appear to be linked to individual employability development, and/or to labour market outcomes later in adult life, are identifiable early in life (from birth to teenage years). Evidence to support this claim comes from longitudinal studies and other pre-existing research that has been incorporated into the evidence syntheses that were produced as research outputs.

Given the mixed success of relevant policy responses to date, it appears that policy and programme designs, on the whole, must better account for a combination of key employability development and employment attainment dependencies; not just the context dependencies of being unqualified or being currently NEET. In other words, a multi-faceted *theory of employability*, and of policy implications for changing *employability outcomes* is needed. This includes theory about education outcomes, and most importantly, eventual labour market outcomes being subject to: multiple, generalisable types of interactions or change mechanisms (read key influences on outcomes), and previous types of life outcomes. It also includes other variables that comprise a current type of context (including description about an individual and their relationships or network connections, a labour market context, and other environmental particulars).

The only *theory of employability* I found that gave explicit recommendations for the design of policy responses was from the UK by Hillage et. al. (1998). It proposed a helpful summary of generalised personal and external components of employability (read context dependencies) and suggested that policy makers address the full range of components. Apart from the contribution by Hillage et. al., what I expected to find, but did not, was a body of evidence-based transferable conclusions which could be described as *employability theory*. Certain theory gaps and inadequacies, which appear to be shaping and potentially limiting the effectiveness of common types of policy responses, should be reconsidered in light of the evidence syntheses and the theory-building progress that this research contributes.

As a first step towards rethinking what barriers, change potentials and types of intervention are relevant to improving young people's employability and eventual labour market outcomes, one research conclusion is a proposal to expand policy thinking beyond the practice of targeting those who are NEET, and instead targeting a range of overlapping subgroups who can be redefined as *youth at risk of limited employment* (YARLE). Some youth are at risk or disadvantaged, compared to their age peers overall, for more reasons than matching the education and employment status that the NEET acronym represents.

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[3] The exact earliest age for classifying youth as officially being NEET varies slightly between countries.

Understanding how to manipulate persistently adverse NEET and associated youth labour market outcome patterns remains a policy problem internationally, including in New Zealand, which is an example country and policy context that was of particular research interest. As a policy consultant for New Zealand government agencies, and earlier as a provider of government funded programmes for NEET youth and low qualified workforce populations, it appeared to me that policy work and programmes being led by different government agencies shared one or both of the agendas of improving youth *employability* (mainly via education programmes and career services), and improving youth employment outcomes more directly. Many also shared a focus on targeting low qualified, NEET or other relatively 'at risk of limited employment' subgroups.

Taking the example country context of New Zealand, what appeared to be missing was a cross-sector, cross-disciplinary synthesis of evidence and theory, one that was made to inform evaluations and designs of policy responses that are meant to support youth employment or employability development. Such a synthesis of evidence – and a subsequent offering of transferable conclusions about policy implications – seemed to be missing as a basis upon which to design, refine and evaluate the policy responses that New Zealand has aimed at 'the NEET problem', as well as mainstream education and career support programmes that are meant to support all young people's employability[4]. Apart from being NEET and leaving school with low or no qualifications, there was a lack of policy explanation about *what else* tends to distinguish or change young people's employability, or the nature and extent of their eventual labour market outcomes.

It seems that risk-targeted programming might be more effective overall if it was less myopically focused on traditional forms of low level qualification outcomes, as almost the only theorised driver of improved eventual employment outcomes. Several generalisable *employability dependencies* and change mechanisms that are relevant to employability development and employment attainment became apparent via the research undertakings, in addition to qualification attainment as one kind of theorised dependency. The dependencies appear to help explain the labour market outcomes of NEET and other relatively disadvantaged or at risk youth subgroups in particular. However, they also have implications for understanding how to support all young people's employability development and employment attainment in general.

1.2   SOME INITIAL TERMS AND DEFINITIONS

At its most general, *employability theory* encapsulates a range of theories and evidence relevant to understanding, measuring and defining, and manipulating a set of individual employment and

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[4] Mainstream secondary and tertiary education provision, and careers, information, advice and guidance (CIAGE) services, count among the policy responses that are meant to contribute to supporting all young people's employability and eventual employment. Education also serves other purposes simultaneously.

employment capability variables; including measuring and defining employment outcomes (labour market outcomes), other types of *employability outcomes* and associated programmes outcomes. It includes *employability development theory*, which is change theory about why, how, for whom, or in what conditions individual employment abilities and intentions develop, or employment outcomes emerge, or do not. Employability development theory can include *theories of action* and *theories of change*. Theories of action and change underpin what are sometimes called *programme theories*, as the embedded rationale for proposed policy or programme actions, outcome expectations, and acknowledged or unrecognised assumptions for programmes to work to achieve outcome intentions.

Employment outcomes, which is used interchangeably with *labour market outcomes*, are the *end* outcome types of paramount policy and research interest. Conversely, abstract concepts and theorised indicators of individual *capability* (abilities and employment-focused intentions) have been framed as *interim* outcomes, outcomes thought to typically influence what end outcomes occur. The term *employability outcomes* includes descriptions, measures or indicators of employment outcomes as well as types of contexts or characteristics that are thought to comprise a state of employment capability.

To move beyond the limitations of taking a narrower focus on NEETs, I developed the concept of *youth at risk of limited employment* (YARLE) to better describe youth subgroups whose employability, and ultimately employment outcomes, are likely to become and remain the most limited relative to their age peers. YARLE is proposed in addition to the current policy emphasis that the OECD and many member countries are placing on targeting and understanding how to improve NEET outcomes (Mascherini & European Foundation for the Improvement of Living and Working Conditions, 2012; New Zealand Treasury, 2017; OECD, 2019a). An adoption of the YARLE concept is suggested partly to encourage more lateral policy thinking about who or what to target, or try to change or measure, as theorised barriers or improvements to common employability risks or disadvantages. Other reasons for recommending what policy makers conceptually regard an unconventionally diverse range of policy responses (including programme types), as being those that are mutually relevant to improving the eventual employment outcomes of YARLEs, are explained later.

1.3   RESEARCH QUESTIONS

A range of employability development and employment-related policy responses could perhaps be more successful if informed by better syntheses of evidence and theory. The underlying theories that are driving popular types of education and employment-related policy responses seem to be currently flawed or too simplistic to work well, especially to work well for youth who become NEET, welfare dependent, or stuck for years in low paid and insecure terms of employment at the bottom of the labour market.

Accordingly, the research reported here involves not only evidence syntheses, but an evaluation and building of theory to address the following question. And the question is answered in terms of having policy implications.

> *What key dependencies shape the nature and extent of individual employability, which is taken as employment abilities, intentions and outcome likelihoods or prospects, and what explains why some youth are at risk of limited employment relative to their peers?*

The evidence-based theoretical conclusions generated by the research could be used to inform the future design or evaluation of a range of policy responses that are meant to support employability development, recognition or employment outcomes for all. Furthermore, some of the context-specific conclusions are insights about what works or does not (or why), and what range of things may need to be responded to, in order for interventions to improve outcomes for NEET or YARLE target groups specifically.

1.4 RESEARCH AIMS

A first research aim was to produce syntheses of existing evidence, and draw together some established academic theories, as a basis for a subsequently produced set of conclusions which I refer to overall as *employability theory.* This included aiming to identify (and reconceptualise where necessary) a set of factors that tend to distinguish the nature and extent of individual employability and, ultimately, individual labour market outcomes. It also included an attempt to explain some of the social mechanisms through which employability becomes recognised by others or developed, for better or worse, or through which employment attainment typically occurs. In addition to producing *general* theoretical conclusions, which have implications for policy working to support the employability development and employment attainment of *young people overall*, a second aim was to privilege extra evidence and produce context-specific clarifications about what matters to improving outcomes for NEET and other relatively *at risk or disadvantaged* youth in particular.

A second research aim was to explicitly articulate the *policy relevance and implications* of what was reviewed and what was concluded. In other words, the aim of developing refined employability theory included aiming to develop conclusions at a level of generalisation that could be practically applied to the tasks of evaluating and designing multiple types of *employability- and employment-related policy responses*. In particular, emphasis was placed on privileging risk-relevant evidence and theory, and evaluating implications for interventions to better recognise which youth are relatively disadvantaged and at risk (YARLE), or why, and what might need to be addressed in order to improve their eventual labour market outcomes.

A third research aim was to give a working *demonstration* of the newly generated employability theory, and supporting literature syntheses, being applied to a real policy research and

evaluation task. In particular, the aim was to demonstrate and simultaneously test the validity and usefulness of the newly generated concept of *YARLE subgroups*, and the conclusions made about a set of *key employability dependencies* that tend to influence outcomes for all youth; in addition to employability's dependency on qualification attainments. This research aim was fulfilled by including a New Zealand policy research report as the contents of Chapter 9. The report demonstrates how the research can aid policy thinking to move beyond a narrower focus on only targeting NEETs, towards the broader YARLE concept and associated needs to recognise or respond to some additional employability challenges (besides being currently NEET).[5]

A fourth aim was to privilege New Zealand examples of employability policy responses, their outcome focus and embedded assumptions, and evidence on actual outcomes. A supplementary research aim was to evaluate the theoretical workability and potential flaws in New Zealand's suite of education and employment-focused policy responses, in light of what the earlier produced *employability theory* revealed as policy implications. New Zealand policy attempts to define, identify, and respond to the known and proposed reasons for being relatively YARLE or NEET was the focus of the New Zealand policy evaluation undertaken. The supplementary aim of detailing policy and outcome examples from New Zealand, and of evaluating the theoretical workability of New Zealand responses to improve outcomes for NEET and YARLE subgroups, is addressed by the New Zealand policy research report provided in Chapter 9.

1.5   RESEARCH DESIGN

To address the research question, existing and previously disconnected sources of theories and outcome evidence were synthesised, in order to produce a theoretical explanation of individual employability, its development, and contexts of risk or disadvantage. The syntheses include literature and evidence about a diverse range of programme types, spanning early childhood to adulthood and involving multiple policy sectors.

My research design is reflective of a *realist synthesis,* although the research question and scope is broader than many realist syntheses, and the research might also be regarded accordingly as a *scoping review*.[6] Reflecting a mix of these two types of research, the design facilitated an aim to: synthesise existing evidence; review and build generalisable theoretical explanations about outcomes as a policy topic; clarify key concepts and definitions, partly by bringing together different bodies of literature; identify key characteristics or factors, or change mechanisms, in

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[5] Note that the validity of research conclusions was partly tested by carrying out additional searches and selections of evidence, mainly about NEET-focused and active labour market programme outcomes, in order to strengthen the conclusions made in the example New Zealand research on 'what works' to support NEET or at risk youth.

[6] For a summary of what scoping reviews entail, see Munn et al. (2018). For a summary of what realist syntheses entail, see Wong, Greenhalgh, Westhorp and Pawson (2013).

relation to a research topic; and translate the implications of reviewed evidence and theory for the workability of policy or programme types of interest.

Before this research was conducted, multiple sources of relevant but separate evidence and theories were already available from a range of academic disciplines and from fields of policy practice.

A sample of those that appeared to be relevant to answering the research question were selected for inclusion in my syntheses of evidence, and my review and development of theory. Their respective contributions and limitations informed my final conclusions and evaluative commentary within Chapter 8. The purpose of Chapter 8 was to bring together the research findings and conclusions as an overall refined theory about employability. This includes theoretical conclusions about employability development and intervention; employability recognition, signalling and signals; and the mechanisms and context dependencies of employment attainment.

A standalone research report that I produced for the New Zealand Ministry of Education is presented as Chapter 9. The report was included partly because it demonstrates the practical policy applications and implications of the refined employability theory in Chapter 8, and the supporting evidence syntheses. The report draws heavily on the findings and conclusions that had been generated earlier for this doctoral research. In addition to the evidence reported in Chapters 5 to 7, the New Zealand report contains supplementary references to literature on active labour market programmes (ALMPs) and *second chance* education and training programmes, including outcome evidence from international meta-analyses and New Zealand programme evaluations. Developing more adequate descriptions and explanations of young people's employability / employment characteristics, risks, needs or potentials – most of all with regard to NEET and other YARLE subgroups – and doing so in a way that can be applied to policy or programme review or improvement was a focus of the report.

1.6 OVERVIEW OF THE THESIS

Chapter 2. The Nature of Employability

This chapter explains my philosophical perspective on the nature of individual employability, employment and the emergence of these phenomena as a set of complex and context-dependent outcomes. What I ended up conceptualising as *employability outcomes* includes both measures of an individual's employ*ment* or labour market outcomes, as the *end* outcome types of research and policy interest, as well as outcomes in the sense of other features of context that appear to be components of an overall state of individual *employability*.

I introduce some existing philosophies, principles and terminologies that influenced my interpretation and way of explaining these phenomena. These are *complexity thinking*, *ecological psychology* and a *realist* philosophy about complex social outcomes as a policy concern.

The realist practice of relating evidence and theory to research explanation about generalised *contexts* (or context dependencies), *change mechanisms,* and to *outcome types* of policy concern is reflected in the research reporting. This practice is elaborated on in Chapter 2.

Chapter 3. Research Design

This chapter outlines what was done to answer the research question and address the research aims. It explains what kinds of evidence and theory were searched for and selected from in order to produce literature syntheses and notes some selection criteria. It includes an explanation about my approach to evidence-based theory review and development.

A summary of my professional work history, which is relevant to the research topic, closes Chapter 3. A summary of researchers' work history is a recommended addition for realist syntheses. This is because it is expected that some degree of prior knowledge about the policy problems, practices and outcomes being studied is important to have as an extra information source to help guide the starting directions of initially broad literature and policy searches.

Chapter 4. A Starting Point for Developing Employability Theory in the Policy Context

This chapter introduces the reader to a starting point of explanations from which the rest of the research unfolded. It overviews the types of policy responses, target groups, outcome agendas and outcomes that were deemed to be in scope for later literature review and theory development. What eventually became nominated as thematic *focus topics,* and as *broad theories* that were already established within academic literature, are also introduced in Chapter 4. They became focus points for evidence synthesis and employability theory development work. Most of the focus topics and broad theories are subsequently mentioned within the other chapter and section headings.

The term *youth at risk of limited employment* (YARLE) is introduced to set the scene for an expanded policy perspective, one that is more comprehensive than the approach of attributing employment outcome risk to being NEET and being unqualified or low qualified. The current common emphasis placed on targeting NEETs, and on qualification attainment, is accordingly questioned, being examples of what I refer to overall as theories regarding *education-employment interrelationships*. Specifically, the emphasis placed on secondary school or equivalent low level qualification attainments for youth who are NEET, or who have left school recently without qualifications, is brought into question; in terms of whether such an achievement on its own tends to trigger improved labour market outcomes for the at risk target groups concerned.

Literature Synthesis Chapters: A Note on Chapters 5 to 7

Chapters 5 to 7 should be read all together as a set of syntheses of empirical evidence, and initial conclusions about what the evidence indicates in relation to the research focus topics and the research question. Some sections within these chapters weave in a discussion about selected broad theories. Doing so helped to make sense of the evidence covered in other sections. It helped to explain associated outcomes for youth, and programme outcomes and implications, and vice versa. These three chapters are the basis for the theoretical conclusions that are summarised in Chapter 8, which serves as a refined overall theory of employability, including policy implications and context specifics that concern YARLE subgroups.

Chapter 5. Non-cognitive Skills and Employability Outcomes

Chapter 5 is dedicated to the focus topic of non-cognitive skills as an identified key employability dependency. A thesis definition of non-cognitive skills is provided, being a term that overlaps in meaning with the less well defined term of soft skills and with many alternative terms. The chapter discussion is based on having extensively reviewed and identified what is in common to a plethora of conceptually overlapping key terms, descriptors, skill measures (especially from psychology literature), and skills frameworks and initiatives that have been developed by policy makers and industry actors. Furthermore, the situation-dependent nature of non-cognitive skill application, and challenges regarding how to assess, formally report on and otherwise support youth to signal their non-cognitive skills to employers is discussed. Finally, a second major contribution is made of a summary of evidence which has linked labour market outcomes, as well as education outcomes, to measures of non-cognitive skills or to conceptually equivalent and well established descriptors (particularly Big Five traits). Some examples of what came to be classified as *second chance programmes*, and other non-cognitive skills intervention are included in this final section on outcome evidence.

Chapter 6. Employment Outcomes: Dependencies and Responses

In addition to non-cognitive skills, Chapter 6 synthesises different types of evidence to ascertain what *else* the nature and extent of employability outcomes tend to depend on (ultimately individual labour market outcomes). More specifically, the chapter focuses on reviewing and building explanations about mechanisms and context dependencies for attaining new employment (getting hired in the first place), as an employability outcome type of particular relevance to youth.

The chapter discusses *work experience*, as a seemingly key context dependency that influences who gets what employment outcomes, and as a social mechanism through which one might further develop and/or signal their employability; potentially including their non-cognitive skills. A problem of there being inconsistent definitions of work experience in academic literature, and in programmes and outcome evaluations, is acknowledged as a research

limitation. This definition problem made it difficult to locate, refine selection criteria, compare, and synthesise a larger range of evidence about work experience's relevance to the research question. The tentative conclusion is that work experience is key to understanding employability outcomes and inequalities (it is a key employability dependency) but how, why, in what circumstances and to what extent remains unclear. Further evidence synthesis and theory development work is needed to advance beyond this tentative conclusion.

Sections 6.2 and 6.3 summarise a selection of empirical evidence from employer surveys, and from active labour market programmes and other programme types that include a *work experience* component within them. The selections are not exhaustive but were chosen because of insights they gave about work experience as a theorised key employability dependency. This includes work experience being a theorised *context* dependency that affects employment attainment (past experiences being the context), or as an employability change *mechanism*, through which an individual's skills, employment intentions and/or signalling capability can change.

Section 6.4 discusses the relevance of some existing broad theories to explaining recruitment behaviours and outcome inequalities, mainly being *signalling* theory and *human capital theory*, and associated theory about qualifications as a one of many relevant signals.

At least for non-graduate entry level jobs, the possession of qualifications did not seem to be as much of a barrier to getting hired as employer demands for skills that are essentially non-cognitive in nature. Based on the limited reviewed evidence, qualifications also did not seem to be as important as having past work experience, or attaining new work experience, partly as another means of signalling one's abilities and intentions to a potential employer.

What this chapter reveals about work experience and signalling has implications for understanding and supporting employment attainment for youth in general. However, it also indicates that work experience and signalling challenges—and associated social network disadvantages—may particularly need to be recognised and addressed by intervention to support youth who are comparatively disadvantaged *because* of these challenges.

Chapter 7. Early Employability Development: Intergenerational Disadvantage, Dependencies and Responses

This chapter provides additional evidence that was selected to aid the development of *risk-focused, disadvantage-focused,* or what could be called *YARLE-specific* theoretical conclusions. Thus, it is a YARLE-focused supplementary evidence base to be used in conjunction with the general employability evidence and theoretical explanation provided in chapters 5 and 6. Having said this, some of the evidence and programmes discussed within chapters 5 and 6 are also specifically relevant to targeting NEET, lacking in qualifications, at risk or otherwise

disadvantaged children and youth (YARLE subgroups). Some evidence was placed in Chapters 5 or 6 because of its relevance to the focus topics and programme types that were introduced in those chapters.

The evidence reviewed in this chapter provides detail about intergenerational disadvantages and early childhood to teenaged experiences and social connections that influence what develops or fails to develop with regard to the key employability dependencies. The nature of parents' own work experiences, attitudes and aspirations or expectations regarding work, their own non-cognitive skills and their connections to workforce networks (social capital) are identified as key early influences on those of their children. Young people's early experiences of the world of work, as well as school-mediated work experience programmes are also discussed. Furthermore, an argument introduced in Chapter 5 in favour of starting non-cognitive skills intervention from as early as early childhood is further supported by the contents of Chapter 7. Note, this is not a conclusion that non-cognitive skills intervention can *only* be effective during early childhood.

Chapter 8. Refined Employability Theory: Conclusions and Policy Implications

Chapter 8 is a key research contribution comprising a summary of evidence-based and policy-relevant answers that concern the research question. It contains a set of conclusions about key types of employability dependencies or factors, and their relevance to recognising and responding to employability challenges for youth in general. Further to the conclusions about employability challenges and policy responses for youth in general, some context-specific or risk-focused conclusions are presented about better identifying or supporting youth who are relatively more at risk or disadvantaged than others (read NEET or YARLE).

The chapter revisits and confirms some key suggestions that were foreshadowed in Chapter 4. Namely, the conclusion is made that policy thinking should move beyond a relatively limited focus on targeting NEETs and low level qualification outcomes towards targeting a more multi-faceted set of common reasons for being YARLE. Being that the NEET audience are low qualified is only one, amongst other reasons for being YARLE. Secondly, the conclusion is made that YARLE-targeted interventions could be nested within a broader cross-agency focus on *employability development for all youth* based on addressing a set of key employability dependencies (including employment attainment dependencies). The previously fragmented bits of explanation offered by selected broad theories, is relevant to explaining employability outcomes and policy implications.

In sum, Chapter 8 brings together the findings and conclusions that were first presented in Chapters 5 to 7, and draws out their policy implications and transferability as *employability theory*. It establishes a new platform for future theoretical and empirical work, which can continue to refine policy makers' understanding of how to recognise and influence employability, especially eventual employment outcomes among otherwise YARLE subgroups.

Chapter 9. New Zealand YARLE Report: An Example of Applying the New Theory and Evidence to Inform YARLE Policy and Programme Development

Chapter 9 serves as an initial and partial test of the practical applications of the refined employability theory and supporting literature syntheses that were earlier research outputs. The bulk of the chapter is a specifically New Zealand policy focused research and evaluation report. It is included in the thesis to illustrate how the employability theory that is reported in Chapter 8 (and associated literature syntheses) can be used as a basis for evaluating or informing better design of programmes and higher level policy settings, specifically to support NEET and other YARLE employability development and eventual employment outcome improvements.

In addition to using the evidence syntheses and theory presented in Chapters 5 to 8, the report refers to examples of New Zealand youth and NEET outcomes, programmes and higher level policy settings. An explanation of New Zealand outcomes, and recommendations on what might work to improve them was presented within the report; both in light of the earlier research outputs of international literature syntheses and the production of refined employability theory (in Chapters 4 to 8), and as further supported by additional New Zealand programme evaluations and outcome data.

The report was commissioned to inform high-level policy discussions, and ministerial advice, about making New Zealand's suite of policy responses work better to ultimately improve labour market outcomes for NEETs and other youth subgroups who are at risk of ongoing limited employment. It was commissioned by the New Zealand Ministry of Education, and the Ministry of Business, Innovation and Employment (MBIE).

Chapter 10. Contributions, Limitations and Next Steps

Chapter 10 concludes the thesis by summarising key research contributions and acknowledging some research limitations. Some remaining needs for better explanation and supporting evidence are noted and recommended as a future research focus. The aim of such future research could be to achieve further validations, corrections, refinements or extensions to the employability theory (conclusions) and evidence syntheses produced by this research. In sum, the focus proposed by the research question, the reframing of relevant policy problems, and the answers produced by this research, are only the first steps needed to further improve the evidence base and theory about employability outcomes and about policy implications.

2. THE NATURE OF EMPLOYABILITY

2.1 INTRODUCTION

This chapter explains my philosophical perspective on the nature of employability and employment and how we can know about them or develop theory about them. Some key terms and concepts that shaped my worldview and explanation about employability and employment, as complex phenomena, are also outlined in this chapter.

My perspective draws on *complexity thinking*, a 'scientific' version of *realist* philosophy and *ecological psychology*. I first outline these three mutually compatible philosophical underpinnings in sections 2.2 to 2.4 and then summarise some ontological implications in section 2.5. These sections establish how I have conceptualised the phenomena at the focus of the research and policy interest, and their potential to develop or change it. The phenomena include what I refer to as the nature and extent (status) of individual employment *capability* and a wider concept of individual *employability*, *employability outcomes* and more conventional concepts of *employment outcomes* (also called labour market outcomes). Finally, in Section 2.5, I pull together definitions of concepts and depict some key relationships.

2.2 COMPLEXITY THINKING AND SOCIAL PHENOMENA

Complexity thinking is a transdisciplinary way of thinking about and accounting for the nature of phenomena that are 'complex', or of complex systems from which complex phenomena may emerge. Mitleton-Kelly (2003, p. 26) proposes that complexity, "is not a methodology or a set of tools (although it does provide both). … The theories of complexity provide a conceptual framework, a way of thinking, and a way of seeing the world" (p. 26).

Mitleton-Kelly (2003) argues that a strength of complexity, or associated principles of complexity thinking, "is that it crosses the boundaries of disciplines in both the natural and social sciences" (p. 47). However, multiple philosophies about the nature of complexity and about how it should be dealt with have developed via multiple disciplines and fields of study, and some conflict with others (Alhadeff-Jones, 2008). The terms *complexity theory* or *complexity science* are sometimes used instead of complexity thinking. This reflects some of the divergences of disciplines that have developed their own philosophical and methodological responses to complexity, with only some 'complexity theorists' interpreting complexity thinking or its applications as a 'science'. Despite philosophical differences, the academic attention given to complexity thinking (or science or theory) is apparent across disciplines (Gerrits & Marks, 2015; Mitleton-Kelly, 2003). The attention indicates its usefulness and relevance to making sense of a range of complex social and non-social types of phenomena.

Some of the explicit attempts that have been made to philosophically and methodologically address complexity come from, and are suited to, the social sciences. However, a multidisciplinary understanding of complexity, how to deal with it or not, and for what

purposes, might also be enriched by an awareness of complexity philosophies and research approaches that have emerged from non-socially focused fields of study. Such fields, according to Davis (2006) include "complex adaptive systems (physics and ecology), non-linear dynamical systems (mathematics), dissipative structures (chemistry), autopoietic systems (biology), and organized complex systems (information science)" (p. 8).

While this broad range of sources does not lead to one fully agreed list of properties to define what makes a system or phenomenon complex, I offer some complexity properties and concepts that are generally accepted. As set out in the next section, this set summarises some key tenets of complexity thinking based on my review of characteristics present in descriptions from multiple authors and fields of study. Some of my choices about which of many overlapping terms to adopt from other authors were based on selecting language that seemed best suited to describing social, rather than non-social, complex systems.

2.2.1   *What Makes a System or Outcome Complex?*

Complex systems are often defined in contrast to systems that are merely *complicated* or simple (Alhadeff-Jones, 2008). Compared to complex systems, non-complex systems can be appropriately conceptualised as *machines* with clearly separable parts (Mikulecky, 2001). The functions and outputs of non-complex and machine-like systems, in comparison to the emergence of complex systems, are easier to explain and predict with regard to identifying and separating out 'cause and effect' relationships. Complex systems, on the other hand, are adaptive and self-organising.

There is no widely accepted list of principles or properties to define what makes a system or phenomenon complex in nature (Alhadeff-Jones, 2008; Cham & Johnson, 2007; Mitleton-Kelly, 2003). Instead, there are many conceptually overlapping lists and descriptions about the nature or properties of complexity (among these are (Alhadeff-Jones, 2008; Byrne, 2002; Cairney, 2012; Cham & Johnson, 2007; Cilliers, 1998; Davis, 2006; Gilbert et al., 2013; Mitchell, 2009; Mitleton-Kelly, 2003).

Drawing from the sources cited above, I have synthesised six characteristics that summarise some key terms and concepts that distinguish complex systems from other systems. While I say they are characteristics of complex *systems*, by association, they also describe how complex systems behave and change and therefore the nature of complex *outcomes*. This includes individual, group or other types of *social* outcomes and potentially associated systems or system influences. For a type of outcome to be considered complex in nature, its existence must be the product of at least one complex system. It may be influenced by multiple complex systems that interact with each other in *dynamic*, potentially *context-adaptive* and, accordingly, somewhat unpredictable ways. A complex outcome may also be influenced by the existence or absence of

non-complex systems or 'objects' within an environmental scenario. These, too, can shape what outcomes emerge.

Particularly in reference to humans and other social systems, then, complex systems and the nature of the outcomes that emerge from them are:

- **Dynamic, reflexive and non-linear**. Outcomes, events, experiences, or happenings are non-sequential in their order and uniformity. Complex systems are **not machine-like**, in that they lack consistency and predictability in how they function or what outcomes are produced; although the system might comprise parts, the parts are not easy to completely separate, or their 'workings' are hard to make sense of separately from each other.

- **Feedback emitting and perceiving** (feedback loops). Complex social systems or objects (such as a human or an organisation) tend to influence and be influenced by other systems or objects via emission and perception of feedback; some of which may intentionally be sent or perceived and some of which may not be. The feedback that a complex system emits or perceives in each instance of interaction can be unidentical; including being adapted to context. Subsequently, future perceptions, actions, experiences and outcomes are accordingly uncertain and can be unidentical or inconsistent, compared to mechanical interactions. While the feedback, perceptions and actions that comprise social interaction are not entirely predictable or consistent, they are a source of potential to influence or trigger changes to current states of being.

  - Figure 2.5.2 illustrates social interaction—or really the invisible existence of interaction and influencing *potential*—as the mechanisms or feedback loops through which *intentions, perceptions and actions* (IPAs) can happen, and through which future intentions, perceptions and possibilities for actions or outcomes can be changed, as a next state of context.

  - Note that an individual, organisation or other social system can perceive and/or emit feedback intentionally or unintentionally. Feedback can also be conceptualised as *signals* (which are discussed in Chapter 6 in detail).

- **Self-organising.** In the case of *social* types of complex systems, they behave autonomously, or at least semi-autonomously, in what they do or how they go about doing it.

- **Emergent**. The phenomena or outcomes of interest are related to a context, and arise from interaction between a complex system and its context, which might include other complex systems that exist as part/s of that context.

- **Fuzzy boundaries**. The boundaries that distinguish a complex system as being separate from other systems that it interacts with are not exactly clear because of the co-affecting exchanges that happen between the two. In my research, I distinguish between 'the

individual' as a 'personal context' and other systems an individual might interact with as part of 'external context'. However, when attempting to describe social influence or interaction between an individual and other social systems (humans or organisations), it becomes difficult to say whether the description is attributable to the individual or to their external context, or to both.

- **Having a history.** Complex systems have a history that influences what becomes a current state of being. A context's state of being, or the state 'outcomes' as observations about a frozen point or period in time, are defined partly by time. Furthermore, the reasons for a present state of being (as context or associated outcomes) can be partly explained by observations about its past states of being. For example, certain characteristics of an individual's previous life events, experiences or previous behavioural tendencies as 'usual states of being' may give clues as to how they are likely to behave in the present tense and why.

The history of a complex system is a key source of clues as to what might happen to it, or because of it, *next* or at a later time. Cilliers (1998, p. 4) explains that: "Complex systems have a history. Not only do they evolve through time, but their past is co-responsible for present behaviour. Any analysis of a complex system that ignores the dimension of time is incomplete" (p. 4). Efforts to understand why or how an individual, or any other type of complex *social* system, ended up in a certain state of being should include consideration of its former states of being, including the notion of past experiences, interactions and past outcome or context description. By considering past interactions, behaviours, outcome patterns or historical influences, it may be possible to make better informed guesses about what might emerge *next*, or to better understand why or how an individual or social system came to be in its present state.

2.2.2   *Social Systems and Outcomes*

My research is focused on the types of complex systems and associated types of outcomes that are not only complex but *social* in nature. My definition of a social system includes the notion of an individual, social group, organisation or any other type of system that comprises humans in its makeup. Some types of systems and outcomes in the world are complex but not social in nature; they do not include humans in their makeup.

A *social* system and the networks it involves can include non-social and non-complex systems, or simple inanimate objects, as components within the makeup of what become defined as an overall social system. An 'education system' and a 'school' are examples. However, in order to be classified as a social network or system, at least two humans must be involved in its makeup with identifiable *roles*, who must interact and accordingly have the potential to influence or be influenced. Alternative definitions of 'social systems' could be debated. The definition provided here is adequate for my research purposes.

It could be argued that some examples and embodiments of artificial intelligence (AI) are also 'social' systems. I say this given that some such systems display human-like abilities to apply sophisticated and internally self-directed reasoning, interact with and adapt to their environment and interact with humans in an intentionally influencing way. Some forms of AI have demonstrated 'the highest form of reasoning' and a growing field of interdisciplinary complexity research is dedicated to AI (Simon, 1996 in Alhadeff-Jones, 2008). I make the point of acknowledging some AI applications as a 'social' system or larger social system 'member'—one that can be human-like, self-organising and interactive with humans—because AI applications have implications for 'the future of work' and the notion of 'workers'. My research deals with the employment prospects and employability of today and tomorrow's young people as current and upcoming workforce members, ones who may increasingly be competing with AI for jobs, having the nature of their job prospects affected by AI (for better or worse) and interacting with AI as part of their jobs.

2.2.3   *Time and the Observer Defines a Social or Programme 'Outcome'*

An observer and their intentions can determine what becomes defined as a particular type of social *outcome* and/or as a *programme outcome.* This matters in terms of what is officially recognised, measured and responded to as outcomes among populations of policy concern. For example, official definitions and measurements of individuals as being 'employed' is determined by certain authorities as 'the observer'. Official outcome data on employment rates for populations, and on whether an individual is treated as being 'employed', usually excludes unpaid types of 'work' within what becomes recognised as employment.

Some complexity-focused authors have, "recognised the importance of the relationship binding the observer to a phenomenon" (Le Moigne, 2001a in Alhadeff-Jones, 2008, p. 68). Others who apply a 'dynamic systems approach' towards studying complex systems appear to lean towards reductionism and the protocols of scientific method and they accordingly might reject this view that an observer could or should influence an outcome (Alhadeff-Jones, 2008). I adopt the former view for the reasons explained below. Many outcomes that are defined as types of social or policy outcomes are at least partly socially constructed and abstract concepts. They are real because others defined and perceived them as such.

Furthermore, the notion of defining and measuring any kind of change to an individual or their life context as being a policy or *programme outcome* reflects that policy actors have particular intentions for observing and reporting on such change. For example, they intend to define and compare certain changes (or lack of change) to pre-programme and post-programme states of being as 'outcomes', and attribute post-outcomes both to individuals as programme participants and to the programme. Such practice is a common way of defining and indicating programme 'effects' or 'success'. This example of 'pre- versus post-programme' outcome definition also

illustrates how the notion of an 'outcome' can be defined based on points, periods or events in time. What does and does not get defined as a social outcome and/or programme outcome, and how or when outcome measurements are taken, can affect what becomes defined as a 'successful' or 'favourable' outcome.

When certain types of life experiences, behaviours, situations or outcomes are defined as a *programme outcome*, or as a policy concern, it is important to consider whose outcome intentions or expectations are being described. The proposed definitions and measures of outcomes that are typically seen in programme and policy documents are most often a statement of intentions and assumptions that are held, or have been defined, by programme decision-makers and designers. Statements of programme intentions, and policy thinking about what is a successful or desired life outcome for a target group, may or may not be shared, or even consciously perceived, by all or any of the individuals who are classified as members of the target group.

Outcomes Can Be Reclassified as Context

Outcomes can be interchangeably reclassified as *context* description. Effectively, the notion of an 'outcome' is the reframing of description about a specific type or state of context; a state of being, experience or an event. Given that research and policy practice is often focused on understanding or manipulating 'the thing that does or does not *change'* about a state of being, it is common to refer to something about a state of context as an outcome. What gets defined and focused on as an 'outcome' partly depends on what type of contextual change is wanted, unwanted or otherwise of interest to the observer, describer, or 'intentional context manipulator'. Furthermore, the act of singling out and describing a feature of context as an outcome is often motivated by an interest in measuring *changes* to a state of being over time; regardless of whether the state of being (context) has already happened and been observed, or is being described as a future possible state. A policy-relevant example is the practice of taking pre versus post programme participation measurements.

In sum, what could be defined as a programme outcome, based on a measurement taken at a specific point in time, might alternatively be reclassified as a feature of context in reference to a later point in time. Past programme implementations, and past- or present-tense measurements of life 'outcomes' regarding target groups, accordingly, become part of a 'next' or present overall context within which future programmes need to work. My thinking about the interchangeability of context and outcome descriptions, as relevant to pre- versus post-programme description, was aided by 'the ripple concept' presented by Jagosh, Bush, Salsberg, Macaulay, Greenhalgh, Wong, Cargo, Green, Herbert & Pluye (2015).

'Employability Outcomes' as Interim and End Policy Outcomes

Policy responses can be designed with the intention of triggering *end* outcomes directly, or they may be expected to trigger what I call *interim* outcomes. Interim outcomes are known or proposed to be key indicators and/or influences upon what emerges as a defined positive or negative end outcome. For example, my research frames measures of labour market outcomes (also referred to as employment outcomes) as the *end* outcome types of research and policy focus. A researched example of an *interim employability outcome* is that of qualification attainment. The attainment of a qualification is a type of theorised interim employability outcome, even though it is not normally referred to as such. The theory is based on evidence about links existing between qualification attainments and the nature and extent of labour market outcomes. However, the theorised 'working' of qualification attainment, as a key influence on what happens as later labour market outcomes, involves generalisation and a lot of assumptions about other sorts of context/outcome dependencies.

2.2.4 *Public Administration and Complexity Thinking*

My interest is not only in explaining some complex social outcomes that are attributable to individuals (employability outcomes); I am also interested in implications for public policies and programmes 'working' as responses to those types of outcomes. Therefore, it was important to confirm that my adoption of common tenets of complexity thinking is compatible with public policy research. Here, public policy as a subject area includes policy evaluation and development and its manifestation as the implementation of programmes or higher-level determinations. Social intervention is another term sometimes attributed to the subject area.

The merits of applying complexity thinking to the study of public administration (or social intervention) have been argued since the 1990s. Since then, the number of publications in public administration literature that refer to complexity theory have rapidly multiplied (Gerrits & Marks, 2015). According to Gerrits and Marks (2015, p. 539), "Ideas, concepts, and theories from the complexity sciences have slowly but steadily gained popularity in the social sciences in general, and in the domains of public administration, public policy, and public management in particular (e.g. Teisman et al. 2009; Gerrits 2012)."

Raadschelders (2011 in Eppel, 2017, pp. 850–851) identified four scientific traditions in use within public administration literature: "scientific knowledge, practical experience, practical wisdom, and relativistic perspectives." Eppel (2017) examined and confirmed the extent of alignment of these four traditions with the general tenets of complexity theory, noting high alignment in particular with practical experience and practical wisdom. Furthermore, the tenets of complexity theory are not only relevant to understanding the workings of the social outcomes that public policy actors attempt to change, but they are also relevant to understanding the workings or non-workings of public administration systems themselves. In other words, public policy

development and its manifestation as implemented programmes or 'policy responses' are acts of developing and implementing complex systems that, in turn, are meant to control or change other complex social systems, with the latter including members of a policy target group. This view of public policy, taken through the lens of complexity thinking, implies an ontological position generally referred to as realist.

2.3   A 'SCIENTIFIC' REALIST PHILOSOPHY

While there are many philosophies that claim to be *realist*, some of which are in conflict with others, I aligned to a scientific version of realism underpinning the work of Ray Pawson (Pawson & Tilly, 1997; Pawson, 2006, 2013). This work makes explicit the implications of realist philosophy, and of complexity, for those interested in researching, evaluating or informing the development of public policy. Pawson explains complexity as relevant to conducting programme evaluations, evidence syntheses (as part of what Pawson calls realist syntheses), and developing programme theories that acknowledge context-dependencies but are transferable to an extent that is useful to policy actors (Pawson, 2006, 2013).

In his book, *The Science of Evaluation: A Realist Manifesto* (2013), Pawson summarises the contributions of seven other realist philosophers whose work he drew from as 'pillars of realist wisdom'.[7] It is worth noting that some of these authors' writings were focused on social science interests, while others were focused on natural sciences.

Pawson emphasises that his philosophical viewpoint and proposed handling of complexity can be regarded as scientific. He says this partly to distinguish his version of realism from versions that give little or no regard to the philosophical underpinnings and methodological standards that are associated with the term 'scientific method' (Pawson, 2013). However, Pawson acknowledges that the kind of 'results' produced via the application of scientific method has both strengths and limitations regarding the types of 'knowledge' it can produce and the purposes it can serve. Applications of scientific method typically involve attempts to observe relationships between a limited selection of variables and to do so within controlled environments; as experiments. Scientific method draws focus toward only that which can be practically observed and measured. It follows that scientific method suits the purpose of testing narrowly defined hypotheses about a selection of relationships, and making accordingly narrowly focused conclusions about selected variables. When used on its own, application of scientific method to research can produce important evidence about a piece of a complex puzzle. However, the types of conclusions that can be drawn from controlled experiments, as pure scientific research, are insufficient on their own when the goal is to better understand or manipulate complex social phenomena; including via policy practice.

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[7] The seven authors and sources Pawson summarises are Bhaskar (1978); Archer (1995); Elster (2007); Merton (1967); Popper (1992); Campbell (1988) and Rossi (1987).

A limitation of scientific method application is that it falls short in its *explanatory power*. Specifically, it does not produce the explanation needed to inform the development or review of theories about complex social outcomes; about why or how they tend to occur, or in what types of uncontrolled real-world environments. It does little in itself to aid social-intervention-focused *theory development*. Theory development is key to making better guesses about what types of policy responses might work, and within what contexts, in the future.

The complexity of real-world contexts and social systems means that the 'effects' of social policy or programmes are not entirely predictable, nor is it practically possible to control all potentially relevant variables. However, it is possible to develop informed guesses (evidence-based theories) about what types of programmes seem likely to produce desired effects, and for whom or what types of circumstances (Pawson, 2013). The fact that the social outcomes policy actors propose to cause or change cannot be infallibly controlled, repeated or predicted as certain outcomes is a key reason why retrospective 'outcome evidence' is of limited use. On its own, research that identifies *what* social policy outcomes already happened and only describes what happened as quantitative 'results' lacks explanatory power, as is typical of pure applications of scientific method (Pawson, 2013).

Pawson's proposed approach to conducting a *realist synthesis* reflects a belief that policy evaluation and development should be informed by 'evidence'. However, he has noted the limitations of only looking to types of evidence that are quantitative and retrospective, regardless of whether they are large-scale or obtained via strict adherences to scientific method. Pawson (2013) proposes to use the aforementioned types of evidence as a basis for then developing or evaluating programme theories, which can be used to better inform future programme or policy development.

I adopt Pawson's view that policy evaluation and advice should be *evidence-based*—drawing from past programme or other officially monitored outcomes as key evidence—and be coupled with other types of evidence, including practitioner experience, and with theoretical reasoning.

While many views from different disciplines about the nature of complex phenomena appear compatible, disagreement seems to arise about the choice and legitimacy of methodologies to study and explain them. Pawson (2013) argues that we cannot meaningfully explain the workings or non-workings of programmes, or predict and repeat social outcome patterns of policy concern, based on how they unfold in an artificially controlled and simplified laboratory context. The variation in what emerges as each instance of a programme implementation and each life outcome for an individual can be more realistically explained when the potential influence of the variable real-world contexts within which they emerge is at least acknowledged. This has implications for choices of research design, including my own.

I adopted Pawson's argument that there is value in conducting policy research and evaluation in ways that acknowledge and study the complexity of the real-world social contexts within which programme outcomes emerge, as much as studying the programme itself. Rather than breaking down each part of a complex system and studying each part separately—out of context—more sense can potentially be made of what emerges by studying the system as a whole (Mikulecky, 2001). Some advocates of applying a 'whole system' approach to studying why or how outcome patterns emerge have done so in reference to the study and development of education or health programmes or public policy more widely (Byrne, 2002; Cilliers, 1998; Eppel & Wolf, 2012; Mason, 2008; Plsek & Greenhalgh, 2001).

2.4   ECOLOGICAL PSYCHOLOGY

Ecological psychology offers a set of principles that can aid research aimed at identifying or explaining environmental influences on certain types of behaviours or life outcomes. Ecological psychology is suited to the aim of studying interactions and seemingly influenced types of human behaviour, partly by conceptualising an individual or group and objects within their environment as components of interaction and influencing potential. Ecological psychology reflects a worldview that behaviours are context- or situation-dependent and perception-dependent (Center for Research in Human Learning, 1977; Gibson, 1986; Heft, 2005; Marsh et al., 2006; Read & Szokolszky, 2018; Shaw et al., 1982). The principles offered by ecological psychology are relevant to the aim of understanding employers' recruitment intentions and their perceptions of and reactions to different job candidates. Recruitment behaviours and decisions appear to be highly dependent upon (read influenced by) social interactions and other environmental conditions (context).

The principles and key terms used in ecological psychology literature align well to the principles and concepts that are commonly attributed to complexity thinking. Ecological psychology is also compatible with the aforementioned 'scientific realist' philosophy (Pawson, 2006, 2013), in that both emphasise the need to account for the real-world contexts within which social phenomena emerge. Some of the key terms associated with ecological psychology are elaborated on below.

2.4.1   *Affordances of Objects Within Environment*

The concept of *affordances* is core to the 'interactionist' world view that shapes ecological psychology discourses (Gibson, 1986; Greeno, 1994; Heft, 2012; Mace, 1977; Marsh et al., 2006). The psychologists James J. Gibson and Roger G. Barker were among key authors who first developed the concept of affordances around the 1960s (Heft, 2012). An individual, such as a research subject, may perceive certain *objects* as *affordances,* based on whether and how the individual perceives the object's relevance to achieving or maintaining whatever *intentions* they have. Marsh et al. (2006) mention a simplified reference to affordances as 'action possibilities'.

The term *objects* is often used in ecological psychology literature (Greeno, 1994; Heft, 2012; Marsh et al., 2006; Read & Szokolszky, 2018). Objects include concepts of social systems, groups, organisations and individuals as well as inanimate objects; all of these are components of what makes up an overall real world environment, or real world *context.* Importantly, the term object works as a neutral reference to something that could be perceived and reacted to as, for example, a useful tool, a threat or barrier, or as something that is irrelevant to whatever an individual's intentions are. For example, an individual may perceive a box as a box, or they may perceive and react to it as a 'seat' if their intention is to find something to sit on. John. J. Gibson (in Read & Szokolszky, 2018, p. 177) writes that: "even though objects can be said to have properties or qualities such as color, texture, composition, size, shape (including elasticity, rigidity, mobility), what we perceive when we look at objects are their *affordances*, their meaning and action possibilities, not their properties/qualities" (p. 177).

As a note on terminology, use of the terms *environment* and *objects* in much of the ecological psychology literature is basically equivalent to what I describe as *context.* I refer to features or components of an overall environment (including the objects that exist within it) as *external context*. I also refer interchangeably to *internal or personal context* description, in reference to description that is attributable personally to an individual or type of individual. Accordingly, description about *profile types* or target groups (as internal context particulars) is distinguishable from description or theory about features or types of external context.

2.4.2   *Intention-Perception-Action (IPA), Interaction and Network Dependencies*

What does or does not occur as a type of behaviour, outcome, way of interacting or a life outcome depends partly upon variables that pertain to *intentions, perceptions and actions*, both those of 'the individual' and of whoever they interact with. I refer to intentions, perceptions or action description using the shorthand reference of *IPAs*, including referring to descriptive particulars about certain Is, Ps or As, or describing the occurrence of outcomes or behaviours as being dependent on IPAs. Note that reference to 'actions' includes decisions and some types of outcomes, such as 'hiring decisions' or 'intending to avoid seeking work'.

Interactions are the means through which intentions and perceptions can change, and through which actions, outcomes or *experiences* can happen. Interactions typically involve two-way feedback loops, although it is not a given that the availability of feedback is noticed or is intentionally sent. Interactions are sources of *potential* for behaviours, experiences and other concepts of outcomes to manifest, and what manifests via the influence of interaction can accordingly influence what happens as future IPAs and as life outcomes.

Furthermore, the nature and extent of one's *network connections* is a dependency that shapes the nature and extent of interactions, life outcomes, experiences and behaviours. Who or what one is

connected to shapes the potential that exists for intentions, perceptions and experiences to be influenced or changed, and for life outcomes (such as job offers) to be afforded by such connections. The nature of one's networks, and of the social interactions that happen through them, may otherwise be conceptualised as *relationship* description.

Static descriptions of networks, or of who or what an individual is connected to, can be conceptualised as features of *external context*. Conversely, description of the nature or dependencies of the interactions that happen *via* network connections are part of the description of the *mechanisms of change,* or the *outcome potential*. By conceptualising the potential for an outcome, action or change in behaviour as something that partly depends upon certain types of interactions, experiences, IPAs, and network connections, it becomes easier to develop codified explanations about what realist literature conceptualises as *mechanisms*.

2.5 MECHANISMS

Some realist researchers have acknowledged what I found to be methodological challenges in operationalising and codifying *mechanisms* in practice, when attempting to follow realist definitions of a mechanism (Dalkin et al., 2015). The definition listed below was provided by the realist RAMESES II Project Team (2017, p. 2), as a training resource for adopters of the realist approach to evidence synthesis and programme evaluation.

"A mechanism is:

- the interaction between programme resources and the ways in which participants interpret and respond (or not) to them

- an explanatory account of how and why programmes gives rise to outcomes

- hidden, but still real, shaped by and interconnected with context.

Mechanisms are not:

- programme components, inputs or outcomes

- variables, mediators or moderators" (p.2).

I use the term mechanism when describing a type of interaction and its seeming influence or relevance to a type of outcome that emerges, which is in line with the above realist definition of mechanisms. However, unlike the realist definition offered above, I do not limit my research and explanatory focus to the description of interactions between 'programme resources' and intended programme target groups or populations. Presumably, the definition is meant to keep realist researchers focused on only conceptualising the real world mechanisms that involve a target group's interaction with a programme resource or object, as opposed to conceptualising a

target group's potential to be influenced by other mechanisms (read other interactions with objects that are not programme resources). After all, realist practitioners are meant to eventually relate a description of a mechanism to the workings or non-workings of programmes.

In contrast the above definition, I do not accept that realist researchers should only focus on developing theory about mechanisms that involve an interaction between a programme resource and its intended participants because the intdended participants' interactions with other objects in their world environment (such as with family members, social groups, sources of money) can also influence whether a programme achieves its intended effect on participants. Furthermore, by recognising that a non-programme-related mechanism appears to influence a programme target group in a certain way, it may become possible to improve programme effectivness by designing a programme response to the influencing power of such a mechanism.

2.6   CONCLUSION AND ILLUSTRATIONS OF KEY CONCEPTS

This section summarises key points from the chapter by relating some of the generic theoretical concepts and terms that were discussed earlier to the social outcomes and change dependencies (or influences) of research interest. Employability is conceptualised as an ever-changeable and time-delimited state of being, one that can be estimated by estimating the status of some seemingly key features of context. Current and past states of employment are one important feature of context that indicate the nature and extent of one's employability, but employment outcomes are not the only indicators or dependencies that shape current and future employability (employment abilities, intentions, potentials and likelihoods).

In sum, the nature and extent of an individual's employability, and what emerges as their actual employment outcomes, and the potential for these two states of being to *change*, depend upon:

a) the *mechanisms* (types of networks or relationships, and interactions) through which employability develops and/or through which actual employment status can typically be changed; and upon

b) certain states of *context,* or *context-dependencies,* that appear to influence what states of employability and employment emerge, and for whom.

In order to progress theoretical explanation about employability development, employment outcomes, and positive or negative influences on certain types of employability outcomes, it is necessary to synthesise evidence and develop theory about seemingly 'key' change mechanisms and context dependencies. This is what the remainder of the thesis aims to do.

Three figures are provided below to visually summarise some of the key terms and concepts discussed in this chapter, as relevant to the nature of employability, employment and their

potential to change. Some of the concepts that Figures 2.5.1 to 2.5.3 capture are elaborated on as follows.

Figure 2.5.1, below, illustrates the nature and extent of an *individual state of employability* as if it were frozen in time, as description of the status of key features of context and outcomes to date. In reality, states of context, including employability and employment status, are ever-changeable rather than static.

The nature and extent of overall *individual employability* is dependent upon, or approximately made up of, the status of (a) *personal or internal* context variables, which are attributable to the individual, and (b) *external* context variables, which are everything else that exists within a real-world environment, and that an individual has the potential to be influenced by or to influence.

Thus, the nature and extent of individual employability, including future employment prospects, can be theoretically estimated based on measuring or indicating the status of theorised *key context dependencies*. Work experience, non-cognitive skills, subject knowledge and qualifications attained to date are examples of theorised key context dependencies that seem to strongly and commonly influence the nature and extent of employability.

After any kind of outcome or change to context happens, it becomes part of a 'next or future state of context'. It could potentially change employability if not also immediately changing employment status.

Figure 2.5.2, below, illustrates the sometimes-invisible kinds of *interaction, 'IPA' and change potentials* that exist between some seemingly important employability stakeholders and outcome influencers. The illustration depicts what might otherwise be called *change mechanisms.* It focuses on the types of relationships or network connections that appear to be particularly relevant as components of *employment attainment* mechanisms. However, some of the illustrated potentials for interaction, and between who, are also relevant as mechanisms through which other components of employability can typically be changed (besides changing employment status immediately and directly).

The nature and extent of an individual's *network connections* are the means through which interactions, experiences, influences and outcomes (including employment outcomes) can be activated. They are the means through which the IPAs of employability stakeholders can happen, or can be changed, via the influence of others.

Within the limits of a two-dimensional diagram, Figure 2.5.3, below, illustrates both employment and employability as intertwined, constantly changeable states of being. This includes short-term and comparatively long-term concepts of measurable employment 'outcomes. The middle

section of the diagram summarises some *dependencies* that typically influence what emerges as an overall state of employability and as more easily measurable states of employment 'outcomes'. The outer sides of the diagram contain examples of commonly seen programme strategies, or interim programme outcomes, outputs or activities that are meant to work to improve employability, or employment more directly.

Figure 2.5.3 was produced early on in the research as a working draft. It was drafted during the early stages of the research to sketch examples of what appeared to be common types of policy responses, outcome expectations and 'change dependencies' that seemed relevant to influencing or anticipating what emerges as types of employment outcomes. Because Figure 2.5.3 was drafted before the evidence synthesis and final efforts to refine theory were completed, some of the terms in the diagram vary slightly from those used in Chapters 5 to 9. For example, the diagram refers to *competencies, skills* and *motivation orientation* but it was later deemed to be better to refer to all types of skill concepts (including those cognitive, non-cognitive, transferable, technical) as *abilities and intentions*. While minor refinements were made to the labelling of concepts within Chapters 5 to 9, little substantively changed. The diagram continued to be a useful and accurate enough illustration of examples of programme activities, and other theorised common influences on employment outcomes.

The next chapter outlines the research design and revisits the research question that was introduced in Chapter 1.

2.6.1 *Figure 2.5.1: Employability and Employment as Static Context Description Frozen in Time, Including Outcomes and Experiences To Date*

EXTERNAL CONTEXT

Family Members & Dependents

Labour Market Context

Supply/type of job candidates
Demand/type of jobs on offer
Employers & their behaviour tendencies
Where & what competition/jobs exist

PERSONAL CONTEXT

Family situation   Experiences to date
Cultural/social situation **Employment status**
Socioeconomic situation   Abilities (skills, traits)
Geographic situation   Behaviour tendencies

Education, life, sport, health, welfare,
employment 'outcomes'

Media

Neighbourhood

Geographical
Existence

Education Responses

(organisations, staff/agent actions, inputs, outputs)

Peers & Social Groups

Policy Responses

(implemented inputs, agent actions)

2.6.2 Figure 2.5.2: Employability/Employment Change Mechanisms as Interaction and 'Intention, Perception, Action' Potential

EMPLOYABILITY OF AN INDIVIDUAL

INDIVIDUAL AS AGENT

Employee/Job candidate

Current employment **capability**

= nature & extent of abilities & intentions

Employees/Job candidates
(agents seeking/doing jobs)

I-P-A

I-P-A

I-P-A

I-P-A

Other 3rd Party Signallers of Individual Agent Employability

Employers
(agents offering/able to offer jobs)

I-P-A

I-P-A

POLICY RESPONSE AGENTS

Programme providers

Response designers, administrators, regulators, communicators

'Outcome' observers, managers, definers

2.6.3 *Figure 2.5.3: Theories of Action or Change for Employment/Employability as a Short-
and Long-term Outcome Focus*

Employment
Long term self-sustaining
'career managing'

Employment
Short term or any conditions

EMPLOYABILITY

**Motivation
Orientation**

TO RECOGNISE CAPABILITY

CVs

Network Connections
(schools, clubs, professional &
social groups, cultural groups)

past WRE
(Extra-curricular activities are
a non-employment subset?)

Extra-curricular activities (i.e.
unpaid goal-specific roles in a
Network where members may
recognise your contributions as
being work-relatable or
beneficial to others)

Referees
(validates past WRE, KCs/Skills,
Networks, behaviour norms,
Motivation Orientations)

Qualifications
(the issuing institution also
works as Network Connection)

**summative/mastery
assessment feedback**

Networks
(access to people, opportunities, resources)
Work-relevant Experience included

Soft/Transferable Skill types
Hard Skills & subject knowledge

Networks   **Competencies**

**CONTEXT
DEPENDENCIES**

the individual and their
environment

TO DEVELOP CAPABILITY

**Influence motivation
orientation or goal-focused
behaviours** (e.g. coach to
consciously plan-act-review
goals as routine)

Inform of barriers, threats,
opportunities, resources

Create or connect to **WRE &
Networks**
(to develop & gain employer
recognition of skills)

**Mentor. coach or counsel to
develop 'soft skills'** e.g:
identity/self-awareness
employability confidence
self-management
relating to others
communication / literacies

**Teach/train 'hard skills' or
specific knowledge**

material/financial resourcing

assessment & feedback

Theories of Action, Theories of Change, Context Assumptions (Intervention Theories)

3. RESEARCH DESIGN

3. RESEARCH DESIGN

3.1   INTRODUCTION

This chapter explains what methods and overall research approach was applied in order to fulfil the research aims. The chapter outlines the literature synthesis and theory-building work that was carried out to answer the research question, and to explain and demonstrate the policy relevance of what became produced as concluding employability theory. The research design is grounded in the principles of *realist* philosophy, as was set out in Chapter 2. It is a hybrid example of realist syntheses and scoping reviews, as is explained in sections 3.2 and 3.3. The method involved iterative, and initially broadly scoped searches and syntheses of evidence and theory that existed before the research commenced. This includes theory that was already established within academic literature (referred to in the thesis as *broad* theory), and *programme theory* or other wider assumptions and expectations that appear to shape typical policy responses to the outcomes of interest. The research also involved a parallel process of locating, critiquing and building theoretical explanations and concept clarifications; as relevant to understanding or changing employability outcomes and explaining subsequent policy implications.

Section 3.4 elaborates on what types of literature were deemed to be within scope for search and synthesis. It also outlines some judgement criteria that were used to guide selection decisions. A multidisciplinary range of academic literature was eventually cited in the literature syntheses, alongside a smaller selection of example policy documents, programme evaluations and other non-academic grey literature, mainly from the world of public policy practice.

The chapter concludes with a summary of my past professional work experience. To be able to conduct a *realist synthesis*, it is important to have prior professional experience working with the policy or programmes, target groups or outcomes, or thematic areas of interest that are going to be researched. Otherwise, decisions about what to look for and include in the research scope, especially to inform the earliest rounds of literature and policy searches, would be more difficult without having prior knowledge of any relevant policies, topics or literature. Lack of prior familiarity with relevant types of policy agendas and programmes would also hinder one's ability to evaluate and translate the policy implications, and potential applications, of the research findings and conclusions.

The choice of research design made it possible to generate the useful new concept of *youth at risk of limited employment (YARLE)*, and an accompanying explanation about how some youth are greater at risk or disadvantage than others, with regard to labour market outcomes as the end outcome type of primary policy interest. The YARLE concept was a major research contribution; as was the development of associated theory about individual employability (and eventual outcomes) being dependent upon a set of key context factors, and certain social mechanisms of employability development and employment attainment. The term YARLE was eventually generated to encapsulate some of what was concluded from having undertaken the literature synthesis and theory building work. By comparison, the YARLE concept—as part of the newly

generated employability theory—accounts for more reasons and indicators of risk and disadvantage than the NEET classification captures. It indicates *what else* policy responses might need to recognise and manipulate in order to effect improvements for at risk target groups.

3.2   REALIST SYNTHESES AND SCOPING REVIEWS

The overall research design is essentially a hybrid of a *realist synthesis* and a *scoping review*. For example, the research involved a broad type of question, a necessarily iterative approach towards searching for and selecting existing literature, the bringing together of multiple types and bodies of literature, and a focus on developing a narrative or explanatory type of answer; all of which is characteristic of both realist syntheses and scoping reviews (see definitions in Munn et al., 2018; Sucharew & Macaluso, 2019; Wong, Greenhalgh, Westhorp, & Pawson, 2013).

Some overlapping concepts and definitions were brought together which had previously not been well connected, partly due to being scattered across different bodies of literature. The mutual relevance of the literature to answering the research question was then made explicit. The need to clarify or better connect thematic concepts or definitions, and to accordingly make it possible to relate the mutual relevance of a diverse range of information sources to a research question, is a common reason for choosing to conduct a scoping review (Munn et al., 2018). It became apparent at the research design phase that many conceptually overlapping key terms, thematic concepts, and associated sources of evidence and theory existed but their *relevance* to each other, and to the research question, was not obvious at face value. This included disconnects in the terminology used in different pockets of academic literature, and that used in policy discourses (within policy documents and other grey literature). Terminology overlaps particularly needed to be untangled with regard to: soft skills, non-cognitive skills, traits, key competencies, and many other related terms and 'skill' descriptions that have emerged from policy practice or from academic disciplines.

As well as connecting mutually relevant key terms, concepts and theories, different types and sources of empirical evidence were also synthesised. Doing so addressed the lack of there being one existing body of studies that could explicitly answer the multi-faceted research question. Employability is a complex and abstract concept, and employability outcomes and programmes are multiple and complex. Thus, it is not surprising that relevant evidence was available but was not yet well signposted in terms of making explicit its mutual relevance to one or many topics of influence regarding employability. By using multiple types of evidence from multiple fields, it was possible to build evidence-based theory about a combination of factors, as employability outcome dependencies or influences, which could not have been achieved by studying one body of evidence about one factor.

The aforementioned need to identify and synthesise relevant concepts (before a theoretical explanation of employability could be advanced) was one reason why not to conduct a more

systematic and accordingly narrowly scoped review of literature. Many types of systematic reviews require the setting of more specific search and selection criteria, and complete predetermination if not prepublication of such criteria. The setting of search scope and selection criteria, and the reporting of selection criteria and eventual decisions, was not as predetermined or as extensively documented as would be required to comply with publication standards for some types of systematic reviews. Having said this, Section 3.4 provides some comparatively general selection criteria that were applied, and a rationale for the search and selection decisions that were iteratively made as the research progressed.

Given the commitment made to investigating multiple possible influences on employability outcomes (as a product of complex interactions), and the subsequently broad nature of the research question, it was not deemed necessary or helpful to restrict the search and selection process more tightly. Thus, it would not have been possible or appropriate to comply with every standard for some of the more well-known systematic review standards or protocols. The aim was to build an unusually multi-faceted and holistic account of what seems to be key to understanding, recognising and changing young people's employability, and eventual labour market outcome patterns. Such a multi-faceted explanation, and the diversity of supporting evidence needed to support such explanation, could not have been achieved if literature search and selection specifications were narrowly restricted from the start.

In hindsight, evidence of the care that was taken to manage selection bias might have been improved by putting more time into documenting lists of articles that were located via some of the main rounds of literature searches. Or by documenting any reasons for excluding located articles from the literature syntheses if they challenged the theoretical conclusions that were produced as answers to the research question. However, the time that would be required to track all of the iterative search and selection decision-making that necessarily occurred was not a realistic goal, partly due to research time and resource limitations. Furthermore, some findings, conclusions and concept definitions within reviewed literature were identified as being in conflict with each other and—because of their importance to the research focus topics and aims—their differences were noted and they were cited within the literature syntheses.

Several standards have been published about how to design, conduct and report research, as requirements for particular types of systematic reviews. Examples of publication standards and requirements for specific types of systematic reviews include the *Cochrane Handbook for Systematic Reviews of Interventions* (Higgins et al., 2019) and the *PRISMA Statement* (see Moher et al., 2009), which was published in 2009 and includes a reporting checklist.

Some publications refer to realist synthesis as a type of systematic review (for example see Pawson et al., 2004), whereas other publications about types of systematic reviews acknowledge realist synthesis as if it is notably different from systematic reviews (for example see Munn et al.,

2018). Regardless of whether realist syntheses should be classed as systematic reviews, one thing that realist syntheses and other systematic reviews have in common is a focus on synthesising existing sources of evidence. For more explanation on what realist synthesis entails, see resources on the website for *Realist And Meta-narrative Evidence Syntheses: Evolving Standards (RAMESES)* Project: www.ramesesproject.org.

Recommendations for reporting on realist syntheses are itemised in *RAMESES Publications Standards: Realist Syntheses* (Wong, Greenhalgh, Westhorp, Buckingham, et al., 2013). A minority of the recommended reporting items were not adhered to. In particular, Item 8 which gives recommendations about documentation of searches, and Item 12 which recommends inclusion of a document flow diagram, were standards that were not fully met in the reporting of this research.

Reasons for opting not to comply with a minority of the realist reporting standards included: the fact that this was doctoral research being carried out by a sole researcher, time and resource constraints, the decision to hybridise the design to better address the research aims, and the broader than usual range of policy responses, employability factors and outcome types being considered. Realist syntheses are often conducted by expert teams, particularly examples of realist syntheses that authors have labelled as systematic reviews. Given that this is a doctoral research project, it was not admissible to engage a team of researchers. Furthermore, the time that would have been required to more meticulously document the numerous rounds of searches and decision points, and the results of searches, would have reduced what time was instead allocated to searching and synthesising such a large and diverse range of literature. Less time would have been available to also elicit, critique, sketch, generate, validate, and then translate the policy relevance of theories; as a contribution that goes beyond recalling what synthesised evidence indicates.

The research design adheres to the *Quality Standards for Realist Syntheses and Meta-narrative Reviews* (for a copy of the standards see Wong, Greenhalgh, Westhorp, & Pawson, 2013). Realist members of the RAMESES Project co-authored these standards for conducting a realist synthesis. The research design and its execution arguably meets or exceeds all the 'adequacy' criteria for the judgement statements that the Quality Standards comprise. One exception is that Item 8 in the Quality Standards was not fully adhered to, as it recommends compliance with all items in *RAMESES Publications Standards: Realist Syntheses* (Wong, Greenhalgh, Westhorp, Buckingham, et al., 2013). It is worth noting that some of the Quality Standards refer to a research team, which reflects an assumption that most research that complies with these standards will have been carried out by a team rather than a sole researcher.

3.3 RESEARCH DESIGN

The research design facilitated what Donaldson (2007) refers to as *programme-theory-driven* kinds of research. Realist synthesis is one of many kinds of programme-theory-driven approaches (Pawson et al., 2004; Wong, Greenhalgh, Westhorp, & Pawson, 2013). Unlike other types of systematic reviews, an essential additional requirement of a realist synthesis is to evaluate and develop theory about the implications of synthesised literature for understanding or improving outcomes of explicit policy concern. It is also important for realist syntheses to elicit and summarise what existed before the research commenced as: commonly seen types of programmes or policy responses, problems regarding associated types of outcomes, and as theories and theoretical flaws or inadequacies that are reflected within such policy responses.

The aforementioned requirements were met by producing the observations reported in Chapter 4, then producing the evidence-based theoretical conclusions reported in Chapters 8 and 9. Chapter 4 introduces what existed as pre-research theories and associated problems with explaining what outcomes occur; including outcomes in relationship to common types of programmes, higher level policy settings and the targeting of youth subgroups. Some policy implications are accordingly reported as refined theoretical conclusions and explanation in Chapters 8 and 9. The conclusions are based on having synthesised several sets of existing empirical evidence and having utilised and critiqued some already established theories.

Both *general* and *context-specific* theoretical conclusions about individual employability were generated, with key conclusions summarised in Chapter 8. The relevance of reviewed theories, key terms, evidence and conclusions were translated as being relevant to developing theory about generalisable types of *contexts, mechanisms,* or *outcomes*. Generalisations were also developed about programme types, strategies and embedded types of policy assumptions or outcome expectations. This includes assumptions about the personal characteristics and external contexts that matter in order to better identify (as target groups), or to respond to common reasons why some youth experience more limited employment than others. Because the evidence-based theoretical conclusions are generalised to the level of *types*, their relevance is not limited to evaluating or improving one particular *instance* of a programme.

The research method entailed the activities and outputs listed below. The list is in order of what mostly started to be carried out first. However, some listed items were carried out simultaneously because progress on one activity was meant to iteratively inform and enable progress on another activity.

1. Sketch the pre-research status of common employment- or employability-development-focused policy responses, the theories that they embody or reflect, and outcome or explanatory problems. Report any other starting theories that were held by the researcher, and any revised conceptualisations of problems, outcomes, contexts,

mechanisms or programmes, which emerged after having completed the literature synthesis and theory building work.

2. Retrospectively summarise what became the *focus topics* for literature searches.

   o Focus topics were at first tentatively nominated. Then their selection, description and scope were finalised only after early rounds of literature searches, analysis and theory-sketching work had commenced. The topics subsequently became the focus of literature selection and synthesis decisions, and of the work done to develop conclusions as employability theory.

   o What eventually became finalised as the full set of focus topics included a selection of *broad theories*. The term broad theories was used in this thesis to refer to theories that were already well established within academic literature. This was done to distinguish them from references to *programme theories*, and from the theories that were generated as original research outputs, as conclusions or concept developments.

3. Conduct initially broad and multiple literature searches. Search and scan a selection of those that seemed most relevant to the research question, the policy-focused and at-risk-focused research aims, and the draft selections and definitions of focus topics. Review and revise the draft nomination, scope and description of focus topics, and the initial selection and framing of outcome problems and types of policy responses; in light of what was learned from the first rounds of literature scans (including grey literature).

4. Conduct additional and more narrowly scoped rounds of literature searches. Do so in response to what was discovered from the first rounds of more broadly scoped literature scans.

   • Decisions on where and what to search for, or what new key search terms to use, could be triggered by having snowballed reference lists, or having identified key terms, theories or concepts within previously scanned literature or example policy documents. Decisions could also be triggered by having identified problems or similarities regarding the terminology used in different bodies of academic literature or fields of policy practice.

5. Make final decisions on which of the located literature to synthesise and to subsequently use as a basis for making conclusions as employability theory, including as a basis for evaluating policy implications.

   o Cited selections could have been located as search results from any of the first, or the more targeted and later rounds of literature searches. Not all of the literature that was selected from scans to be analysed in more detail was included within the final cut of the reported literature syntheses.

    o   Privilege literature relevant to producing a subset of synthesised evidence that is deemed to be most relevant to recognising or addressing the needs of youth who are at risk of limited employability and employment (YARLE). This includes evidence about youth who already match the NEET classification (read risk context criteria), and evidence about early reasons or indicators of being on YARLE trajectories from birth through to childhood and on to adolescence.

    o   The literature that was synthesised was deemed to be credible, and be the most *relevant and useful* to addressing the research question and policy-focused aims. Empirical evidence literature was mainly grouped and cited under separate section headings from the sections where literature about theories was discussed.

6. Report a summary of concluding generalisations, as a refined overall theory of employability. Frame conclusions at a level of generalisation that could help to move policy thinking and practice beyond what was outlined in Chapter 4, as the research *starting point* of current policy thinking and practice and starting theory and outcome problems.

    o   This summary was based on what was produced earlier as syntheses of evidence and broad theory. Conclusions emerged after what had gradually been identified via a process of compiling, comparing, critiquing and refining theories, definitions and the theoretical logic of typical policy responses.

7. Demonstrate how the new theory of employability (and associated literature syntheses) can be practically utilised, for policy or programme development and evaluation purposes. In particular, demonstrate whether and how the new *YARLE* concept—and the work done to reframe the 'disadvantage or risk relevance' of existing literature—can be used to improve policy explanations and responses to risk or disadvantage, instead of more narrowly focusing on targeting NEETs and low level qualification attainment.

8. Demonstrate what implications and applications the newly produced theory of employability has (along with the accompanying literature syntheses), as a basis for evaluating New Zealand's suite of relevant policy responses. Conduct additional searches to cite literature and policy documents that are specific to New Zealand youth employability, employment outcomes and policy responses, as a country case study. This task is intended to supplement and further check how well additional literature, and actual examples of a country's programmes and outcomes, support what was earlier presented and concluded within Chapters 4 to 8.

    o   The scope and definition of relevant policy responses could include mainstream secondary and tertiary education and training provisions and outcome priorities, as employability development responses for all youth. It should also include evaluating New Zealand's exclusively risk- or NEET-targeted programmes, and other active labour market programmes. The widest definition of employability

policy responses can include types of programmes, outcome agendas and higher level policy settings that cover education, careers support, employment-focused support, youth development and social welfare provisions.

Note that some of the itemised tasks that are listed above relate to what is reported in one or many of the remaining chapters. Items 1 and 2 are addressed mainly by what is reported in Chapter 4, as a retrospectively amended narration of the *pre-research starting point* of theories, problems and relevant policy responses; plus an introduction of the research focus topics and a foreshadowing of post-research conclusions. Item 7 above is addressed partly by the answers reported in Chapter 8, and partly by the New Zealand research and evaluation report that is presented as Chapter 9. Item 8 above is also addressed by the report presented in Chapter 9.

3.4   TYPES OF LITERATURE REVIEWED AND SELECTION CRITERIA

The eventual choice of literature cited in the thesis were included because of judgements made about their credibility, and their relevance to answering the research question and fulfilling the research aims. Below is a list of *rigour and credibility* that guided decision-making about which literature to select for further analysis (to inform theory development), and which sources to incorporate into the literature syntheses. Literature selection decisions were partly based on meeting *relevance* criteria. Relevance judgements had to involve the application of some discretion in making evaluative judgements.

- the reputation of any journal or book it was published in

- whether it had been edited by other subject experts or peer reviewed

- whether a well-recognised government or multilateral agency had published or officially endorsed reports

- what was or was not reported within a publication about methodology, caveats, research limitations, and references to other key publications that are relevant to whatever was the research topic.

Some exceptions were made with regard to the above criteria in order to allow for the inclusion of some supplementary materials. In particular, some documents, statements and reports that were produced by government agencies, and by policy research commissions and multilateral agencies, were permitted for inclusion. They served as examples of common policy responses, and of existing policy-focused explanations or theories that were concerned with employability development or youth employment. Unsurprisingly, most of the grey literature and policy material that came from, or was commissioned by, government agencies did not appear to have been peer reviewed independently from the agency concerned. Some multilateral agency reports had been externally reviewed and/or incorporated expert contributions from multiple co-authors, thereby reducing the risk of an author's biases or knowledge limitations.

What was reviewed as grey policy literature included examples of programmes, higher-level policy outcome statements, ministerial briefings and policy working papers, documents regarding national strategies, and programme or workstream information from agencies that gave insights into the proposed rationale for such policy responses. Samples of official frameworks, programme success measures and information about target group or eligibility criteria were also considered to be in scope. Particular attention went to conducting searches and comparing 'skills' frameworks, lists and descriptions, as was particularly relevant to the synthesis work on non-cognitive or soft skills in Chapter 5.

The OECD was a key multilateral agency that was referred to as a source of both academically published papers and non-academic OECD reports and information resources. Furthermore, a selection of material about New Zealand's policies or programmes, policy problems, and programme evaluation reports were sourced from New Zealand government agency websites, and from New Zealand policy official.

Having acknowledged the aforementioned exceptions about cited material that did not meet all of the above listed selection criteria, it remains that the key conclusions that the refined theory of employability comprises (as summarised in Chapter 8) are supported by empirical evidence and broad theories that were located in cited literature that did meet the above listed criteria. Most of that literature has been cited and discussed under different section headings from those where policy examples and other grey literature are the focus of discussion. Within Chapters 5 to 7, most of the reporting about empirical evidence has been signposted under section headings that include the word 'evidence'.

For a visual sketch of what I initially started scanning as potentially relevant topics, fields of literature and areas of policy, see **Appendix A** entitled Map of Literature Fields to Draw From. It covers most but not all the scope of my first and broadest starting rounds of literature searches, whereas final rounds of searches were aimed at additional search terms and more specific topics or fields of literature. The Map is only provided to give an indication of the breadth of literature that was initially considered to be 'potentially relevant' to answering the research questions and addressing research aims. It is not intended to be a complete summary of everything that eventually was searched for via later, and often shorter and more targeted, searches. What is missing from this 'starting point' diagram, and appropriately so, is one of the specific broad theories that became the focus of some of the later and more narrowly scoped search rounds. Namely, there is no mention on the diagram of *signalling theory*. This is because it was only identified as relevant existing theory *after* having conducted multiple search rounds (including snowballing reference lists from previously located literature). Literature on signalling theory was eventually included in theory development work and in the evidence syntheses because it

was identified as being highly relevant to explaining theoretical flaws and policy problems that were outlined in Chapter 4, and relevant to answering the research question overall.

Whereas Appendix A is a high level map of what was considered to be potentially within scope *at the start* of the research journey, **Appendix B** provides a more detailed overview of what was eventually searched for, where, and what was selected *by the end* of the iterative search and selection process. Appendix B lists many of the key search terms that were eventually used, the journals or locations of literature that became cited in the reported syntheses, which also gives an indication of the literature having come from multiple disciplines. It also includes reference to the bulk of the authors who were cited from academic publications. As a caveat, the lists included in Appendix B are not exhaustive. They do not include absolutely every search term and search location that was scanned, and every source that was cited in the following chapters. However, they capture the bulk of what was searched for, where, and they indicate what types of literature were taken into consideration (to inform theory development work and include in evidence syntheses).

3.5   RESEARCHER'S RELEVANT WORK EXPERIENCE

Researchers who conduct realist syntheses often have professional work histories related to their research topic. Pawson, Greenhalgh, Harvey and Walshe (2004) emphasise that realist reviews or syntheses are 'not for novices'. They propose this partly because the tasks of navigating and evaluating the relevance of a vast range of 'potentially relevant' literature is likely to be unmanageable without having some prior knowledge of at least some of the relevant literature and, ideally, prior knowledge of the programme/s of research concern.

Rather than pretend that researchers approach a research question and design an iterative literature search process from a completely blind starting point, Pawson et al. (2004) suggest that authors of realist reviews openly acknowledge any practitioner experience and pre-research reading of literature as valid information sources to inform what I call 'a starting point' for further evidence searches and theory refinement. Thus, it is considered good practice to explicitly recognise that some pre-informed guesswork was required on the part of the research and previous relevant experience influenced the researcher's starting choices of search terms, theory topics and evidence types or locations to explore further.

I provide a summary below of my own work experience as a policy consultant and programme delivery practitioner. My experience is directly relevant to being able to answer the research question, and being able to analyse and evaluate the implications of research findings for current policy practice. More specifically, my work experience is relevant to working with policy responses that are targeted at NEETs, low qualified school leavers, low literacy and low skilled young workers, and youth beneficiaries; many of which might otherwise be referred to as YARLE subgroups. Most of my experience involves working in the New Zealand context.

Before undertaking this research, I had developed practitioner knowledge of a range of relevant New Zealand policies and programmes. This includes experience as a frontline tertiary training practitioner between 1999 to 2006. I started as a tutor in a government funded private training establishment, providing 'second chance' or foundation education. Later on, I provided one-on-one job placement and coaching services for young beneficiaries, long term unemployed adults and youth, and provided group training sessions to low qualified imminent school leavers. I delivered one-on-one job seeker coaching to hundreds of clients while based in social welfare offices as a contractor. I also delivered workplace-based training to groups of low literacy employees who worked at the low end of the labour market, and managed relationships with employers as programme stakeholders. Eventually, I designed and managed the delivery of qualification-based *second chance* education and training programmes, and other types of active labour market programmes (ALMPs) that tend to be more urgently focused on job placement.

I was the managing director of a government-funded job placement and training organisation that mainly catered for unemployed and low-qualified adults and youth, including via relationships with secondary schools (roughly 2006 to 2009). In this role, I needed to maintain detailed knowledge of national programmes and higher-level policy agendas, programme implementation challenges and success measures, and policy focus and funding shifts.

Since 2010, I have been a self-employed consultant, mainly providing policy research and advisory inputs as requested by New Zealand central government agencies. Recent government agency clients include the Ministry of Education and CareersNZ. Earlier experience involved reporting to the New Zealand Qualifications Authority, the Tertiary Education Commission and to the Ministry of Social Development (Work and Income) regarding at risk-targeted training and active labour market programmes (ALMPs). The report that comprises Chapter 10 was work the Ministry of Education commissioned to be used for cross-agency discussions about how to better address YARLE or NEET needs in New Zealand.

I have provided advice as a consultant to other education and training providers in New Zealand and Vanuatu, including advice on programme design and success indicators. For more details about my work experience, and familiarity with the target groups and programme types that my research deals with, see my profile on www.linkedin.com/in/mandymcgirr.

The work reported in the remainder of the thesis fulfils the above research design. The next chapter is a retrospective narrative of: the policy problems of interest, some relevant programme types and wider policy responses, and some relevant theories and problems with the pre-existing explanations of outcomes or programme workings. That is, before this research produced another explanation.

4. A STARTING POINT FOR DEVELOPING EMPLOYABILITY THEORY

4.1   INTRODUCTION

Consistent with the recognised first step in a realist approach as outlined in Chapter 3, this chapter documents a 'starting point' from which the direction of my later evidence synthesis, theory review and theory development progressed. The summary of research conclusions presented in Chapter 8 are in response to some of the problems and current policy practices overviewed in this chapter. Some theories or assumptions that seem to drive the rationale and outcome expectations of the overviewed types of policy responses are also identified in this chapter. The chapter concludes with an overview of what was tentatively nominated as a set of research *focus topics,* plus existing *broad theories*, the selection and framing of which was slightly amended in the latter part of the research due to what iterative literature searches and theory development made clear. What I eventually came to conceptualise as interrelated types of *employability outcomes* include theorised indicators of employment *capability or outcome likelihoods* – such as attainments of qualifications or work experience, or indications of improved skills or behaviours – as well as *end* employability outcome measures being labour market outcomes.

Parts of the narrative in this chapter are written retrospectively. The chapter serves as an attempt to foreshadow what I discovered and concluded by the time my research was near completion. It subsequently foreshadows the focus of the conclusions made in Chapters 8 and 9. It also provides some of the reasoning as to why certain topics and literature eventually became nominated as the foci of literature searches and selections, and synthesis within Chapters 5 to 7. In sum, this chapter equips readers with a starting overview of what the rest of the thesis discussion hones into. It also signals what the remaining chapters conclude (as fresh evidence-based theory) about the key factors that individual employability outcomes tend to depend on; subsequent reasons for being relatively *at risk of limited employment*, including risk of being NEET; and implications for policy responses to work to improve youth employability and/or employment outcomes.

Chapter 3 explained the research approach taken to iteratively search for and select literature, select and conceptualise focus topics, and to identify, critique and progressively build theory. This chapter further narrates the implementation of the approach. It discusses some of the motives (such as identified theory inadequacies and offerings) and the reasoning for making iterative judgements about what to search for, synthesise, and review and develop explanations about. Ultimately, the direction of literature search rounds, selection decisions, and theory-building and theory-review decisions were steered by the need to prioritise that which could best help to (a) answer the research question, (b) address early identified theory inadequacies, and (c) translate implications for policy responses to youth employability development and employment (especially for YARLE subgroups).

My previous professional work experience, which is directly relevant to the research question and aims, was openly accounted for and summarised at the end of Chapter 3. Subsequent

personal theories that I held at the start of the research about youth employability (especially challenges, opportunities or support needs concerning at risk youth) are woven into this Chapter 4 narration about what appeared to be explanatory inadequacies that had implications for the workings of education and employment-related policy responses. Past work experience was deemed to be a valid type of knowledge and a basis upon which to nominate starting theories and topic selections, to become a focus for later literature search and explanation development. However, past personal experience was not deemed to be an adequate basis on its own upon which to justify the final rounds of decisions made in the latter half of the research journey. Later rounds of decisions about what to further search for – and what to focus on synthesising and producing theoretical explanations about – ultimately became driven by what earlier rounds of literature search and review revealed, and by the gaps identified when first attempting to sketch and piece together theoretical explanations.

In the latter half of the research journey, what ended up becoming my final choice and scoping of themes (as focus topics) did not end up being substantially different from what I had earlier tentatively nominated as a moveable 'draft' selection of focus topics. However, what did change was my thinking about how to theoretically frame the focus topics and translate the relevance of a diversity of literature and policy practice accordingly. Amendments made to the way in which I conceptualised and labelled a thematic area as a 'focus topic' were partly done to make it easier to signal to readers the mutual relevance of some diverse selections of synthesised evidence and theory. For example, evidence on active labour market programmes plus a separate body of evidence from employer surveys were both discussed in Chapter 6 because of their mutual relevance to producing a base of evidence and theoretical explanation about *hiring mechanisms and influences* (read social mechanisms that influence the employability outcome type of job attainments).

Broad Theories. The thesis draws upon what I refer to as some broad theories, which were already well established within various fields of academic literature. The existence and relevance of these broad theories eventually became identified via multiple rounds of searching literature and policy documents and seeking relevance to answering the research question. Those selected were found to be particularly relevant to addressing explanatory gaps or problems with the theoretical conclusions that underpin current education and employment-focused policy responses. The broad theories chosen include *human capital theory*, *signalling theory* and *social capital theory* or associated theory about employment outcomes being dependent upon one's social *networks* and subsequent experiences.

Draft Nomination and Final Selection of Focus Topics. I had already tentatively nominated and roughly defined some research *focus topics* during the early stages of refining the research scope. This was based on learning from early rounds of literature searches, initial interpretations of examples of policy responses and outcomes, and my own starting theories about 'what matters'

to addressing the research question and aims based on my prior relevant work experience. The scope, conceptual framing and selection of so-called focus topics were accordingly in a draft state at this so-called 'starting point' of explanation, beyond which the later rounds of searches and synthesis work then progressed.

<u>Limitations in Research Scope and Discussion of Programme Types</u>. Choosing a limited set of focus topics, broad theories and typical policy responses and outcome expectations also meant that the potential to discuss other aspects of employability theory and relevant types of policy responses were not pursued. Their mention here serves as a reminder of the fact that the proposed umbrella concepts of *employability theory* and *employability policy responses* spans multiple policy sectors, multiple subsets or families of programme types, and associated high-level policy agendas. One example not pursued is the theory and policy responses that are generally referred to as *careers information, advice, guidance and education* (CIAGE).

Another policy area and family of programmes that deserves future research attention is the potential relevance of *vocational education and training* (VET). Programmes that are classified as VET are highly relevant to refining theory about what types of education and training sector interventions work, or do not, and why or for whom. The programmes are relevant to achieving the policy outcome interests of:

a) developing young people's employment capability (abilities or skills, intentions, and extent of job opportunities or potentials),

b) triggering the attainment of new employment, during or very soon after programme participation, and

c) triggering the attainment of 'quality' types or terms of employment, including occupations that tend to come with long term employment agreements (such as an apprenticeship), or that are tightly and explicitly linked to an occupational skills shortage and that normally pay above minimum wage rates.

The relevance and potential merits of VET programmes appears to lie in their typical inclusion of a major workplace-experience component. This is relevant, given that work experience was identified as a key employability dependency. Furthermore, evidence reviewed in Chapters 6 and 7 shows some of what is known and proposed about young people's work experience being a key influence on whether and what types or levels of employment they attain. Work experience was identified as a key 'success ingredient' for so-called active labour market programmes.

Section 4.2 outlines how I eventually came to relabel, or reconceptualise the relevance, of a mixture of common types of programmes, high-level policy problem definitions and outcome aspirations or targets, and the theories or assumptions they reflect, as relevant to developing or changing and recognising young people's employability. The section recalls what I recognised

near the start of this research that multiple policy outcome agendas (and outcomes of concern) and multiple programme types or broader families of policy work are interdependent, ubiquitously applied and relevant to the notion of youth employability outcomes, employability development, and being NEET, at risk or YARLE. Section 4.2 also introduces a concluding proposal to conceptualise all of NEET, unqualified, *plus other* definitions of youth being 'at risk of limited employability and employment' based on the notion that there are many overlapping YARLE subgroups. This chapter, and conclusions within Chapters 8 and 9 accordingly, argue in favour of moving from education policy problem definitions, and outcome foci, beyond the current emphasis placed on targeting NEETs and secondary or low-level qualification outcome improvements. I say this in terms of the rationale for focusing on these two types of outcomes as if doing so will trigger improved employment outcomes among the youth who match those two criteria after they have left secondary school. Section 4.3 accordingly introduces the notion of *education-employment interrelationship theory* which includes what is being questioned as seemingly overgeneralised and flawed expectations for qualification outcome targeting to lead to labour market outcome improvements for all youth.

Section 4.4 elaborates on the matter of defining programme effectiveness or success and directly, or theoretically indirectly, supporting eventual employment outcome attainments. It also elaborates on wider issues regarding definitions of employability outcomes, and policy practices regarding what gets measured and reported on, especially with regard to what education sector programmes measure and report.

Finally, Section 4.5 overviews what became the selected research *focus topics*, and Section 4.6 introduces what became selected and referred to as existing *broad theories.* The broad theories were drawn upon to address explanatory gaps or incoherencies. The chapter headings and certain sub-headings within Chapters 5 to 7 align with certain focus topics and broad theories.

4.2   REFRAMING MANY TYPES OF POLICY RESPONSES, OUTCOMES AND TARGET GROUPS AS RELEVANT TO EMPLOYABILITY

At the start of the journey I observed that a diverse range of common types of programmes and higher level policy responses from multiple sectors were mutually relevant to developing employment capability and/or improving labour market outcomes. They comprised multiple families of programmes, policy work areas and different government agencies' mandates that are conventionally analysed separately from other. Yet, the types of outcomes that they focus on are all relevant to directly or indirectly helping people to develop their employment-relevant abilities or intentions and/or to attain employment or better employment, immediately or over a longer timeframe. Thus, I conceptually grouped multiple types of policy responses and work areas, and multiple common types of outcome agendas under the cross-sector umbrella term of *employability policy.*

The work of the public education sector, as well as career support services, comprise two subsets of employability policy that mainly focus on continuously improving people's employment capability and on influencing their knowledge and attainment of possible employment outcomes as a further-away outcome focus. Conversely, another subset of active labour market programmes (ALMPs) is focused on getting people employed in the relatively near future. While ALMPs often include provision of training components, training is typically shorter and less intensive than mainstream education sector programmes, and ALMPs are comparatively more focused on directly triggering labour market outcomes as soon as possible and as a higher priority than the education sector's foci on further developing capabilities and on qualification attainments. In sum, *employability policy*—which includes employability development and employment attainment as policy foci—is proposed as a high-level term to group together for analysis and make explicit what is mutually relevant to some otherwise seemingly unrelated areas of policy practice, outcome agendas and outcome evidence.

4.2.1   Why YARLE Instead of Focusing on NEETs and Qualifications?

I developed the working definition of YARLE (youth at risk of limited employment) as a way of referring to a wide range of youth subgroups who are all at relatively greater employability development and employment outcome risk or disadvantage than their peers but who may be at varying levels of risk and for varying reasons regarding them or their life contexts. I eventually concluded that there is value in shifting policy thinking beyond the typical focus on being NEET, low qualified or unqualified and/or currently unemployed towards an expanded focus that can be captured within the concept of YARLE and YARLE subgroups.

This explicit move to reframe the policy problem represents an interest in improving both immediate and long-term labour market outcomes for young people who are already aged 15 to 24 (and potentially older), as well as intervening in cases of today's younger children whose needs or risks are identifiable before age 15. Furthermore, the wide age range that a YARLE focus accommodates, and its relevance to intervening in developmental progress during early years of life aligns with the theoretical perspective presented in Chapter 2 that employability is an *emergent* and *socially developed* phenomenon, not a one-off outcome that suddenly happens upon reaching the later 'NEET and working aged' life periods.

Having YARLE as an encompassing term for a range of youth subgroupings made it possible to develop one cohesive set of evidence and theory about the nature and extent of individual youth employability (including employment outcomes), its development and dependencies, reasons for being at risk or disadvantaged; as well as policy implications for identifying and responding to common employability support needs among youth *in general* and among targeted at risk subgroups *in particular*. The subgroupings are defined based on employability dependencies and context particulars of employability risk or disadvantage.

The YARLE concept allows for a multi-factor-focused answer about what individual employability development and labour market outcomes typically depend upon. It allows for a multi-faceted and diagnostic way of recognising and responding to a range of common sources of employability risk, disadvantage and support needs or opportunities. This is rather than limiting risk diagnosis and response to a focus on 'being NEET' and 'being a low-qualified or unqualified school leaver'. Many YARLE may be NEET, low-qualified or unemployed at various times and have employment prospects that were and are limited for additional reasons beyond these three narrower classifications. A focus on YARLE enables policy explanations about 'who is relatively at risk of short- and long-term limited employment, and why' to be expanded.

It is important to note that, at least in the New Zealand context, young people who leave school without NCEA Level 2, who become benefit dependent and/or NEET are a bulk of the same young people who could be counted as YARLE. However, not all young people who have low qualifications, become NEET or receive a benefit are necessarily at risk of limited employment. A particular limit of the NEET measure is that it also captures many young people who are relatively less at risk of long-run unemployment or limited employment. Most New Zealand young people are NEET at some stage between the ages of 15 and 24. Also, a focus on NEET or benefit dependence will miss young people who are engaged in low-paid, casual work that does not lead to sustained lifetime employment.

4.2.2   *What Counts as Employability Policy Responses or Programme Types?*

The policy areas and the types or 'families' of programmes that became classified as subsets of an overall national policy response towards the complex agendas of youth employability development and eventual youth employment outcome improvement included secondary and tertiary education and training (including mainstream and targeted programmes, and including academic and vocational subsectors); workforce development, youth employment and productivity or 'skills' policy; active labour market programmes (ALMPs); welfare policy; labour mobility agendas; and so-called career development services.

Many of the programme and policy types that were considered to be within scope for my focus on 'youth employability theory development' come from the *secondary and tertiary education and training sector*. They make up a large chunk of the types of policy responses that were deemed to count as being directly or indirectly designed to influence youth employability development, the recognition or 'signalling' of employability to employers, and/or the *end* outcome type of labour market outcomes. This includes mainstream education provision (which theoretically should 'work' for all youth) as well as risk-targeted programmes aimed at subgroups for whom mainstream education 'did not work' or is not working.

What are often referred to in academic literature as *active labour market programmes* (ALMPs) make up another large subset of the families of programmes, and associated outcome agendas and targeting practices, that fall within the proposed overarching umbrella concept of *employability policy responses.* So too are what I have referred to generally as *second chance* education and training programmes. Both second chance programmes and ALMPs are discussed further in Section 4.5.

In addition to the policy work areas and programme types listed above, *early childhood education* was eventually identified as being key to understanding the earliest indications of employability disadvantage or risk, and the earliest apparent potential to counter such risk; this is specifically with regard to *non-cognitive skills* as an identified key indicator of later life labour market outcomes (especially poor outcomes). At face value, early childhood education provisions might seem irrelevant to achieving the far-away *end outcome* focus of supporting youth labour market outcome improvement. However, they were treated as such because what does or does not happen as early childhood intervention and needs assessment practices during this early life stage, specifically in reference to the development of *non-cognitive skills.*

Evidence on what does or does not happen during the childhood and teenage life periods was found to be relevant to early identification and potential for response to employability disadvantage or risk. The mid-teenage life period is the point from which officially NEET-targeted interventions tend to start. The NEET classification varies between countries but approximately tends to include youth only after they reach age 15 or 16. Chapter 7 elaborates on evidence regarding intergenerational and childhood features of context, or risk factors, that seem to be key to the potential for early identification and response to employability risk or relative disadvantage.

It deserves mention that education and training programmes are designed to serve more than one social or economic purpose, in terms of the benefits or outcomes they are meant to change or produce, and for whom, especially as compulsory mainstream education provision. Nonetheless, the research was focused on evaluating which common types of education policy and programmes do or do not appear to work in terms of achieving the employment-relevant purposes of needs-assessing, risk-assessing or improving the developmental status of key components that make up individual employability and/or more directly or immediately influencing employment attainment (or other achievement of other measures of favourable labour market outcomes).

The broadest definition of *employability development policy responses* could also be said to include career support services, or what is often called *careers information, advice, guidance, and education* (CIAGE). They essentially comprise information and support to help individuals identify the nature and extent of their employability, their employment interests or intentions, and a range of

employment or 'career' opportunities and pathways that they could hypothetically pursue. CIAGE programmes or services can also include personalised assistance or advice to execute job seeking actions, to identify and troubleshoot personal employment barriers, or to take actions to develop a specific type or source of capability; in order to achieve individual employment goals.

Little attention was given to reporting on the implications of research findings and conclusions for better evaluating or designing the CIAGE subset of employability policy responses, and vice versa. This is simply because the research project and discussion needed to be restricted to a manageable size and scope. Several other subsets of education- and employment-focused types of programmes were alternatively included in the scope of the evidence syntheses, and in the production of research conclusions about employability, employability/employment change, risk or disadvantage, and policy implications. However, the reported explanation about what matters for policy responses to 'work', to support the development of young people's employability, and to improve their actual employment outcomes, could be applied to a future evaluation of its implications and applications to CIAGE.

4.2.3   *Active Labour Market Programmes and 'Second Chance' Programmes*

What I came to describe as *second chance* types of programmes and as active labour market programmes (ALMPs) were deemed to be within scope, as two overlapping subsets of programme families and policy work areas that sit within the diverse range of employability-relevant policy responses and policy work areas. Second chance programme designs typically focus on helping unqualified target groups to gain a secondary or equivalent low-level tertiary qualification, after having left secondary school with very low or no qualifications. These types of programmes were found to have mixed to poor track records in improving labour market outcomes for the at risk, and often NEET, target groups concerned.

Second chance programmes are sometimes included within references to there being a family of ALMPs and associated outcome evidence, and other times they are not classified as ALMPs. My use of the term second chance programmes was intended to distinguish other types of ALMPs from the types of at risk-targeted post-secondary programmes that entail relatively long and intensive education and training provision, and that use qualification attainment as a key programme success measure. By comparison, other ALMPs often include shorter training components and do not tend to nominate large, lengthy qualifications as a key programme outcome; they instead focus directly on getting unemployed target groups into employment as soon as possible.

The heterogeneity in the range of what has been classified as examples of second chance programmes and other types of ALMPs makes it hard to ascertain *why* some second chance programmes and ALMPs are notably more successful or unsuccessful than others. This is in terms of their design, duration, programme resourcing, definition of success measures, output

targets and intended outcomes or impacts, as well as variation in profiles of target groups. There was accordingly a need to compare and work out how to best generalise about these types of programmes and associated evidence on outcomes, by taking a range of publications and programme evaluations into consideration. The very mixed results that have been reported for these types of programmes (in meta-analyses and other programme evaluations) may be mixed partly because they involve generalisations about a heterogenous group of programmes and target groups. Furthermore, what is counted as a successful type or measure of a labor market outcome does not appear to be a standardised practice across programmes that are classified as ALMPs. These existing inconsistencies in programme and outcome definitions had implications for identifying or making transferable conclusions about what *types* of programmes work or do not to improve labour market outcomes among at risk target groups; particularly the many overlapping groups that ALMPs and second chance programmes typically target.

I eventually identified as international empirical evidence about outcomes from second chance programmes and ALMPs that did provide some indication about what matters to supporting employment attainment, or about what distinguishes the instances of ALMPs that 'worked' better than ALMPs on average. See Sections 5.5 and 6.2 for examples of relevant programmes and outcome evidence. Also see Chapter 9 for additional evidence synthesis and summarisation of key findings about these types of programmes, which are discussed in Chapter 9 as having implications for New Zealand policy responses.

The level of emphasis placed on getting unqualified secondary school leavers to pass a lengthy secondary or foundation-level qualification is a myopic response to what really appears to be a range of common *reasons why* such youth are 'YARLE'. Not being qualified is only one of multiple common reasons why NEET and unqualified school leavers appear to be different from their qualified school-leaving-age peers. Their employment-oriented abilities, motivation and outcome likelihoods appear to also be limited because of needing intervention regarding other personal attributes or contextual situations. Other key attributes or 'employability dependencies' were found to include limitations regarding the development status of non-cognitive skills, early work experiences attained or not attained, and the notion of employability 'signalling challenges'. Some of the common reasons for being relatively at risk, in addition to not having qualifications, are made clear through the rest of the thesis narrative. Note that some YARLE subgroups may also be disadvantaged for more context-specific or subgroup-specific reasons, in addition to the general aforementioned employability dependencies. For example, having a physical or learning disability may distinguish another of many overlapping YARLE *subgroup* profiles.

4.3   OUTCOME DEFINITIONS, CHOICES AND MEASURMENT

In order to clarify what works and what matters to the challenges of gauging individual states of employability, and potentially improving employability outcomes, there is a need to consider what measures are being used or theoretically should be used as the definitions and measures of relevant types of *outcomes*. Whatever becomes defined and prioritised in policy practice as labour market outcome measures, other types of programme performance indicators or success measures, statements of high-level outcome agendas, and as indicators of individual risk, needs or opportunities (for target groups), has implications for being able to identify and potentially manipulate *employability outcomes*. In order to develop theory for employability-focused policy evaluation or practice, it was deemed necessary to evaluate current practice, and to consider alternatives for practice, with regard to the definition of employability-relevant *outcomes* and the selection and use of indicators or measures; including programme outcome definitions and priorities, and including what policy makers have relied upon to date as indicators of employment risk and success.

This dependency about what type, duration or other measurement parameters are applied as programme and labour market 'outcomes' also has implications for what programme providers are likely to focus on achieving or delivering. For example, what works to achieve the outcome of 'getting employed in any job for at least six months', regardless of the wage level or terms of employment involved, is an employability outcome agenda that is focused on *short-term* or relatively immediate employment outcomes. Measures of simply being employed represent a different labour market outcome focus from measures such as earnings or wage levels, or the measurement of employment outcome patterns across a much longer period of time.

4.3.1   *Interim and End Employability Outcomes: What Counts?*

A working concept was developed of there being a set of interrelated *employability outcomes,* including some short-term and some relatively longer-term focused types of labour market outcome measures; as well as some outcome aspirations of policy interest such as supporting job progression or labour mobility, and agendas to support ongoing employment capability development as a lifelong process. Programmes to support ongoing and/or long-term capability development agendas are primarily the concern of the education sector, whereas many active labour market programmes are shorter programmes and are focused on triggering relatively shorter term or near future labour market outcomes.

Some programmes are theoretically proposed as a means of changing both *interim* and *end* types of employability outcomes as their success measures, whereas others more explicitly are designed to focus only on theorised interim or defined end outcomes. Employ*ment* outcomes became classified as a unique type of interim employability outcome, as well as being an end

employment outcome, because a change to employment status is also a likely change to one's overall employability from that point forward.

What I eventually classified as *interim* types of employability outcomes includes measures or descriptions of features regarding both personal and external context. This includes other types of life outcomes and experiences that have occurred to date, or that describe someone's present-tense situation, apart from describing their past and present employment situation (labour market outcome description). Interim outcomes are those that are known or theorised as being particularly common and strong influences on what patterns emerge, eventually, as labour market outcomes.

What I ended up classifying as *employability development policy,* or *policy responses*,[8] includes a diverse range of programme types, and associated outcome expectations that are designed or meant to trigger interim employability outcomes and/or end outcomes more directly. Employability policy responses include some policy sectors, programmes and statements of intended outcome interests that mainly focus on the *end outcome types* of labour market outcomes (description of past or present employment situation), whereas other relevant types of programme or policy work are more explicitly focused on what I called *interim employability* outcomes.

As an example of what is meant by known or theorised *interim* types of employability outcomes, theories about 'qualifying' is an education sector strategy that is theoretically meant to improve employability and likelihoods regarding the nature and extent of one's eventual *end outcome types* of labour market outcomes. Thus, the relevant education-focused policy theory goes that investing in the provision of education and training (especially at tertiary level), and an associated strategic focus on providing qualification systems and increasing qualification outcomes, is a key indirect way and 'interim step' to improve later labour market outcome patterns.

The emphasis placed on qualification attainments, as the seemingly most highly prioritised and formally monitored indicators of education provider performance—and of success for the student—reflects a theory embedded within conventional secondary and tertiary education policy that qualifications are a key *interim* measure of employability (interim employability outcome) and key indicator of the education sector's theoretically contributions towards eventual labour market outcome agendas. While there are examples of formalised education sector definitions of what else matters as measures of individual student success, and of programme provider effectiveness or performance, it is formal qualification attainments that

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[8] Reference to *policy responses* includes but is not limited to programmes, types of programme activities or strategies, choices of proxy measures and programme success definitions, setting of regulations and high-level statements about national outcome agendas.

typically become the most publicly reported on education programme output, and that programme funding is often tightly tied to as a tangible target. I concluded that education sector policy responses are too myopically focused on traditional forms of qualification attainments, as if this is the only type of contribution that the secondary and tertiary public education system could hypothetically make towards supporting employability.

Some ALMP and second chance programme evaluations have judged programme effectiveness or success based on the inclusion of criteria for labour market outcome quality and/or long-term outcomes, rather than only measuring short term movements from unemployment or underemployment into full employment of whatever kind. Examples include basing effectiveness or success judgements on measures of wage rates or earnings, or on staying employed for durations longer than, say, one year after programme engagement. Many instances of ALMP outcome targets and funding releases are based on helping unemployed people to become employed for a minimum period that is typically less than a year, often for six months or less. However, some ALMPs' performance outcome criteria, and some ALMP evaluations, have defined and measured programme success based on what labour market outcomes participants had across several years after programme participation. See Section 6.2 for examples of relevant evidence and further discussion about labour market outcome measurement as a programme outcome measure.

4.4   EDUCATION-EMPLOYMENT INTERRELATIONSHIP THEORY AND QUALIFICATIONS AS A THEORISED EMPLOYABILITY OUTCOME

Measures of education and training outcomes are inferred within policy as being key types of *interim* employability outcomes. In particular, qualification attainments are theoretically meant to validate and signal information about an individual's abilities and it is implied that the provision of this form of validation to employers also improves an individual's employment prospects.

Many national suites of policy responses towards employability development appear to rely on an overgeneralised theory that qualification attainments (along with other measures of formal education participation or outcomes) are a key indicator of having improved employment outcome likelihoods or prospects. This serves as an underlying rationale for making major investments in secondary and tertiary education and training programmes. Furthermore, a key purpose of having a national qualification system, and a reason for governments making a lot of programme funding conditional upon the offering of approved qualifications, is that quality managed qualifications are meant to work as a *signal* to employers about the nature and extent of people's employability; also as a signal to the qualification holder about their own employability.

National investment in the provision of secondary and tertiary education is often inferred as being a long term investment in the development of a current and future labour force's

employability. In theory, such investment is meant to pay itself off financially by resulting in more people getting more employment, and/or getting better quality labour market outcomes, compared to what might otherwise have occurred in the long run without having made such investments.

In government funded education and training programmes, qualification outcomes are given so much prioritisation, as a key programme success measure, that one might conclude that qualification attainment is the only *interim* or indirect way to feasibly estimate and/or improve youth employment capabilities, intentions and eventual employment outcomes.

The common policy emphasis placed on improving *low level*[9] qualification attainments, both via secondary school and post-secondary *second chance* types of programmes, shows that low level qualification attainment (or lack of attainment) is being heavily relied upon as an indicator of young people's readiness and capability to attain entry level employment or not. It is a key measure used to define which youth are at risk of no or limited employment, along with the measure of being currently NEET. Chapter 8 provides alternative conclusions about what else could become focused on as part of a set of theorised *key indicators* of employability, and of employability risk or disadvantage. This has implications for rethinking how else to define and identify youth as being at greater risk than others of having current or future limited employment. This could incorporate but extend beyond the current practice of profiling and targeting youth who are unqualified, very low qualified or NEET.

Although the research is not focused on reporting evidence that specifically addresses this point,[10] the inference that the price of attaining a university-level qualification will pay itself off in the long run, by ensuring that one can compete for and attain middle class jobs and wages, is a theoretical generalisation that is not playing out for many university-qualified youth. For an introduction to some of the evidence and arguments regarding this point, see Lauder, Young, Daniels, Balarin & Lowe (2012) and Lauder & Brown (2012). Labour markets for some types of 'graduate occupations' are becoming more globalised, as too are markets for the buying and selling of university educations. In the contexts of many developed economies, higher proportions of workforce populations seem to be getting tertiary qualified, but this is arguably diluting the competitive and *signalling* value of having a tertiary-level qualification. There may be sub-contexts whereby a specific type of qualification is matched to a specific high demand for

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[9] By *low level* qualifications I am referring to national senior secondary school qualifications plus some that are proposed to be of a 'secondary equivalent level' on national qualification frameworks but are often delivered by tertiary sector providers.

[10] Doing so would stray from the research emphasis placed on developing an evidence base that is more relevant to understanding outcomes among non-university qualified and otherwise relatively at risk or competitively disadvantaged youth. However, much of what the thesis produced as general theory about employability dependencies, and about employment attainment mechanisms and challenges for youth, may be equally relevant to understanding and supporting employment outcome attainment for university graduates.

an occupation or industry and a high pay offering, but this is a context-specific condition about tertiary *education-employment interrelationships*.

4.5   FOCUS TOPICS

Below is a list of what I privileged as research focus topics, along with starting comments about their known or theorised relevance to the research question and associated policy outcome interests. I also provide some starting points about some problems and terminology barriers that initially presented challenges for being able to progress with developing a more multi-faceted and synthesised explanation of 'what matters' to employability development, outcomes, risk or disadvantage, and as relevant to policy practice or implications.

- **Non-cognitive skills.** Inconsistent and sometimes conceptually overlapping uses of terminology within literature and policy practice needed to be reconciled before I could advance the theoretical explanation and a synthesis of relevant evidence about *non-cognitive skills*. Little common ground could be initially discerned about what non-cognitive skills or numerous overlapping terms and concepts actually are, which at first made it difficult to identify, cross-evaluate and synthesise existing evidence, theory and sets of skill descriptors or measures. It became apparent that these terminology clashes were probably part of the reason why what I eventually synthesised as *non-cognitive-relevant* terms, descriptors, evidence and associated policy responses had not previously been all brought together and recognised for their mutual relevance. Chapter 5 is dedicated to evidence and discussion about non-cognitive skills, and associated concepts and outcomes.

- **Employment outcomes – particularly attaining employment in the first place** as the privileged employment or labour market outcome type of most interest. The aim was to bring together disconnected bodies of evidence, draw on some additional existing theories, and subsequently develop a fuller overall explanation of why or how employment outcomes occur, or outcome inequalities. This was done as relevant to contributing towards, and better supporting with evidence, explanations about: who gets hired or not, for what types or levels of work, and why, how, or in what labour market or life contexts?' This includes developing explanations about seemingly key mechanisms of influence on hiring decisions, associated context dependencies or employment attainment challenges, and articulation of how this relates to explaining employment outcome inequalities and challenges for youth as job candidates. Chapter 6 is focused on making sense of 'what matters' to the phenomenon of employment attainments (outcomes); including what might otherwise be called recruitment behaviours and hiring outcomes

- **Signalling challenges or mechanisms** and employment outcomes. The signalling of one's employability (particularly to potential employers) was eventually identified as an employment outcome dependency that deserved theoretical explanation and critique

with regard to having policy implications. The relevance and availability of existing evidence and theory about the concept of signalling was not known about in the early research stages. Once its relevance was identified, signalling theory and associated evidence helped to fill an explanatory gap where other theories and bodies of evidence were falling short in explaining key employment attainment challenges for youth in general, and reasons *why* some youth in particular are YARLE. Signalling theory helped to critique and develop theory about 'education-employment interrelationships', and implications for policy expectations and efforts to address employment challenges.

- o Section 4.6 introduces the reader to the version of signalling theory that informed the research, mainly the works of Michael Spence. Section 6.6 unpacks and utilises signalling theory as relevant to answering the research question. This includes explaining signalling's relevance to the theorised purpose and influence of *qualifications* as a signal and understanding what else youth may need help with apart from becoming 'willing and able' to do jobs.

- **Work experience**, which was conceptualised as a key *context dependency* that may affect what subsequent employment outcomes occur, and as an employability *development mechanism,* in terms of the interaction involved in undertaking of work experience. Evidence and explanation about experiences of the world of work was focused on. This is a subtopic of employability's wider **social network dependencies** (or interaction and experience dependencies)*.* Work experience appeared to be relevant as a mechanism through which *employment attainment outcomes* and outcome differences happen, as well as working as a mechanism for potentially *developing or changing* other key aspects of individual *employability* (including skills and work intentions). What work experience an individual attains can be described as *context*, whereas the social act of engaging work experience can be described as a *mechanism* for employment and/or employability change. Work experience can be conceptualised and described in multiple ways, including as description of:

- conceptualised and described in multiple ways, including as description of:

  - o a type of *social network connection*, such as who or what workplaces one is connected to via past or present relationships

  - o a type and extent of *experience* attained to date, as *past experience* (context/outcome description)

  - o a specifically work-purpose-oriented type of social interaction and influence, being one of many types of life experiences and interactions that may influence employability or employment.

- **Social network and experience dependencies**, including early **experiences of the world of work** and **interactions with parents.** The research investigates and unpacks employability's dependency on **social network connections or relationships, and types of interaction or experience**, as a cross-cutting thematic focus. I explain the relevance of some theorised dependencies regarding social network connections and what experiences and interactions a young person has (via particular types of networks or relationships).

  o The cross-cutting theme of dependencies on certain types of networks, interactions and experiences overlaps with what was otherwise described as theory about social capital, signalling capability, human capital or 'skill' attainment, non-cognitive skills, and the formation of work-oriented attitudes, expectations or aspirations during early childhood through to teenage years.

- **Employability development's dependency on childhood or intergenerational disadvantages, and intervention during early years of life**. The aim of Chapter 7 is to connect a diverse range of evidence that has mutual relevance to describing indicators (or seeming reasons) for already being on a disadvantaged or 'YARLE' trajectory; well before becoming old enough to be classified as NEET or before leaving secondary school. The evidence refers to observations about contexts or life experiences from as early as birth and up to approximately then end of teenage life. A modest selection of evidence about certain types of early intervention responses that target youth during this life period is also presented because it has intersecting relevance to the two other focus topics of 'work experience' and 'non-cognitive skills'.

  By no means does Chapter 7 cover all of the many subtopics and associated bodies of evidence that could have been included because of having relevance to 'early life influences on employability development'. Any attempt to include all bodies of somehow relevant evidence would be unmanageable for the size and scope of this research project. Instead, the evidence and associated subtopics that were synthesised in this chapter were prioritised because they were relevant to developing contextual clarifications about the theorised dependency of individual employability (and ultimately adulthood labour market outcomes) on: non-cognitive skills, work experiences, and social networks (really the interactions or experiences that childhood or teenage networks afford).

  o The focus here is on synthesising evidence that has linked labour market outcomes from later in life to particulars regarding any period *between birth to the mid-teenage life stage.* Particulars of interest included descriptions of: socio-economic status during childhood; intergenerational or family characteristics, including the nature of interactions with parents, and parents' attitudes towards or experiences of the world of work; transmission or teaching of non-cognitive skills; and a young person's own first experiences of the world of work.

- o Chapter 7 deals with evidence and theory relevant to explaining why or which youth are already disadvantaged, or are already likely to go into lower-paid or poor-quality types of employment, based on measures regarding them or their parents' socio-economic circumstances, work-relevant networks or experiences; or based on the notion of skills, attitudes and forms of capital being passed on intergenerationally (from parent to child).

- o Emphasis also went towards reporting evidence about identified links between **childhood measurement of non-cognitive skills and their later life labour market outcomes**. The body of evidence and a pre-existing economic argument in favour of **starting non-cognitive skills intervention as early as early childhood**, including as a means of improving later life employability among disadvantaged subgroups, was recent but substantial. Major recent advancements have been made regarding the evidence on non-cognitive skills and labour market outcomes. Such evidence is potentially not as widely known to relevant policy practitioners; compared to what evidence has been accumulating over a longer period about links between cognitive skills, or qualifications, and labour market outcomes.

The aforementioned *focus topics* cover what I eventually concluded to be seemingly key influences on employability outcomes; and key to understanding who, why or how some youth become more or less at risk of limited employment, and implications for policy responses. They accordingly became nominated as the thematic and keyword foci for later rounds of narrowly targeted literature searches. The nomination and scoping of focus topics emerged iteratively after an exploratory stage of conducting widely scoped literature searches. That which became the focus of targeted searches and syntheses, and of theory critique and development, was that which appeared to address an explanatory gap or a flaw in overall employability theory and outcome expectations.

4.6   EXISTING BROAD THEORIES

This section introduces a selection of broad theories that eventually became selected and woven into discussion within the remaining chapters. As noted earlier, I drew upon three existing *broad theories.* I refer to human capital theory, social capital theory and signalling theory as broad theories to distinguish them in my discussion from programme theories and from my own emerging theoretical explanations of *employability theory* that were being generated through the research process, and which took these broad theories into consideration. The broad theories are outlined below. They were already widely recognised and utilised within various academic disciplines before my research commenced.

Additionally, I introduce a more general focus on employability's *network dependencies*, as a concept of *network theory* which overlaps with and is broader than the theoretical notion of

having social capital. What I came to refer to overall as *education-employment interrelationship theory* is also noted as something that has been influenced by human capital theory in particular. By this I mean theories and associated education policy responses (and outcome expectations) about education working to influence employment outcomes, and the recognition and development of employability.

4.6.1   Human Capital Theory

Human capital theory, and associated arguments in favour of investment in formal education and qualification systems, emerged from seminal works by Gary Becker (1962, 1993). Human capital theory has had a wide influence in OECD and many member countries' policy thinking and has heavily influenced many governments' choices of programmes and programme 'success' or 'contribution' measures. It is typically relied upon as the rationale for subsequent policy proposals about what will be achieved by investing heavily in traditional forms of education provision, and by focusing on qualification attainment as if it is virtually the main or only 'key' to improving employability and eventual long-term labour market outcomes.

Unlike signalling theory, human capital theory has strongly influenced secondary and tertiary education sector policy thinking and practice. It has often been referred to in education policy discourses as part of the rationale for why governments should invest heavily in secondary and tertiary education and training provision, and why to focus on qualification attainments as a theorised proxy for human capital attainment and for improved eventual employment potential. The associated programme theory that is typically inferred is that education programmes, and what they typically target as types of programme outcomes, will lead to an increased supply of more 'skilled' workers and will subsequently—subject to a lot of assumptions—trigger improved eventual rates or quality of jobs attained by a then more qualified current and upcoming workforce population.

The above theory and proposed types of policy responses (namely, prioritising qualifications and traditional provisions of secondary and tertiary education and training) are clearly focused on manipulating the *supply side* of the 'supply and demand dependencies' that affect labour market outcomes. The lack of recognition and response to *demand side* dependencies via traditional forms of secondary and tertiary education policy and interim outcome foci, and implications for helping youth to gain any or better employment, are discussed throughout the following chapters. Human capital theory, and associated assumptions that seem to drive education sector policy reasoning and practice, is part of what I came to refer to overall as *education-employment interrelationship theory.*

It is worth noting here that the *early childhood* education sector does not seem to have been influenced so much by human capital theory, not in reviewed examples of Western countries. Instead, early childhood education policy and practice seems to have been more influenced by

theory from the discipline of psychology, including human development theory and theory about 'social and emotional development' in particular. This is relevant to what was discovered as the research progressed about the concept of *non-cognitive skills*, the potential for these skills to be developed via intervention (especially during early childhood), and the relevance of the formation of non-cognitive skills to inequalities in eventual labour market outcomes later in life.

As touched on in Sections 4.3 and 4.4, formal secondary and tertiary education system provisions still tend to be where a large chunk of investment in theoretically employability-development-related programmes exist, as skill development and skill 'supply' programmes. However, ALMPs are also widely applied internationally as risk-targeted programmes for 'when things go wrong' and people become unemployed after leaving secondary school. ALMP evidence is covered in Section 6.2.

4.6.2   *Social Capital or Network Dependencies*

The concept of *social capital* is a widely recognised general theory that is relevant to explaining individual states of employability, employment outcomes, the social processes through which employability develops and through which employment happens, and associated advantages, developmental risks or disadvantages. Bourdieu's widely recognised description of social capital (as interpreted below by Archer (2014)) overlaps with and supports some of what I discuss as *network dependencies*; or as employability's dependency on the nature and extent of one's social networks, and the types of *experience* that do or do not happen via them. The nature and extent of one's social capital appears to involve a developmental process that starts from childhood and that depends at least partly upon the nature and extent of one's family and personal network connections. This accordingly may affect what one experiences early in life and how one becomes perceived and responded to by others, including but not only within the labour market (being a social system of interest that is nested within larger society).

Human Capital is Personal Skill While Social Capital is Relational. In his definitions of human capital and social capital, James Coleman (1988) notes that the nature of social capital is harder to observe or measure than the concept of human capital, partly because it is not a performance characteristic (skill description) of a person so much as it is of their relationships.

> Just as physical capital is created by changes in materials to form tools that facilitate production, human capital is created by changes in a person that bring about skills and capabilities that make them able to act in new ways. Social capital, however, comes about through changes in the relations among persons that facilitate action. If physical capital is wholly tangible, being embodied in observable material form, and human capital is less tangible, being embodied in the skills and knowledge acquired by an individual, social capital is less tangible yet, for it exists in the *relations* among persons. Just as physical and

human capital facilitate productive activity, social capital does as well (Coleman, 1988, pp. 100–101).

Social capital theory appeared within critical and constructivist types of academic publications by sociologists and by critics of formal education's reinforcement of social class divides. Archer et al. (2014a, p. 60), for example, defined social capital as follows:

> Social capital, from a Bourdieusian perspective, refers to the ability to gain value from social relations and networks of contacts. The symbolic value of capital is determined by the extent to which particular forms of capital are valued within society and can be used to re/produce privilege (p. 60).

Regardless of its critical origins, the concept of social capital is relevant to explaining both the gradual development of key components of individual employability (which includes years-long developmental processes) and the more sudden 'outcome' of attaining or not attaining a job. The nature and extent of one's social capital, or one's social network connections and exchanges, is particularly relevant to explaining *who gets what types* of jobs and work experience, and when across their lifetime. The process of developing aspects of individual employability, the nature and extent of individual employability at a point in time, and eventual employment outcomes during working-age life depend substantially on influences and affordances via one's childhood and family social networks.

Skills, Productivity, and Social Valuing of Capital. This literature also addresses the notion of value; the value of a so-called *skill* or of a form of *capital*, and what social outcome potential it does or does not create for a capital holder, appears to depend upon whether and how society recognises and responds to the capital as something potentially useful to their own purposes or interests. The recognition and response could be in relation to serving the interests of another individual (say, an employer), a particular group (say, a specific family, company, interest group or village) or the collective interests of any larger social system within 'society'.

It follows that the economic concept of *productivity* is often discussed as being linked to the concept of *skills*, based on an assumption that a person needs certain knowledge and abilities (cognitive, non-cognitive, physical) to be able to produce, perform or achieve something of perceived value to other organisations, communities, employers, customers or other groups within society. I propose that the *value* of social capital, and of abilities as valuable *skills* depends on others in society perceiving a social connection (or implied affiliation with certain types of others) or a particular ability (skill) as something of use to whatever purposes they value. This proposal should be considered as an extension to Archer et al.'s (2014) definition of social capital as being dependent on society valuing a form of capital.

<u>What Counts as Work? What Should Count?</u> Similarly, it must be recognised that not all employers or organisations are only interested in how or what capital can serve the organisation's output or profit-making agendas. An individual's ability to produce outcomes or outputs of social or community benefit is also a form of capital that is sometimes socially valued and recognised as 'employment capability'. For example, what individuals can do to provide services of benefit to others or to the environment is recognised as a form of capital and value, regardless of whether such service provision or activity produces profit or advantage for one organisation's interests.

The above point deserves further consideration with regard to the ways in which workforce development and economic development policy is designed, and with regard to what types of 'work' are and are not counted within official measures of productivity and of employment or labour market participation. It has implications for the limited official recognition of volunteer, family-based and other unpaid work that is identifiable as a 'role', and that produces tangible outputs of social value. Marilyn Waring speaks to this point in her work on the unrecognised 'work' of women within measures such as GDP (1988a, 1988b). Although, I will not revisit this issue, it deserves mention because of its relevance to rethinking what could potentially become better officially recognised as forms of workforce participation (that is, as a sub-classification of employment); or at least better recognised as a source of work-relevant experience attainment, and as a means through which programmes might help youth to attain and become better recognised for first experiences of 'work'.

4.6.3   Signalling Theory

Signalling theory was produced by the seminal works of the economist Michael Spence (1973, 1974). While other theories may be about the broad notion of signalling, it is the work of Spence and those who have built on his work that I found to be relevant to explaining signalling's relevance to developing employability and to understanding who gets hired and for what, especially within competitive labour market contexts.

Despite my years of experience, I was not familiar with signalling theory at the start of the research journey and it was not acknowledged anywhere I looked in example policy documents or informal policy statements. Nor did I see it mentioned anywhere in academic literature that dealt with policy or programmes for youth employment, nor in literature about education theory or education policy. The only place I found signalling theory was within labour market economics literature, after much later discovering the relevance of certain pockets of economics literature to the youth employment and employability development explanation.

After having discovered what signalling theory had to offer to building an evidence base for non-economics-focused policy sectors and programmes (particularly education as employability intervention), I decided to delve further into this field of literature in my later search rounds and

discussion of programme theory implications. I further explored leads by scanning reference lists of useful articles and conducted additional searches based on key terms, references and 'seminal works' that those articles steered me towards. Snowballing reference lists and citations was undertaken accordingly.

Spence's signalling theory has been used to explain all sorts of market behaviours. Spence himself published detailed examples of how signalling theory can be used to explain the buyer-seller interactions and behaviours of job seekers and recruiters. He concluded that the latter sends what he conceptualised as 'signals' to the former in order to be perceived as a preferred candidate, within a competitive labour market context, for premium wages or jobs. The theory Spence has provided about job seeker and employer uses of qualifications (or education undertakings) as competitive signals was mainly in reference to tertiary-level, not secondary, qualifications as signals.

Michael Spence's (1978) version of *signalling theory* and Gary Becker's seminal works on *human capital theory* (1962, 1993) both add something to the explanation of *who gets hired, for what, and how or why*, but they also each have limitations or flaws regarding assumptions they depend upon. I concluded that they are better to be read together (synthesised). In this form, they moderate each other's assumptions and the explanatory flaws or overgeneralisations were challenged, and alternative or explanatory refinements were proposed as part of my development of a refined 'overall employability theory'. As highly generalised theories, Becker's version of human capital theory, and Spence's explanation of tertiary qualifications for signalling, rely too heavily upon assumptions about context (including types of policy target groups), to the extent that their conclusions are potentially distracting policy makers from other key employability development needs apart from conventional forms of qualifications. At their general level, they overlook, or do not account for, other employment outcome dependencies such as the status of a labour market context or sub-context; the characteristics of some youth subgroups, including assumptions about general or specific work motivation or job intentions; or other layers and circumstances of 'life context' that may typically pose as employment barriers or affordances.

The above theories are valuable additional reference points from which we can then proceed to identify and synthesise an explanation about multiple seemingly 'key' influences on individual employability development, employment attainment and implications for current or potential policy responses. My use of these broad theories particularly helped to (a) fill in explanatory gaps about 'invisible mechanisms' of social interaction having an influence on employability development and/or employment attainment, and (b) evaluate why human capital theory, and associated education sector and 'qualifying' responses, do not always seem to 'work' to influence labour market outcomes as theorised, especially in context conditions.

The next chapter is the first of three chapters that serve as an originally scoped selection and synthesis of evidence and theory. Many of the section headings, including the three main headings, are reflective of all the focus topics and broad theories. What became cited in the following three chapters was eventually confirmed to be highly important to improving an explanation of employability development, outcomes and policy implications. Chapters 5 to 7 are relevant to evidencing and understanding what matters to youth employability in general, but they also contain supplementary evidence and explanation regarding NEET and unqualified (or low qualified) youth, and other reasons for being relatively 'YARLE'.

5. NON-COGNITIVE SKILLS AND EMPLOYABILITY OUTCOMES

5.1   INTRODUCTION

The 'starting point' that was set out in Chapter 4 illustrated that policy knowledge is limited with regard to articulating *what types of responses do or do not work, for which youth, and why*. This is ultimately to improve eventual labour market outcomes but also to improve education outcomes as theorised proxies for improved employment capability or outcome prospects. What the following two chapters reveal serves as a basis for the conclusions and clarifications presented in Chapter 8. Discrepancies between the relevant policy practice, outcomes and theories laid out in Chapter 4, and what the evidence and reviewed theories in these chapters reveals about *what influences employment outcomes and employability development*, indicates the value of conducting such syntheses.

The aim of this chapter and of Chapters 6 and 7 is to synthesise evidence, and draw upon selected theories and example policy responses, in a way that can be used to practically inform policy evaluation and design. What these chapters present is relevant to multiple intertwined employability and education outcome agendas and types of responses, including education sector and active labour market programmes. As a more specific aim, Chapters 5 to 7 point out details that are relevant to better identifying and potentially improving outcomes among youth from contexts that are associated with relatively *limited* eventual employment outcomes, with being or becoming 'YARLE'. Remember that the working definition of *limited* employment outcomes includes periods of being officially unemployed, NEET, or stuck for many years churning between very low paid and piecemeal work at the low end of the labour market.

The focus of this chapter is *non-cognitive skills*, a term I eventually opted to use out of many alternative semantically similar terms. I concluded that non-cognitive skills and *soft skills* can be used interchangeably for the purpose of discussing some issues and properties that these concepts have in common, although soft skills is a less well-defined term. Descriptors for *traits* in psychology also overlap semantically with the term non-cognitive skills. Skills are often conceived of as *what* a person knows or can do, whereas a conception of non-cognitive skills as *ways in which a person perceives, interacts and behaves* is consistent with the common thrust of the reviewed literature.

Section 5.2 considers multiple definitions and descriptions of concepts that are, or are conceptually similar to, non-cognitive skills. A thesis definition of non-cognitive skills is provided in this section based on what was found to be in common rather than unique about compared key terms, sets of descriptors and their user purposes. Section 5.2 also outlines some of the key terms and descriptors that have become used academically within the disciplines of psychology and labour market economics, and those alternatively used for practical applications within different areas of policy practice, and by some business or employer groups.

Section 5.3 adds to the definition detail provided in Section 5.2 by explaining that concepts and descriptions of non-cognitive skills are difficult to disentangle from concepts, descriptions and theory or assumptions about *motivation* and about *intention, perception and action* as 'IPA' generalisations or dependencies. The notion of *attitudes* is similarly intertwined with the manifestation of non-cognitive skills or traits, given that attitudes are displays and social interpretations of people's intentions, perceptions and actions.

Section 5.4 elaborates on non-cognitive skill assessment and reporting challenges. Consideration is given to there being differences in relevant academic, policy and employer interests in producing or using information about the nature and extent of individuals' non-cognitive skills. Skill performances—as applications of attitude and behaviour in orientation to certain purposes—are dependent upon context, purpose and motivation or 'intention and perception'. Furthermore, the abstract nature of non-cognitive skills' concepts, and the *subjectivity* potentially involved in others *judging* their performance or likelihoods regarding future performance, is explained as having implications for programme assessment and reporting practices. Challenges regarding the *signalling* of clues about individual non-cognitive skills to employers is relevant to this section but is instead covered in Section 6.6, as relevant to explaining the mechanisms and dependencies of employment outcomes.

Finally, Section 5.5 comprises a synthesis of mainly quantitative empirical evidence about the relevance of non-cognitive skills to labour market outcomes, as well as their relevance to earlier education and employability development agendas. The evidence indicates the potential for intervention to *change* non-cognitive skills, their relevance to specific observations regarding labour market outcomes, and fact that it is possible to measure these abstract skill concepts and validate their theorised links to education and employment outcomes. A final part of the section describes programme examples and outcomes that are particularly relevant to YARLE-focused policy decision-making and programme success definitions. Outcomes from example programmes indicate a case in favour of *earlier timing* of at least some non-cognitive skills intervention, rather than typically concentrating most YARLE-focused investment and programmes at youth when they are 'NEET aged', teenagers or in their twenties. Some of the programmes discussed include early childhood and teenage interventions targeted at non-cognitive skill development, as an outcome focus, while other programmes instead focus on second chances for unqualified school leavers to gain a secondary or 'equivalent level' qualification.

5.2 DEFINITIONS AND SOURCES OF SKILL CONCEPTS

As Heckman and Kautz (2012) note, there are differences in the connotations or nuances that have become attached to some overlapping concepts that include personality traits, non-cognitive skills, character and soft skills. Some debate continues about the subtleties of what is meant or implied by each term, particularly with regard to traits being 'skills' that are

changeable or 'learnable' over time, rather than being entirely determined by genetic inheritance. Nonetheless, Heckman himself has made use of all of the terms of soft skills, traits, non-cognitive skills and character skills across a range of his publications and interviews, as if they are 'equivalent enough' in meaning to be used interchangeably, at least when discussing their overall relevance to policy and to inequities regarding the labour market, education and other life outcomes he has studied. Heckman and Kautz (2012) provide the following conclusion about what terms can be used interchangeably, and to what extent these traits or skills can be changed:

> These attributes go by many names in the literature, including soft skills, personality traits, non-cognitive skills, non-cognitive abilities, character, and socioemotional skills. These different names connote different properties. The term "traits" suggests a sense of permanence and possibly also of heritability. The terms "skills" and "character" suggest that they can be learned. In reality, the extent to which these personal attributes can change lies on a spectrum. Both cognitive and personality traits can change and be changed over the life cycle but through different mechanisms and to different degrees at different ages (p. 452).

Relevant overarching key terms, sets of descriptors or measures of skills or traits, and associated policy initiatives were reviewed and compared for their apparent mutual relevance, as attempts to capture what could otherwise be called non-cognitive skills. The common non-cognitive focus of the terms and associated descriptors were not always obvious. This was partly because of what was different about the finer detail and scope of their focus; the types of purposes or contexts the skills were described in relation to; the purpose of the descriptors; or differences in additional cognitive skill requirements. Assumptions or aspirations were woven into each set of descriptions. Their equivalence as non-cognitive-focused key terms and descriptors were also not obvious at first glance because they involved the use of different overarching key terms to refer to them, each of which were only familiar to some, but not all, fields of practice.

5.2.1   *Thesis Definition: Non-cognitive Skills and their Nature*

This section provides a thesis definition of what the term non-cognitive skills generally represents, as a reference to abstract and socially defined behavioural concepts. See Section 5.4 for further points about the nature of non-cognitive skills and associated challenges regarding how to define and recognise them formally, especially to assess and report to education and employment stakeholders about their nature and extent.

Non-cognitive skills, and the more generic and abstract description of *traits,* can be thought of as *usual ways of being, perceiving and behaving.* Non-cognitive skills are concepts of *behaviour, intention and perception tendencies.* The manifestation of such tendencies, as behaviour or action, are situation- or context-dependent, intention- or motivation-dependent, and task- or purpose-

dependent. While intention and perception is difficult for others to directly observe, behaviour, including the 'performance of a skill', is observable and can thus be socially judged or measured.

Descriptions about the nature and extent of an individual's non-cognitive skills includes description not so much about whether but about *how* they are likely to interact with others; to perceive and act towards problems, challenges, tasks or objectives (which relates to concepts of perseverance, grit and initiative); or how an individual is likely to manage themselves (which overlaps with concepts such as self-control, self-discipline and self-organisation). Abstract and generalised measurements or descriptors that are designed to indicate something about the nature or extent of an individual's non-cognitive skills (by whatever names) essentially involve measuring or describing *how one perceives and interacts with oneself, with others, or in response to wanted or unwanted outcome possibilities, or in relation to achieving or performing.* The aforementioned reference to 'wanted' is addressed later by my discussion of motivation-related concepts.

The above thesis definition and explanation of non-cognitive skills is an attempt to capture what multiple reviewed terms, measures and descriptions seem to have in common. It represents an effort to move beyond semantic overlaps and points of difference with regard to ways to measure, or define standards for, abstract notions of *skills, traits* or behaviour or attitude tendencies.

Soft skills is another of many terms that I propose can be used interchangeably with non-cognitive skills as an overarching umbrella term. However, the soft skills term is less clearly defined by any particular set of descriptors or measures and there appears to be less agreement about what soft skills does and does not mean or include. By comparison, descriptors for traits and particular non-cognitive skills have become widely adopted, along with some validated measures, within the disciplines of psychology and labour market economics. Importantly for the research question, the soft skills term does appear to be widely, albeit loosely, used by some groups of employers and HR professionals, seemingly more so than among educators, psychologists or policy makers. From my observation, many tech-sector employers appear to use the term soft skills to define what they are looking for, and often cannot satisfy their demand, when recruiting for highly paid occupational roles at the top end of the labour market. In contrast, lists of so-called *employability skills* incorporate many employer demands regarding soft skills but the term employability skills seems to used only in reference to the most basic levels of soft or non-cognitive skill requirements and in reference to new, young workforce entrants being ready for entry-level roles (towards the low end of the labour market). Whether or not my observation aligns with that of others, it illustrates the definitional variation.

<u>Motivation, IPA and Attitude Concepts Woven into Non-cognitive Skills.</u> Concepts of *motivation*, and the related notion of *intention-perception-action* (IPA) being an interdependent and ever-

changeable set of variables, are difficult to completely separate from the description and assessment of non-cognitive skills. However, it is not necessary to separate them, so much as to acknowledge that non-cognitive skill performance or manifestation, as instances of behaviour, is partly due to and dependent upon motivation variables or 'intention and perception dependencies'.

The notion of *attitude* is one that has become woven into some non-cognitive and similar 'skill', trait or behaviour descriptors. The inclusion of attitude concepts within non-cognitive skill concepts is highly relevant to research question because employer references to 'attitude' as being key to employability and employer demand is ubiquitous.

5.2.2 *Psychology and Economics: Use of Terms and Measures*

Multiple definitions and measures of specific non-cognitive skills, along with broader *trait* concepts, have been developed and used within the discipline of psychology, and adopted by some labour market economists. On the whole, the measurement and standardisation practices concerned serve the purpose of being able to generalise about *tendencies* regarding individual emotional regulation, 'attitude' or 'disposition' and ways of behaving, rather than being designed to report context-rich detail about instances of behaviour demonstration or task performances. Section 5.5 contains references to numerous examples of studies that involved the use of psychology-derived concepts and measures to produce evidence about relationships between 'traits' or other particular 'non-cognitive skills', and a range of life outcomes.

Big Five Traits. The *Big Five* model of descriptors for five *traits* has become widely adopted and refined over many decades of critique and testing (Almlund et al., 2011; Borghans, Duckworth, et al., 2008; McShane & Travaglione, 2007). The model comprises a set of five trait spectrums and associated descriptors, which are widely accepted as having captured all the overarching variables of human *personality* or *traits.* It is one of the most long-standing, repeatedly tested and now widely adopted sets of descriptors regarding personality traits, or what might otherwise be reframed as non-cognitive 'skills' in the sense of traits 'manifesting' or 'being applied to tasks', as matter of skill performance.

Definition and descriptors for each of the Big Five traits have become widely accepted and referred to within the discipline of psychology (for Big Five definitions see VandenBos & American Psychological Association, 2015). The trait of *conscientiousness* is described as, "the tendency to be organised, responsible and hardworking" (VandenBos & American Psychological Association, 2015, p. 236). The negative end of the *neuroticism* trait spectrum is, "characterized by a chronic level of emotional instability and proneness to distress" (VandenBos & American Psychological Association, 2015, p. 705). As an example of behaviours falling along a spectrum, *extraversion* is one of the five trait labels, and the word *introversion* could be used to summarise behaviour falling at the other end of that spectrum.

Particular Non-cognitive Skills. Measures and definitions exist for particular non-cognitive skills that are each more narrowly defined than the concepts captured within the Big Five overall trait descriptors. Some examples of particular skills for which specific definitions and predictive measures have been developed are provided below.

The definition and measurement of *grit* as a non-cognitive skill has been recently advanced by the work of psychologist, Angela Duckworth and co-authors of multiple studies (Ako Aotearoa, 2009; for example see A. Duckworth & Gross, 2014; Angela Lee Duckworth & Quinn, 2009; Angela L. Duckworth et al., 2007; Eskreis-Winkler et al., 2014). Grit is a more narrowly defined skill than the Big Five trait of *conscientiousness*, while the term grit is seen within the Big Five model's description of conscientiousness as one of the broad five trait concepts (American Psychological Association, 2016). For examples of evidence and the use of grit measures see Borghans, Duckworth, et al., 2008; Borghans, Meijers, and ter Weel, 2008; Heineck and Anger, 2010; McShane and Travaglione, 2007; and O'Connor and Paunonen, 2007. Grit is a description about the tendency to persevere, often over years-long periods, towards achieving goals that are ambitious or hard for the individual concerned to achieve, such as completing a years-long degree programme or a military boot-camp programme (Duckworth et al., 2007; Eskreis-Winkler et al., 2014). Via multiple studies, Duckworth and co-authors found that measures of grit were significantly linked to labour market and educational outcomes (Duckworth et al., 2007; Eskreis-Winkler et al., 2014). Evidence on grit is discussed further in Section 5.5.

Self-discipline or self-control, locus of control and *self-efficacy* are other examples of particular non-cognitive skill or trait concepts for which measures have been developed and applied. Heineck and Anger (2010) is one example of studies that measured locus of control. Self-efficacy measures have also been linked to individual education and training outcomes, or behaviours and efforts applied to education and training objectives (Borghans, Duckworth, et al., 2008). See Section 5.5.3 for details on research that has linked measures of self-discipline or self-control to life outcomes.

While the refinement of measures of particular non-cognitive skills or traits is still a work in progress within psychology-based research, major advancements overall have been made within this discipline to develop reliable and strongly predictive measures of non-cognitive skill concepts. A common limitation of measurement practices in psychology-based research is over-reliance on self-reports about trait tendencies, although many studies have used multiple report sources to gain a more objective or balanced assessment of subjects' traits.

Old Debate on Trait Stability in Psychology. Whether behavioural tendencies are *predictable* or *stable* enough to justify conceptualising them as an individual's generalised 'traits' was debated among psychologists for several decades, starting from the 1970s. It is now widely accepted within the mainstream psychology literature that individuals do tend to behave in generally

stable or consistent ways and that the notion of distinguishable traits is accordingly valid (Almlund et al., 2011).

An individual's personality traits, as *usual* and generally *stable* tendencies, can change to some extent between different stages or phases in life but more as a gradual development process over years rather than, say, days (Borghans, Duckworth, et al., 2008; Heckman & Kautz, 2012; Kautz et al., 2014). When traits are described as being *changeable* or *learnable,* they are often referred to in relevant literature as non-cognitive skills instead of traits because the former implies that they can be learned as 'skills' rather than being entirely genetically determined for life. Furthermore, different types of contexts, purposes or social roles in life may trigger different response tendencies in an individual, such as for their workplace versus parenting roles, contexts and purposes.

5.2.3   Employers Versus Psychologists' Use of Terms

The measures and definitions of *traits* and other particular *non-cognitive skills* that are becoming widely adopted in psychology literature are not widely recognised or used by many employers. Non-cognitive skill and trait concepts from psychology essentially capture many of the personal attributes or variables that employers say they seek in employees. However, employers use other terms to describe what they are looking for when recruiting.

Examples of the alternative terms that many employers use or recognise are often terms for particular skills or traits, or what are sometimes instead framed as attitudes, attributes or qualities. Employer surveys illustrate the types of terms that are commonly recognised by many, but not necessarily all, employers. Examples of employer surveys and what they indicate about recruitment decision-making or demand are discussed further in Section 6.3. Note that such surveys have often been targeted at a specific group of employers, an industry or occupation type or as surveys of job outcomes among participants in particular programmes (especially university graduate outcomes). The key terms included in each survey may have been chosen because they were commonly recognised among a particular group of employers, or as relevant to describing skill requirements in terms that are typically attributed to high-level or low-level roles.

A synthesis of literature about definitions of *employability* was conducted as a systematic review by Hogan, Chamorro-Premuzic and Kaiser (2013). It included comparing what employers and psychologists say that individual employability depends upon, and differences in how employers versus psychologists describe employability requirements or dependencies. Hogan et al. (2013) reviewed the language employers used in employer surveys to describe what they want in their employees. They then compared employer responses to the language psychologists use to describe semantically similar or equivalent skills or characteristics. Their study is a key contribution to understanding the language barriers that may be preventing well-refined

definitions of non-cognitive skills and traits in psychology literature from being adopted by employers or recruiters.

In sum, some of the most well-refined and widely adopted non-cognitive skill and trait definitions exist in psychology and labour market economics literature, and those skill concepts greatly overlap with what employers want in recruits (at least at a generic level). However, the relevance of psychology terms for skills and traits has not become well recognised or accepted by employers. Nor has it been accepted by policy makers who have created many alternative skill lists and key terms in an attempt to articulate what young people need to be employable, including lists for university graduate employability and lower qualified school leaver employability. This might be partly due to employers, various policy actors (also educators) and researchers in the disciplines of psychology and labour market economics having different purposes and levels of information need for measuring and describing these types of skills or traits. For example, employers may be unsatisfied with generic and abstract trait scores and may seek employment-context-specific or role-specific examples of 'times when a skill was performed'.

5.2.4 *Policy Actors and Industry Groups' Alternative Terms*

Different groups of policy actors have invented a large number of key terms and frameworks for skill concepts that semantically overlap with each other and with the non-cognitive skill and trait descriptors that have been comparatively more longstanding and better validated within the discipline of psychology (Lipnevich & Roberts, 2012). The overlaps appear to have occurred partly as a result of disconnected and sometimes competing attempts by different policy work groups and agencies to create frameworks for what are basically the same kinds of abilities and dispositions. Importantly, the terms non-cognitive skills and traits do not appear to be used very often in education and youth-employment-focused policy documents or discourses. One exception may lie within the training provided to educators who study *human development* or *educational psychology* training, particularly early childhood educators.

Public-sector-initiated or co-designed concepts of non-cognitive-related 'skills' and 'competencies' have been produced partly in order to contextualise or make explicit the relevance of these skill types to different life purposes. In particular, many of them have been tailored specifically for use in certain types of education programmes or subsectors of an education system, and for application to the preparation of young people for employment. It is common to see policy-invented lists of non-cognitive-related abilities as 'skills' in terms of being 'desired types or ways of performing'. The terms and *capabilities* and *competencies* are often attached to the overarching terms used for sets of skill descriptors that were designed either by policy actors working in the education or employment space and/or by industry or business groups as the voices of 'what employers want' in their employees.

Employability skills lists are one of many overarching terms that policy actors and business groups have used in their attempts to capture non-cognitive skill concepts as lists or frameworks. Employability skills frameworks and associated resources have been published by government agencies and by business or industry groups in New Zealand, Australia and the USA (for examples of employability skills and core skills frameworks and lists, produced by governments and industry groups, see Business Council of Australia, 2014; Commonwealth of Australia, 2012, 2013b; Department of Education, Employment and Workplace Relations, 2012; National Network of Business and Industry Associations, 2014; New Zealand Pathways Advisory Group, n.d.; Office of Career, Technical and Adult Education, U.S. Department of Education, n.d.).

Employability skills lists, or other frameworks or models that include the term employability, tend to involve descriptions about the ways in which employers want *entry-level* or *low-authority-level* employees to behave in general. The term does not appear to be used to describe requirements for more sophisticated levels or applications of non-cognitive abilities. Particularly absent from employability skill lists tends to be an expectation for employees to act with a degree of *autonomy* and *leadership* that might be wanted in, for example, a recruit for a senior manager or an executive role. The appearance of employability skills lists or models reflect policy intentions to relate what are really *generic* or context-transferable *life skills*—as constructive ways of perceiving, interacting and reacting or behaving—to the purpose of defining and judging *employee performance* or *employment readiness.*

There have also been attempts within education policy work to produce sets of *core skills* or *key* skills, which incorporate employability skills (generic skill relevance to workforce participation) into a wider set of generic 'life and learning skills', including generic literacy, numeracy, communication, learning and problem solving abilities. Employability skills frameworks and resources have been published by government agencies and by business or industry groups in New Zealand, Australia and the USA (see examples cited earlier in this section).

OECD Work on Non-cognitive Skills and 'Social and Emotional Skills'. Two areas of recent OECD work deserve mention for their relevance as emerging policy-focused attempts to more explicitly target and assess non-cognitive types of skill developments in young people. First, the OECD Education and Skills Directorate commissioned a working paper from a team of four economists, entitled *Fostering and Measuring Skills: Improving Cognitive and Non-cognitive Skills to Promote Lifetime Success* (Kautz et al., 2014). Second, the OECD began a large programme of work in 2017 involving the development of an international assessment of what they call *Social and Emotional Skills*.[11] In this work, the Big Five descriptors have been explicitly matched to the OECD's production of a model and terms to describe social and emotional skills.

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[11] For an overview of the current OECD work on Social and Emotional Skills, including information about its conceptual overlaps with the Big Five trait concepts and other non-cognitive skill concepts, see the following sources: Chernyshenko, Kankaraš, and Drasgow, 2018; OECD, 2015, 2019b.

5.2.5   New Zealand Examples of Relevant Policy Terms and Concepts

In the example of New Zealand, the education sector alone uses at least three different frameworks and terms that represent similar concepts. *Te Whāriki*, the national early childhood curriculum, refers to *learning dispositions* such as 'perseverance', which overlaps with concepts of grit and Big Five Conscientiousness, and 'taking an interest' and 'courage and curiosity', which potentially overlap with concepts regarding motivation and Big Five Openness (New Zealand Ministry of Education, 2017, p. 23). The *National Curriculum* for New Zealand schools contains a set of *Key Competencies* that are emphasised as being a core focus for all students. These competencies are described as a mix of non-cognitive abilities and dispositions interwoven with some cognitive criteria and assumptions. Interestingly, even though the national *New Zealand Curriculum* document promotes the Key Competencies as a priority focus, no indications or measures of them are actually reported on nationwide. Schools are encouraged but not formally performance-assessed or rewarded based on what they do to needs-assess, report signals of, or improve competencies. A third example is an *Employability Skills Framework*, which has been promoted primarily to secondary school youth who are heading for, or deemed to be suited for, vocational pathways and school-to-work transitions rather than university (see New Zealand Pathways Advisory Group, n.d.). The framework frames non-cognitive skill descriptions as behaviour and attitude norms applied to the purposes of 'performing well' as an employee. In other words, the source describes non-cognitive skills specifically as applications of these skills to workplace contexts and tasks.

Career management skills or competencies, as concepts of knowing how to navigate the job market, and obtain or progress through job opportunities, have also been interwoven with some government-commissioned frameworks that include what psychologists might otherwise call traits or non-cognitive skills. The learning outcomes in the *New Zealand Career Management Competencies Framework* is an example of interwoven descriptions of non-cognitive skills with job seeking and labour market navigation skills.[12] Another example is the *Australian Core Skills For Work Developmental Framework* (Commonwealth of Australia, 2013a). It blends together the description of career management or job-seeking skills, interpersonal and self-management behaviours.

Appendix C provides a table of a selection of publications that were compared when developing a thesis definition of non-cognitive skills. Other academic literature, skill definitions and measures of non-cognitive skills were also used to inform the conclusions in this chapter about the meaning and nature of non-cognitive skills; especially from the discipline of psychology. Non-academic lists and descriptions about *soft* or conceptually similar skill concepts for work purposes were also reviewed which had been produced by organisations who publish material on recruitment, management consulting and career-related information services. However, the

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[12] Refer to http://nzcurriculum.tki.org.nz/Curriculum-resources/Career-education/Career-management-competencies/Learning-outcomes

selection of publications provided in Appendix C were chosen as an example of the searches and selections undertaken, and because they are particularly relevant to illustrating the plethora of overlapping umbrella terms, skill lists, frameworks and policy work areas or initiatives that have been invented by policy makers and by academics concerned with education sector and policy practice.

The multitude of terms and descriptors that have been published by governments suggest that there is policy interest in trying to formally recognise and focus on the development of these skills but attempts to do so have been partly complicated by the nature of non-cognitive skills and further complicated by a remaining lack of agreement on what to call these skills and how to formally define them. An area where there seems to be particular room for improvement lies in the apparent existence of multiple relevant terms and descriptive frameworks being produced in siloes within various pockets of a country's education sector. This raises questions about how seamlessly the development and recognition of these skills is being approached as a cross-education-sub-sector and a years-long personal development agenda for learners. Importantly, some of the cited skills lists that have been produced by government agencies for secondary or tertiary education sector use were developed in collaboration with industry or business groups.

5.3　MOTIVATION, INTENTION-PERCEPTION-ACTION (IPA) OR BEHAVIOUR DEPENDENCIES AND NON-COGNITIVE SKILLS

Existing concepts for motivation-related variables can either be treated as part of the definition of non-cognitive skills in themselves, or as non-cognitive skill *performance dependencies*, or more generally as *behaviour or trait dependencies.* The application or performance of a non-cognitive skill, and how it plays out in each unique instance of application, partly depends upon the purpose or task and the wider situation at hand. Furthermore, non-cognitive skill performance depends not only on one's motivation towards performing a particular task or role but also on one's motivation orientation towards, or perception of wanting or needing to do other things in life at the same time. Thus, it is important to consider motivation dependencies or influences when describing non-cognitive skill performances or performance dependencies.

A wealth of well-established *motivation theory* studies, including descriptive models and empirical evidence, already exist within psychology literature. Psychology's models and measures of motivation concepts are widely used in organisational behaviour and management textbooks, especially in relation to the topics of managing or understanding employee performance (or work behaviour) and recruitment and selection (for example see Griffin, 2016; Lussier, 2016; McShane & Glinow, 2017; McShane & Travaglione, 2007; Robbins et al., 2010). This literature on motivation essentially includes theories about 'motivation dependencies or influences', which, in turn, works as a theoretical explanation about an individual's 'usual ways of behaving' being dependent upon already defined variables regarding motivation.

The Big Five trait of *conscientiousness* and the concept of *grit* within psychology literature are example definitions and measures of non-cognitive skills for which their manifestation—as persistent applications of effort towards goals or tasks—assume or are heavily dependent upon motivation variables. See Section 5.2.2 for details about these concepts.

The notion that behaviour is context-, purpose- and motivation-dependent is intertwined with the notion of behaviour or *action* being subject to *intentions and perceptions*. An outcome-oriented *purpose* and an *intention* are interchangeable concepts of action dependencies. In conclusion, another way in which one could describe behaviour's dependency upon motivation variables is to refer to *IPA dependencies;* meaning intention, perception, action dependencies, or really interdependencies, given their reflexive nature. This is how I have attempted to capture motivation dependencies within my theoretical explanation about what non-cognitive skills (as behaviour concepts) depend upon. Furthermore, the concepts of IPA or motivation dependencies are also relevant to the explanations laid out in the next chapters about what other kinds of employment-related behaviours and decisions also depend upon.

In employment-focused terms, the above points translate to dependencies regarding whether, how, in what types or instances of job roles or tasks, or in what workplace cultures or contexts an individual is likely to perform a task or broader job role in the way an employer wants. Performance depends partly on the individual employee or job candidate's *perceptions of*, and motivational orientation or *intentions towards*, the types of tasks or role concerned. It is important to acknowledge that performance additionally depends on external factors that are practically outside the individual's control over their own behaviour. That is, personal and external dependencies are two sides of a 'performance' coin. Furthermore, how, whether and with what level or effort or persistence an employee (or job candidate) is likely to display certain non-cognitive skills—as a current trend in behaviour and attitude towards doing their job—depends additionally on what they are intending and perceiving with regard to their life outside of work during that time.

Some *realist* attempts to account for the behaviours of various programme stakeholders being subject to motivation- and perception-related dependencies have instead referred to dependency on *reasoning* (for example see Dalkin et al., 2015; Pawson, 2013). The explanation provided in this section about motivation and IPA concepts, as behavioural dependencies, may be a more useful way to conceptualise and account for reasoning dependencies within future programme theory developments or evaluations of programme logic.

5.4   ASSESSING AND REPORTING NON-COGNITIVE SKILLS

This section discusses some of the probable reasons why mainstream education policy and programming has historically lacked formalised activities that focus on the *assessment* and

reporting of non-cognitive skills, and associated concepts. In addition to definition problems, there are challenges regarding how to meaningfully and practically assess and report on the status of these types of skills or traits, especially to satisfy a range of stakeholders' interests in using such information. The thesis definition of non-cognitive skills that was presented in Section 5.3, along with initial comments about their nature, such as their context- or situation dependency, gives some indications as to why purely standardised and quantified methods for measuring and reporting on these skills may be of limited use to employability stakeholders.

5.4.1   *Situation-dependency and Subjectivity of Skill Performance*

Whether a person performs or applies non-cognitive skills to each instance of a task, interaction or larger purpose, and with what result, is *situation-dependent*. Said as a broader generalisation, an individual's usual perceptual and behavioural tendencies, as can be conceptualised as the performance of non-cognitive skills, is *context- and purpose-dependent*. This has implications for employers and any other stakeholders who want to predict likelihoods regarding how, when and whether skills are likely to be applied in future, especially as relevant to carrying out specific tasks or roles in future.

The *appropriateness* of how one acts, or should act, in certain contexts or situations and within certain roles, is partly *subjectively judged* by others. This includes being judged by employers and by intervention providers as assessors. These points about the nature of non-cognitive skills, their assessment, and the involvement of subjective judgement when these behaviours are treated as 'skill performance' may be some of the reasons why non-cognitive skills are less explicitly assessed and reported on via formal qualification systems and education 'outcome monitoring' practices. I say this in comparison to the standardised assessment and reporting on subject knowledge, cognitive and technical skills that are typically the focus of state-funded educational assessment and result monitoring outputs from programmes.

The challenge of some aspects of non-cognitive skill performance needing to be judged by others, and the subjectivity involved in judging their 'situation- and role-appropriate and effective' application, has implications for policy makers, programme providers and employers. An interrelated challenge for predicting future non-cognitive skill performances or manifestations is that people's behaviour and attitude displays can vary depending on   behaviour purpose, situation or wider context dependencies.

Programme funders and providers, employers, HR managers and industry bodies are among the types of stakeholders who typically want to measure, report on, judge or predict individuals' likely or usual ways of being and behaving. Namely, they want to gauge the nature and extent of individuals' non-cognitive skills, and any clues of conditions about the types of situations, contexts, or purposes for which such skills are likely or unlikely to be applied, as *performance* dependencies. This is discussed further in Section 5.4.

5.4.2   Different Assessment or Measurement and Reporting Purposes

Various education, employment, policy and research actors may want to assess, measure and/or report information about people's non-cognitive skills for different purposes. For example, mainstream secondary education programme provider organisations, individual teachers/assessors and their students, government agencies as education programme funders and performance managers, psychology researchers and theorists, industry groups, and individual employers can have different purposes for wanting to assess or access information (signals) about individuals' non-cognitive skills. Some of them may also have different intentions to act on assessment, qualification or reported types of information about an individual's skills. While this could also be said to be true regarding stakeholder purposes for assessing and using reported information about cognitive or technical skill concepts, or academic or subject knowledge, the nature and situation-dependency of non-cognitive skill performance, by comparison, appears to present challenges for education policy actors in particular. Much of the formalised assessment, national reporting and 'result monitoring' of skills among secondary and tertiary students involves methods of assessing skill 'levels' in *standardised ways,* and based on use of *abstract benchmarks* of skill performance or subject knowledge.

More research and evaluative work is needed to improve an answer as to how policy actors can practically approach non-cognitive skill assessment and reporting (including for signalling and outcome monitoring) in ways that can serve the interests of employers, education sector actors, and of youth about themselves. Some starting indications about how and whether individuals' non-cognitive skills can and have been measured and compared to date are provided by many of the sources cited in this chapter. More specifically, see Section 5.2.4 for examples of OECD evidence reports and recent international assessment work that relates to this challenge.

Formative or Diagnostic Versus Signalling Purposes. Diagnostic and formative assessment purposes include giving coaching and feedback to learners, in educational or workplace contexts. The potential purposes of formative or diagnostic skill assessment, and of coaching or teaching accordingly, includes helping individuals to learn *how to self-recognise,* critically reflect on, and potentially *practice changing* their behavioural, emotional or attitude tendencies. This form of non-cognitive skills' development intervention, as a self-awareness and self-development process of 'practising and receiving practice feedback', can be for other human development, learning and 'life skill' purposes as an education outcome, not just as a matter of developing employment skills.

Formative assessment and provider provision of personalised coaching feedback to individuals can include doing so for the purpose of training young people how to *self-report or translate* the relevance of past skill performances, as examples to raise in job interviews or applications. This feedback purpose could be regarded as part of teaching young people how to *signal* indications about their non-cognitive skills to future employers. The challenge of sending favourable signals

of information about all sorts of skills to employers, for the sake of influencing employers' hiring decisions, is discussed further in Chapter 7. Challenges and dependencies regarding how, and how well, some young people can signal their skills (and other employability information) to potential employers is one skill 'reporting and judging' challenge that particularly appears to influence which youth eventually get hired, for which jobs and why, or why not. See Section 4.9 for an introduction to the works of Michael Spence on *signalling theory* and see Section 6.6 for further discussion on signalling theory in relation to employment outcomes.

Psychology Purposes for Measurement and Result Analysis. Psychology research uses self-reports or psychologists' judgements prominently in measurement studies. Limitations of self-reports are well-recognised. For example, self-reporting depends on respondents' honesty and ability to be objective and self-aware. Yet objectivity and awareness of how one's behaviour comes across to others (is perceived and responded to by others) may be precisely in the zone of highest interest for policy. Conversely, the expert-judgement measure approaches may not transfer well into, for example, the secondary school context, where most teachers have not been trained how to consistently and appropriately apply particular measurement tools. Whether or not such challenges are surmountable remains for future consideration by anyone attempting to design methods for measuring or assessing non-cognitive skills for policy intervention purposes.

Summary of Challenges. "The difficulty in measuring, assessing and reporting on employability skills" was clearly outlined by Australia's Department of Education, Employment and Workplace Relations (2012, pp. 5–6). The Department outlined a list of challenges regarding how to define and formally assess so-called *employability skills*, and how to implement this as standardised practices within Australia's education and training system. What the Department listed (see below) reflects some of the challenges caused by the nature of non-cognitive skill and 'employability skill' concepts, being context- and purpose-dependent, socially defined and partly subjectively judged.

- **differing definitions**, interpretations and approaches used across sectors, and even within sectors, which create confusion about expectations;

- **failure to recognise the context-dependent nature** of employability skills and impact of the context upon these skills;

- incorrect assumptions that competence is automatically transferable;

- **lack of explicit focus** on employability skills in workplaces and in education and training;

- insufficient confidence and/or capability of teachers and trainers to address these skills; and

- the **difficulty of measuring, assessing and reporting on employability skills**

(Department of Education, Employment and Workplace Relations, 2012, 5-6 in 2012, p5-6 in Brennan Kemmis et al., 2014, p. 7 emphasis added).

The list captures some of the difficulties regarding how a formal education system might meaningfully report information that is based on education providers' assessments or judgements about the extent and nature of individuals' transferable skills or capabilities. Difficulties extend to situations in which education providers/assessors and qualification authorities are meant to act as a third-party source of feedback, to influence an employer and a job seeker's perceptions about the job seeker's future capability or behavioural likelihoods. Such actors estimate and *vouch for* or *verify* likelihoods about whether, how effectively, and in what types of contexts, an individual is likely to behave in certain ways, or achieve certain types of objectives in a future situation.

The relevance to the *vocational* training education subsector of the assessment and reporting challenges listed above have been evaluated by Brennan Kemmis, Hodge and Bowden (2014). They note that the Department's reference to *employability skills* overlaps conceptually with other Australian policy terms and frameworks for similar concepts of transferable capabilities or so-called skills. Namely, it overlaps with *transferable skills* and the *Core Skills for Work Framework* (see Commonwealth of Australia, 2013b). The aforementioned key terms and associated descriptors conceptually align with the thesis definition of *non-cognitive skills* in terms of their focus.

5.4.3 *A Note on Skill 'Sophistication', Adaptability, Learning and Artificial Intelligence*

The notion of someone having developed a non-cognitive skill to a 'low or high level' involves the abstract idea of levels. This kind of abstraction with levels may be of limited meaningfulness for certain information stakeholders, including employers. Some stakeholders may want to know detail about in what ways, to what extent, in what types of context, or for what types of *simple, complicated or complex and unpredictable* tasks or purposes a person has demonstrated ability to apply a non-cognitive skill.

Some jobs require capability to apply one or many 'soft' or non-cognitive skills in ways that additionally involve a higher degree of *adaptability*, *creativity or learning* than is required in other jobs. Thus, job roles that involve these additional needs could be more accurately said to need people with more *sophisticated* capabilities to adapt their application or transfer of non-cognitive skills, rather than as people merely operating at a higher skill 'level'.

The execution of complex or non-routine tasks, or needing to work out how to achieve objectives or solve problems in non-prescribed ways, are the types of purposes and contexts that require highly sophisticated development and application of soft skills. Examples of sophisticated skill application or 'performance' include those that require one to do more than simply repeat their application of soft skills as *robotic* behaviours. Robotic performance involves giving precisely the

same reactions to highly similar and predictable types of scenarios as those that have been experienced before, or that one has been given very detailed instructions in how to execute. Where there is uncertainty about the nature of an objective, or how to achieve it, and where there is little instruction or standardisation regarding how to execute something, one may be required to apply creativity and/or innovation, including in terms of how one perceives and acts towards the challenge. This is not to say that the ability to apply soft skills to more predictable and routine tasks and job contexts is not valued in the labour market. However, certain industries and occupations place high value on individuals having creative, innovative and self-leading (self-instructing) capability, including but not only in the sense of how one tends to behave, or perceive and act, towards unclear objectives.

Sophisticated forms of soft skill application often involve self-directed *learning* capability; given that the ability to learn and to adapt are interrelated abilities. Thus, the importance of sophisticated capabilities can also be appreciated in the context of contemporary attention to the advent of robots, *machine learning* and *artificial intelligence*. There is wide debate and uncertainty about in what ways, to what extent, or for whom these technologies will trigger more, less, better, worse or different job opportunities. One dystopian view is that they will replace the need for current supplies of human labour and create more unemployment than employment, especially among those who lack specialist skills, experience or social network connections to more limited job opportunities. Soft skills might be a key type of skill set that distinguishes why and which types of human workforce participants become hardest to completely replace with these technologies.

It is typically left to chance what contributions a programme, or its providers, make towards helping youth to develop and self-recognise their non-cognitive skills, and to help youth be better recognised by both education providers and state programme funders, and ultimately by employers. Non-cognitive skill assessment and reporting practices—including for the purposes of employer signalling and for formative or diagnostic development purposes—is not something that is 'baked in' to programme designs and outcome monitoring. Accordingly, programme outputs of non-cognitive skill reporting have not become used by policy actors as a key indicator of programme success, or even as a useful type of information to know about for needs-assessment, risk-assessment or strengths-assessment purposes, regardless of whether skill progressions or improvements are triggered by a programme. It can be speculated that an underlying cause of this is that policy actors are unsure how to measure non-cognitive skill concepts in ways that serve varied education and employment stakeholder purposes and interests.

5.5   EVIDENCE: NON-COGNITIVE SKILLS, AND EMPLOYMENT AND EDUCATION OUTCOMES

This part of the chapter comprises a synthesis of selected empirical evidence, most of which involves quantitative research.

The evidence was selected because it helps to validate, create or provide a basis for refining theoretical explanations and generalisations about the relevance of non-cognitive skills (or traits) to employability and eventual labour market outcomes. Some of the evidence also suggests that non-cognitive skills additionally affect education outcomes, which, in turn, could be another way in which they affect eventual labour market outcomes. Labour market outcome evidence was given most attention because it is the *end* outcome type of policy and research interest. Additionally, the evidence cited that links non-cognitive skills to education outcomes is relevant to the research aim of clarifying theory and evaluating policy expectations about *education-employment interrelationships*.

Most of the evidence cited comes from the fields of psychology and labour market economics, where the Big Five traits, and other particular non-cognitive skills and measures have become validated and used by multiple researchers. See Section 5.2.2 for details about the Big Five traits and other particular non-cognitive skills and measures from psychology. Because so many studies made use of the same definitions of traits and particular non-cognitive skills, it was feasible to compare and synthesise many of the findings from them. Thus, while there was still some variation in how these concepts were measured and defined, and while sources did not all produce compatible conclusions, a basic level of cross-validation of evidence could be achieved and enough compatibility existed to justify conclusions about employability policy implications.

The evidence synthesised in this section reveals that more is known than the general finding that non-cognitive skills influence both education and labour market outcomes for people overall. More specifically, certain measures of 'traits' and other non-cognitive skill concepts have been strong predictors that distinguish *which youth* are more likely than their peers to end up with poor labour market, educational and other life outcomes. In effect, they are *YARLE indicators*.

As relevant to clarifying policy implications for supporting YARLE subgroups, Section 5.5.7 gives examples of outcome evidence from programmes that targeted 'at risk' or disadvantaged children or older youth. Some of the programmes specifically targeted non-cognitive skill development and some were more focused on the outcome types of secondary level qualification attainment, or other academically focused educational outcomes.

5.5.1   *Recency of Non-cognitive Skills Evidence*

Since the 2000s, a wave of studies has produced a body of empirical evidence that has substantially advanced understandings about the influence of non-cognitive skills on labour market and education outcomes. Before the 2000s, little quantitative evidence existed to validate theories about individual educational and labour market outcomes being affected by the developmental status of 'traits' or other more specific concepts of non-cognitive skills. Now, a bunch of robust studies and associated skill measures exist, coming mostly from the disciplines of psychology and economics. The types of evidence cited throughout this section serve as a suitable, and only recently available, basis for developing or refining theoretical generalisations for policy purposes about relationships between non-cognitive skills, education outcomes and labour market outcomes.

Almlund, Duckworth, Heckman and Kautz's (2011, p. 6) observe that: "there remains a substantial imbalance in the scholarly and policy literatures in the emphasis placed on cognitive ability compared to other traits" (p. 6). Duckworth and Seligman (2005, p. 939) give an example of how new and less well-recognised the evidence is about the skill of self-discipline and its relevance to educational outcomes, compared to the evidence that has accumulated over decades about the influence of cognitive skills, intelligence or IQ: "For every article on academic achievement and self-discipline in the PsycInfo database, there are more than 10 articles on academic achievement and intelligence" (p. 939). Nonetheless, studies that significantly linked non-cognitive skills to educational and employment outcomes appear to have activated a recent increase in research to further validate or clarify those links.

James Heckman has emerged as a leading voice within a body of literature that has quantitatively linked labour market, educational and other life outcomes to non-cognitive skills. He is a Nobel Prize-winning labour market economist who has made 'return on investment' arguments in favour of non-cognitive skills becoming an explicit focus of more education policies and programmes. Much of his work draws on large-scale longitudinal data sets. Publications by Heckman and a mixture of co-authors have snowballed since roughly 2006. Work by Heckman, fellow economist Tim Kautz and other co-authors serves as a substantial series of evidence that has linked measures of non-cognitive skills to labour market outcomes and educational outcomes. Their work includes explanations about cause and correlation between these three factors (Heckman & Kautz, 2012, 2013; Kautz et al., 2014, 2014; Kautz & Zanoni, 2014).

5.5.2   *Non-cognitive Skills Measurably Influence Education and Labour Market Outcomes*

Overall, the reviewed evidence shows that non-cognitive skills are strongly linked to labour market outcomes, and the evidence base includes multiple measures that were taken during childhood or adolescence that were predictive of labour market outcomes years later during

'workforce aged' life (Almlund et al., 2011; Borghans, Duckworth, et al., 2008; Flossmann et al., 2007; Heckman et al., 2006; Heckman & Kautz, 2012; Roberts et al., 2007). Reviewed evidence also illustrates that reliable measures of particular non-cognitive skills and 'traits' can and have been developed. Subsequently, a body of 'hard' outcome evidence exists about the influence or relevance of these abstract skill concepts to more tangible outcomes that are typically a policy focus.

In addition to directly measured links with labour market outcomes, multiple longitudinal studies have shown that non-cognitive skill measures predict *educational* outcomes, better than IQ tests or other cognitively focused academic tests do (Brunello & Schlotter, 2011; Duckworth & Seligman, 2005; Heckman & Kautz, 2012, 2013; Heckman et al., 2006; Kautz et al., 2014). Studies that have linked particular non-cognitive skill concepts to educational outcomes, and to educational-achievement-focused behaviours, are summarised by Lipnevich and Roberts (2012, p. 173) as follows:

> Among the important non-cognitive constructs related to educational processes and outcomes are: conscientiousness (e.g., Chamorro-Premuzic & Furnham, 2003; Noftle & Robins, 2007; O'Connor & Paunonen, 2007; Wagerman & Funder, 2006), academic discipline (e.g., Duckworth & Seligman, 2003), social skills (e.g., Robbins, Allen, Casillas, Peterson, & Le, 2006), emotional control (e.g., Zeidner & Saklofske, 1996), study habits (e.g., Crede & Kuncel, 2008), and attitudes (e.g., Lipnevich, MacCann, Krumm, & Roberts, 2011) (p. 173).

Heckman and Kautz (2012) found that some measures of traits or non-cognitive skills not only *correlate* to long-range measures of labour market outcomes, but they also have a *causational* effect on both labour market and education outcomes. Furthermore, and even after controlling for family background differences as another important contextual influence, Heckman et al. (2006, p. 3 with emphasis added) concluded from longitudinal data that:

> …latent non-cognitive skills, corrected for schooling and family background effects, *raise wages* through their *direct effects* on productivity as well as through their *indirect effects* on schooling and work experience (p. 3, emphasis added).

Having reviewed literature about the importance of non-cognitive skills to both labour market and educational outcomes, Brunello and Schlotter (2011, p. 2) concluded: "Across large parts of the literature, there is consensus that non-cognitive skills have important effects both on school attainment and on labour market outcomes" (p. 2). Like Heckman et al. (2006), Brunello and Schlotter concluded that non-cognitive skills affect labour market outcomes *directly* and *indirectly*. The indirect effects concern the influence of non-cognitive skills on educational types of outcomes, some of which in turn have been linked to differences in labour market outcomes. *Cognitive test scores* as well as longer-time-framed measurements of *schooling completion* and

qualification attainment were among the types of educational outcomes considered in the evidence reviewed by Brunello and Schlotter.

5.5.3   Particular Skills and Outcomes: Conscientiousness, Grit and Self-control

Measures of particular Big Five trait and non-cognitive skill concepts have been linked to differences in people's labour market outcomes, as well as education and other life outcomes. This section details some of the studies and findings regarding a selection of particular trait or skill concepts for which there is substantial evidence about links to labour market outcomes, as well as links to educational outcomes, which, in turn, can impact upon labour market outcomes. The selected skill measures and associated evidence concern the Big Five trait of *conscientiousness*, and the more narrowly defined non-cognitive skill concepts of *grit* and *self-control*.

Conscientiousness stands out from the other Big Five traits as a particularly strong predictor of labour market outcomes, education outcomes and what are sometimes called 'risky' behaviours or 'antisocial' life outcomes. Multiple studies have linked measures of high conscientiousness to favourable educational and labour market outcomes. Many of those studies have been reviewed and further validated as part of a large meta-analysis conducted by Poropat (2009). See also Heckman and Kautz (2012) for a comprehensive review of evidence on the predictive power of measures that are based upon the Big Five trait concepts as well as other non-cognitive skills concepts. Heckman and Kautz (2012) conclude that:

> Conscientiousness—the tendency to be organized, responsible, and hardworking—is the most widely predictive of the commonly used personality [trait] measures. It predicts educational attainment, health, and labor market outcomes as strongly as measures of cognitive ability (p. 452).

Grit is another non-cognitive skill concept for which measures have recently been developed and they have been strong predictors of outcomes regarding employment *retention*, as well as educational achievement and other life outcomes. Standardised measures of grit have been linked to *job retention* in the example context of sales roles; educational achievement and *fewer career changes* among adults; longitudinally higher grade point averages, and fewer hours spent watching TV among adolescents; *higher retention in an intensive US military boot camp*; and even to lower chances of getting divorced (Duckworth et al., 2007; Duckworth & Quinn, 2009; Eskreis-Winkler et al., 2014). Since the mid 2000s, psychologist Angela Duckworth and co-authors have made substantial advancements in refining the definition and measurement of grit, and validating measures via multiple studies (see Duckworth & Gross, 2014; Duckworth et al., 2007; Duckworth & Quinn, 2009; Eskreis-Winkler et al., 2014). The word grit is included in the Big Five descriptor for the overarching trait concept of conscientiousness.

Self-control is another non-cognitive skills concept that has been distinguished from grit but both overlap with the broader concept of conscientiousness. A study by Duckworth and Gross (2014, p. 319) clarifies that: "Although both self-control and grit entail aligning actions with intentions, they operate in different ways and over different timescales" (p. 319). They conclude that grit and self-control are closely related but distinct and that people can often but not necessarily have high levels of both. As an employment-relevant example, someone may show a high level of grit in terms of persistent effort and actions towards achieving a years-away career goal; yet they may lack the day-to-day self-control to resist their temptation to spend hours chatting socially at times when they are meant to be doing other tasks.

Duckworth and Seligman (2005) validated the predictive power of *self-discipline*, as another non-cognitive measure that conceptually overlaps with *self-control*. Duckworth and Seligman included an existing self-control scale among other measures to validate the predictive power of what they defined as self-discipline. Measures of self-discipline were found to better predict adolescent academic performance longitudinally than IQ test scores. Unusually, the validity of the test was further strengthened by teacher and parent reports on an individual's self-discipline, along with the common method of self-report.

5.5.4   *Gender Differences in Traits and Job Outcomes*

Multiple studies that have linked non-cognitive skills and individual labour market outcomes have also identified gender differences in trait tendencies, as well as the apparent relevance of 'traits and gender' to who ends up with what labour market outcomes. The Big Five traits and other non-cognitive skill concepts, such as locus of control, have been found to partially explain some gender differences in wages attained, types of occupations attained (which can affect wages attained), and in decisions to participate in the labour market (Bowles et al., 2001; Cobb-Clark & Tan, 2011; Mueller & Plug, 2006; Osborne, 2000; Wichert & Pohlmeier, 2010). Having said this, many of the aforementioned sources also conclude that gender differences in labour market outcomes are more strongly affected by discrimination or disadvantage occurring at a systems level, than they are by the otherwise significant influence of an individual's non-cognitive skills or 'the makeup of their traits'. Employer recruitment and selection biases is one example of these broader systems-level differences in how people of respective genders are perceived and treated differently by employers.

In sum, the *labour market context* or *demand dependencies* that affect 'who gets what jobs, what pay, and why' include differences regarding how employers react to their gender-based trait perceptions, interpretations or expectations; regardless of whether they do so consciously or unconsciously. Additionally, gender differences exist regarding what traits people are statistically more likely to display or 'be strong in', and these differences appear to be one reason but not the only reason why certain occupations are male- or female-dominated.

Cobb-Clark and Tan (2011) found that, even when women have a theoretically competitive advantage of better non-cognitive skills than male counterparts, they still receive lower wages on average than men within some of the same occupation types. Cobb-Clark and Tan acknowledge that women and men with similar measurements of non-cognitive skills do not tend to go into higher rather than lower-paid types of occupations at the same rates. Thus, gender wage disparity across the labour market overall could additionally be explained by more men than women entering higher paid types of occupations, not just by gender discrimination 'within an occupation type' between candidates with similar non-cognitive skills. Their findings were based on studying the Australian labour market context.

Certain Big Five traits have been linked to attainment of higher paid occupations and to gender differences in such attainment. While confirming that *Openness* to experience was linked to the attainment of managerial roles, which are generally higher-wage roles, Cobb-Clark and Tan (2011) also found that the rates of men and women who attain these types of occupations is unequal *regardless* of their measured levels of openness. Furthermore, males who score highly in *Agreeableness* appear to be less likely than males overall to attain managerial roles and more likely to enter educational roles (Cobb-Clark & Tan, 2011). On the whole, education sector occupations tend to be lower waged than, say, occupations within the private business sector. As a separate but related point that has implications for understanding who gets what wages and types of occupations, and why, differences in *workforce participation* decisions have been linked to Big Five traits, specifically among females (Wichert & Pohlmeier, 2010).

With regard to the proposed effect of people's education outcomes on their labour market outcomes, female labour market participation was found to be exaggerated when traits were not also accounted for (Wichert & Pohlmeier, 2010). Furthermore, Tavares (2010) provided some interesting clarifications about measures of females' Big Five traits being linked to their decisions about participating in education and to childbearing postponement decisions. Childbearing postponement decision-making was inferred as something that is juggled with education and labour market participation decisions.

> Indeed, we find that whereas high levels of Agreeableness, Extraversion and Neuroticism accelerate childbirth, high levels of Conscientiousness and Openness are associated with childbirth postponement. The nature of the relationship between education and postponement of fertility is far less clear … Our results support [two] hypotheses i.e. on the one hand, personality traits influence both education and fertility decisions; on the other hand, more educated women do not equally delay childbirth compared with less educated women: the more "open-minded" ones postpone childbearing for longer (Tavares, 2010, p. 2).

5.5.5   Service Sector Jobs, Social Class and 'Soft Skills'

Keep and James (2010a) warn that some employers misuse 'lack of soft skills' as a synonym for 'not being upper class' and accordingly discriminate in favour of upper-class job candidates, rather than basing hiring decisions primarily on the ability to perform tasks. Note that the term soft skills is sometimes used informally in the service sector. Any policy efforts to support labour market and social mobility among youth who come from low-class or 'working class' backgrounds may need to take this potential challenge into consideration. However, the extent to which this kind of employer perception and reasoning is really causing one job candidate to be chosen over another, and in what particular labour market sub-contexts or country contexts, may need further investigation before any realistic conclusions can be drawn about its implications for 'social mobility' policy agendas. Nevertheless, such bias potential is relevant for social- or labour-mobility programme theory development.

Hospitality and retail, as a major part of the wider service sector, exemplifies how labour market demand for certain types and levels of soft skills varies to some extent between occupations or industries (Hurrell et al., 2013; Weber et al., 2009). Hospitality and retail employers have a particularly strong demand for a large number of employees who have well-honed abilities to verbally and visually interact with others—not just functionally with other staff but in ways that provide customers with a 'hospitable' interactive experience. Front-line hospitality and retail recruitment decisions, and expectations of those staff, are thus weighted towards judgements of well-developed *customer service* skills. Customer service, however, overlaps with other ways of describing certain soft skills. It overlaps with criteria regarding confidence and tact when speaking and listening to strangers, and speaking and acting in a way that shows motivation to be helpful to others, or at least to appear friendly.

Interestingly, soft-related skill demands in the hospitality sector is one topic of literature within which the term soft skills is widely used, even though its definition is debated there (for example, see Hurrell et al., 2013; Nickson et al., 2012; Weber et al., 2009). A review of this literature also indicated that, especially with regard to hospitality and retail sector jobs, recruitment decisions heavily depend on how one physically looks, or at least on how a person presents and grooms themselves to 'fit the image' an employer wants to portray to customers. Nickson, Warhurst, Commander, Hurrell and Cullen (2012) propose the term 'aesthetic labour' to represent this as an industry-specific high demand for a skill, and propose it as a soft skill.

5.5.6   Timing of Intervention and Non-cognitive Skill Malleability: Starting From Early Childhood

Some forms of education or other intervention have been found to *change* people's traits (Heckman & Kautz, 2012). However, the feasibility of interventions being able to change traits appears to vary depending on life stage. As is relevant to decisions about intervention timing

and focus, traits have been found to be malleable via intervention during both early childhood and adolescence, whereas cognitive skills or IQ are generally fixed once people reach teenage years (Almlund et al., 2011; Borghans, Duckworth, et al., 2008; Borghans, Meijers, et al., 2008; Brunello & Schlotter, 2011; Carneiro et al., 2007; Cunha & Heckman, 2008; Heckman, 2007; Heckman & Kautz, 2013; Kautz et al., 2014).

While it is ideal to start focusing on developing non-cognitive skills during early childhood, evidence indicates that many non-cognitive skills remain malleable and have the potential to be improved via intervention during the adolescent life phase (Kautz et al., 2014). However, this generalisation about such skills being malleable depends on the timing and types of intervention, and on other matters of context, circumstance or 'profile type'.

The strategy of including some explicit non-cognitive skill initiatives *during early childhood*, particularly for disadvantaged subgroups, has been recommended based on evidence that doing so is a more cost-effective and impactful way to respond. This is compared to only providing non-cognitive skills as 'last resort' intervention once people become teenagers or adults (Heckman & García, 2017a; Heckman & Kautz, 2013; Kautz et al., 2014). Heckman (2008, p. 317) explains that public investments in a combination of early childhood intervention and later life interventions for the same groups is justified as both on the basis of economic 'return on investment' and in term of compounding positive effects on cognitive and non-cognitive skill formation:

> Capabilities produced at one stage of the life cycle raise the productivity of investment at subsequent stages … investments in capabilities at different ages bolster each other. They are synergistic. Complementarity also implies that early investment should be followed up by later investment in order for the early investment to be productive. Together, dynamic complementarity and self-productivity produce multiplier effects which are the mechanisms through which capabilities beget capabilities (p. 317).

The sooner in life that desired states of non-cognitive skills become developed or improved, the sooner those non-cognitive skill developments can start to trigger cognitive or learning gains as well. As concluded by Heckman (2008), "[cognitive and non-cognitive] skill begets skill; motivation begets motivation. Motivation cross-fosters skill and skill cross-fosters motivation" (p. 290).

The labour market economist James Heckman's production and co-authoring of a series of empirical evidence adds weight to his advocacy for investment in early childhood programmes that explicitly aim to develop non-cognitive types of skills. Part of the argument he provides for such investment is presented in economically interested terms; as a long-term-focused and ultimately cost-saving investment in the development of future workforces. His argument is

partly based on the logic that, like compound interest, earlier intervention in non-cognitive skill development is more likely to accumulate bigger return on investment, by preventing or achieving certain types of education, employment and other social outcomes during much later adolescent and adult life periods. The argument is made in comparison to the strategy of saving or delaying most of the spending on at risk-targeted youth interventions, to wait and see who becomes NEET or ends up with employment- and education-failure-associated outcomes upon reaching teenage or later years. Active labour market programmes (ALMPs), and spending on training programmes to give unqualified school leavers 'second chances' to attain a secondary or equivalent level qualification, are examples of later-timed programmes that might be better to combine with YARLE-targeted early childhood intervention.

5.5.7 YARLE-focused Programme Examples and Outcomes

Non-cognitive skills can sometimes be improved through intervention (Bhaerman & Spill, 1988; Heckman & Kautz, 2012, 2013; Kautz et al., 2014; Kautz & Zanoni, 2014). Some example programmes that have included an explicit focus on non-cognitive skill development come from the education sector and were targeted exclusively at youth who had been identified as disadvantaged or matching some kind of 'risk' criteria. Examples of such intervention are summarised in this section.

Some of the following interventions were implemented while a young person was simultaneously enrolled in a mainstream early childhood or secondary education programme, whereas other examples involved standalone or post-secondary programmes that exclusively targeted, and thereby singled out, youth who had already left secondary school with very low or no qualification attainment. These differences are worth noting because of having implications for comparing the use of 'standalone programmes' versus 'supplementary support interventions' being woven into mainstream education programme participation. This is relevant to considering when and how to support YARLE subgroups.

Intervention During Early Childhood for Non-cognitive Skills

Some early childhood education programmes have explicitly included a focus on developing non-cognitive skills, and have been linked to improved education, employment and crime-related outcomes later in life (Belfield et al., 2006, 2006; Heckman, 2011; Heckman & Kautz, 2013; Kautz et al., 2014). In particular, these types of programmes have been linked to measures of improvement in the non-cognitive skills of disadvantaged children as a targeted group, and to improvements in their employment and other life outcomes decades after they participated in the programmes (Belfield et al., 2006; Kautz et al., 2014).

The *Perry Preschool Program* is one well known example of an early childhood intervention that involved explicit activities to develop non-cognitive skills. It is an example of an intervention

that exclusively targeted disadvantaged preschool children: specifically, African American three- and four-year olds with low IQs from low-income backgrounds. Life outcomes for Perry programme participants and a control group have been tracked up to age 40 and the results have become the focus of multiple evidence reviews and additional studies (Belfield et al., 2006; as examples see Berrueta-Clement & And Others, 1984; Heckman et al., 2006, 2010; Kautz et al., 2014). Compared to a control group, the programme significantly improved later life outcomes including employment and earnings, level of schooling completed, and reduction in crime-related outcomes, as well as improving non-cognitive skills (Belfield et al., 2006; Heckman et al., 2006; Kautz et al., 2014). Schweinhart (1993, p. 1) summarises some key differences between the life outcomes at age 27 of Perry programme participants:

> Participants have significantly higher earnings, rates of home ownership, and levels of schooling, as well as significantly fewer arrests and social service interventions, than a control group of non-preschool participants (p. 1).

Interestingly, IQ tests showed that there were cognitive skill improvements among Perry Programme participants but that effect eventually faded away, with IQ results later becoming not much better than a control group's scores (Heckman et al., 2013; Kautz et al., 2014). The intervention's success in having decades-long favourable effects on measures of educational achievement (not IQ tests), employment and crime-related outcomes was caused comparatively more by its effect of improving non-cognitive skills than improving cognitive skills (Heckman et al., 2013).

As further validation of what it is about the design features of the Perry Programme that caused improvements to both non-cognitive skills and employment-related outcomes, see Heckman et al.'s (2013) paper entitled *Understanding the Mechanisms Through Which an Influential Early Childhood Program Boosted Adult Outcomes.* This is important to take into account when evaluating the transferability of findings. This includes distinguishing the key design features of such a programme that might be replicated to achieve similar outcomes, and distinguishing key target group or context features that may affect transferability. The paper attributes most of the influence on life outcomes to the programme's effect of improving non-cognitive skills.

Schweinhart's (1993) review of outcome data on Perry Programme participants at age 27 aligns with others' findings about there being significant economic returns on investment in interventions that are explicitly designed to develop non-cognitive skills before formal schooling age. Quantifiable overall public savings have been achieved by investing in similarly focused early childhood programmes to prevent, rather than later intervention in, negative employment-related, crime-related and other social life outcomes (Heckman et al., 2010; Heckman & García, 2017a). Schweinhart (1993) notes that "Cost-benefit analysis revealed that, over the lifetimes of the participants, the preschool program returned to the public an estimated $7.16 for every dollar spent" (p. 1).

Intervention While in Secondary School: Chicago OneGoal Example

The Chicago OneGoal programme is a public secondary school intervention that focuses on developing disadvantaged adolescents' non-cognitive skills to improve tertiary college education enrolment and completion rates among youth from low income backgrounds (see Kautz et al., 2014; Kautz & Zanoni, 2014). Increasing college education entry and college (university) qualification rates are commonly focused on as a policy agenda as theorised indicators of young people's employment prospects having been improved, compared to not entering and completing college.

The OneGoal programme was designed to develop time management, goal attainment, teamwork and self-reflection, which are, or heavily depend upon the application of non-cognitive skills. The intervention also involved other practical activities, such as helping students to write college enrolment applications. However, 15 to 30% of the programme's effect on outcome improvements was attributed to its success in improving non-cognitive skills (Kautz & Zanoni, 2014). Kautz and Zanoni (2014) demonstrate a method for measuring individual non-cognitive skills that makes use of existing school administration data. Those measurements, really being estimates of skill status, were found to be more reliable indicators of future educational outcomes than cognitive skill measures.

Evidence from this programme supports the theory that adolescence is not too late in life for interventions to help improve non-cognitive skills, and for disadvantaged adolescents in particular. It also indicates that the inclusion of intervention activities that primarily aim to improve non-cognitive skills can work to trigger improvements to tertiary education enrolment and/or completion rates among disadvantaged youth. This does not necessarily mean that increased rates of disadvantaged youth enrolments in, or completions of, tertiary programmes will then also lead to them then gaining more or better employment. That involves yet another set of theories and contextual dependencies about the links between educational qualifications and employment outcomes. Nonetheless, it indicates that intervention to improve adolescents' non-cognitive skills has worked to improve their tertiary education participation likelihoods.

'Second Chance' Training and Qualification-focused Programmes After Secondary School

I offer two examples here that typify what I will refer to as second-chance types of education and training programmes. They are a popular type of programme and programme outcome focus used to exclusively target unqualified or very low qualified school leavers in many OECD countries. Many of the youth who end up in second-chance and typically qualification-achievement-focused programmes are currently also classified as NEET, and/or they have been NEET before. However, upon becoming enrolled in a second-chance programme they are technically 'not NEET' for however long they remain enrolled in this form of education and training. Thus, youth may be excluded from a national headcount of NEET youth for

intermittent periods of time while they move in and out of second-chance programmes enrolment status.

The first of two examples of second-chance programmes discussed below is that of the GED certificate programme (for General Education Development) from the USA. GED is a qualification that so-called 'high school dropouts' can choose to attempt. GED qualification attainment is meant to equate to the attainment of a high school graduation diploma. The second example is a more general set of New Zealand interventions that are essentially second-chance programmes and are very similar to each other but that have had various brand labels attached to them over the years.

Different language is sometimes used to describe the subgroups these programmes target. However, they have an 'at risk youth' focus in common and exclusively target those who leave school without qualifications. A key aim and programme success measure, in addition to re-engaging school leavers in some form of education and training, is to help them attain qualifications that are meant to represent equal ability to that represented by the attainment of qualifications via earlier attempts while at secondary school. Lack of secondary school-level qualifications is thereby inferred as the key factor that puts some school leavers more at risk than others of poor future tertiary qualification attainment, crime-related or employment outcomes.

These second-chance programmes sometimes target and monitor other outputs besides secondary-level qualification attainments, as additional indicators of programme 'success' or effectiveness in reducing participants' risk status. Job attainment, or transitioning into higher-level tertiary programmes, are sometimes also used as key programme performance indicators. However, qualification attainment, or at least achieving certain numbers of credits towards a secondary qualification, tends to be treated as a minimum programme output requirement. It reflects an intervention theory that the lack of a secondary-level qualification is the key factor that distinguishes unqualified school leavers as being at risk of ending up with worse employment and other life outcomes, compared to qualified school leavers.

GED Certificate in the USA. The GED certificate programme in the United States is one example of many educational programmes that are designed to work as a 'second chance' for unqualified secondary school leavers. The programme outcome focus reflects the theory that unqualified school leavers can catch up and develop the same employment potential as qualified school leavers by attaining a high school qualification equivalent via a post-secondary programme that is mainly designed to develop and assess academic or cognitively focused types of ability. The embedded policy assumption is that a lack of skills or knowledge (mostly in the cognitive sense of skills), as well as a lack of paper to validate those skills, is the only or main reason why these people are less employable than their high school graduating peers. Without being combined with other types of intervention, it implies a policy perspective that changing the qualification

status, and the cognitive or knowledge status, of these people is perhaps all that interventions can realistically do in the hopes of changing their later employment outcome likelihoods.

The GED programme is typical of the bulk of at risk-targeted and employment-focused programmes in that it is timed to engage people *after* they have left school with low or no qualifications, and focuses on the achievement of a secondary school or theoretically equivalent level of qualification as the key intervention success indicator; that is, the key interim outcome used as a proxy for improved employability.

Being associated with the GED programme as a brand name might work as a negative signal to employers who have preconceived negative perceptions of GED participation simply being a signal of 'having been a high school drop-out'. Sometimes participants willingly self-refer to the GED programme and sometimes they are coerced into participating, for example as a condition of welfare receipt, or sometimes as a prison or diversion activity.

Heckman, Stixrud and Urzua (2006) found that any cognitive skills that were gained and/or recognised via GED qualification attainment did not outweigh the negative effect of the lack of non-cognitive skills that was disproportionately common to those who ended up in GED programmes. Heckman and Rubinstein (2001, p. 146) compared the life outcomes of GED recipients against (a) those who gained the high school graduation certificate but did not later gain tertiary level qualifications, and (b) those who dropped out of high school without the graduation certificate and did not attempt to gain the GED certificate as a 'second chance' equivalent to high school graduation. They observed:

> The pattern is the same for other groups. GED recipients earn more than other high-school dropouts, have higher hourly wages, and finish more years of high school before they drop out. This is entirely consistent with the literature that emphasizes the importance of cognitive skills in determining labor-market outcomes. Controlling for measured ability, however, GED recipients earn less, have lower hourly wages, and obtain lower levels of schooling than other high-school dropouts. Some unmeasured factor accounts for their relatively poor performance compared to other dropouts. We identify this factor as non-cognitive skill Heckman & Rubinstein, (2001, p. 146).

New Zealand Second Chance or 'Targeted' Training with Qualification Focus. New Zealand has similarly offered second-chance training programmes that prioritise the outcome of attaining a Level 2 National Certificate, which is the same or theoretically equivalent to the NCEA Level 2 certificate the majority of youth attain while at secondary school. Or at least the attainment of NCEA Level 1 is a common outcome focus for programme participants who left school without Level 1 and who are not deemed to be likely to complete a Level 2 certificate within the programme duration. See Chapter 10 for further details about programmes and associated

evidence specifically regarding New Zealand second-chance and other at risk-targeted programmes.

The programmes through which these second chances are delivered have gone by many names over the years, including being referred to as *foundation* education, *targeted* training, Youth Training, Youth Guarantee, or as NEET-focused programmes. Training Opportunities is another now expired large-scale programme that used to engage unemployed and unqualified youth as well as adults (see Tertiary Education Commission, 2009; Ministry of Social Development, CSRE, 2011).

Providers of these programmes are diverse, as are their methods of programme delivery and quality control. The incentives and outcomes expected of them as contractors are not uniform. Some providers are classified as alternative education or private training establishments, while others include polytechnics. All targeted training programmes and their providers focus on foundation-level qualification attainment as a key interim outcome and success indicator (or at least credits towards a qualification). They exclusively target at risk youth who are no longer enrolled in school, and programme completers are meant to become employed immediately after the programme.

5.6 CONCLUSIONS

A range of academic disciplines, and policy, education sector and industry actors have developed descriptors for an array of concepts, traits or skills that I have concluded can all be approximately equated to the umbrella term of non-cognitive skills. The current existence of so many overlapping umbrella terms, associated measures and descriptors—including the existence of multiple policy initiatives intended to define and frame these skills as relevant to different policy outcome definitions—complicates policy interests in ascertaining how to define, explicitly assess and report on the nature and extent of individuals' non-cognitive skills. Furthermore, any education- or employment-focused policy interest in implementing a national method of non-cognitive skills assessment and 'outcome monitoring', formal reporting or signalling, and associated responses to skill development needs is complicated by some challenges regarding the nature of these skills and their judgement by others as 'performance'. These challenges were outlined in sections 5.2 to 5.4. Having noted the challenges, the chapter also discusses evidence and practice from the discipline of psychology that suggests that individual states of non-cognitive skills can be measured or otherwise assessed, at least in certain ways. Some of the cited programme evidence also suggests that these skills can be improved via intervention, at least during early childhood and teenage years.

The chapter concludes with a synthesis of empirical evidence that has linked measures of non-cognitive skills, including Big Five traits, to educational and labour market outcomes. Reviewed evidence also includes outcomes from at risk-targeted programmes that prioritised the

development of these skills *or* the attainment of low-level qualifications, at varied ages and stages that span preschool to young adult or workforce-aged life.

In sum, the chapter contributes towards an improved understanding of what non-cognitive skills, traits and similar skill concepts (especially those made by policy actors and industry groups) entail; challenges regarding how to recognise and respond to them; evidence on their importance to education and labour market outcomes; evidence about their malleability; and considerations regarding the *timing* and potential of intervention. Subsequently, the chapter provides an evidence synthesis and basis for making evaluative conclusions about implications for policy recognition and responses to non-cognitive skills as a key employability dependency. More specifically, it illustrates the relevance of shortfalls in non-cognitive skills to distinguishing which or why certain youth are 'YARLE', and the potential for intervention to address this employability development need for target groups.

6. EMPLOYMENT OUTCOMES: DEPENDENCIES AND POLICY RESPONSES

6.1   INTRODUCTION

Chapter 5 synthesised evidence on non-cognitive skills and confirmed that the nature and extent of them are a key individual employability dependency. The chapter included evidence that various concepts under the non-cognitive umbrella are strongly linked to likelihoods regarding labour market outcomes; including concepts of traits, attitudes, social and emotional skills, or one's usual ways of interacting and otherwise behaving. Furthermore, evidence in Chapter 5 indicates that non-cognitive skills *can be changed via programmes*, at least in some circumstances.

This chapter provides evidence and theoretical explanation about *what else* the nature and extent of individual employability depends upon, as both distinct from and in combination with dependency on non-cognitive skills. Evidence in this chapter is discussed particularly in relation to developing theoretical clarifications about the employment outcome type of employment attainment or 'getting hired in the first place', rather than other employment outcome types such as getting promoted internally.

It bears keeping in mind that reference to being at risk of *limited* employment outcomes includes the less favourable outcome types of being officially unemployed, underemployed, or churning frequently between short periods of low-paid work towards the low end of the labour market. All these outcomes may lead to an associated outcome of being frequently, or long-term, dependent on welfare.

The evidence considered in this chapter has implications for understanding what *all* young people's employment attainment typically depends on. But it is also more specifically relevant to explaining the employment outcomes and intervention potential for low-qualified, welfare-dependent and otherwise YARLE youth who have already left school. Reviewed evidence suggests that prior *work experience* is a key employment attainment dependency, which is a paradox for youth *in general* who need to gain first experiences in order to gain a first few experiences. Furthermore—and partly due to being likely to have less experience than older job candidates—youth in general may need support in relation to developing *employer signalling capability* and at risk subgroups in particular may be distinguished because of having particularly limited signalling capability, or being tarred with negatively perceived signals.

It was deemed appropriate to privilege evidence and explanations concerning hiring behaviour at the entry level or *low end* of the labour market. The rationale for this is that the research question is particularly concerned with outcomes among youth and at risk youth more so than among workforce populations overall. Jobs at the low end of the labour market are where the bulk of youth are likely to gain their first jobs. Some are likely to become stuck at the low-paid end of the labour market, especially those that are comparatively least skilled, experienced and otherwise least able or willing to compete. Having said this, there are also lessons to be learned

from some evidence pertaining to the high end of the market, and to university qualified job seekers, so a smaller selection of associated evidence is also briefly considered in this chapter.

Section 6.2 reviews evidence from employer surveys about what they seek most, or most highly rank, as being important to their hiring decisions (as well as what they seek more of in current and potential staff). Employer survey evidence is one of two main bodies of evidence considered in this chapter.

Section 6.3, synthesises evidence concerning *active labour market programmes* (ALMPs) as well as some evidence on what are classified as *second-chance or targeted training* programmes. These programmes typically focus on assisting youth to first gain a secondary schooling or equivalent qualification, with the expectation that they will then gain employment or progress into tertiary-level training. Most ALMPs and second-chance programmes do not target a general youth population. Instead, they usually target adults and/or youth who have already left secondary school and are currently unemployed. Many targeted youth are also NEET and low qualified. In other words, the bulk of youth-targeted ALMPs and second-chance programmes target YARLE subgroups rather than youth generally.

Moving on to explanations, Section 6.4 discusses *signalling theory* and its implications for understanding key dependencies that typically affect hiring outcomes. It is a broad theory that was initially introduced in Section 4.5.3. It helps to explain the social mechanisms and exchanges typically influencing employer perceptions and decisions to hire people. Signalling offers an alternative, and in some ways better, explanation of employment outcomes than those afforded by both human capital theory and associated programme logic theory that assumes that increased supply of qualified job candidates will drive increased demand for accordingly qualified candidates. Furthermore, the multiple sources of evidence that highlight *work experience* as somehow being key to employment attainment success is partly clarified by signalling theory, in that prior work experience is sought by potential employers as a top ranked *signal* of employability.

Section 6.5 concentrates on the cross-cutting theme and focus topic of *work experience*, and elaborates on some implications for employability theory development. This section includes some reflection on findings and limitations regarding what earlier sections in the chapter indicated about work experience as an employability dependency.

Section 6.6 brings together a summary of key findings and theoretical conclusions from this chapter. It summarises some implications for developing theoretical generalisations about key influences on employment outcomes or hiring behaviour.

6.2   EVIDENCE: EMPLOYER SURVEYS

Employer surveys and associated analysis cited in this section are direct evidence of what employers say they want most in employees. The surveys mainly focus on how employers rank or demand various types of abilities (skills, knowledge and intention, attitude or motivation attributes), experience, qualifications or other signals or attributes that they want in current or prospective employees. Some surveys uncover skills that employers say they cannot generally find enough of within job-candidate pools, as 'skills' shortages.

While there is variation regarding what is ranked highest by employers in different surveys, the general trend is that *non-cognitive skills (including attributes regarding attitude), and possession of prior experience trump the ranking of formal or academic qualifications*. Consensus around this generalisation was notably apparent in reference to what employers ranked regarding recruitment at the low end or unskilled end of the job market, which is where those most unskilled, unqualified, lacking in specialist skills or experience, and accordingly 'limited employability' subgroups are most likely to gain employment if they are going to gain any at all.

Employers highly rank what are essentially non-cognitive skills, although numerous alternative terms and phrases are used Surveys use more specific or work-contextualised descriptors regarding sought-after behaviours, attitudes, work ethic, flexibility, communication skills, and self-management abilities.[13] McIntosh (2013, p. 11) shows that what are soft or non-cognitive skills by other names (such as teamwork or communication skills) make up the bulk of the types of skills that employers listed as in shortest supply or in greatest demand for multiple UK industries or sectors. McIntosh (2013, p. 29) also confirms that employers who recruit youth between ages 16 to 18 directly from education rank "lack of experience" and "poor attitude" as by far the highest reasons why youth recruits are not prepared for employment. Poor attitude is a behaviour- and communication-related description that could otherwise be reframed as aspects of poor non-cognitive skills, specifically regarding skill application or orientation to workplace tasks and social interaction.

When deciding whom to employ in low-level jobs, the majority of surveyed employers do *not* highly rank a formal low-level qualification as being one of the most important criteria. Nor do employers highly rank qualifications as something that current employees need in order to meet *performance* or capability requirements in low-level roles. In conclusion, low-level of qualifications appear to have limited *signalling* power and influence upon employer decisions to employ youth in non-specialised low-level jobs. Signalling theory and explanation is considered further in Section 6.4.

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[13] Refer back to Chapter 5 for more detailed discussion about types of non-cognitive skills or traits and how they are differently defined by different academic, programme and employment actors.

In contrast to low-level qualifications, other types of *signals, or signal senders* or sources that employers appear to resort to, or rank highly in surveys, include impressions from interactions with candidates at job interviews, prior work experience, and personal recommendations from networks personally known to the employer (Hasluck, 2011b; Keep & James, 2010a, 2012; Shury et al., 2008, 2011). Personal recommendations of a job seeker via an employer's networks exemplifies how or why some youth may be at a disadvantage when seeking employment. Specifically, lacking personal connections to networks of either employers or to people who are close to and trusted by employers could limit a youth's ability to become known to employers and to become aware of a potential job opportunity.

A number of the foregoing themes are amplified in the following subsections.

6.2.1   Focus on UK Employer Surveys

While employer surveys from other countries were reviewed, most of the largest-scale employer surveys and the most in-depth associated analytical reports that were reviewed were from UK employers s and—usefully for YARLE-focused theory development—these surveys included specifics about employer preferences regarding jobs at the *lower end of the labour market*. In particular, the UK Commission for Employment and Skills (UKCES) has produced a major biennial *Employer Skills Survey*, the most recent of which involved interviews with 91,000 employers in 2015 (the survey results and analysis are reported in Vivian et al., 2016). The survey is complemented by numerous reports that have used and elaborated on different aspects of what the vast range of UKCES survey data shows. Hasluck (2011b) produced a comprehensive review of evidence on *Employers and the Recruitment of Unemployed People* which draws upon UKCES survey data. Shury et al. (2008) published a key report on findings from the first major UKCES employer survey.

The reviewed UKCES surveys and associated publications appear to particularly focus on employers who recruit for roles at the lower end of the job market. The survey evidence is particularly relevant to understanding what influences recruitment outcomes among low skilled, or otherwise 'low employability' members of the workforce, including young recent workforce entrants who are likely not to be able to compete for higher end jobs, at least until they attain more work experience. While noting that employer feedback might vary between different countries' labour market contexts, the exceptionally large-scale evidence available from the UK provides insights that seem logically transferable to the purpose of developing non-UK-specific employability theory about what employers most want and what they look for in job candidates.

6.2.2   Low End of Labour Market: What Employers Want

For jobs at the low-paid or entry-level end of the market, the same or conceptually overlapping key terms that are soft or non-cognitive in nature repeatedly appear as those highly rated in job

advertisements and in multiple employer skill surveys. Common terms and phrases in the lists show that employers want employees who have a positive or 'can do' attitude, a good work ethic, conscientious and initiative. They want people who are flexible, reliable or trustworthy, can manage time or organise themselves (including turning up regularly and on time), mature or responsible (for example, careful about workplace safety), self-motivated and able to solve problems. They want people with listening skills, interpersonal skills, communication or customer service skills and people who can follows instructions.

The bulk of the total low-paid jobs available in Western developed economies come from only a few industries. For example, the top ten occupations advertised in UK Jobcentres made up 78 per cent of all vacancies advertised in the Jobcentres, and as Hasluck (2011b) notes: "The list is dominated by vacancies for sales assistants, cleaners, personal service workers and elementary jobs in process plants and construction." The service sector overall, and notably hospitality, retail and caregiving, accounts for the largest mass of low-paid entry level jobs, and a large chunk of these are low paid at the low end of the job market. As Hasluck (2011b, p. 20) points out in reference to the UK context:

> Two-thirds of employees in the hotels & restaurants sector earned less than £7 per hour in 2010 while half of all employees in the retail & wholesale sector earned less than £7 per hour. Together, these sectors account for around two-fifths of all those earning less than £7 per hour.

While lowest-level manufacturing or product-processing jobs still make up a chunk of the bottom-end jobs on offer in Western economies, as opposed to jobs involving face-to-face customer service, they are not where overall growth in demand is happening. The general trend in countries such as the United Kingdom, United States and New Zealand is a reduction in low-level manufacturing jobs on offer—especially ones that have paths leading to promotion or wage increase—while the service sector sustains or grows its demand to fill jobs that similarly do not justify a need for specific tertiary qualifications or extensive industry-specific experience.

The service industries provide the bulk of the jobs that teenagers and young adults, especially non-university-qualified and currently unemployed youth, typically gain or compete for. However, even university graduates end up competing in these sub-markets when competition for higher-level jobs is fierce (Hasluck, 2011a; Keep & James, 2010a). With the exception of formalised apprenticeships, many of these job types involve high staff turnover as the norm and it appears that a long-term employment relationship is not necessarily what the employers concerned are expecting to achieve.

While some evidence indicates that the attainment of low-level formal qualifications after leaving school has been linked to slightly increased chances of *being employed*, at least for some years after leaving school, such qualification attainment does not appear to be linked to increased

earnings. This generalisation is modified by a need to review additional relevant evidence, but it is supported by studies regarding the UK context (Keep & James, 2010b, 2012) and by New Zealand evidence about differences in youth labour market outcomes (Earle, 2016; Scott, 2018; Tumen et al., 2015). Keep & James (2012) provide more references that illustrate poor links between earnings at the low end of the job market and the attainment of basic secondary school or equivalent level post-compulsory qualifications.

Recruitment and selection practices for low-level jobs are often for high-turnover jobs and usually involve employers paying less attention to qualifications and more attention to other quick-to-obtain and low-cost *signals* of having minimum transferable *employability skills* (Keep & James, 2010a). Preferred signals include past job referee reports obtained by phone calls, impressions gained face-to-face via job interviews and sometimes demonstrations in short work trials.

6.2.3   Aesthetic Labour, Soft Skills and Service Sector Recruitment

Employer feedback from the hospitality and retail industries shows a particularly high demand for non-cognitive or so-called *soft* skills as a top hiring priority (Hurrell et al., 2013; Nickson et al., 2012). Interestingly, literature regarding skill demands in the hospitality sector is one of few areas where the exact term soft skills is widely used, although its definition is debated there (for example, see Hurrell et al., 2013; Nickson et al., 2012; Weber et al., 2009).

Most employers for entry-level hospitality and retail jobs do not require prior job-specific technical skills, experience or qualifications as hiring prerequisites. Instead, it is soft skills that appear to matter most to recruitment decisions in this part of the service sector. Soft skills are among the highest ranked attributes in demand for low-paid hospitality roles, while a study by Weber et al. (2009) also reports that specific soft skills are deemed to be critical for hospitality management roles. Service-sector employers appear to have a particularly strong demand for recruits with well-honed abilities to verbally and visually interact with others, not just in a transactional way but in ways that express a proactively hospitable and keen-to-please attitude. Recruitment choices within this sector accordingly appear to be weighted towards employer perceptions and judgements of a job candidate's soft skills, including what may otherwise be called *customer service* skills, more than being influenced by attributes such as holding formal qualifications.

Brown et al. (2003) note that recruitment discrimination happens in terms of not having what Bourdieu called *cultural capital*, which could include not having the right accent to project that one belongs to a certain *class*. Warhurst, Nickson, Witz and Cullen (2000) coined the term *aesthetic labour* to describe some of the kinds of subjective employer selection criteria regarding how one looks, talks or acts. Nickson, Warhurst, Commander, Hurrell and Cullen (2012) refer to soft skills in the sense of how one behaves and manages oneself. Mainly UK-focused descriptions of aesthetic labour include concepts of job candidate capability but also preferability, which is

judged partly based on how job candidates physically look, dress, walk, talk and embody stereotypes about an intended social image, culture or class, or about 'service rituals' involved in a certain service provision (Warhurst, Nickson, Witz, & Cullen, 2000; and, for a more extensive and internationally scoped discussion of aesthetic labour theory, see Karlsson 2012b). Thus, hospitality and retail recruitment choices also appear to heavily depend on how one physically looks, talks, dresses or grooms oneself (Nickson et al., 2012). Employees' aesthetic appearance is being subjectively judged to see if they match a desired 'company image'.

Unsurprisingly, what counts as aesthetic bias or recruitment discrimination varies between authors on the subject. This topic offers the opportunity to introduce yet a further caveat on the use of employer survey data. This concerns the fact that the surveys capture employers' biases and subjective perceptions to some extent, along with more objective preferences. Such concerns may be amplified in the context of aesthetic labour.

In conclusion, it may not be enough for an applicant to convince an employer that they are motivated and technically able to perform the tasks involved in a particular job, especially with regard to the labour market sub-contexts of front-line service-sector jobs. Recruitment decisions are often additionally based on employer biases and subjective perceptions of whether a job applicant is willing, able and *aesthetically matched* to the image or customer experience that an employer wants its staff to emanate (Karlsson, 2012b; Lynch et al., 2007; Nickson et al., 2003; Nickson & Baum, 2017; Nickson & Warhurst, 2007; Timming, 2015). This is not surprising, given that these industries rely on providing customers with not just a transactional service but often a socially and culturally ritualistic 'experience'.

The aforementioned evidence challenges any assumptions embedded within education or other intervention theory that expects recruitment and selection decisions to be entirely fair, or entirely based on merit or ability alone. Service-sector employers' demands and biases have significant implications for agendas to help youth in developed economies, especially the least qualified or unqualified school leavers, to attain their first years of employment. Large proportions of young people get their first few years of work experience and paid work via the service sector. Furthermore, the service sector is one of the biggest growth sectors in many developed economies. It is where masses of job opportunities remain available for unskilled or semi-skilled job candidates, and is where years of prior work experience is not something that employers can always be in a position to insist upon.

As supplementary detail about biases and interpersonal or aesthetic signals influencing employer decisions, some studies have pinpointed discrimination in regard to more specific criteria, such as disabilities or judgements about self-confidence. For example, one study found that facial disfigurations have a more negative impact on one's chances of gaining employment than having a physical disability (Stevenage & McKay, 1999). Another study concludes that *self-*

confidence, in addition to and more than physical attractiveness, is a key basis for recruitment decisions in the international hotel industry; both concepts are cast as relevant to the concept of aesthetic labour (Tsai, 2019).

6.2.4   *Regulatory Obligations Causing Demand for a Credential*

Instead of low-level qualifications issued by national qualification authorities, decisions to hire and/or provide on-job training for some low-paid jobs, appear to be often driven by regulations or laws demanding that employees in a specific occupation or industry must have a specific *certificate, licence* or other *credential*. Or it may be that such employees are required to undertake very specific training courses or assessments which have been approved by a regulating authority or industry body. This may include a need for a license to comply with legal or regulatory requirements and to be able to accordingly carry out the key duties of a regulated occupation. For example, one may need to have a liquor management licence to be a bar manager, or a driving licence to do a truck-driving job; or one may need to have passed an industry-approved security course which teaches and tests specific knowledge to do with security jobs.

Sometimes the insistence on having such credentials is decided upon by an employer as an self-imposed minimum requirement, say to set a safety standard in-house. Other times it is a higher regulatory authority or the law that dictates to employers what their staff *must* obtain or undertake in terms of training, licensing and other usually non-academic types of credentials. Either way, when a specific kind of licence, credential, qualification, or evidence of having undertaken specific training *is made compulsory*, and when there are fewer job candidates than jobs vacant that insist upon such a requirement, it follows that the *value and influence* of such a qualification or credential (read 'signal') becomes more likely to influence one's competitive chances of getting hired in the occupation type/s concerned.

In contexts of job vacancies where employers have no choice but to only employ staff who meet regulatory requirements to have specific training, licences or *credentials*—in contrast to a narrower definition of typically larger and non-compulsory academic *qualifications*—it follows that credentials have greater power to influence employers' hiring choices. Or the obligation may influence employer willingness to provide the required training or arrange for the assessment and certification of otherwise capable job candidates, especially if there is a shortage of already credentialed job applicants.

Driving licences have been identified, at least in the United Kingdom and New Zealand, as one of few non-industry-specific licences where supply does not exceed demand at the lower end of the job market and/or where the attainment of a driving licence among unemployed job seekers has been linked to increased earnings and increased chances of employment relative to comparison groups (de Boer & Ku, 2018a; Hasluck, 2011b). As other relevant evidence, the UK

Commission for Employment and Skills' employer surveys break down employer identifications of labour shortages into official occupation classifications, and into geographical areas (MacIntosh, 2013). It is hypothetically possible to use official geographical and occupation classifications within employer survey data to inform further theory development about the potential influence of driving licence attainment on youth employment outcomes.

While possessing a driving licence does appear to be linked to higher chances of gaining employment—including among certain otherwise low qualified target groups—it may be that the influencing power of driving licence attainment is only enough to trigger employment among otherwise 'limited employability' target groups when other context conditions are involved. For example, rural versus urban employment may be affected differently by the holding of a driving licence. Furthermore, having own transport is another potential recruitment condition that may affect whether licence attainment leads to a new job. These details regarding the potential influencing power of a driving licence to trigger job attainments, and conditions for it having such an influence, requires further research.

6.2.5   *What Employer Surveys Did Not Clarify*

Employer surveys provide convincing evidence about what employers want most, and for what types or levels of occupations in the labour market. However, there are limitations to what can be concluded about the full range of common influences that affect what employers actually do as recruitment actions, rather than what they claim to base their actions upon or what they claim to most highly value, or be unable to get, among current or potential employees. In other words, employer surveys provide a lot, but not all, of the explanation and evidence needed to fully understand what influences employers' recruitment intentions, perceptions and actions (read employer IPAs).

A limitation of these surveys is that they cannot serve as evidence about additional influences on employers' recruiting perceptions and behaviours. For example, when used on their own, they may not reveal the *sometimes unconscious* and *sometimes denied* other intentions and reasons that employers have for preferring some job candidates over others. Specifically, employers might not give honest answers in surveys about their personal biases and recruitment preferences regarding the social class, race, sex or appearance of job candidates. They may also hold subjective rather than evidence-based opinions about which signals or signal senders are more trustworthy or reliable indicators of candidate capability (or preferability) than others. Subjective employer biases and preferences may disadvantage some young job candidates compared to others. Specifically, social class bias, and the range of ways in which employers may seek and judge signals about social class, might help to explain what else influences recruitment decision-making apart from what employers say in surveys that they base their decisions upon.

6.3   EVIDENCE: ACTIVE LABOUR MARKET PROGRAMMES (ALMPS) AND SECOND-CHANCE PROGRAMMES

After numerous iterations of keyword searches and literature scans, it became apparent that outcome evidence about active labour market programmes (ALMPs) and what became generally referred to as *second-chance programmes* is relevant as evidence about key employability dependencies. More specifically, outcome evidence from these programmes is relevant to ascertaining what influences the labour market outcome type of 'getting hired in the first place', and what matters for interventions to work to trigger employment outcomes among currently unemployed, unqualified and at risk target groups.

In agreement with what was also indicated by the reviewed employer survey evidence, the evidence on ALMP and second-chance programmes strongly supports the theory that *work experience* is a key employability dependency. The action of connecting programme participants to *new* work experience is a key programme design feature and outcome focus that distinguishes the ALMPs and second-chance programmes that work better than others to help unemployed at risk groups become employed.

Thus, the evidence is relevant not only to refining a *general theory* of what employability and employment attainment depends upon but to refining *context- or risk-focused* theory about common reasons why some youth end up with more limited employment outcomes than others, and about what works to help YARLE subgroups in particular to become employed. Most ALMPs exclusively target NEET, low-qualified or unqualified, and currently unemployed or underemployed target groups, rather than general current workforce and/or youth populations. Some also exclusively target youth, rather than youth and/or adults. The evidence on ALMPs aligns to the theory that work experience may be a common and key employment attainment challenge, and employability change mechanism, for youth in general as recent workforce entrants. More explicitly, however, this evidence is relevant to identifying common reasons for being YARLE and unemployed as a young person who has already left school—or for churning through limited states of employment—and for identifying what types of intervention work to make currently unemployed youth more likely to gain employment. Key generalised programme success ingredients for doing so are summarised in this section.

6.3.1   *Second-Chance Programmes: A Subset of ALMPs?*

Second-chance education and training programmes could also be conceptually counted as a unique subset of ALMPs. Such programmes also go by many other names, including *foundation* education and *targeted training*. They typically exclusively target unqualified and low-qualified youth or workforce-aged groups who have already left school. Refer to Section 5.5.7 for examples of second-chance programmes, which are discussed there as relevant to theory development on non-cognitive skills.

Second-chance programmes are arguably distinguishable from other ALMPs in that they prioritise the *achievement of a secondary school or theoretically equivalent low-level of tertiary qualification* as key outcome focus and programme success or performance measure.[14] Furthermore, programmes that can generally be descried as second-chance programmes typically include training components that are relatively long in duration and intensity compared to other types of ALMPs, which tend to include days- or weeks-long training components if they include any training component at all. Other ALMPs accordingly tend to be less expensive than second-chance programmes. Additionally, other ALMPs often include a narrowly industry-targeted or occupation-targeted training component in response to a specific identified current labour market demand (or a specific opportunity from an associated employer-programme partnership).

Importantly, the range of reviewed evaluation literature that was said to be about ALMPs varied in terms of whether it included second-chance types of programmes in its definition of ALMPs. This may affect meta-analysis results in terms of their generalisations about ALMPs' effectiveness in triggering the *end* employability outcome type of labour market outcomes.

Given the overlaps in what has been classified within different sources as an 'education and training' component within a multi-faceted ALMP, or as one of the three to four more broadly defined types of ALMPs, or as a second-chance programme that places greater emphasis on qualification attainment and involves often lengthier training, it made sense to review the evidence about both second-change programmes and other ALMPs together. They are all types of risk-targeted programmes. Furthermore, based on OECD country evidence, these programme both are usually timed to engage people who have already left secondary school, and while they are unemployed or underemployed.

6.3.2   *Effectiveness and Heterogeneity of ALMPs*

Because not all ALMPs are exclusively targeted at youth, the relevance of them as a family of programmes aimed at improving outcomes for NEET, low-qualified, unemployed or underemployed youth was not immediately obvious. Even the exclusively youth-targeted ALMPs are not all explicitly labelled as 'NEET' interventions, although many of them restrict eligibility to youth who are currently NEET. Many ALMPs are designed for adults, or not only for youth. The age parameters for defining youth is slightly inconsistent within and across countries when it comes to ALMP and NEET-focused programme criteria. However, exclusively

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[14] Low-level qualification attainments are one type of *interim employability outcome*, meaning that this kind of outcome is commonly alluded to in second-chance programming as something that will improve the chances of gaining entry-level employment; if not also the chances of later completing higher-level qualificaitons, which in turn is theorised as another means of improving employment prospects.

youth-targeted ALMPs tend to include youth no younger than their mid-to-late teens and sometimes up to mid-twenties.

As a family of programmes, ALMPs are effectively a subset of the cross-sector range of what could be reconceptualised as *employability development policy and programmes,* which includes numerous education, employment and workforce development policies and programmes. Yet, conclusions about which ALMPs work for whom or in what contexts do not appear to be well developed, at least in OECD countries. The effectiveness of these programme types in improving labour market outcomes for the unemployed or low-qualified target groups seems to depend heavily on the details of programme design, targeting or implementation, or on correctly tailoring them to meet the specific opportunities and needs of target groups and contexts. Moreover, definitional and methodological choices made by programme evaluators complicated the task of identifying effectiveness themes. However, some initial clues have emerged regarding what to focus on as interim outcomes, or as success ingredients that have been found to distinguish which ALMPs result in comparatively better labour market outcomes.

Overall the effectiveness of ALMPs, especially those which exclusively target at risk youth, has generally been modest to disappointing according to some of the most recent and large-scale international meta-analyses of ALMPs (Card et al., 2010; Kluve, 2010; Kluve et al., 2019). ALMPs that exclusively target NEET and other identified 'at risk' youth subgroups are even more ineffective than the modest effectiveness achieved by ALMPs overall (Kluve, 2010; Kluve et al., 2019; Martin & Grubb, 2001; Quintini et al., 2007). Heckman and colleagues make the point below that an averaged-out generalisation about ALMPs having modest success (in activating positive labour market outcomes) hides what is actually a very mixed range of programme results from a diverse range of programme designs, all of which have been classified as ALMPs:

> Previous evaluations of policies in OECD countries indicate that these programs usually have at best a modest impact on participants' labor market prospects. But at the same time, they also indicate that there is considerable heterogeneity in the impact of these programs. For some groups, a compelling case can be made that these policies generate high rates of return, while for other groups these policies have had no impact and may have been harmful. (Heckman, et al., 1999, p. 1865)

As another distinction about which types of ALMPs tend to achieve better results than others, large-scale nationwide rollouts of ALMPs that are aimed at all youth or other broadly defined workforce populations—rather than being more specifically targeted and tailored to respond to the needs and opportunities of specific at risk groups, or specific geographical labour market contexts—are less effective and less cost-effective (Betcherman et al., 2007; Calmfors et al., 2002; Larsson, 2003). In sum, tightly targeting and tailoring programme designs, and allowing for

them to have some flexibility to respond to particular needs or opportunities of particular groups or geographically defined labour markets, appears to distinguish relatively successful ALMPs.

6.3.3   Programme Effectiveness Judgements

Other apparent reasons for the very mixed results from ALMP evaluations lie in the inconsistency of the success or effectiveness measures that are used, in choice of evaluation methodology more broadly, and in inconsistent use of definitions. For example, what is meant by references to 'work experience' as a programme type, or as one component within a broader programme design, or as some kind of work-relevant experience that participants undertake, is not consistently defined within ALMP evaluations. Similar but not entirely consistent attempts have been made in relevant literature to sort ALMPs into a few broad categories of programme types, and to distinguish certain ALMP design features or components but this has not been carried out uniformly across relevant literature (for elaboration on this point see Bredgaard, 2015; Heckman et al., 1999, p. 19).

Furthermore, measures of being officially employed versus unemployed, as opposed to labour market measures such as earnings or wage attainments, is the outcome type for which there is most evidence. It may be that an ALMP is *effective* in moving unemployed people into any type or level or employment. However, its effectiveness in terms of policy agendas to improve job 'quality' or labour mobility—such as attaining higher than minimum wage jobs—is a different evaluation question. Finally, as a caveat about timeframes for measuring effectiveness, judgements about ALMPs can vary according to whether effectiveness was judged based on short-term measures of labour market outcomes as opposed to years-long measures of labour market outcomes (Kluve, 2010; Kluve et al., 2019; Vooren et al., 2018).

Evaluation judgements about the effectiveness or ineffectiveness of certain ALMPs partly depends on two temporal considerations. Firstly, the duration or point in time at which measurements are taken to represent post-programme labour market outcomes can significantly affect whether and which ALMPs are deemed to be effective. Secondly, *education and training programmes* have consistently been identified as the *most ineffective,* and sometimes even harmful, types of ALMPs overall. But, further delving into these claims reveals that effectiveness judgements about these post-secondary types of education and training have often been based on assumptions that the time spent in training is time that otherwise would have been spent getting employed and starting to earn wages sooner. Further complicating effectiveness assessments is the purported role of a *lock-in effect*, whereby lengthy programmes may be deemed ineffective because they lock in some 'already employable' participants to training commitments rather than helping them get hired sooner (Borland & Tseng, 2011; Ibarrarán et al., 2018; van Ours, 2004; Vooren et al., 2018).

6.3.4   *What Works or What Matters for Programme Design?*

Having noted some caveats about comparing evaluations of ALMPs and second-chance programmes, it can be said that many of the reviewed evaluations and meta-analyses agreed upon some key features regarding programme design or outcome focus that distinguish which programmes are more effective than those on average, and which ones are not (in terms of improving labour market outcomes).

Work experience attainment emerged as one of a few key 'success ingredients' that distinguish which ALMPs and second-chance programmes lead to improved labour market outcomes. Thus, a body of evidence supports the conclusion that the strategy of '*helping low-qualified and unemployed youth to gain workplace-based experience*' distinguishes which of the ALMPs work better than most to improve post-programme employment outcomes (Card et al., 2010; Kluve, 2010; Kluve et al., 2019; Loeb & Corcoran, 2001; Mann & Percy, 2014; Martin & Grubb, 2001). Furthermore, a valuable context-specific detail is that the inclusion of a work experience component distinguishes which programmes work to improve employment attainment out of the programmes that exclusively targeted unemployed, unqualified or low-qualified and/or NEET *youth* (in particular see Kluve et al., 2019).

Reviewed evaluations, and the instances of ALMPs that they refer to, were not consistent in their definitions of what was counted as 'work experience' and as associated descriptions of programme design. Some evaluations included *on-job training* in their definition of work experience as a programme activity, whereas some ALMPs and second-chance programmes include the arrangement of work experience but not formalised or explicitly structured training activities within the arrangements made with employers concerned. This is worth keeping in mind for future potential research, in that there may be differences regarding the effects of work experience that includes formalised on-job training compared to work experience activities that do not. It has implications for any further research into employability theory development that might more comprehensively look at evidence about vocational education and training (VET), which effectively is another overlapping 'type' of programme that includes work experience as a major design component.

New Zealand Examples of What Works or Does Not. Several large-scale reports on New Zealand programme outcome evidence about what 'types' of ALMPs and second-chance training works or does not, and for which at risk target groups, have been produced using government agency data on the programmes, participants and target groups concerned. Examples of relevant reports include de Boer & Ku (2017, 2018b), Ministry of Social Development CSRE (2011) and Tertiary Education Commission (2011).[15]

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[15] Chapter 9 further reviews ALMP and second chance programme evidence—both from New Zealand and internationally—and analyses implications for New Zealand YARLE-focused policy development in particular.

The example country context of New Zealand ALMPs and second-chance training programmes revealed very similar findings and conclusions about essentially the same 'types' and range of programmes as those described in international meta-analyses and reports from other countries. There are similarities in terms of what types of programme designs, activities or strategies, and outcome foci have been identified as programme success ingredients. There are also similarities in terms of the types of unemployed or underemployed target groups for which particular programme types or intervention strategies do or do not work to achieve intended labour market outcomes.

New Zealand evaluations of ALMP and second-chance programmes indicate that, on the whole, programme effectiveness in improving labour market outcomes is linked to the inclusion of the following success ingredients in a programme (for example see de Boer & Ku, 2017; Ministry of Social Development, CSRE, 2011):

- some kind of *work experience*, including experience labelled as *on-job training;*

- *case management*, which typically involves some degree of *assessing individual employability* based on personal or situational employment barriers, opportunities and needs, and involves providing ongoing one-on-one interactions or 'plan and reviews' of progress towards job goals;

- other forms of *job seeking support*, which includes activities such as CV writing and job interview coaching to improve how or what job candidates *signal* to potential employers, and personally introducing clients to *employer networks* and job opportunities; and

- some or all of any component of *training being tightly matched to specific industry demands* or labour sub-markets, rather than only focusing on generic low-level qualifications or shorter generic training objectives.

There is notable consensus that *job search assistance* or job-seeking support, and *case management* (which implies some level of tailoring of responses) are other key success ingredients that distinguish which ALMPs are more likely to be effective for unemployed target groups; that is, in addition to *work experience* being another common feature of successful programmes (de Boer & Ku, 2017; Martin & Grubb, 2001; Quintini et al., 2007).

6.3.5   *Work for The Dole and School-mediated Work Experience as Other Programme Types*

Some authors warn of work experience schemes having the effect of reinforcing social class inequalities in terms of which youth get referred to what types and quality of work experiences, with 'working class kids' being referred to working-class opportunities (Francis et al., 2005; Hatcher & Le Gallais, 2008). However, most of this literature and criticism appears to be in reference to *school-mediated* types of work experience schemes (for youth while still in secondary school), rather than in reference to evidence about ALMPs or second-chance programmes. See

Section 7.4 for further discussion on school-mediated or 'while in school' types of programmes, which includes some that focus on arranging work experience for youth in the widest sense of the term work experience.

Further adding to complications about the role of work experience, it is important to distinguish *work for the dole* schemes from other types of ALMP designs that include 'work experience provision' or on-job training. *Work For The Dole* in Australia, and a similar *Work Programme* in the United Kingdom are examples of very large-scale outsourced national schemes which obligate beneficiaries to accept any work or work experience, or else be sanctioned by having their benefits cut or cancelled. The outcomes of both of these specific schemes were poor (BBC News, 2013; Borland & Tseng, 2011; Butler, 2013; Carson et al., 2003; Reuters, 2012). The reasons appear to include lack of tightly matching offered jobs, participant subgroups' personal support and development needs, their current abilities and experience, other limitations regarding personal circumstances, and misassumptions about a subset of participants' current willingness and reliability to undertake any kind of role in a workplace (Butler, 2013; Carson et al., 2003). The sheer volumes of beneficiaries that these two schemes were expected to find work or 'work-like experience' for, and quickly, presumably also made it harder than more targeted and smaller scale programmes to appropriately match mass labour supply to demand.

While 'work for the dole' types of programmes are generally very ineffective at moving masses of beneficiaries into sustained employment or work experience, there are indications that the inclusion of a work experience activity in itself is not the flaw in the detail of these programme designs. Positive participant feedback was reported in an Australian evaluation of *Work For The Dole.* Participants perceived and self-reported that their work experience had made some kind of positive change to their employability:

> Two-thirds (68%) reported having had a valuable experience. Two-thirds (67%) reported doing "interesting" activities. Four-fifths reported they felt like a valuable member of staff (81%), that host organisations were willing to teach new skills (78%) and that the routine was good for them (79%)…Two-thirds of survey participants felt that their 'soft' skills had increased - primarily their ability to work with others (72%), self-confidence (69%) and general work skills (65%) (Kellard et al., 2015, pp. iii–v).

6.4   SIGNALLING

Signalling theory was introduced in Chapter 4, mainly in reference to the seminal works of labour economist Michael Spence. For the sake of advancing theoretical detail about what hiring decisions and subsequent employment attainment typically depends on, it can be said that an individual's *signalling capability* appears to be a key employability dependency. Accordingly, it appears that a personal lack of signals that are favourable to employers, or a lack of network connections and subsequent ability to send and translate favourable signals (especially for

particular types or levels of jobs), appears to present as a key employment attainment challenge for youth in general as relative newcomers to competitive labour markets. Furthermore, signalling capability challenges appears to be another key reason *why* some youth are more likely than others to become stuck in low level or intermittent jobs, or become often unemployed.

Spence's work is particularly relevant to refining theory about the proposed influence of qualifications on recruitment and selection behaviour (employment outcomes). It is also relevant to a broader theory that employers use multiple types and sources of information or 'signals' about an individual's employment *capability,* as well as their *preferability* in accordance with a particular employer's intentions. Formal qualifications can be conceptualised as one type of signal that job seekers can attain, and qualification providers are one type of *signal sender.* But other types and sources of signals also appear to be key to understanding who gets hired and for what. Work experience can be conceptualised as another signal, or as a social network and mechanism for sending signals from job candidates to potential employers.

Spence concludes that job seekers choose to invest in attaining a tertiary level qualification because it is perceived by employers as a trusted signal of employment capability and because it can be used to persuade employers to choose them in preference to other less qualified applicants within competitive labour market contexts (Spence, 1973, 1974, 1978). An important caveat about using Spence's work to generalise about job seeker behaviour is that his work on 'choosing' to invest in attaining a university level qualification assumes that a job seeker is in a realistic personal position to be able to achieve such a level of qualification. That said, the broader theory about signalling as an employment attainment challenge faced by job seekers is highly relevant to understanding who gets hired and for what types of jobs, across high to low ends of the labour market.

Multiple types and sources of information, described here as *signals* and *signal senders*, influence employer judgments about the *ability*, work intentions or attitudes, and sometimes also the subjective *preferability* of individuals as job candidates. Signals may include samples of past work outputs, accounts of past work experience, awards or recognitions, or artefacts that make information formally or informally available to an employer about the individual (including formal qualifications). Signals can be sent intentionally or unintentionally, both by the individual concerned and by other people, authorities or groups in reference to the individual. Body language, choice of words and visual appearance are other examples of information sources that can be perceived and judged by an employer as a signal.

What an employer perceives, or fails to perceive, as potential sources and types of information (as signals and signal senders) affects employer judgements about a potential job candidates' abilities, intentions and preferability. Ultimately, the combination of signals that an employer

perceives, how they personally interpret those signals, and also their perceptions about a signal sender or source tends to collectively influence employer decisions about whom to hire.

Signalling works to inform *predictions* about how a job candidate is likely to perform in any, and in particular, future roles. The relevance of some signals sometimes requires *translation*. Employers need to judge the relevance and reliability of each signal, as one of many clues upon which to make an educated guess about a job candidate's likely future performance in a particular job role or context, and about whether they are likely to meet any other subjective expectations or preferences held by an employer. It follows that job seekers may need to succeed in effectively *translating the transferable relevance* of past achievements and experience, and possibly of their network affiliations, in order to convince a particular employer that they are capable of doing a specific potential job, and possibly also that they are a *preferred* candidate in the eyes of the employer concerned. It may be that youth overall, or some youth in particular, need explicit support to learn how to self-recognise the transferable relevance of their life experiences to date and, secondly, to know how to concisely and convincingly relay 'examples of times when they have demonstrated X' in the past, as a means of preparing them for job interviews and applications.[16]

Individual signalling capability is partly defined by the nature and extent of one's social *network connections* or affiliations, both past and present. As well as needing to send signals that have a favourable and convincing influence on potential employers who receive them, especially within competitive markets, a first challenge facing a job candidate is needing to get noticed in the first place. Thus, signalling capability partly depends upon the nature and extent of one's networks and on the interactions and relationships that one subsequently does or does not attain. This conclusion is supported by the broad theory on *social capital* and the associated notion of employment prospects being partly dependent upon the nature and extent of network connections, as was introduced in Section 4.5.3.

Being currently unemployed appears to be a common negative or unsettling signal for some employers, especially after having been so for a long time and without a satisfactory and convincing explanation about why one was out of work. For example, being on maternity leave may be perceived as a satisfactory explanation but being fired from one's last job or put on long-term sick leave might raise doubts among many future employers as to whether such employment performance problems are 'still a problem'. Furthermore, some relatively highly skilled job seekers may choose not to accept what they perceive to be 'lower level' or lower-skilled jobs than what they are aiming for fear that being in a low-skilled job will lead recruiters

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[16] The time and scoping limitations for this research project did not make it possible to synthesise relevant evidence about potential 'translation as signalling' dependencies for getting hired. However, a quick first scan for relevant formal and grey literature included discussion about recruiters' ubiquitous use of the *STAR model* for job interview questioning, which involves describing a situation, task, action and result as examples of previous times when one demonstrated a competency (example introductions to STAR include Brumm et al., 2005; Doyle, n.d.; *The STAR Job Interview Technique*, n.d.).

for higher-level jobs to perceive them as being low-skilled (Ma & Weiss, 1993). Hasluck's (2011b) UK review on employment barriers faced by the unemployed provides evidence that employers are often wary or deterred by the signal of *being currently unemployed.* Thus, current unemployment status is a negative signal and a competitive disadvantage for unemployed job seekers, especially the long-term unemployed.

6.4.1 Third-Party Signals

Individuals can intentionally or unintentionally emit signals themselves, but there are also some key types of *third-party signals and signal senders*. Employer and job candidate perceptions of each other, including whether they notice each other in the first place, is complicated by the influence of what third-party signal senders, or signalling actors. Third-party signal senders include qualification authorities, educational organisations and job referees. Other third-party providers of signals that are intended as endorsements of individuals in terms of their employability have emerged from industry directly. Examples include Microsoft certifications and memberships with professional associations that set quality, practitioner or ethics standards for their registered members (such as a registered builders' association). It is not only the information that is signalled to a potential employer that may affect an employer's perceptions of and responses to a job candidate. An employer's perceptions and hiring decisions may additionally depend on their perceptions about the sender of a signal, including their perception of the sender as a reliable or trustworthy source of information.

Job referees are an example of third parties who typically signal and strongly influence hiring decisions. It is common practice for employers at all levels of the job market to request contact details for referees. Thus, in addition to lacking extensive and positive first work experiences, the subsequent lack of opportunities to attain referees who have observed the individual in a workplace context may be a barrier to getting hired. Lack of any or good quality and supportive past work referees may be a particularly significant signalling disadvantage for young new entrants into competitive labour market contexts. This employability signalling barrier particularly stands out as a problem linked to YARLE subgroups who are targeted by ALMPs, who have often had poor-quality, negative or little to no workplace experience and few connections to employers who are willing to act as their referee.

The employer's own social networks may also work to enhance or diminish the signalling offered by a job candidate. Social network connections are the mechanisms through which employers might potentially notice an individual, then perceive and judge signals about them personally and about their employment abilities and intentions. An employer may interpret and judge both an individual's affiliation with a certain other person, company, educational institution, other group or social network as a signal in itself about the individual's capability and / or preferability.

6.4.2 *Capability Versus Preferability Signalling*

Signals can influence employers' perceptions and their partly subjective judgements about candidate preferability, in addition to signals influencing employers' perceptions about whether or not a candidate is capable of performing a certain job role in a certain work context. Capability is meant here in terms of the abilities, skills and intentions or self-motivation of an individual to carry out the duties that a particular job involves. Conversely, preferability is more in reference to additional decision-making influences regarding employers' conscious or unconscious biases, where they look for candidates, and what signals or bases they use to discriminate between job candidates. Reasons for preferring one candidate over another may include some hiring intentions or priorities that employers do not wish to openly acknowledge. The contexts within which employers' preferences have a heavier influence on their hiring decisions is presumably also dependent upon the extent to which they have a choice of perceived-to-be capable job candidates to choose from. Where there is truly a shortage of capable applicants, it is logical to conclude that additional employer preferences are less likely to prevent employers from hiring able job seekers.

6.4.3 *Using Qualifications to Cull an Oversupply of Candidates*

There is some evidence to suggest that otherwise unnecessary qualifications are used as candidate culling and selection criteria even for low-paid and supposedly *'low skilled'* job types. These are job sub-markets where employers appear to want quick methods to shortlist and mass-recruit staff, based on signals that cost the employer little, such as requesting qualification levels on application forms (Keep & James, 2010a). The need for whatever specific type of knowledge and abilities (human capital*)* a tertiary qualification is designed to signal may not in itself be what 'culling practices' are concerned with, particularly not with regard to university-qualification-based culling practices for low-paid and low-skilled jobs.

If and when *culling or screening* purposes is the reason why employers require job applicants to have university qualifications, then the signalling purpose and the influencing power of having a university qualification as an applicant is different from less competitive job markets where there are fewer university-qualified applicants available for employers to choose from. Thus, in labour market sub-contexts where there is an oversupply of university-qualified candidates, then the signalling power of university qualifications is relatively weak because, on its own, it does not distinguish one university graduate from another as being more capable or preferable than another. Having said this, the type of university qualification attained or the subject area and skill set that it represents, and employer perceptions of and preferences for the 'brand' of one university over another, are additional signalling details that could affect which graduates gets shortlisted over others. For example, several education providers might provide training to help people attain the same national nursing qualification but the training and experience that nurses

gain via one course provider may be deemed to be better than that offered by another and therefore be used as a screening device.

6.4.4 Theory on Qualifications Influencing Labour Market Outcomes: The Signalling Versus Human Capital Explanation

Whereas human capital implies that the volume and nature of labour supply can drive labour demand, Spence conceptualises employer demand for job candidates as being finite. Labour demand is not only subject to the availability of capable job candidates. It is also dictated by the extent of the willingness and ability of employers to create more vacancies, or to change the mixture or types of jobs available in a given labour market context. Employer willingness and ability to change what labour they demand is dependent on what labour they can get and on conditions such as their access to finance, labour market regulation, and responsiveness to changing demands for their products or services, to name a few factors.

In an oversupplied labour market, some employers may be motivated to take advantage of their increased bargaining power and may increase what they prefer or otherwise expect in job candidates. For example, they may add or increase essential criteria for job applicants such as minimum qualifications or years of experience. In competitive contexts, employers are in a position to not only seek an applicant who they perceive as being 'good enough'; they can also demand extra criteria to help them cull and/or otherwise discriminately select 'the best' and 'most preferred' out of many potentially capable candidates. The value or effect of qualifications working as a signal from job applicants to recruiters has been tested in multiple studies, many of which come from the field of economics (for example see: Clark & Martorell, 2014; Heywood & Wei, 2004; Hussey, 2012; Spence, 1978).

Compared to human capital theory, signalling theory may better explain why links have been found between individuals' prior work experience and their short- and long-term labour market outcomes, including as is found in the case of university graduates' labour market outcomes:

> Results indicate that tertiary graduates do not profit from work experience that is unrelated to the field of study or was a mandatory part of the study programme. Even though field-related and voluntary work experience helps graduates to realize a fast integration into the labour market [the short run outcome of getting jobs], it is not linked to higher chances for entering a favourable class position or to higher wages in the long run. These results provide evidence for the signalling explanation of educational benefits in the labour market rather than the human capital explanation. (Weiss et al., 2014, p. 788)

Heywood & Wei (2004) tested the *signalling* versus the *human capital* (read 'skill attainment') explanation about the theorised influence of qualification attainments on labour market

outcomes. The can be conceptualised as 'improved signalling capability' versus 'improved skills or ability to perform job duties', as possible reasons why the attainment of a new qualifications might lead to increased chances of employment, or of more skilled and often better terms of employment. Heywood & Wei (2004) found that the link between the labour market outcomes of job candidates and their tertiary qualifications was stronger within highly competitive labour markets, based on the example of Hong Kong. From this, they inferred that the attainment of qualifications is more important or influential within highly competitive contexts—where there is oversupply of willing and adequately skilled job seekers. This led them to conclude that it is the signalling effect of qualification attainment that is the reason why a qualification led to improved job prospects, not the effect of theoretically becoming more skilled or able via the training and skill or knowledge attainment that a tertiary qualification is meant to represent. In other words, the signalling explanation is that qualification attainment can work as a means of making it past the first cut of applicants in contexts where employers use the qualification signal as a heuristic to *screen or cull* candidates. The influencing power of qualification attainment, at least regarding tertiary qualifications and highly competitive (oversupplied) markets is not just due to improved abilities or human capital, even though that might also have been attained through the process of education (Heywood & Wei, 2004).

6.5   WORK EXPERIENCE

Work experience is a cross-cutting employability theme and one of the focus topics introduced in Chapter 4. It stood out as being a key employability dependency in reference to both the evidence on 'what works' as ALMP and second-chance programme designs, and in employer survey feedback about what employers want. Furthermore, work experience appears to work as a mechanism for *signalling* one's abilities, work intentions and preferability to potential employers.

It can be generally concluded that work experience matters as a key employment attainment dependency. This conclusion appears likely to apply as an employment attainment dependency for youth in general, as relatively inexperienced newcomers to often (but not always) competitive labour markets. However, the selection of evidence reviewed provides an even stronger case for the conclusion that work experience matters in particular as a reason why some unemployed, underemployed and often low-qualified and 'limited experience' target groups are relatively at risk of staying in limited employment, unless they are able to attain new work experiences.

The chapter's concentration on ALMP and second-chance programme evidence indicates that the arrangement of new work experience is a key programme feature associated with success in triggering labour market outcomes among at risk and currently unemployed target groups. This finding supports a theoretical conclusion that the programme strategy of providing new work experience opportunities functions as an employability development mechanism, and more

specifically as a mechanism for improving how one is perceived and responded to by potential employers (in terms of them offering someone employment or not).

The high ranking placed on having prior work-relevant experience, and the likely need for third-party endorsements or other signals of evidence about such experience, poses a challenge for youth in general but more so for youth who have relatively limited *social capital or personal network connections* within the world of employer networks. Lack of personal or family connections to potential first or early employers, while one has limited or no work history upon leaving school, appears likely to disadvantage some youth in terms of capability to gain first quality work experiences. This theory is further evidenced and discussed in Chapter 7.

6.5.1   *Work Experience as a Signalling and a Human Capital Development Mechanism*

The reasons why work experience matters to both employment attainment and other employment capability development appear to be at least two-fold. The act of undertaking work experience, and the attainment of work experience as a past outcome and signal, means that work experience can work as a mechanism for changing work-relevant abilities and intentions, as well as working to improving signalling capability, or the nature of the signals that one has to send. In addition to affecting signalling capability, the act of undertaking work experience could also work as a mechanism for changing employment *ability* in the sense of *human capital* or skills. It may also change the nature of one's work-related future goals or more general work intentions, motivation, or attitudes (read 'non-cognitive skill manifestations') for better or for worse.

The nature and extent of individual work experience can influence which potential employee gets noticed in the first place by particular employers, who eventually gets hired or not, and for what jobs. In this sense, the act of undertaking a particular work experience opportunity works as an employment change mechanism *because* it helps one to get noticed and send further signals to potential employers.

Obtaining job referees appears to be one type of employability signal, based on employer survey feedback and a more informal consideration of typical application requirements seen in job advertisements. Referee attainment is a biproduct of attaining work experience, and lack of experience may create the additional disadvantage of lacking referees who can act as a *third-party signal sender* to endorse one's work capabilities, intentions or behavioural norms (read 'non-cognitive skill performance'). If individuals are unable or unwilling to obtain any positive referee endorsement from an appropriate past workplace colleague or past provider of work experience, then this may act as a signalling disadvantage compared to those who can. Thus, the quality and durations of early work experiences that a young person has could have a two-fold effect on their *signalling capability*. Firstly, their self-reporting to a potential employer about having undertaken a particular past work experience is one means of signalling and one type of signal.

Secondly, attainment of work experience is the *source of potential* to attain referee endorsements (being a third-party signal), and referee endorsement, or lack of them, is a second type of signal or means of signalling.

<u>Work experiences could positively or negatively affect future employment prospects.</u> Whether a new work experience triggers positive, negative or no changes to an individual's employability status and future employment prospects depends on variables regarding such experiences. For example, the signalling power of a past work experience to improve a potential employers' perceptions about an individual may depend on what the employer thinks about the quality, extent or transferable relevance of a past work experience in relation to what they are currently seeking in a recruit. It is possible that employers may perceive a particular past work experience as a signal that a job candidate is less desirable than they might otherwise be if the employer had not associated the candidate with that particular role. It is also possible that negative experiences in a workplace setting can scar or otherwise negatively change the future work motivation or attitudes of a young person. Poor performance in past work experiences, getting fired or abandoning jobs, and subsequently being unable to obtain any positive references (signals) from past employers, may be typical negative signalling effects from negative past work experiences. This is a theory that deserves further attention in relation to identifying and addressing common potential reasons for being persistently or frequently unemployed after leaving school.[17]

6.5.2   *Work Experience is Important But Not Clearly Defined*

The reviewed ALMP evidence and employer surveys were inconsistent or unclear about definitions of *work experience* or *on-job training.* The general conclusion that the provision of work experience, including on-job training, is a success ingredient for the design of ALMPs and *second-chance* training programmes, and the associated conclusion that new attainments of work experience substantially improves young people's employment prospects requires further evidence synthesis in order to better clarify important conditions regarding these generalisations. This is an important caveat to bear in mind before concluding that the provision, coordination or other ways of enhancing *any* type or duration of work experience will likely improve young people's later employment outcomes. To the extent work experience is important, it will also be necessary to look more closely at variations associated with subsidised work schemes, and experience delivered through *vocational or industry training* and apprenticeship programmes.

Having noted the definition caveat above, it remains that multiple reviewed sources collectively indicated on the whole that the inclusion of some kind of on-job training or of other work-relevant experience stands out as being in common to those ALMPs and second-chance programmes that have led to comparatively successful labour market outcomes.

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[17] The research time constraints did not allow for evidence to be synthesised specifically in relation to testing this theory.

6.6   KEY FINDINGS AND IMPLICATIONS FOR EMPLOYABILITY THEORY

As a synthesis of two bodies of evidence and as additional explanation afforded by signalling theory, the above sections collectively indicate what young people's employment attainment tends to depend upon. Additionally, it indicates what is likely to work (or not) as types of programme designs to help YARLE subgroups in particular to attain employment after having already left secondary school. This section summarises key findings from the reviewed evidence and theory, some theoretical conclusions drawn about relevance to employment attainment and employability change mechanisms, and some implications of the evidence for programme theory or for responding to YARLE subgroups in particular.

The reviewed employer survey evidence is particularly relevant to ascertaining what *most* young people's chances of getting hired tend to depend upon, not only YARLE subgroups' chances, especially given that young people's recent entrance to the workforce makes them more likely than adults to have attained relatively less work experience. Furthermore, the decision to review two different bodies of evidence—one on ALMPs and second-chance programmes and one on employer surveys—also served to cross-validate conclusions drawn from each of the two types of evidence.

Evidence on ALMPs and second-chance programmes, as well as the preferences that are typically ranked highest in employer surveys, indicates that *work experience* and *non-cognitive skills* are two key employment attainment dependencies. McIntosh (2013) also clarifies that poor attitude, being a concept intertwined with poor non-cognitive skills, and lack of experience are the top two reasons employers give for judging youth overall, and specifically those who leave various education and training between ages 16 to 18, as being ill prepared for even entry-level jobs.

Furthermore, it appears that whether and what levels or types of jobs one is likely to be able to attain depends on the nature and extent of one's *signalling capability*, meaning ability to become noticed by potential employers and perceived by employers as being an able and preferred job candidate. The nature and extent of one's personal network connections and relationships with potential employers—and with other organisations, social ecosystems and with *third-party signal senders* who are trusted by particular employers—seems accordingly likely to be one dependency that defines the extent of one's signalling capability. The apparent influence and disadvantages associated with personal as well as parental or family network connections to the world of work is discussed further in Chapter 7.

The fact that attainment of new work experience is linked to the attainment of new employment may be partly due to work experience serving as a new means of sending signals to potential employers, and not just due to the attainment of new skills (human capital), which might also be another interim employability outcome from work experience. Work experience attainment was identified as one of the key features in common to those ALMPs and second-chance programmes

that achieved better labour market outcomes for unemployed or underemployed groups than others (this includes NEET and YARLE youth).

Qualifying theory, and theory about education and training working to trigger improved labour market outcome likelihoods, is challenged by the findings and conclusions in this chapter. In particular, it appears that the influencing power of low-level and non-occupation-specific qualification attainments, and the undertaking of associated 'second chance' training does not tend to result in improved labour market outcomes for the disadvantaged and at risk target groups concerned. This is concluded in relation to the context of target groups who have already left school unqualified or low-qualified and who are currently in an unemployed or underemployed situation. Having said this, the ALMPs and low-level training programmes that were reviewed as a basis for this conclusion are highly heterogeneous and some programmes do work better than others, especially those that include a work experience component and some means of tailoring or personalising the intervention service provision. Furthermore, a limited amount of reviewed evidence about higher-level tertiary qualifications being linked to improved labour market outcomes suggests that higher-level tertiary qualifications might have a comparatively stronger influence on one's ability to get hired, compared to the weak signalling power of low-level qualifications.

Legal or regulatory compliance requirements that force some employees to only employ staff with specific credentials or licences, or staff who have undertaken regulator-approved training, is a likely exception to the general finding that low-level qualifications (or non-university-level credentials) have a very weak influence on employers' hiring decisions. This weak link was specifically identified with regard to employment attainment at the so-called low-skilled and typically low-paid end of the labour market. The term credentials is used here to distinguish a broader definition of credentials, qualifications, licences, course completions and other certifications that includes those that law enforcers or industry regulators make compulsory to have in certain occupations. Those types of credentials seem likely to have a greater influence on employer decisions to hire someone who has such credentials for accordingly regulated occupations, more than the influence that typically larger and not-compliance-associated *qualifications* from academic institutions are likely to have in such circumstances.

In sum, this chapter and Chapter 5 together provide a basis for starting to make refined theoretical conclusions about employability outcome dependencies, and about some change theory or intervention theory that is relevant to improving outcomes for at risk subgroups in particular. Whereas much of the evidence and theoretical explanation provided in Chapters 5 and 6 are relevant to developing *general* employability theory relevant to supporting all youth, the next chapter is more exclusively dedicated to providing supplementary evidence and explanation that has implications for early recognition and understanding about common reasons for being and becoming YARLE *in particular*.

7. EARLY EMPLOYABILITY DEVELOPMENT: INTERGENERATIONAL OR BIRTH-TO-TEENAGE DISADVANTAGE AND POLICY RESPONSES

7.1   INTRODUCTION

The nature and extent of what emerges as individual employability, including eventual employment outcomes, tends to depend on the same types of context dependencies and change mechanisms for all youth *in general*, as key general employability dependencies. In addition to describing key general employability dependencies, the research question for this thesis additionally sought clarification as to why some youth *in particular* are relatively more likely than others to have limited employment capability and to eventually experience limited employment outcomes compared to their age peers. In other words, why do some youth become or remain relatively YARLE, given what has been identified about key employability dependencies; with dependencies including mechanisms of employability and employment change, and contexts that appear to affect such change?

Much of the evidence and initial theoretical discussion provided in chapters 5 and 6 is relevant to informing *general employability theory.* It subsequently has implications for recognising common youth employability challenges and for supporting the employability development and employment attainment of youth in general. What this chapter provides is additional evidence that was selected to aid the development of *risk-focused, disadvantage-focused,* or what could be called *YARLE-specific* theoretical conclusions. Thus, this chapter is a YARLE-focused supplement to be used in conjunction with the general employability evidence and theoretical explanation provided in chapters 5 and 6. Having said this, some of the evidence and programmes discussed within chapters 5 and 6 are also specifically relevant to targeting NEET, unqualified, 'at risk' or 'disadvantaged' children and youth (YARLE subgroups) and it was placed in chapter 5 or 6 because of its relevance to the focus topics and programme types that were introduced in those chapters.

In sum, chapters 5 to 7 should be read all together as a set of evidence syntheses, a discussion of the research focus topics and of several existing broad theories, and as a basis for making theoretical conclusions about the nature of employability and employability / employment change; including conclusions about implications for targeting and effecting change via programmes or other policy responses. Chapter 8 recaps on the findings conclusions first discussed in Chapters 5 to 7, and further elaborates on implications for policy responses to support the development of youth employability and employment in general, but in particular for YARLE subgroups.

Unlike the previous two chapters, this chapter focuses primarily on intergenerational patterns and influences, and on what happens or does not happen to start developing key components of employability during the life period of birth to late teenage years. The evidence discussed in this chapter mainly describes an individual, their parents and family background, work-related networks and experiences, and other particulars about life circumstances between the period of birth to teenage years, which is when most youth are living under the care and influence of their

parents. The range of early life attributes that have been linked to poor long-term labour market outcomes later in life include some that are attributable as personal characteristics and some that are attributable as features of external context. External context includes features of disadvantage regarding key types of social networks, interactions or relationships, including with parents and workplace connections. Identified contexts of risk or disadvantage appear to limit the nature and extent of one's employability development as a years-long process.

This chapter focuses on explaining some of the earliest disadvantages and intergenerational influences that appear to limit the initial development of some key components of individual employability. The chapter details some common reasons why youth are already identifiable as being on a YARLE developmental trajectory from approximately birth through to late teenage years, due to the following reasons and early indicators of future employability risk or disadvantage.

- Early non-cognitive skill underdevelopment, intervention, and parental influence.

- Parent's experiences of the world of work, work attitudes and aspirations, as a key influence on those of their children.

- Young people's early work experiences, interventions to support teenage work experience attainment, and why or how they influence inequalities in employability.

- Other intergenerational, socio-economic or social class inequalities regarding early life attainment of work-relevant social capital, network connections and experiences, and their experience of school-mediated work experience activities.

Social reasons for employability development disadvantage are given most attention in this chapter, rather than economic and genetic reasons for intergenerational disadvantage. Social reasons concern types of interaction, network connections, experiences, social capital attainment, and interactive processes of *developing or changing* skills and experience over time. Having said this, it is acknowledged that other physical and genetically inherited influences on skill formation, and other socio-economic status inheritances are among the other types of influences that can affect one's employment likelihoods later in life. So too can material resource access or geographical access to work-relevant opportunities.

Social network disadvantages, including the nature of parent-child relationships and the nature of both parents and young people's workforce networks and experiences, explain a lot about how and *how early* employability disadvantage emerges. Additionally, the personal or family connections that individuals do or do not have with certain types or levels of workplaces and employer networks while growing up may have implications for their future employer *signalling* ability and their knowledge about jobs beyond the low end of the labour market.

Social, experiential or associated network-related disadvantages were prioritised for discussion partly because they appeared to be least well addressed by YARLE- or NEET-related policy responses and because there was evidence to suggest that their influence on labour market outcomes, and their potential to be changed via intervention, deserves more policy attention. Traditionally, relatively more attention has been given to evidence that links childhood cognitive skills, genetic inheritances, and teenage formal educational outcomes to labour market outcomes later in life; as what might otherwise be labelled as theorised employability dependencies.

Ultimately, social and especially intergenerational evidence was drawn upon in order to advance some context-specific or YARLE-specific theory on: employability, the potential for otherwise YARLE subgroups to be identified and supported *preventatively*, and implications for YARLE-targeted policy responses. The chapter concludes with a summary of the policy and theory implications of reviewed evidence for YARLE-focused intervention. In sum, the chapter aides the development of YARLE-focused theory about: why some youth are already becoming YARLE as a process that starts from birth, what forms of disadvantage or developmental support needs are identifiable before reaching the NEET aged or mid-teenaged life period, and whether and what types of early intervention or a focus on what outcomes or development needs are relevant to improving the later life prospects of 'otherwise intergenerationally YARLE' subgroups.

7.2   NON-COGNITIVE SKILL FORMATION

This section expands on Chapter 5, which synthesised reviewed evidence pertaining to non-cognitive skills, associated interventions and links between non-cognitive skills, education and labour market outcomes. This section adds further evidence about the relevance of non-cognitive skills to the early life formation of employability, specifically YARLE-relevant evidence about intergenerational disadvantages and interventions affecting the development and refinement of non-cognitive skills early in life.

Parents and home environments during early childhood appear to have a critical influence on the formation or the underdevelopment of non-cognitive skills (Caspi et al., 2005; Edmonds et al., 2008; Roberts & Jackson, 2008). These skills are conceptualised as traits or as changeable 'personality' in some of the relevant literature. Non-cognitive skill formation tends to be influenced by the way in which parents interact with their children (Edmonds et al., 2008; Heckman, 2008; Heckman & Kautz, 2013; Kautz et al., 2014; Roberts & Jackson, 2008, 2008). Measures of children and teenagers' non-cognitive skills and their labour market outcomes later in life have been linked to those of their parents; particularly in terms of negative or limited intergenerational patterns (Caspi et al., 1998; Cunha & Heckman, 2008; Heckman, 2008, 2011; Heckman & García, 2017b; Heckman & Kautz, 2012; Loughlin & Barling, 2001). It appears that non-cognitive skills are intergenerationally transmitted from parents to children, partly genetically but also as a *socially normalised and learned*, or not learned, way of perceiving and interacting with others, with opportunities and with challenges.

Preventative interventions during early childhood appear to have been successful both in improving non-cognitive skills, as their direct programme outcome focus, and in improving labour market outcomes much later in life. The evidence reviewed mainly concerns interventions that targeted socio-economically or intergenerationally disadvantaged groups. There is evidence in favour of providing such intervention as one of the earliest forms of *YARLE-focused intervention* (read employability-focused intervention) but also as relevant to developing non-cognitive skills for personal development and everyday life purposes. Section 5.5 outlines much of the relevant evidence. Supplementary evidence is provided below as relevant to intergenerational and early childhood disadvantages for developing these skills and intervention potential when timed at this early stage of life.

Early childhood has been identified as a critical window of opportunity to influence the formation of non-cognitive skills, or to change what are otherwise called traits (Belfield et al., 2006; Chetty et al., 2011; Cunha & Heckman, 2008; Heckman et al., 2010; Heckman & García, 2017b; Heckman & Kautz, 2013; Kautz et al., 2014, 2014). Unlike the relatively shorter window of opportunity that exists to develop children's cognitive skills, it remains possible for intervention to improve non-cognitive skills across a longer period of childhood and adolescence, at least to some degree and in some circumstances (Almlund et al., 2011; Heckman & Kautz, 2013; Kautz et al., 2014). There is not clear agreement about the age at which the extent of a person's cognitive skills becomes permanently set. However, much of the literature suggests that early childhood is the critical development period and that these skills become fixed by or before early teenage years. See Section 5.5 for further evidence about the *timing in life* of opportunities to develop non-cognitive versus cognitive skills.

Chapter 5 included a discussion in Section 5.5.7 of the Perry Preschool Programme, which developed non-cognitive skills during early childhood. Section 5.5.6 summarised James Heckman's economically focused argument for timing and targeting non-cognitive skills interventions at disadvantaged groups as early as early childhood. Chetty's work on the Project STAR early childhood education programme in Tennessee is another example of evidence that supports the theory that quality early childhood intervention can improve labour market outcomes *by* improving non-cognitive skills:

> Students who were randomly assigned to higher quality classrooms in grades K–3—as measured by classmates' end-of-class test scores—have higher earnings, college attendance rates, and other outcomes. Finally, the effects of class quality fade out on test scores in later grades, but gains in noncognitive measures persist (Chetty et al., 2011, p. 1593).

The body of literature about non-cognitive skills at early childhood being linked to differences much later in life—including poor education and labour market outcomes—is more recent and

subsequently smaller at this stage than the literature on childhood cognitive skills and other measures of socio-economic status being linked to later life outcomes (as pointed out by Almlund et al., 2011; Fletcher, 2013). Having compared the predictive power of different measures of cognitive skills, non-cognitive skills and socio-economic status, Roberts, Kuncel, Shiner, Caspi & Goldberg (2007, p. 313) concluded that, "personality traits deserve more attention to balance out the attention previously given to SES [socio-economic status] and cognitive skills."

The developmental status of non-cognitive skills during childhood, and potentially through teenage life, *directly* influences and indicates the chances of limited labour market outcomes later in life, but also appears to *indirectly* influence and indicate future employability in that childhood non-cognitive skills measures are predictive of future *qualification* and other education outcomes. Duckworth and Seligman (2005) found that measures of non-cognitive skills still predict academic achievement even after controlling for socioeconomic variables including demographics, school attendance, and home educational material. A review of cognitive and non-cognitive evidence by Almlund et al. (2011) similarly concludes that measures of non-cognitive ability, including Big Five personality traits, are predictive of both education and labour market outcomes.

As relevant to the point made above, the explanations provided by *signalling theory* and *human capital theory*, in relation to refining theory about the influence of qualifications on employability, were discussed along with illustrative evidence in Chapter 6. It was concluded in Chapter 6 that the power of qualification attainments to influence hiring decisions is *limited* or highly conditional upon what types of qualifications and types of job opportunities are being taken into consideration. One key clarification was that low level, non-regulator-enforced and academic rather than industry-initiated types of qualifications have a weak influence on employment outcomes for jobs at the low end of the labour market. In contrast, university level qualification attainments may have a comparatively stronger influence on one's chances of attaining relatively higher paid or higher level work in the long run, although even this level of qualification attainment is not enough on its own. With these clarifications in mind, it remains that an additional *reason why* non-cognitive skill underdevelopment from an early age works as an employability development disadvantage is because it subsequently reduces one's chances of eventually gaining *university or equivalent tertiary* level qualifications; as well as one's chances of gaining competitively high academic grades during first attempts in secondary school, as a signal that employers may use to cull job applicants who are recent school leavers.

A study by Fletcher (2013) strengthens the evidence that non-cognitive skills, as measured while young, have a *causal* influence on later life labour market outcomes, rather than only being correlated. He tested this by controlling for the potential other influences of family background on labour market outcomes. Fletcher was able to control for family background differences to

some extent by studying siblings and twins, within a large national sample of youth in America who had been measured for non-cognitive skills and for their labour market outcomes much later in life. Additionally, Fletcher (2013) cites a range of existing evidence which indicates that non-cognitive skills are partly genetically inherited from parents and partly linked to *parenting* influences while growing up, the latter being a matter of *socially* transmitting or learning non-cognitive skills, attitudes and behaviours.

7.3   PARENTS' WORK EXPERIENCES, ATTITUDES AND ASPIRATIONS

Young people's general attitudes towards working and their job aspirations, if they have any, have been linked to the work experiences, attitudes and aspirations held by their parents, as an intergenerational pattern (L. Archer et al., 2014b; Loughlin & Barling, 2001; Mann et al., 2014). When parents have mainly had negative, limited or vulnerable labour market experiences, their attitudes about working are more likely to be pessimistic and work aspirations are more likely to be limited or aimed at the lower end of the labour market. Negative and limited experiences of the world of work may include: unemployment, periods of welfare dependency, working for persistently low pay while remaining in poverty or low socio-economic status, having experienced and learned about few types of jobs in one's lifetime, and accepting rather than *choosing* jobs in order to simply financially survive. Loughlin & Barling (2001, p. 545) have summarised some evidence related to the aforementioned negative or limited work attitudes and experiences of parents having an influence those of their children:

> Children's understanding of work and employment is influenced by their parents' employment and economic circumstances (Dickinson & Emler, 1992). Between the ages of 4 and 11, children's understanding of the world of work steadily increases (Berti & Bombi, 1988). From the age of about 7 or 8 years, children can accurately report on their parents' job satisfaction (Abramovitch & Johnson, 1992). Further, although not universally supported (e.g. Dowling & O'Brien, 1981), there seems to be strong evidence that children's perceptions of parental work attitudes and experiences shape the development of their own work beliefs and attitudes (Barling, Dupre, & Hepburn, 1998), including attitudes to unions (Barling, Kelloway, & Bremermann, 1991; Dekker, Greenberg, & Barling, 1998; Kelloway & Newton, 1996; Kelloway & Watts, 1994).

The children of parents who have had negative or insecure experiences of the world of work might start with positive or ambitious future aspirations but their expectations about their own work futures are more likely to become pessimistic or uncertain once they move through their teenage years (L. Archer et al., 2014b; Kintrea et al., 2015; Yates et al., 2011). Negative or insecure parents' experiences might include a lack of bargaining power or job security, years of low paid work, and being financially insecure to the point of feeling forced to accept rather than choose job offers as a matter of survival. Furthermore, children from poorer backgrounds (which

suggests children whose parents have had insecure, low paid or limited work) are more likely to lack clear occupation aspirations; or to have aspirations that are unlikely based on their current lack of relevant resources, educational achievements or lack of planned steps towards achieving the aspirations (Yates et al., 2011). Relevant to proactively responding to early indicators of who is at risk of becoming NEET, Yates et al. (2011, p. 513) find that:

> Young people with uncertain occupational aspirations or ones misaligned with their educational expectations are considerably more likely to become NEET by age 18. Uncertainty and misalignment are both more widespread and more detrimental for those from poorer backgrounds.

While the evidence discussed above indicates that parents with negative or limited work experiences and attitudes or aspirations appear to transmit these attributes to their children, any policy responses to these disadvantageous kinds of parental influence should be carefully thought through. Strategies that involve simply placing expectations on these parents to improve their work attitudes and aspirations for their children seem unlikely to work. Parents who have tried unsuccessfully in the past to progress into better paid or more secure jobs beyond those at the bottom end of the labour market may be justifiably convinced by their own experience that their children do not have realistic chances of gaining any better terms and types of employment than they have experienced themselves; at least not without additional intervention support. Furthermore, parents with limited knowledge of other occupations and of how to go about attaining them, and who have limited researching skills, are limited in what they can realistically do on their own to help their children aspire to and set relevant interim goals towards entering other occupations.

7.4   YOUNG PEOPLE'S EARLY WORK EXPERIENCES

In addition to parents' transmission of skills and ways of interacting with their children, and in addition to young people vicariously experiencing the world of work via their parents' work experiences, another key influence on young people's employability development is their own first experiences of being in the world of work. Lack of good quality and positive work experiences during roughly the teenage life period appears to be key to distinguishing why some youth end up with relatively limited employment capability and employment outcomes as they move through their teens and twenties.

Work experience appears to work as an employability change mechanism in at least three ways. Limited or negative first experiences of work are accordingly relevant to being and becoming YARLE for multiple reasons. Firstly, a lack of quality work experience means reaching the later teenage life stage with remaining limitations regarding the developmental status of: employment abilities, attitudes and intentions, signalling capability, knowledge of job options and requirements to go about getting them. Secondly, the relevance to disadvantage also includes the

fact that a lack of work experience typically also means a lack of practice in applying theoretical 'know how or know what' to real work tasks and uncontrolled work contexts, as evidence of 'can do' and 'can adapt'. Thirdly, limited work experience during teenage years means having limited opportunities to build social connections, or *social capital,* and reputation among people or organisations within the world of work. Another disadvantage attached to this limitation is a lack of opportunity to gain one's first *referees* from people who have witnessed one's performance or at least one's general behaviour (read non-cognitive and social skills) within a workplace context.

Before moving on to the developmental reasons why work experience is relevant to being and remaining YARLE, it must be noted that the bulk of reviewed evidence in this section pertains to work experiences and related programme provisions that happen during teenage years. However, what does or does not happen with regard to work experiences during this life period is also relevant to ascertaining why and who is more likely than others to have limited employment and employment capability throughout much of their twenties as well. Percy & Mann (2014) overview some longitudinal studies that have linked *school-mediated* work experiences, including short contacts made between employers and secondary students, to having better labour market outcomes than peers years later. Most of the studies they note come from American or UK contexts.

The nature, quality and extent of work experience that young people attain during their teenage years is a key *employability development mechanism* for several reasons, or in several ways, as will be explained next. Firstly, work experience can be a means of developing non-cognitive skills, and pro-work-focused attitudes and applications of effort. Secondly, new work experience is new potential to attain, or practice and refine one's application of industry-relevant technical skills, subject knowledge, or 'ways of doing things'. However, technical practice and skill development often takes time and more than a one-off short experience of a workplace, The argument that work experience is an opportunity for *human capital attainment,* in the sense of gaining practical knowledge or technical skills, is subject to conditions such as whether on-job training or feedback is given, and to the duration and allocation of tasks within an assigned 'work experience'.

Rather than further delve into the human capital attainment potential of work experience, attention is directed to early experiences of work as a mechanism for changing young people's *social capital*, *signalling capability*, *awareness* of future work options and requirements, as well as work *aspirations*. Given that this chapter focuses on explaining employability development disadvantage or indicators of risk during childhood and teenage years life, the evidence discussed in this section details inequalities regarding the types of teenage work experiences attained, links to later life labour market outcomes and: intergenerational or parental differences,

socio-economic or 'class' differences, and associated differences in terms of which youth get what types of early work experience.

A longitudinal New Zealand study by Roberts, Caspi & Moffitt (2003) entitled *Work Experience and Personality Development in Young Adulthood* indicates that work experience can work as a mechanism to change non-cognitive skills, whether that be for better or worse. Roberts et. al. (2003, p. 582) found that, "work experiences were related to changes in personality traits from age 18 to 26."The study focused on the relationship between changes in emotional and behavioural tendencies (personality traits) and work experiences in young adulthood. Note that they frame non-cognitive skills as personality traits but in the sense that they can be changed via experience to at least some extent. Roberts et al (2003, p. 582) found that: "measures of personality taken at age 18 predicted both objective and subjective work experiences at age 26…[and] work experiences were related to changes in personality traits from age 18 to 26". Similarly, Loughlin & Barling (2001, pp. 544–545) concluded that first experiences of the world of work can shape long term attitudes towards working and associated behaviours, "just as early childhood experiences affect how personalities are formed." Generalisations about attitudes and behaviour tendencies can essentially be other ways of describing non-cognitive skills or trait concepts; as was explained in Chapter 5.

Hatcher & Le Gallais (2008) compared the school-mediated work experience placements arranged by five UK schools and analysed differences in experiences and aspirations, based partly on feedback from parents, participating students and school representatives. It questioned whether compulsory mainstream work experience placement programmes were facilitating improved labour market mobility or simply reinforcing existing social class divides, in terms of intergenerational patterns in the kinds of work experience attained. The study paid particular attention to the potential role of parents' *social capital* and *socio-economic status* being linked to differences in aspirations for the young person, and to differences in what kinds of work experience the young person was placed in. A summary of their findings are listed below. Overall, the findings indicate that parents' workforce connections or social capital and their aspirations for their children's work futures do influence likelihoods regarding what their children's early work experiences will entail.

> (Hatcher & Le Gallais, 2008, pp. 72–73 emphasis added)
>
> A particular focus has been on the role of **family social capital**. This has involved us in an analysis of the relationship between parental occupations and the arrangement of student placements. We have also explored the benefits which students have gained from their work experiences…
>
> Finding 1: Some employers prefer students from high SES schools….
>
> Finding 3: The distribution of students to workplaces exhibits a combination of social class patterns and school-effect differences. Overall there is a **significant correlation between the social status of workplaces and the SES of schools.**…
>
> Finding 10: Teachers perceived social class differences in parents' aspirations and expectations for their children's careers: **parents of students at higher SES schools had higher aspirations.**
>
> Finding 11: Students at the higher SES schools were much **more able to use family contacts to access work placements in professional workplaces**…
>
> Finding 13: No school was effectively widening students' career horizons. **Because career aspirations were class-related, the schools' policies tended to confirm class differences** in student aspirations rather than raise them.
>
> Finding 14: **There was a correlation between lower SES schools and vocational courses…**
>
> Finding 15: There was a correlation between school SES and the educational value of the placement. Students at the **high SES school were much less likely to undertake menial tasks and much more likely to undertake responsible tasks and work-shadowing**, and to be treated as a colleague and to receive mentoring in a professional context.

7.4.1   *Work Experience to Improve Social Capital or Signalling*

Work experience is a means of improving *signalling capability* as well as directly work-relevant *social capital* or network connections, all three of which are intertwined concepts and employability dependencies. Social capital formation and signalling theories appear to explain how and why work experience can improve a young person's employability and their labour market outcomes later in life, better than the theory that early work experiences improve labour market outcomes *by improving skills or human capital.*

Having had past work experience, or at least some kind of work-relatable experience, is a key type of signal (information) that employers appear to highly value and demand, based on what employer surveys indicated in Section 6.3. Additionally, work experience is a mechanism for *attaining referees* to vouch for how one behaves and interacts in workplace contexts, and they might also comment on one's performance of tasks or wider duties. Past workplace referees are particularly relevant to convincing future employers about one's non-cognitive skills. Past experience and referees may also serve as a means of convincing future employers that one has successfully applied occupation-specific or other technical skills to real-world instances of

workplace tasks; as more convincing evidence of what one can do rather than what one theoretically knows.

Undertaking new work experience serves as new potential to attain *social capital* and network connections, as direct connections to where work opportunities exist. It also creates potential to *signal* one's abilities and job seeking intentions to a current employer in that workplace scenario but also to potential employers in future. Being observed directly for one's performance and behaviour in a work experience situation presumably works as a highly trusted signal of abilities and work intentions, say, compared to a qualification as a signal, because it allows employers to directly observe whether and how someone applies hypothetical abilities in practice and within a particular type of role or workplace context.

7.4.2   *School-mediated Work Experience Activities*

School-mediated work experience, including as a mainstream programme activity, has been trialled in many countries. The impact on students appears to be conditional upon details such as what was counted as 'work experience', the explicit design or structuring of experiences as learning or relationship-building opportunities, and differences regarding which youth tend to be sent to what types of work experiences. For a comparative review of numerous countries' school-based work experience schemes see Watts, Jamieson & Miller (1989); although it does not include more recent evidence from large-scale examples of school initiatives, such as that available from the UK context (see Hatcher & Le Gallais, 2008; Mann et al., 2014; Mann & Percy, 2014).

Percy & Mann (2014) conclude that the *social capital* attained via school students' work experiences is the main reason why school-mediated work experiences are linked to improved later life labour market outcomes, more than because of any *human capital* that might also have been attained. Their conclusion is based on having studied differences in young people's labour market outcomes after going through the UK's compulsory provision of at least some form of 'work experience' to all secondary school students. A large proportion of the instances of experience provided were too short or 'hands off' to expect that substantial skill development would have been achievable.

Work experience attainment while young also appears to be a key mechanism for improving *signalling capability*, improving *awareness* of what jobs exist 'out there' to *aspire* to, and improving understanding about what is probably needed to achieve certain work goals. Signalling is an employability challenge that partly depends on one's social capital, especially becoming personally known to employers and members of workplaces. While Percy & Mann (2014) use the term 'social capital' to summarise why teenage work experiences lead to improved later labour market outcomes, their explanation of findings from their UK study of school student outcomes also alludes to the interrelated concept of improved *signalling;* particularly in terms of a young

person becoming noticed and known to particular employers. Furthermore, they describe the influence of school-mediated work experience as a social mechanism through which young people can *become aware* of certain occupation or workplace opportunities—which creates the possibility to *aspire* to them—and can learn about what is probably needed to attain those or similar opportunities in future (Mann & Percy, 2014, p. 513).

> The great value that young people gain from school-age employer engagement is in their heightened ability to gain access to reliable, relevant information which enhances their own ability to identify achievable, desirable career aspirations and navigate well towards them.

The adage that 'it's who you know, not what you know' also appears to be supported by evidence that young people with parents in professional occupations are more likely to be helped into high quality work experience opportunities that relate to professional occupations, via their parents' work connections (Hatcher & Le Gallais, 2008; Mann et al., 2014). If a young person comes from a low socio-economic status family, or attends a low socio-economic status school, they are more likely to be referred as teenagers to types of work experience that involve typically lower paid or 'working class' roles, or that are poorer quality experiences in terms of the social-capital-development potential that the experience affords (Ahier et al., 2000; Avis & Atkins, 2017; Calvó-Armengol & Jackson, 2004; Hatcher & Le Gallais, 2008). For a recent collection of further research into the importance and influence of early exposure to employers and work experiences—which includes a focus on themes of social capital, inequality and access to opportunities, mobility and aspirations—see the book entitled *Understanding Employer Engagement in Education* (Mann et al., 2014).

In conclusion, differences regarding the nature, quality or extent of work experience that young people have attained by roughly the time that they leave school, and become full time work candidates, is a key context difference that distinguishes why and which youth are more or less YARLE than others. Gaining work experience during teenage years is generally a key mechanism or 'source of potential' for improving employability. However, the nature and extent of the work experience attained, and what social capital or network connections, awareness, and signalling capability it affords, are key dependencies for how well and for whom teenage work experiences *work* to improve employment prospects. Limitations regarding the nature, quality or extent of early work experiences attained during the teenage life period—as well as subsequent attainment of quality referees—are early indicators of why and who is comparatively YARLE to some extent, even before leaving school or becoming officially NEET.

7.5 CONCLUSIONS AND POLICY IMPLICATIONS

Early indicators of disadvantage and of likely limited developmental progress regarding employability dependencies are identifiable well before youth reach the mid-teenage 'NEET'

classification period in life. Some indicators and sources of disadvantage that hinder employability formation are even identifiable before birth, as *intergenerational or parent context* particulars. Other indicators of developmental disadvantage pertain to having a comparatively limited extent and/or quality of first-hand experiences of being in the world of work, starting from teenage years and including while still being at school.

The extent of some young people's access to, aspirations towards or knowledge about higher paid or 'non-working-class' types of occupational opportunities appears to be one many reasons for intergenerational patterns of low paid types of labour market outcomes. Furthermore, the *vicarious* experience of growing up with parents who have negative, low paid or low security, or otherwise limited experiences of work, and the social process of parents *transmitting* limited skills, aspirations and work attitudes intergenerationally to their children, seem to be other significant reasons for children having underdeveloped non-cognitive skills, and forming their own negative or limited work attitudes or aspirations[18].

Some of what appears to act as a disadvantage starting from birth, or be an early indicator of who is likely to have limited capability in key areas of employability dependency by the time they reach their mid-teens (by the time they reach NEET age parameters) includes: attributes of parents such as their non-cognitive skills; the work attitudes, nature and quality of work experience, and work-related aspirations of young people and their parents; and measures of socio-economic status. Parents and their children having limited or poor quality experiences of the world of work seems to be at the heart of multiple reasons for ending up being relatively less employable than other young people as they become part of the workforce aged population.

Non-cognitive skills evidence and implications. There is evidence that non-cognitive skills can be measured or gauged, and early indications about which youth are most likely to need more support than most to develop these skills are intergenerational or identifiable from early childhood. Having said this, early childhood is a prime window of opportunity and need for *all* young people to develop non-cognitive skills as life skills. Supplementary intervention support for disadvantaged youth may not necessarily need to be presented to participants as an explicitly risk-labelled or potentially stigmatising intervention; it can be integrated into 'mainstream' early childhood programmes for all youth. Furthermore, both later life measures of non-cognitive skills and later life labour market outcomes have been found to have *improved* via intervention during early childhood and during teenage years (as outlined in Section 5.5 as well as this chapter). Accordingly, it can be said that the formation of non-cognitive skills, being 'perception, attitude and behaviour' concepts, and their orientation or application to employment-focused

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[18] Parents are referred to here instead of caregivers or guardians. Most of the evidence reviewed refers to parents. A lack of clarification about who counts as 'parents' in evidence about parental influences is a research limitation. Differences in outcomes or experiences might distinguish subgroups of children who grow up, for example, in the care of the state or other guardianship arrangements.

purposes are at least partly *intergenerationally transmitted*; at least in regard to evidence about the underdevelopment of such skills or unfavourable displays of traits.

Work experiences, aspirations and attitudes. There is evidence that childhood and teenage experiences and perceptions of the world of work—both personally and vicariously via parent's experiences, perceptions and networks—distinguish which youth are more likely to not only enter but remain in persistently low wage and otherwise limited employment status later in life. Furthermore, if parents have limited or negative personal experiences of the world of work, or display negative or low work aspirations and expectations, then their children appear to be more likely than others to eventually present with similar quality experiences and similarly limited or negative aspirations, expectations and attitudes towards work. In sum, the emergence of negative or limited attitudes, intentions or aspirations (regarding work in general or job types specifically), and inequalities regarding young people's first-hand and vicarious early experiences of work appear to involve social processes of intergenerational transmission from parent to child. These are dependencies regarding the nature and extent of family and work-relevant social networks, and social interactions or experiences.

As a caveat, the above generalisations are not intended to be interpreted as an allocation of fault on the part of parents who end up in limited employment or unemployment themselves. Rather, these intergenerational generalisations are made because they are reasons to consider providing early childhood and early youth intervention support specifically to influence what children gradually develop as: work attitudes, aspirations and knowledge, and work-relevant network connections and experiences of the world of work. Such intervention might overlap with an interrelated need to provide non-cognitive skills intervention, in terms of overlapping personal and social development objectives. Non-cognitive skill formation includes concepts of forming general attitudes[19].

Timing and types of programmes. The typical timing, mixture and rationale for employability-focused interventions, and for risk or needs assessment practices, should be reconsidered in light of the fact that many childhood or family risk characteristics are identifiable well before youth become of workforce age, often before youth leave school, and many intergenerational risk characteristics are even identifiable before the young person is born. It follows that at least some of these known characteristics of network- and family-related disadvantage could perhaps be more proactively and effectively countered via earlier interventions; in addition to the 'last resorts' of interventions that are known as active labour market programmes and tertiary sector 'at risk targeted' programmes.

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[19] For example, generalisations about a person's attitudes and self-managing tendencies overlap with the Big Five trait concepts of Openness and Conscientiousness, as discussed in Chapter 4.

The above findings and conclusions have implications for defining some of the earliest reasons and indicators of employability risk or inherited disadvantage, which translates to being earliest indicators or contexts of 'being on a YARLE trajectory'. A practical reason for pointing out these early contexts of developmental and social-network-related disadvantage is that it may be feasible for some of the earliest forms of YARLE-targeted policy responses to include more preventatively timed support much earlier than the age period targeted by most NEET-focused policy responses. There are implications for thinking about what might be included, and might be more explicitly recognised within programme investment justifications, as a national combination of YARLE-targeted policy responses which span different life stages, needs and windows of opportunity. This proposed way of conceptualising a diverse range of programme types and policy areas as all being YARLE-targeted (some being preventatively focused early in life and some being interventions later on in life) promotes a shift beyond the narrower common policy focus on identifying and responding to youth only *after* they become NEET; or after they experience unemployment or limited labour market outcomes.

To recap, Chapters 5 to 7 presented some syntheses of existing evidence as a basis for making the summary conclusions that are presented in the next chapter. A discussion about some existing broad theories was woven into Chapters 5 to 7 in order to make better sense of reviewed outcome evidence, employability and employment change mechanisms and dependencies, and implications for policy theory development or currently common types of policy responses. Thus, Chapter 8 mainly comprises a summary set of conclusions as an overall refined *theory of employability.* The overall theory includes concluding generalisations about employability development, employment attainment, common indicators or reasons for being relatively at risk of limited eventual labour market outcomes, and policy implications. It follows that Chapter 8 is an evidence-informed answer to the research question. Many of the conclusions in Chapter 8 are relevant to policy working to support youth employability development and employment attainment *in general.* However, context-specific conclusions are also provided about identifying and responding to a range of needs, risks and opportunities that concern NEET and other YARLE subgroups *in particular.*

8.   REFINED EMPLOYABILITY THEORY: CONCLUSIONS AND POLICY IMPLICATIONS

8.1 INTRODUCTION

A key aim of the research was to contribute new or refined theoretical conclusions about: individual states of employability, youth labour market outcomes, the means through which employability and employment status can change, and outcome or change dependencies (or contexts of outcome risk, disadvantage or advantage). Furthermore, the research aimed to make explicit the implications of findings and conclusions for a cross-sector range of relevant types of policy responses, common policy outcome foci and the assumptions or theories that they reflect. Implications for recognising and responding to a range of risk indicators and needs that distinguish YARLE subgroups were given specific attention. The research approach that was applied to achieve these aims involved synthesising existing sources of evidence and theory, then summarising the relevance of what was discovered as a set of generalised theoretical conclusions about youth employability, its dependencies, and implications for policy to work to improve outcomes for YARLE or YARLE subgroups.

This chapter addresses the main research aims by presenting a *refined theory of employability*, as a set of conclusions that are relevant to multiple contexts and policy instances. The theory draws upon the syntheses of evidence and pre-existing broad theories discussed in Chapters 5 to 7. It includes generalisations about some *key employability dependencies*, which are also typical reasons or sources of influence on a young person's likelihood of being disadvantaged or at relative risk of limited employment outcomes, now or later in life. Key employability dependencies, along with associated findings about intergenerational or early life disadvantages and intervention, have policy implications for supporting youth employability in general for YARLE subgroups in particular. Thus, the chapter works as a summary of *general* employability theory about key employability dependencies for virtually all youth, and gives additional details as *context-specific* or *YARLE-specific* theory.

Conclusions about reconceptualising a range of relevant policy responses, especially the types that are meant to target and directly or indirectly support labour market outcome improvement among at risk youth, are put forward. In particular, it is concluded that policy responses and outcome interests that are risk-targeted should involve more multi-faceted risk definitions and subsequent responses than the popular policy focus on NEET and secondary school or low-level national qualification outcomes.

This chapter mirrors but moves beyond what was laid out in Chapter 4. In addition to introducing the selected focus topics and broad theories, Chapter 4 gave an overview of what was deemed to be relevant to the notion of employability theory, outcomes and relevant types of policy practice and policy outcome agendas.

The conclusions provided in this chapter align to the theoretical perspective presented in Chapter 2 about the nature of employability, and associated concepts of employability outcomes.

Namely, individual employability, employment outcomes, and the potential for these two states of being to change over time are phenomena that are complex, emergent, socially influenced and partly socially judged and defined. Employability development and outcomes are accordingly partly dependent upon the nature and extent of one's *social networks* and the *experiences and relationships* that they do or do not afford. Furthermore, individual employability, including employment outcome likelihoods or prospects at any given time, depends partly on the status of *external context* particulars that make up part of one's real world environment. Employability does not only depend on the nature and extent of one's individual attributes, such as abilities and intentions, as *personal context* particulars. It also depends on who and what affordances an individual is connected to.

Section 8.2 summarises what were found to be *key employability dependencies* that are relevant to recognising and supporting the employability of virtually all youth in general. Many influences can affect employability development and employment outcomes across life. However, these dependencies stood out as being common and often strong influences on what labour market outcomes eventually occur, and it seemed realistic to think that policy responses could potentially influence these types of dependencies. Section 8.3 adds further conclusions about common reasons for being YARLE, and about supporting employability development and eventual labour market outcome improvement among relatively YARLE and intergenerationally disadvantaged youth subgroups. Section 8.4 concludes that policy thinking should move from the narrower foci on targeting NEET and low-level qualification rates to a more multi-faceted recognition and response to a set of common reasons for being relatively YARLE. It also notes some problems and conditions regarding the effectiveness of second-chance education and training. Furthermore, Section 8.4 presents a proposal to move from fragmented policy discourses and underlying assumptions about the influence of education and qualification attainments on employment outcomes, especially for low-level job attainment and especially for YARLE youth who leave school with low or no qualifications. It is concluded that policy discourses, outcome agendas and the rationale for programme designs could instead be reconceptualised as contributions to an agenda of *employability development for all youth,* with targeted NEET and other YARLE subgroups being nested within that agenda. Section 8.5 concludes the chapter.

8.2   KEY EMPLOYABILITY DEPENDENCIES (INCLUDING EMPLOYMENT OUTCOME DEPENDENCIES)

The following section is a theoretical summary of *key employability dependencies*, which includes dependency on the status of certain context variables and on some employability and/or employment change mechanisms. The description of change mechanisms often entails describing a type of social network connection or interaction, as the source of potential for experiences,

interactions and outcomes or changes. Woven into the summary are some points about policy implications or current practices that are relevant to addressing these dependencies.

8.2.1   Non-cognitive Skills

Non-cognitive skills, including usual attitudes and emotional and behavioural tendencies, are key employability dependencies.

- While employers rarely use the term non-cognitive skills, employer surveys indicate that non-cognitive concepts of skills are top-ranked among what employers say they want most in recruits. What is meant by non-cognitive skills includes concepts of attitudes, behavioural tendencies, traits, social and emotional skills, self-management and self-motivation tendencies.

- Employers, education sector actors and other policy actors use numerous semantically overlapping terms in their attempts to communicate about non-cognitive types of skills, attitudes or traits. This includes attempts to frame behavioural, emotional and self-motivational tendencies as *employability skills*, or as skills described in the context of them being needed for, or applied to job roles.

- A policy challenge regarding how to recognise the nature and extent of individuals' non-cognitive skills, or how to help youth to signal these types of skills to employers, lies partly in the current lack of shared terminology and definitions of conceptually soft-or non-cognitive skills. Furthermore, the performance of non-cognitive skills is highly context- and situation-dependent, and non-cognitive capability is partly subjectively judged by potential employers. These are challenges regarding the successful signalling of one's non-cognitive skills to potential employers. Having the skills is not enough in itself.

- There is a critical need to consider how the secondary and tertiary education sectors, and associated national qualifications systems, work to help youth to both develop and signal their non-cognitive skills to employers. Standardised assessments and qualification designs that are suited to the purpose of verifying what people know and what people can technically do appear not to be well suited or trusted by employers on their own as adequate signals about non-cognitive skills.
  - o Examples of alternative ways in which the education system might help youth to accumulate signals about non-cognitive skills include helping youth to attain work experience, helping them to self-reflect and self-report on examples of their past skill demonstrations (say as practice for job interview answers), and helping them to accumulate a portfolio of context-rich and personal examples of roles or projects undertaken whereby such skills were demonstrated and whereby others can attest to the individual's behaviour or performance.

8.2.2 *Work Experience*

Work experience matters to both employment attainment and the process of employability development. Work experience is an employability dependency that appears to be relevant to developing social capital, human capital and work-relevant experience, as well as being a mechanism for potentially signalling one's capability and interests to employers.

Work experience can be conceptualised as both a key context dependency and a change mechanism. Description of past work experience already attained is description of context or outcome features. Conversely, work experience can be conceptualised as a key employability change mechanism, in terms of being a type of network connection and type of interaction or experience through which individual employability and/or employment attainment can change.

- The work experience that one has attained is a key context feature that is linked to later employability outcomes.

- The type, extent and quality of the first few work experiences that one attains early in life appears to have a substantial influence on the formation of work attitudes and expectations, as well as distinguishing which youth are likely to gain any employment and relatively better employment than others.

- Virtually all youth may face a challenge of needing to get a first substantial work experience opportunity in order to develop and signal their capability to potential future employers. However, this challenge may be particularly difficult for certain youth subgroups, including youth who lack personal or family connections to employers and workplaces that may serve as first providers of a substantial work experience opportunity (one that might be defined as a role with assigned responsibilities). Gaining a negative reputation or experience within first jobs, and a subsequent lack of positive referees, is another employability barrier that some youth may need help with to overcome. Having had little or no work experience upon leaving compulsory education appears to be a key teenage indicator of being YARLE.

- Undertaking work experience is a mechanism for potentially changing employment status (including for getting noticed and offered new employment), and a mechanism for developing other key components that make up individual employability (abilities, work intentions and expectations, and general work attitudes).

- While a state of employability can be improved via work experience, it can also potentially be worsened. It depends partly on the nature of the interactions and experiences that happen at work, the matching of an individual to a work context or role, and the expectations and behaviours of both the individual and a particular employer or co-workers.

- Work experience attainment stands out in employer survey evidence and active labour market programme evidence as being a key influence on getting offered future employment.

- The extent of young people's interactions with the world of work, while at school and during the years after leaving school, appears to be a key employability dependency and has been linked to future labour market outcomes.

  o Some programmes that have explicitly been designed to arrange or support the undertaking of new work experiences have had mixed results, particularly programmes that were mediated by secondary schools.

    The active labour market programmes and second-chance education and training programmes that include a work experience attainment activity have generally been more successful than others in moving unemployed or underemployed target groups into employment. Many of them target youth who have left school unqualified, or are unemployed, and who are no longer in school (they are already YARLE and are workforce aged). The context dependencies and specifics about programme designs, outcome intentions and target groups need to be further researched and specified in order to better understanding what is likely or unlikely to work as programme provision of work experience, and for which target groups or in what circumstances.

Changes to an individual's *signalling capability*, *social capital, human capital*, and work-relevant connections to the world of work (to people, organisations and potential employers) can all happen via the potential that is afforded by the undertaking of a new work experience. Furthermore, a new work experience undertaking can have a strong influence on one's potential to change their current employment situation (labour market outcomes), which is the *end* outcome type of research and policy interest.

8.2.3 *Signalling*

Signalling capability is a key employability dependency, specifically a dependency that affects whether and what types of employment one is likely to attain. Signalling challenges and dependencies are intertwined with dependencies on one's experiences and social networks, including work experience attained to date and parent's work experience.

Signalling involves sending multiple types and sources of signals (information) to potential employers, sometimes intentionally and sometimes unintentionally. Signalled information, and employer perceptions about the source or sender of a signal, have the potential to influence employer perceptions of an individual, their general and job-specific abilities and work

intentions, and their general work motivation and attitudes (which is part of non-cognitive skill signalling).

Common types of signals include: past work experiences, past job referee feedback, general character references, interaction and presentation at a job interview, recommendation as a job candidate via an employer's personal networks, affiliation with a certain school, company, ethnic group or club, and formal qualifications.

Importantly, qualifications in the traditional academic sense are only one type of signal that employers tend to use to judge the capability, intentions and sometimes the preferability of a potential employee. Furthermore, qualifications are not a type of signal that employers tend to prioritise among the range of signals and attributes that they base their recruitment decisions upon, particularly at the low end of the labour market and in job types where a specific qualification is not considered to be compulsory. Having said this, in labour market contexts where there is an oversupply of candidates who employers perceive as being capable of doing a job, it appears that they may add formal tertiary qualifications as an applicant requirement simply as a quick and cost-effective means of culling and shortlisting applicants, and not because the qualification and the abilities it is meant to represent is actually needed for the job concerned. This is relevant to the problem of youth becoming stuck in jobs where they are technically overqualified or not making use of the skills and knowledge they attained by completing tertiary qualifications.

One reason why the arrangement of work experience opportunities seems to be a key way to improve the future employment prospects of youth is that undertaking a new work experience is a further opportunity to improve signalling capability. It is an opportunity to personally demonstrate one's abilities and work intentions directly to potential employers. Especially for low-level roles, work experience appears to be a more personalised, context-rich and valued type of signal than tertiary academic qualifications.

Hiring decisions can depend on signals and employer judgements about candidate *preferability* in addition to their capability and motivation to do a certain job. Employer judgements and signals about individual capability and preferability may be partly objective but also can depend on each employer's subjective and/or biased recruiting intentions and perceptions. Particularly in labour market sub-contexts where there is high competition or oversupply of technically capable job candidates, it seems that capability to signal and meet additional preferability requirements of employers is another challenge youth need to overcome.

For certain hospitality and retail job markets (contexts), employment attainment appears to particularly depend on one's ability to send certain types of signals and act in certain ways that meet subjective preferability criteria. This can include preferences regarding aesthetics or

personal image, knowledge and ability to perform rituals or interact in ritualistic ways with regard to customer service, and sometimes to belong to, or be perceived as belonging to, a certain social class. This labour market sub-market clarification is particularly relevant to YARLE employment opportunities because the service sector tends to be growing in developed economies and is where masses of youth get their first jobs. Furthermore, it is where there are many jobs available where employers do not require a formal qualification or years of job-specific work experience, although some basic work experience does appear to be preferred where available.

8.2.4 Social Networks, Experiences and Interactions

Social network connections are a source of potential through which new experiences, interactions, social influence, feedback or learning, personal development and other life outcomes can emerge. It follows that social networks, or more accurately, the nature of the interactions and outcomes that can happen via them, are the means through which new employment attainments and changes to one's work-relevant abilities and intentions are influenced and made possible. Altogether, descriptions and explanations about types of network connections, relationships, experiences and social influences are descriptions about sources of potential for change or outcomes. Networks and interactions *afford* but do not guarantee a certain type of change, including the attainment of a new job and including changes to people's abilities, work-relevant intentions and attitudes.

While a generalisable type of network connection can be tangibly observed as a context feature, the influence—or potential for influence—that such a connection tends to have on a seemingly affected experience or outcome is harder to directly observe. Nonetheless, based on the outcome evidence reviewed, and the supplementary explanation provided by signalling theory and social capital theory, generalisations can be made about certain types of network connections and associated types of interactions and experiences having a positive or negative effect on young people's employability development and on the nature of their eventual labour market likelihoods.

The nature and extent of certain types of social network connections or relationships, and of the interactions, experiences and outcomes that are typically influenced or triggered via them, are a key dependency that affects employability development as well as eventual employment prospects. These kinds of variables distinguish why some youth are YARLE and why some youth have relatively better employment prospects. Some of the earliest indicators of being on a YARLE trajectory—or otherwise being advantaged with regard to the quality of employment outcome likelihoods later in life—concern evidence and dependencies on specific types of social networks and relationships, as are summarised below.

- Work experience is a type of social network connection and a type of experience that is a key dependency for employment capability development and for employment attainments.

    o The nature of parents' personal connections to workplaces and employers tends to influence what early workplace connections and experiences their children are likely to be exposed to while growing up, including what types of early work experiences a young person can easily access via their parents' connections.

    o Programmes that involve arranging new work experience appear to be key to helping youth improve their future employment prospects, although there are conditions about this generalisation that need to be further researched.

    o Work experience attainments seem likely to improve future work prospects not only because they might work as a mechanism for developing skills but because they work as a mechanism for increasing the extent of one's workforce networks and relationships, and one's *signalling capability* accordingly.

- Parents tend to pass on socially their attitudes, human capital (abilities), and social capital (including work-relevant connections) to their younger family members, which partly explains intergenerational patterns of employability advantage or disadvantage. Thus, the nature of children's and young people's interactions with their parents while growing up is a key network dependency through which employability development, and employment attainment, is heavily influenced.

    o The formation of non-cognitive skills including attitude tendencies, and the formation of work-oriented expectations and aspirations is an intergenerationally transmitted and partly *social* phenomenon, rather than being entirely due to genetic inheritances. Some aspects of non-cognitive skills can be improved and socially learned over time between early childhood and late adolescence. Such skill development is strongly influenced by the nature of everyday feedback from parents but it also appears to be possible to improve non-cognitive skills via other relationships with other people, as alternative or additional sources of social influence. There is evidence to suggest that non-cognitive skills can be improved via intervention, although less is known about the extent to which, or the social circumstances within which, they can be realistically improved. The working of such intervention seems likely to depend (among other things) on the development of close relationships with young people, and possibly with their parents while they are in the care of parents, since the potential for changing non-cognitive behaviours and self-awareness lies in receiving social feedback and experience.

8.3   YARLE-SPECIFIC OR CONTEXT-SPECIFIC CONCLUSIONS

Following on from what the previous section summarised about key employability dependencies that are relevant to the employability of youth in general, this section adds context-specific findings and conclusions that have implications for recognising or responding to common employability risks or disadvantages (and potentially to intervention opportunities) that distinguish what it means to be YARLE. The following findings and conclusions have implications for programmes and for setting policy outcome agendas that are meant to target relatively at risk youth in particular. However, a key conclusion is that a country's mix of YARLE-focused policy initiatives can and should include preventatively focused policy responses that engage youth starting from early childhood and continuing up to the mid teenage years, after which point the bulk of NEET-focused and directly youth employment focused interventions start to be activated. There are common indicators of being on a YARLE trajectory because of intergenerational disadvantages and there is some evidence to suggest that specific types of employability-relevant support for YARLE youth should start from early childhood. That is, attention is needed before youth reach the life stage of becoming potentially classified as NEET or as low-qualified, before they leave school, and before they become members of the workforce population.

The YARLE concept is based on a working definition of *limited* employment outcomes. The definition of relatively limited employment (limited labour market outcomes) includes ending up with relatively frequent or prolonged periods of being officially unemployed, underemployed and/or NEET. This can coincide with frequent or prolonged periods of being dependent upon social welfare, but not everyone in a state of limited employment is necessarily receiving welfare at the same time. Thus, while the populations of NEETs, unemployed youth, and youth receiving a full benefit may overlap they are not exactly the same populations and they do not cover the full populations of those who could otherwise be classified as matching various YARLE subgrouping criteria.

Being in a state of unemployment, underemployment or NEET during a short time period often coincides with other criteria that are common indicators for being YARLE. Welfare policy settings, active labour market programmes and the referral of unqualified and out-of-school youth to low-level education and training are often co-affecting policy responses and they engage the same target groups at the same time.

Welfare policy settings can include incentives or sanctions for engaging or failing to engage in active labour market or low-level education and training programmes, or for engaging in an opportunity to undertake new employment or work experience. Accordingly, some of the YARLE-focused conclusions outlined below are relevant to policy thinking about how active labour market programmes, secondary and low-level education and training programmes, and

welfare policy settings work on their own and in combination with each other to engage YARLE target groups.

8.3.1 Reasons for Being YARLE From Birth to the 'Potentially NEET' or Teenage Period

Several attributes that describe states of context during early childhood to teenage years have been linked to ending up with a limited state of employability and limited labour outcomes later in life. The negative developmental direction, or lack of development of these attributes tends to emerge over time. However, intergenerational characteristics that describe the employability, attitudes and experiences of parents, and that describe the socio-economic status of young people and their parents, are early indicators of which youth are more likely on average to lack positive developmental progress regarding the key employability dependencies. These indicators are:

- limited non-cognitive skills, including problems regarding attitudes, social interaction skills, problem-solving, and emotional awareness and self-regulation skills;

- parents' experiences of work, workforce connections, or their socio-economic situations being limited, negative or financially strained.

    o Parents may have experiences of work being limited in length, quality or level of status within the labour market; work that is negative in other ways; or being perpetually in low-paid or low-security work. Parents may have been unemployed for large chunks of the time while raising children. The notion of having career pathway choices and expectations for labour market progression may accordingly be less likely among parents with these types of prolonged limited or negative experiences of the world of work. Rather, taking any job available now simply to financially survive in the near future might be perceived as a more realistic and urgent aspiration; and

- parents' work attitudes, experiences and aspirations or expectations being limited or negative.

In sum, the nature and extent of parents' employability and employment outcomes—in terms of their social capital, human capital (including non-cognitive skills, cognitive skills and knowledge), work attitudes and expectations, and work experiences—tends to be transmitted intergenerationally to their children. It is acknowledged that other types of social relationships and other genetic or environmental factors can also influence what emerges as the development of a child's employment-relevant capabilities, intentions and the work opportunities once they reach working aged life. However, unlike genetic inheritances, realistic opportunities for intervention to target and change the employability trajectories of children from intergenerationally disadvantaged backgrounds appear to lie in creating additional relationships and/or changing the nature of interactions within current relationships with young people. Intervention that attempts to create new relationships and/or improve the nature of social

interactions via current relationships should explicitly include a focus on social development regarding the key employability dependencies. These could include interventions to influence relationships with parents, education providers and potential new workforce contacts.

The formation of non-cognitive skills, work-relevant social capital, and of initial work attitudes and aspirations happens over years of development and experiences. Thus, it is logical to expect that a years-long intervention strategy, which may involve a combination of different types of intervention support and needs assessment at different points in a young person's life, may be needed to help overcome intergenerationally inherited and gradually learned developmental disadvantages and problems.

8.3.2   *Timing Intervention to Target Early Disadvantage or Risk*

The *timing* of first intervention efforts to identify and respond to the earliest identifiable forms of employability risk or disadvantage deserves revision. Some of the reasons for being on a YARLE trajectory are intergenerational. The emergence of certain limitations regarding one's employability start from early childhood, then become cemented over years-long periods of experience (or lack of) between birth and teenage years. Some developmental risks or disadvantages concern the key employability dependencies, and the influence that one's parents and personal experiences during childhood and early teenage years have on those dependencies. This includes disadvantages regarding social capital formation, first experiences of the world of work (personally and via parents), and non-cognitive skill development.

Current policy efforts are heavily focused on preventing or reducing NEET numbers and increasing rates of youth with at least low-level qualifications, which mainly involves interventions that are timed to engage youth *after* they reach approximately age 15 or 16. This is the age at which one can potentially be classified as NEET and, upon leaving full-time compulsory education, they can also be counted in unemployment and employment statistics. The strategy of waiting until the mid-teenage period before activating any type of employability-development intervention is unnecessarily late and potentially less effective than the alternative of starting some kinds of needs assessment and support at earlier ages. Specifically, there is evidence to suggest that intervention can and should start with early childhood to explicitly work on non-cognitive skill development. Furthermore, there is evidence to suggest that first experiences of the world of work and initial formation of work attitudes and aspirations during childhood or early teenage years are critical.

While it is ideal to start focusing on developing non-cognitive skills during early childhood, many non-cognitive skills remain malleable and have the potential to be improved via intervention during adolescence. The strategy of including some explicit non-cognitive skill initiatives *during early childhood*, particularly for disadvantaged subgroups, has been recommended based on evidence that doing so is a more cost-effective and impactful way to

respond. It may be better than providing intervention to develop non-cognitive skills as a 'last resort' after a young person has become officially unemployed, underemployed or NEET later in life.

While non-cognitive skill formation is key to developing employability, the development of non-cognitive skills is additionally relevant to non-work-related human and social development aspirations, thus making it relevant to other policy interests in addition to employment. Non-cognitive skill development is relevant to becoming socially connected while growing up, participating constructively within society, and developing generic *life skills*, as well as being a critical set of skills that are sought after across the labour market. Having well-developed non-cognitive skills also appears to be relevant to a policy agenda of supporting *wellbeing.* As an example from the New Zealand policy context, a *Child and Youth Wellbeing Strategy* was launched in 2019 with a set of planned actions and success indicators, which incorporates non-cognitive-related concepts such as 'social and emotional skills' and 'self-management'. Non-cognitive skill development is relevant to developing self-awareness, learning to interact constructively with others, learning to cope with life challenges and developing the self-management skills needed to achieve personal goals, *not only* for the sake of performing formalised job roles.

8.3.3   Responses to Being YARLE From the 'Potentially NEET' or Teenage Period into Adulthood

From approximately age 15/16 onwards, youth start to become targeted by programmes and high-level policy agendas that are explicitly focused on improving NEET, youth unemployment, youth welfare dependency, and at least secondary or equivalent low-level tertiary qualification achievement rates. Many programme types and government agencies are involved in targeting youth subgroups in order to contribute towards these outcome agendas. It is common for the same youth to churn in and out of engagement in multiple risk-targeted programmes, and in and out of low-paid jobs over multiple years. Accordingly, many youth who were NEET and low-qualified at one point in time are not considered NEET while they are in second-chance programmes, active labour market programmes or in school but with low likelihood of attaining qualifications and a substantial job outcome upon leaving.

Once youth have reached the stage of leaving school with low or no qualifications, and/or once they have started experiencing persistently limited labour market outcomes, it seems that the strategic foci for intervention should go towards developing non-cognitive skills, arranging work experience opportunities, finding ways to leverage off or make the most of work experiences, and finding other ways to help youth improve their signalling capability and workforce network connections apart from the strategy of gaining low level qualifications as one type of signal.

While it is preferable to intervene during early childhood and early teenage life to prevent the emergence of limitations regarding the key employability dependencies, it is not too late to

intervene and improve some aspects of employability after the approximate age threshold of age 15 or 16, or after youth leave school. The evidence on what seems to work or not work as active labour market programmes, and as second-chance education and training programmes (which include a low-level qualification focus), is highly relevant to understanding what it is that youth in current or imminent states of limited employment often need support with. One key practical strategy for helping unemployed, and low-qualified or unqualified youth to improve their current employment situations is to directly provide job-seeking assistance, work experience opportunities, and individual case management (personally tailored responses and action plans).

Limited development of non-cognitive skills (as types of abilities, behavioural characteristics and attitude concepts) is another key factor that appears to explain *why* some youth are more likely to both leave school with low or no qualifications and to eventually end up with poorer labour market outcomes on average than their peers. Leaving school unqualified is not only an indication of which youth can recall or apply more subject knowledge, or which have demonstrated more technical or academic ability. It is also an indication of whose non-cognitive skills are likely to have so far been less well-developed, perhaps on the whole or in respect to certain non-cognitive skills. Thus, when post-secondary-school training programmes are offered as second chances to gain low-level qualifications, but are not combined with explicit efforts to needs-assess and develop non-cognitive skills, qualification attainment on its own in unlikely to work to help those targeted to gain and sustain employment.

Low-level qualification attainment via engagement in second-chance programmes is not effective on average as a means of improving labour market outcomes among YARLE subgroups who have already left secondary school unqualified. It appears that the lack of a secondary school or equivalent level academic qualification is not the main employability limitation that distinguishes youth who have reached this life situation. However, these programmes vary substantially in terms of their design and outcomes. It appears that some may be effective because of other characteristics regarding programme design or delivery, the labour market context for job placements, the needs of the youth engaged, and especially, the inclusion of work experience and some kind of flexibility to develop personalised programme experiences.

8.4   REFRAMING MULTIPLE POLICY RESPONSES, OUTCOMES AND TARGET GROUPS: WHY MOVE TO YARLE AND EMPLOYABILTY DEVELOPMENT FOR ALL?

High-level policy thinking should explicitly shift to a cross-sector focus on the concepts of *employability development for all*, which includes the intertwined agendas of youth employment outcomes and lifelong employability development, along with recognising YARLE subgroups and YARLE-targeted intervention as a subset of youth employability development policy. The proposal that overlapping YARLE subgroups exist and could be identified based on a range of

common reasons for being at risk or disadvantaged would move policy thinking beyond the narrower foci on improving NEET rates and low-level qualification attainment rates.

8.4.1   Education-Employment Interrelationship Theory and Qualifications: Conclusions

Qualifications are inadequate signals on their own and any power they have to influence employment outcomes is highly conditional.

- With regard to conditions about low-level qualification attainments working to trigger new or better labour market outcomes, it appears that generic, lengthy and education-sector-initiated types of qualifications have a weak effect on labour market outcomes; particularly for youth who are unemployed or already working in the low end of the labour market. However, in highly regulated industries or occupations, the attainment of certain licences or credentials may be compulsory and therefore have a stronger effect on employer decisions to offer someone a job, if there is a shortage of people with such licences or credentials. Furthermore, some types of licences or credentials are in high demand at a certain phase and in a certain labour market sub-context which are not assessed or issued via national qualification systems. The notion of short and often industry-initiated micro-credentials, and the attainment of any credentials that are tightly matched to a specific job role and existing labour shortage, are likely to have a stronger effect on who gets what jobs than traditional low level academic types of qualifications.

- Work experience and non-cognitive skills often may matter more than qualifications in terms of what influences employers' hiring decisions, at least for low-skilled jobs at the entry level or low end of the labour market in particular, which is where many youth gain their first jobs and opportunities for experience. This may also be the case for what matters to get hired in the higher end of the labour market, including so-called graduate or professional occupations. However, more evidence review is needed to validate whether work experience and non-cognitive skills trump the influence of academic qualifications more strongly in low-level jobs, and not as much in graduate, professional or high-end jobs.

  o It seems likely that the relationship between hiring decisions for *high*-level or highly skilled jobs and *high*-level qualifications (university level) is stronger on the whole than the relationship between *low*-level job hiring and *low*-level qualifications (which the majority of a workforce population have within developed economies).

- As theorised interim employability outcomes, qualifications do not appear to drive demand for employees (that is, qualifications do not drive hiring behaviour). This a flaw regarding theory regarding the interrelationship between education and employment. This affects associated policy expectations about what investments in secondary and tertiary

education and training programmes will achieve, how and for which youth, in terms of eventually 'triggering' improved labour market outcomes.

- Having made the generalisation listed above about qualification supply not driving employer demand, there do appear to be specific links between specific qualification attainments and recruitment behaviour. So, it may be more accurate to conclude that specific qualifications can influence hiring rates and candidate selection within specific labour market sub-contexts, industries, or for specific occupations. For example, occupations that are highly regulated industry-wide may mean it is compulsory to have certain qualifications to be employed, such as in nursing or teaching. Official skills shortage lists also illustrate specifics about where the attainment of particular qualifications might be more closely linked to, or able to influence, hiring rates and/or choices of job candidates.

8.4.2   Implications of Broad Theories for Current Education Policy and Qualification Focus

An overview of the concepts of human capital theory, signalling theory, social capital theory and the associated notion of 'social network capital or network dependencies' were introduced in Chapter 4. The discussion within Chapters 5 to 7 drew upon each of these broad theories for their explanatory offerings and limitations in relationship to explaining why certain employability outcomes do or do not occur, and for who or in what contexts. They were also drawn upon because they have implications for understanding why some common employability policy responses work or do not work, or are likely or unlikely to work, and under what conditions, or subject to what else as employability dependencies.

Whether and what types of employment one is likely to eventually gain in life, and what emerges as the nature and extent of one's employment capability, tends to depend on at least several *key employability dependencies*. Qualification attainments, the kinds that are issued and quality assured by national qualification authorities, can be conceptualised as one employability dependency or common influence on labour market outcomes. But the extent of their influence appears to have been exaggerated or overgeneralised in terms of the attention given to qualification attainment agendas as a policy focus. Rather than qualifications, as a theorised type of key employability outcome (interim outcome), other key employability dependencies concern the nature and extent of individual human capital (abilities), social capital, work motivation and particular job outcome intentions and signalling capability. Another cross-cutting employability dependency, one which can affect the status of the aforementioned dependencies, is the nature and extent of an individual's social network connections and the types of interactions, experiences, relationships and outcome or change possibilities that they do or do not afford.

Not all of the broad theories appear to currently be utilised within youth education and employment-focused discussions. Whereas human capital theory seems to have heavily

influenced a rationale for the investment in, and the outcome focus of, secondary and tertiary education and qualification systems it appears that signalling theory receives little mention. Yet, qualification systems and formal qualification reporting seems intended to be a means through which the education sector works to help people to signal their employability to employers. Signalling theory and human capital theory each only deal with one of multiple employability dependencies. However, when taken into consideration *together*, and in combination with theoretical explanations regarding employability's dependency on networks and interactions (or social capital), their combined use and cross-examination provides a more comprehensive explanation of what policy responses may need to recognise or manipulate in order to change eventual employment outcome patterns.

Human capital theory focuses primarily on the need for adequately developed skills in order to gain employment. Conversely, signalling theory emphasises and explains dependencies on getting noticed by potential employers in the first place, and on convincing employers of one's ability and/or preferability as a job candidate, as well as potentially needing to distinguish oneself from many capable candidates within competitive labour market contexts.

Although human capital attainment is an employment outcome dependency, this theory and associated policy responses that have focused on improving human capital (skills or abilities), and on *qualifying* as the key strategy for providing signalling support, is inadequate on its own to change employer perceptions of individuals and their hiring decisions. Explaining that employment outcomes are also dependent upon *signalling capability* (drawing on existing signalling theory), and dependent on the nature and extent of certain types of network connections, and the work-relevant experiences and social capital that networks afford, shows *what else* matters to employability outcomes. These dependencies are not well-recognised within human capital theory or by the frequent priority in at risk-targeted policy on helping youth to at least gain a low-level qualification. Signalling theory, social capital theory and associated theoretical explanation about employability's dependency on social networks and experiences, help to address the shortfalls of human capital theory.

8.5   CONCLUSION

The nature and extent of young people's eventual employment outcomes, and the development of their employment abilities, intentions and overall employment potential over time are phenomena that typically depend on several identified key dependencies, including some that are attributes of the individual and some that are attributes of their networks or wider world context. There is a case for applying a multi-faceted policy definition of what it means to be at risk of limited employment outcomes now or in years to come. It follows that the policy strategies of targeting NEET reductions and low-qualification attainments are unlikely to work on their own to improve the limited employment status that certain youth subgroups enter and often remain in for many years. Furthermore, provision of low-level and generic education and

training is often not an adequate policy response on its own for helping improve labour market outcomes among NEET and unqualified youth who already left school. Certain intervention success ingredients are also required, which appear to include the arrangement of work experience, industry- or occupation-targeted training, and some degree of programme tailoring and personalised support. Some limitations and remaining uncertainties regarding the generalisations made in this chapter are acknowledged in Chapter 10.

9. NEW ZEALAND REPORT: AN EXAMPLE OF USING THE REFINED EMPLOYABILTY THEORY AND EVIDENCE SYNTHESES TO INFORM YARLE-FOCUSED POLICY THINKING

This chapter is a draft of a report that was commissioned in 2019 by New Zealand government agencies, namely the Ministry of Education, and the Ministry of Business Innovation and Employment (MBIE). The report is included within this thesis to illustrate how policy developers and evaluators can practically make use of theoretical generalisations and concept clarifications that were produced as employability theory (as is summarised in Chapter 8).

The report conclusions are supported by the syntheses of evidence in Chapters 5 to 7 and the theoretical conclusions provided in Chapter 8, and they are further supported by additional evidence that is cited within the report itself. The report narrative also reflects the merits of applying the YARLE concept and the identified set of *key employability dependencies* to policy review and recommendations. It shows that applying the concept of there being YARLE subgroups (and applying associated theory about a set of key employability dependencies) can involve expanding upon and incorporating, rather than replacing, the already common policy practice of targeting NEETs and targeting low level qualification attainment.

As an example of a national context, the report illustrates that New Zealand's suite of education- and employment-focused policy responses are typical of what is seen in many OECD countries. Overall, New Zealand's policies, programmes and employability-risk-targeting practices reflect what was introduced in Chapter 4, as an overview of some theories, policy problem descriptions, and interim outcome targeting that a lot of policy thinking and programme design choices reflect. For example, New Zealand is not unusual for its choice of policy responses being reliant on overgeneralised programme theory about education-employment linkages. Nor is it unique for targeting NEETs, and attempting to get NEETs and unqualified school leavers to achieve a low level qualification (equivalent to basic secondary school level). Being NEET and low qualified are not the only employability risk indicators, or the only reasons for being at risk or disadvantaged. The NEET classification does not capture enough of the seemingly *key* previous life outcomes, or current context characteristics, that probably need to be accommodated or changed via intervention, in order to improve labour market outcomes among the most at risk or disadvantaged youth.

The New Zealand report comprises a review of international and New Zealand programme evidence, and cross-sector recommendations about what New Zealand's national suite of policy responses might entail in order to better support labour market outcome improvement for youth who experience, or are likely to experience, long-term NEET status. The report brief included a request to evaluate what works, or what might work to improve years-long labour market patterns for youth who are not necessarily NEET but experience persistently 'low quality', low paid and insecure jobs, or frequent or long periods of being unemployed. This reflects a policy interest in improving labour market mobility, vulnerability and progression over years-long timeframes for youth at the bottom end of the labour market; that is, in addition to helping youth

to get 'any job now' and focusing only on improving outcomes as measured over short durations.

Subsequently, a starting recommendation in the report was to reconceptualise what it is that a combination of New Zealand policies and programmes are theoretically meant to achieve together. Namely, they should not be so narrowly focused on the subset problem of 'reducing or preventing NEET outcomes' and should instead expand the definition of the policy outcome intentions, and of target groups, to that of short- and long-term labour market outcomes for 'YARLE subgroups'. Furthermore, it was recommended that a cross-sector range of policy responses be reconceptualised as *employability development policy*. This would encompass programmes and outcome agendas to improve the development of employability and eventual labour market outcomes for all youth in general, as well as more targeted agendas and programmes focused on improving outcomes for YARLE and NEET subgroups.

The New Zealand 'YARLE report' directly draws upon and refers to much of the evidence that was synthesised within the earlier chapters of the thesis. The recommendations provided in the report for New Zealand senior policy officials—on how to improve the design, targeting or coordination of the country's relevant programmes—clearly draws upon the earlier thesis findings and conclusions about policy implications for recognising and responding to YARLEs.

Note that the evidence syntheses, and the chapter that summarises the new employability theory and programme implications, have New Zealand specific programme evidence included within them. However, the New Zealand evidence that was included is only some of the international evidence, along with broad theories, that were used to inform the review and production of employability theory and conclusions about policy implications. Thus, the main research contribution of a youth-focused employability theory, including YARLE-specific findings and conclusions, is not predominantly based on, or solely relevant to, the New Zealand policy context.

A final copy of this report has been published by the New Zealand Ministry of Education on their website in April 2019. It was commissioned by the Ministry of Education (MoE) and the Ministry of Business, Innovation and Employment, and was reviewed for comment by representatives from other government agencies including the Ministry of Social Development (MSD) and the Tertiary Education Commission (TEC). To ensure that this report was independently authored, in accordance with doctoral thesis requirements, the final draft of the report that was published by the Ministry of Education was not reported here because it included an editor's note and appended data produced by an official at the Ministry of Education (David Earle). However, the draft version of the report that is provided in this chapter is otherwise effectively the same as the final version published by the Ministry of Education.

Not Just About NEETS: A Rapid Review of Evidence on What Works for Youth At Risk of Limited Employment (YARLE)

DRAFT

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Introduction

This report describes what is known and proposed about youth at risk of limited employment outcomes (YARLEs), and about intervention to improve youth employment capability and outcomes, immediately or later in life.[20] It explains implications for New Zealand policy and programmes that are meant to improve employment outcomes, or contribute by changing theorised related outcomes.

Conclusions and recommendations are provided about how to refine the mix, and multi-agency coordination, of responses towards developing young people's employment capabilities and outcomes. The question of how to better connect multiple activities and outcome foci, as a cross-agency response, is discussed. Evidence on the effectiveness of 'types' of intervention is also provided.

The focus was on identifying how to make intervention work better for youth who match a range of risk flags, or who experience poorer-than-average outcomes long term. The outcome agendas, and types of programmes or services, that this report has implications for include but are not limited to secondary and tertiary education and training, social welfare, active labour market programmes (ALMPs), entry-level industry training, and programmes that aim to prevent or target youth who are not in employment, education or training (NEETs).

The timing of intervention is discussed, as well as who or what factors or opportunities to target. While there is a focus on changing outcomes for youth aged 15 to 24, the evidence indicates a need to start from much earlier ages to address certain employability disadvantages or dependencies. A key point is that several factors that distinguish youth as being more at risk of limited employment outcomes than their New Zealand peers (across their working-age lifespan), are intergenerational factors and/or are identifiable from early ages. The programmes and outcome priorities that are normally discussed as parts of New Zealand's 'NEET response' only appear to include those aimed at youth during age 15–24. Some factors could be needs-assessed and responded to earlier or more explicitly, particularly as relevant to work experience and so-called 'soft' or non-cognitive skills.

Work experience and non-cognitive skills are two key employability factors that are highlighted as needing more explicit attention. They are relevant to understanding what matters to improve outcomes for youth who are also likely match other New Zealand risk targeting or profiling criteria; for example, for youth who also leave school with low or no qualifications, and teenagers who become long-term NEETs. Non-cognitive skills are explained in the report and elaborated on in Appendix One.

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[20] Reference to 'limited' employment includes experiencing long or frequent periods of unemployment.

A final section of the report summarises outcome evidence from the family of interventions that are called active labour market programmes (ALMPs). It is listed as Appendix Three. Many of the findings and conclusions from evidence about ALMPs, and from other reviewed bodies of literature, have implications for refining a multi-sector range of New Zealand programmes to work better as a whole.

YARLE: Reframing 'at Risk' Definition and Policy Focus

An aim of this report is to inform cross-agency policy discussions about how to better support youth who are in, and who are at risk of ending up in, *limited* employment outcomes relative to their age peers. Collectively, they are referred to in this report as **YARLEs**.

The working definition of limited employment is proposed to include being unemployed, in minimum wage employment, and/or underemployed for long or frequent periods. It could also include other criteria regarding definitions of short-term or insecure work. It could include criteria regarding jobs that do not provide explicit opportunities for formal on-job training and progression into longer-term or better-paid jobs (for example, being a casual labourer versus being signed up to an apprenticeship).

The YARLE term is a provisional descriptor that would require further cross-agency discussion in order to refine and adopt definitions of multiple medium- and high-risk 'YARLE subgroups'. Virtually all youth face employment risks, barriers or limitations at various stages during their youth and working age lifespan. The youth subgroups of concern fall somewhere along the medium-to-high-risk end of what might be called a YARLE 'risk spectrum'.

Many subgroups overlap in terms of the employability needs or known risk characteristics they have in common. Many of the highest-risk subgroups have multiple 'risk flags' in common; for example, based on what is known about who comes into contact with the Ministry of Social Development (Work and Income), Oranga Tamariki and NZPolice/Ministry of Justice.

Instead of putting emphasis into defining and further dissecting New Zealand 'risk subgroups', **this report focuses on ascertaining 'what matters'** for intervention to focus on, or involve, to directly or indirectly help to improve labour market outcomes for youth. Some of the evidence about first years of work experience attainment, and about developing and signalling non-cognitive skills, have implications for supporting the employability of all youth. However, the focus is on articulating what is relevant to better identify or respond to youth at the medium-to-high end of a conceptual New Zealand YARLE risk spectrum.

By putting forward the YARLE concept, the aim is to expand New Zealand policy thinking. This includes encouraging policy dialogues to be focused on refining or better connecting a 'whole-of-government plan'—including a combination of interventions to support at risk subgroups—rather than reviewing each agency's siloed engagements with them at different periods in their life.

Multiple New Zealand agencies have been **focusing on improving current NEET**, **NCEA 2 achievement**, **youth unemployment and benefit dependency** statistics. However, there are some limitations about only focusing on those statistics as 'the policy problems'. Policy discussions and existing evidence about all those outcome types are very valuable and relevant to what has been conceptualised here as a broader YARLE focus.[21] Indeed, youth who leave school without NCEA 2, who become benefit dependent and/or NEET at particular stages in their life are the bulk of the same youth who could otherwise be counted within medium- and high-risk YARLE subgroupings. However, reports on what New Zealand agencies are doing, or propose to do, to improve these outcomes normally relate to interventions for youth who are currently in the 15–24-year-old age range. What does not seem to get such clear policy attention is a focus on how to also develop the future employability of younger upcoming generations of youth whose needs or risks are identifiable well before age 15; that is, as a decades-long and more preventatively focused investment plan. Such a plan might not call for major new funding or programme designs. It might start as a review of how to better connect or tweak existing funding pools, programme delivery approaches, and the timing or eligibility criteria for access to resources from multiple agencies.

Individual Employability: Dependencies and Definitions

An overwhelming number of **employability factors** can influence the developmental status of individuals' employment capabilities, intentions and end outcomes. However, it is feasible to improve policy identifications of, and responses to, some **key factors**. Key factors are conditions about context that appear to have particularly strong and common links to employment outcomes. Some factors have been grouped and referred to in this section as **layers of context description**, partly to summarise three overall challenges that a whole-of-government response probably needs to address.

The last part of this section details two **key employability factors** that need more explicit New Zealand policy attention; that is, what is sometimes called **non-cognitive skills and work experience**. A stronger focus on recognising and addressing these factors might be a way to

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[21] YARLE represents an interest in improving both immediate and years-long labour market outcome patterns for youth who are already aged 15–24 (and potentially older), as well as intervention for today's younger children.

better support the development of young people's employment capabilities, motivations, and eventual labour market outcomes. Underdevelopment or disadvantage regarding the status of these factors may distinguish what else really puts some youth at relative risk of ending up with limited or no employment outcomes.

Employability Framed as Interim and End Outcomes

Individual employability is framed within this report as a changeable status. The nature and extent of an individual's employability is defined by a combination of their employment outcomes to date, as well as other contextual factors that comprise their employment 'capabilities, intentions, prospects and outcome likelihoods' going forward. Many of the factors that collectively determine individual employability (that is, employment capability and outcomes to date) can be needs-assessed, estimated or indicated, if not measured, signalled to employers and sometimes changed, via interventions.

A mix of New Zealand programmes and high-level policy agendas are meant to work as contributions towards improved employment capability or youth employment outcomes. Some are meant to do so indirectly by improving what could be conceptualised as interim outcomes. For example, increasing rates of youth who gain NCEA 2 is a policy agenda based on the theory that school qualifications are a key interim employability outcome; that is, a key dependency for the outcome type of gaining entry level jobs. What counts as employability-related policy and programmes—including as a cross-sector outcomes focus—could thus be regarded as all sorts of policy agendas and programmes that in various ways are meant to help improve:

a) **end employability outcomes**, that is, labour market outcomes, and/or

b) **interim employability outcomes**, that is, the improved status of factors that are known or proposed to be a strong and common influence on end outcomes.

Formal qualification attainment, such as NCEA, and being 'NEET' are two types of youth employability indicators (about proposed key employability factors) that appear to get the most policy attention in New Zealand. Few other interim outcomes, as theorised indicators of need and/or improvement, get as much attention. It may be necessary to additionally focus on apparent other **key employability factors**, and to develop associated indicators, in order to improve employment outcomes for youth. Doing so might help to develop the employability of most youth but it is suggested in particular to understand and improve outcomes for youth who experience poorer-than-average outcomes.

A diverse mix of New Zealand programmes and services, which involve a range of government agencies and sectors, are collectively treated in this report as pieces of the country's **youth employability development intervention**; that is, as pieces of the whole-of-government

response. What could be counted as part of this suite includes different families or types of programmes. They span multiple sectors and engage youth at different ages and stages in life.

The range of high-level outcome agendas, programmes and workstreams that can be said to count as part of employability development intervention include mainstream education provision; at risk-targeted or foundation education and training; NEET intervention; employment assistance or active labour market programmes; welfare policy and services; and services regarding careers advice, information, guidance and education (CIAGE). While they may simultaneously have unique outcome agendas, what they are meant to have in common is a cross-sector agenda to contribute towards recognising and improving the eventual employment outcomes (or at least capabilities and intentions) of youth. If cross-sector or multi-agency intervention is to become more effective in this respect, it may be necessary to develop a more explicit, shared cross-agency interpretation of 'employability development intervention' and associated 'interim outcome' descriptions.

What Employability Depends On: Layers of Context, Including Key Factors

The description of many of the factors that influence employment capability development, and end outcomes, can be grouped into **three layers of context dependencies**, as listed below.

- Personal factors (**personal context**).

- Network factors (**external context**).

- Employer signalling, competition and labour demand factors (**external context**).[22]

Each layer represents a different way of conceptually framing the factors that employability roughly equates to. Each act as an overarching theme to summarise the nature of issues that are likely to need intervention attention. There can be some overlap in that descriptions about two layers, or 'areas of dependency', might include description about the same type of factor, particularly work experience. Each layer is a distinction about not only what needs policy attention, but also how certain issues might be described or targeted as a policy focus.

At risk-youth-focused intervention in New Zealand currently appears to involve a set of responses to **personal context factors**. Less seems to be done in terms of intervention responses being activated in response to criteria regarding **external context factors**. Some intergenerational or family 'network' factors have been identified as risk flags by New Zealand agencies. For example, MSD identified that having experienced intergenerational family benefit receipt long

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[22] The concept of *employer signalling* factors really includes dependencies about interactions between employers, job seekers and third parties. In this sense it is about employability *change mechanisms,* rather than a static description of current context. However, signalling challenges are listed here among context factors to simplify the report discussion.

term, while being a teenager, is a key risk factor in common to a disproportionate number of those who then go on to become long-term 16–24-year-old beneficiaries themselves. However, the recognition of these types of risk flags (external context) rarely appears to be used as a trigger or eligibility criteria for activating intervention.

Below is a draft list of what and how employability factors can be framed as three layers of context.

Personal Factors (describing the individual or their situation)

Personal factors are relevant to the practices of profiling, identifying risk flags and target groups, and assessing needs. The focus is mainly on describing individuals, or describing their life experiences, outcomes and circumstances in ways that can be attributed to them as the unit of focus. Personal factors include but are not limited to dependencies regarding:

- abilities (sometimes referred to as knowledge, hard skills, and soft or **non-cognitive skills**)

- individual motivation variables (in relation to work generally, and to a job specifically)[23]

- similar concepts regarding behavioural norms, disposition or attitude.

Network Factors (describing relationship, experience and intergenerational issues)

Work experience distinguishes why and who is at risk, when framed as context description. The process of doing work experience is an employability change mechanism. Whether, when and what type of work experience is attained is a key network factor. Other intertwined dependencies and descriptions of network factors include:

- relationships: a key theme linked to intervention effectiveness

- social capital or network capital: a key to employability disadvantage and development

- personal connections to employer networks: a key to who gains what work experience and employer trust (which also serves as a signalling factor)

- intergenerational nature of employability disadvantages.

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[23] The concept of *non-cognitive skills* includes description of variables concerning *motivation*, for example concepts of *conscientiousness* and *grit* have been defined and evidenced as non-cognitive skills in psychology literature.

Employer Signalling, Competition and Labour Demand Factors

Some aspects of what was listed above as network factors overlaps with what is framed below as wider labour market context and 'employer signalling' challenges.

- Dependencies regarding **labour supply and demand.** For example, how many employees are wanted; with what mix of industry-specific and transferable or generic skills and experience; for what hours or terms of employment; in what locations; and at what period in time.

- **Extent of competition** from other interested job candidates. For example, for all jobs in general, or for specific types, levels or locations of jobs.

  - Young people face the general challenge of needing more and better quality experience in order to gain more and better quality experience. They are sometimes competing with older and more experienced workers, especially for higher quality jobs.

- **Employer signalling challenges**. The processes of signalling involves a job seeker attempting to signal 'the right' messages to employers—via a mix of information networks and sources that the employer trusts—about their work capabilities and motivations.

  - Common challenges include translating the relevance of past experiences or training, and getting noticed or known to employers as a potential job candidate in the first place.

  - Some signals may deter employers or trigger doubts about a job applicant. For example, long periods of unemployment, lack of referees, convictions or unexplained gaps in work history timeline in a CV may put off many employers.

Employer signalling often involves a need to:

- not only convince employers that you are capable of doing a job, but that you are preferable compared to other seemingly capable candidates

- be able to satisfy employers' subjective preferences or biases (for example, 'looking and acting the part' for a company's desired image)

- have other people or organisations *validate* certain abilities and *vouch for* your future capability and motivation (formal qualifications are meant to do this but are often not regarded as an adequate signal on their own).

Poorly Addressed Key Factors: Work Experience and Non-cognitive Skills

Further comments are made below about work experience and non-cognitive skills as proposed **key employability factors**. Out of the many factors that are captured within the above three 'layer' descriptions, some challenges regarding work experience and non-cognitive skills stood out as being key to distinguishing which and why some youth experience relatively limited outcomes.

The challenges regarding work experience and non-cognitive skills could be more explicitly recognised in New Zealand policy discourses, and better addressed as an 'intervention outcome focus' for youth who are subsequently at risk of limited employment outcomes. These factors stood out in relation to evidence that was reviewed for this research project as well as additional literature that was reviewed by the report author for other youth employability development and policy research.

Non-cognitive skills

Non-cognitive skills go by many other names, including soft skills. They develop over time as a person's ***usual ways of behaving and interacting***, *and of perceiving and acting towards goals, challenges or opportunities.* They are partly shaped by the nature of interactions with others and by the experiences or feedback that one attains accordingly. Non-cognitive skills conceptually overlap with concepts such as soft skills, traits, attitude, motivation factors, self-management, self-control, conscientiousness, grit and interpersonal skills.

Several New Zealand frameworks and descriptions of transferable skills—or 'competencies', dispositions and attitudes—arguably represent attempts to capture non-cognitive skills using other terminology. For example, what is described within the *New Zealand Key Competencies*, and the Ministry of Education's *Employability Skills Framework* greatly overlaps with various non-cognitive skill descriptions. The latter describes them at a relatively 'foundation' level of development, and as explicitly relevant to 'behaving' or 'performing' as an employee.[24] Speaking and Listening Progressions within the *New Zealand Adult Literacy Progressions* conceptually overlap with some non-cognitive skill dependencies regarding the ways in which one communicates with others; for example, what employers may call interpersonal or verbal communication skills. It may be said that New Zealand has made several attempts to emphasise the importance of non-cognitive skills but has done so via a string of somewhat disconnected frameworks and definitions. It is arguably difficult but not impossible to report on indicators of

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[24] See http://www.youthguarantee.netnz/vocational-pathways/employability-skills/employability-skills-framework

young people's non-cognitive skills, including in relationship to the information interests of recruiting employers.[25]

Employer surveys have shown the high value placed on many types of soft or non-cognitive skills, although employers use other names for these types of 'skills and attitudes'. They are relevant to low-paid and high-paid (or higher skilled) occupations. Along with work experience, they are often ranked above academic qualifications in employer surveys.[26]

There is a recent international body of evidence that connects non-cognitive skills to eventual labour market outcomes, including longitudinal studies. Associated literature:

- links both labour market outcomes and educational outcomes to measures of non-cognitive skills, including measures taken from childhood

- gives clues about when, how or whether these skills can be changed via intervention (they can in some circumstances but mostly during childhood and adolescence)

- is currently limited in its identification and validation of what makes for effective intervention design and implementation (for which youth or circumstances)

For more information see *Appendix One: Supplementary Notes on Non-cognitive Skills.*

Work Experience

The relevance of work experience, to interim employability and end employment outcomes, can be classified in different ways.

- The influence of work experience on outcomes can be described as a key **change mechanism**, one through which people's employment capability, motivations and/or official employment status can be changed. Description and explanation about the act of engaging in work experience is relevant to the purpose of developing *change theory* for interventions.

- For the purposes of assessing or identifying key employability risk factors—as potential intervention support needs—the nature of the **past and present work experience** that an individual or type of individual has attained pre-intervention can be described.

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[25] Comments here are based on the report author's previous research into non-cognitive skill concepts, labour market outcomes and New Zealand education policy.
[26] UK Commission for Employment and Skills, 'Employer Perspectives Survey 2014: UKCES Slide Pack';
Nickson et al., 'Soft Skills and Employability'; Victoria University of Wellington, 'Employability Skills Survey'.

- A lack of past and present work experience, or not having the required type or amount of work experience, or having negative employer feedback from past experiences, act as **employer signalling problems** for many youth. Lack of past employers who are willing to be **job referees** is another common risk factor, and a by-product of poor or no work experience.

Also keep in mind that employers use work experience, and feedback from referees, as key **signals for judging non-cognitive skills**. They may also use it to judge so-called hard or cognitive skills and knowledge. However, it is non-cognitive skills that are comparatively more difficult, but not impossible, to signal and detail in standardised ways. Current New Zealand qualification practices at secondary school level involve highly standardised ways of reporting (describing) people's abilities. Employers do not often seem to be satisfied with formal qualifications alone, as the only type of signal or information about what someone is capable of, and for what contexts or purposes.

Past work experience is a key factor that employers use to estimate the nature and extent of an individual's current employment capability (read their predicted performance capability and motivation for jobs). Variables regarding work experience distinguish why and who is more at risk (or disadvantaged) than others within a competitive labour market context.

The attainment of work experience should be given more attention as a programme outcome focus. It could be useful to focus on more explicitly via education or career support services for a wide range of youth, given that the attainment of a first few years of progressively more challenging and high-value experience is a struggle for many youth who end up in minimum wage work. That said, it particularly stands out as a major employment barrier and intervention support need for youth who leave school with low or no qualifications, and for youth who come from family backgrounds of limited 'social capital'. This includes having limited personal and family network connections to potential providers of work experience. It is partly a matter of what types of work experience a young person becomes exposed to while growing up (personally or vicariously via family experiences), and whether and what work goals their family, peers or programme providers encourage them to aim for. Even if youth have the motivation to actively seek early work experiences, what they are likely to be able to attain seems to be highly dependent upon the personal employer or workplace connections they or their family have. A key disadvantage exists in terms of 'who they don't know'.

Not having past employers who are willing to act as **referees** is a key associated barrier for many youth who become long-term or frequent benefit recipients. For many youth who churn long-term between benefit dependency and unskilled odd jobs after leaving school, it is also a common problem that past employers are unreachable or unwilling to make themselves available for contact as a referee. Sometimes the young person does not know up-to-date contact

details for a past employer or supervisor and/or they do not think that an employer would be bothered to act as a referee for them. This is potentially not only for cases where the young person expects that the employer would give negative feedback about them. It appears to also be a problem that employers often do not know casual workers personally well enough to be bothered, or capable of vouching for the past employee's performance (for example, casual labourers in high turnover, large teams of temp workers). These observations are based on the report author having provided individual job seeking and coaching services to hundreds of youth beneficiaries, via Wellington Work and Income offices. New Zealand government agency research regarding this issue could not be found.

The act of undertaking work experience also works as **a key employability change mechanism;** that is, a type of network connection, and interactions, through which a young person's employment capability (skills and experience) and motivation orientations can be changed. Classroom-based experience and a generic secondary-school-level qualification do not appear to be an adequate substitute for work experience. Not if the aims of intervention are to influence what a young person can do and/or wants to do for work, and to influence employer perceptions and judgements about a young person's capabilities and job motivation. Through work experience, the nature and extent of an individual's capabilities, and likely attitude and dedication to jobs (motivation factors) can become:

- further developed

- better recognised by potential employers

- better recognised by a young person about themselves (including teaching them to self-reflect on performance and experiences)

- better 'signalled' to future employers (including the young person learning to translate the relevance of past work experience for future job applications).[27]

Who Are 'At Risk' or YARLE Subgroups?

It is difficult to classify and quantify 'YARLE' risk subgroups as if they are all discrete sets. In reality, there are many overlapping groups.

- It may be useful to develop a list of risk-, opportunity- and needs-assessment criteria.

- It might not be particularly worthwhile or feasible to attempt to completely separate subgroups from each other; then 'chop up' and target interventions accordingly, as if the needs of each subgroup are different from all others. Furthermore, youth may only match

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[27] This is not to say that work experience always triggers these desirable changes to people's employment capability or prospects. As a *change mechanism* it is a generalised purpose and type of interaction through which positive, negative or no change to employability/employment status can potentially be activated.

some of the criteria for a subgroup definition at a given snapshot in time. For example, many move in and out of 'NEET status', while matching multiple other high-risk profiling criteria.

A more detailed breakdown and definitions of New Zealand 'YARLE subgroups', their head counts, and their locations or other demographics could be developed on request.[28] There is strong evidence that certain profiling criteria or 'risk flags' distinguish certain New Zealand youth as being relatively at risk of poor employment outcomes over years-long periods.

- There seems to be more than one conceptual subgroup who could be said to be at much higher risk than most youth. Those youth comprise overlapping subsets who match varied combinations of criteria that are known to be linked to limited labour market outcomes.

- Some common 'risk flags' or characteristics stand out among New Zealand youth who experience the poorest labour market and welfare dependency outcomes. Some describe the individual and some describe their family, household or socio-economic circumstances.

  o Many youth are **high risk because they match more than one known risk flag** or profiling criterion. Their needs or employment barriers are often multiple. Some common combinations of needs or barriers (or associated risk flags) have a compounding effect on employment prospects.[29]

Known Risk Flags and Targeting Practices in New Zealand

The MSD has extensive data on who is already, and who is likely to become, the most at risk of frequent or long-term benefit receipt. This is based on 'risk flags' regarding official profiles of youth well before they are of age to become eligible for benefits. The Department of Corrections, Ministry of Justice, NZPolice and Oranga Tamariki (Ministry for Children) also have a great deal of data on the risk flags, and numbers, of youth subgroups who come into contact with their services.

Some risk flags that are disproportionately common to New Zealand youth with poorer-than-average labour market outcomes are as follows. They are commonly used as eligibility criteria for a range of at risk-targeted programmes. Gaining NCEA 2 (or credits towards NCEA)—and moving from 'NEET' to 'not NEET' status—are subsequently prioritised as the interim outcomes that many of those programmes are designed to focus on.

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[28] David Earle (Ministry of Education) elicited insights from the Integrated Data Infrastructure (IDI) which could be used to help distinguish multiple YARLE subgroups or risk characteristics.
[29] Consult Eyal Appatov (Oranga Tamariki) for quantitative evidence that indicates some 'compounding effects' in the New Zealand youth context.

- Leaving school without NCEA 2.

- Being currently NEET—or about to leave school and deemed likely to become NEET (and with low qualifications).

- Being NEET for long periods while aged 15–24, especially during ages 15–17.

  - A limitation of the NEET measure is that it captures many youth who are relatively less at risk of long-term unemployment or limited employment. Most New Zealand youth are NEET at some stage during their 15–24 year lifespan.

Focusing only on the above mentioned 'employability risk flags' appears to have led to a New Zealand policy emphasis on 'reducing NEETs', 'increasing rates of youth with NCEA 2' and 'reducing youth on benefit'. These are not necessarily misguided agendas in themselves but may not be enough on their own to more effectively influence employment outcomes for disadvantaged (or medium to high risk) subgroups. For example (and generally speaking), getting unqualified school leavers to attain NCEA 2—and getting NEETs into foundation education or training (thereby making them not NEET)—does not appear to be helping them to later progress to the point of gaining NZQA Level 4+ qualifications. Nor does attainment of NCEA 2 after leaving school (via what are usually branded as at risk-targeted programmes) appear to have the same effect on labour market outcomes as attaining NCEA 2 while at school. Some additional 'employability development needs' are presumably contributing to these patterns.

Below are additional risk flags that are linked to youth who experience some of the poorest labour market outcomes (including periods of unemployment and welfare dependency) throughout their working age lifespan. Note that some of them describe the young person's family or types of environment that they experience (circumstances), rather than describing the individual (for example, their own attitudes, life outcomes, current official status).

- Experiencing **intergenerational benefit dependency** as a teenager in a family that received a benefit.

- **Receiving a benefit** at any stage while young (aged 16–24); especially during age 16–18/19.

- Being a **young parent** (at 16–19 but also for some groups during age 20–24).

- Contact with CYF/Oranga Tamariki during childhood or adolescence.

The infographic below from MSD was attached to a ministerial briefing paper (dated August 2018), for ministers interested in developing a cross-sector programme of work 'for NEET

youth'.[30] It shows four key risk flags (on the left side) that are disproportionately in common to New Zealand 16–24-year-old youth who received a main benefit in 2017. Youth who match one or more of these risk flags are known to be at high risk of long-term welfare dependency throughout much of their youth and adult working age lifetime. They comprise a large chunk of the New Zealand high-risk YARLE subgroups. MSD client records do not capture all of those in the New Zealand youth population who may face multiple or strong and generalisable limitations to their employment prospects. However, they do represent many of the overlapping profile subgroupings that could be classified as the 'hard core' and the *highest risk* YARLE subgroups.
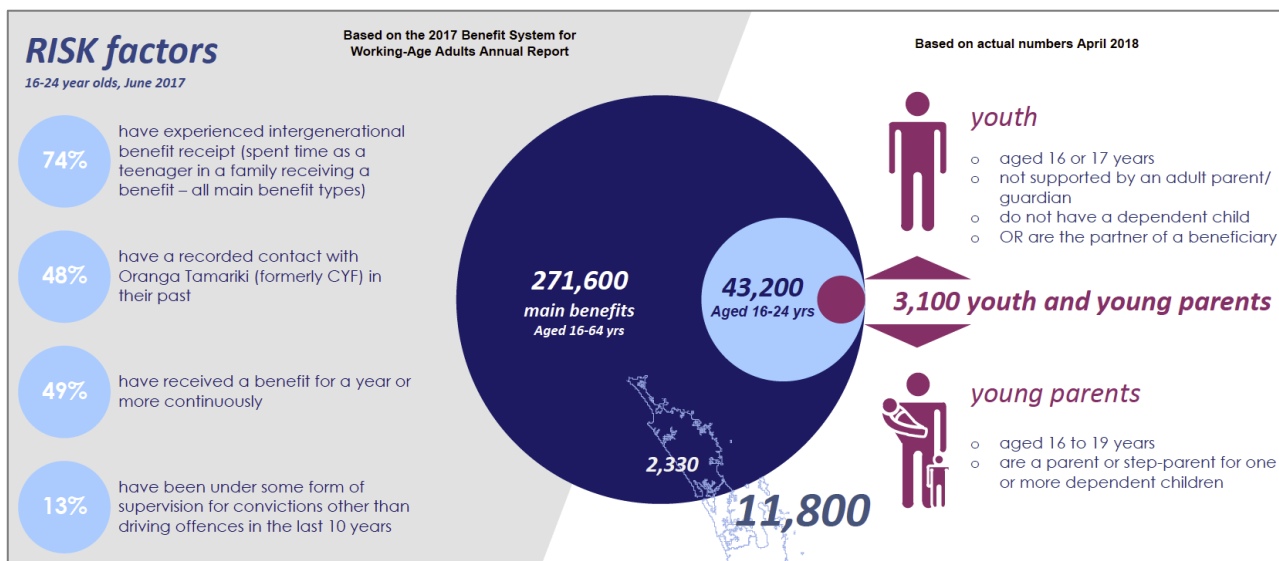
Gaps in New Zealand Agency Knowledge

These comments on gaps in New Zealand agency knowledge or focus should be read in conjunction with the section headed 'What Needs Policy Attention in New Zealand', below.

Work Experience and Job Referees

Government agencies do not appear to consistently collect data about the status of a young person's work experience (including history of past jobs), and about their ability to supply job referees. At least MSD does not do so in a way that the data can be extracted and aggregated from MSD's databases for anonymous insights (according to Marc de Boer, Principal Analyst at iMSD).

Little is officially known about the nature or extent of past work experience that young people have attained, or that they lack, even for youth who are registered with Work & Income as active job seekers.

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[30] New Zealand Ministry of Social Development, 'Developing a Joint Work Programme Focus for NEET Youth'.

MSD (Work & Income) does not consistently record details about the past work history of job seekers, nor about whether a job seeker was able to supply referee contact details, not to mention the quality of referees provided.

It seems that Work & Income only occasionally record data about a young person's ability to supply job referees, on an ad hoc or discretionary basis.

Driving Licence

Not having a full or restricted driving licence, and/or not having own transport, may or may not be strong employment barriers or enablers. It might only be the case only for some youth, locations, job types or other conditions regarding context. Some conclusions have emerged regarding New Zealand's MSD-funded driver licence interventions, and regarding getting licences as a proposed employment enabler for young, mostly NEET mothers.[31]

Caregiving

More research is needed to better quantify and understand the potential intervention needs of New Zealand youth who are providing care to their own children. Perhaps, more importantly, there is a need to better recognise, describe and quantify youth who are committed to caregiving for people other than their own children (or their officially recognised dependents). Anecdotally, this is likely to be a significant number of young Māori and/or Pasifika youth who are trying to meet offficially unrecognised caregiving duties, while also trying to undertake education and training, paid jobs or comply with job seeking obligation if they are receiving certain benefits.

Mental Health and Disabilities

Existing knowledge about employment intervention specifically for disability and mental health consumer subgroups, and about their needs, could not be adequately unpacked within the limits of this research assignment. More work is needed in this space to compile a cross-agency knowledge base about how to support these subgroups effectively, and with what outcome focus for which subgroups or circumstances. It may be worth investigating what is known about the effectiveness of 'mainstream integration' or 'wrap-around support' initiatives, compared to targeted programmes that are exclusively designed for mental health or disability subgroups. What New Zealand programmes or providers do to assess needs, and connect the provisions of

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[31] de Boer and Ku, 'Effectiveness of Driver Licensing Programmes Funded by the Ministry of Social Development in 2014 and 2015: Evaluation Report'; Ministry for Women, Potter, and Macky, 'Mostly-NEET Through 2015: IDI Insights by Gender and Other Important Policy Groupings (Provisional Results Only, LEW 2018 Forthcoming)'.

services to these youth, may be worth reviewing. Keep in mind that the needs and employment prospects of these young people are likely to be diverse and may require fairly personalised case management and action plans.

The UK has recently been implementing innovative and large-scale interventions to support the employment of people with mental health and disability barriers. The report author met with Anita Hallbrook, who is currently leading the implementation of the UK Government's *Thrive Into Work, Individual Placement and Support (IPS) Service Trial*. It is the largest IPS trial of its kind in a Primary and Community Services setting, with a budget of £8.4m. They are conducting formal research into its effectiveness. It includes a trial of GPs referring mental health consumers to job coaching services, rather than welfare office case managers. See: www.wmca.org.uk/news/84m-funding-to-launch-thrive-into-work-in-the-west-midlands/

What Needs Policy Attention in New Zealand?

A *list of conclusions and recommendations* are provided in this section for New Zealand policy actors to focus on, followed by *other notes* as detail about some of the conclusions. This section is intended to aid thinking about next steps towards an improved cross-agency response to youth who already are, and who appear most likely to become, at risk of limited employment outcomes. As part of the basis for the conclusions and recommendations, a summary is first provided below about evidence that was reviewed on the effectiveness of active labour market programmes (ALMPs) for at risk youth.

ALMP Interventions: Key Findings

Appendix Three: ALMP Intervention Evidence is a more detailed synthesis of evidence about 'what works' regarding the family of interventions called active labour market programmes (ALMPs). It is based on a rapid review of existing outcome evidence about ALMPs, including several recent meta-analyses. Some ALMPs target youth exclusively and others target youth or adults. Most target groups who have already become unemployed or vulnerable members of the workforce. Below is a summary of key findings.

Common 'types' of ALMPs are listed below in order of their effectiveness, as broad generalisations.

Type of ALMP	Synthesis of Findings
Job search assistance	most effective or effective
Work experience or on-job training	most effective or effective
Subsidies, and public and private forms of job creation	mixed effectiveness
Education and training programmes	ineffective in general, sometimes harmful

Education and training is the most ineffective type of ALMP for at risk youth, at least when it is not explicitly combined with other types of intervention activity (for example, job search assistance, work experience, on-job training). However, important caveats apply to this finding and it is a generalisation about a very mixed bundle of programmes and target groups, as is unpacked in more detail in Appendix Three. It is based only on evidence about the types of 'education and training' that are classified as ALMPs. Being a current benefit recipient, unemployed or at least having left school are usual targeting criteria for ALMPs. They normally target adults and/or youth aged 15 or older. Findings and conclusions in Appendix Three might also apply to education and training programmes that target youth earlier or more proactively (that is, before they reach this age or unemployment status), but they are based mainly on ALMP outcome evidence.

Characteristics of Effective Education and Training ALMPs

Of those education and training ALMPs that were found to be effective (in terms of effect on labour market outcomes) they had the following characteristics in common. These were identified by multiple sources.

- Having a work experience or on-job training component (a key success characteristic).

- Combining with job seeking assistance.

- Not making academic outcomes the only 'key performance indicator' for providers, or the only programme outcome focus or success measure.

- Being tightly targeted to the needs of a certain group.

- Being aligned to specific skill shortages for identified industries or locations.

- Including a range of supports or activities that holistically address multiple needs or barriers.

  o Individual needs assessment, and semi-tailoring of individual plans or programmes.

  o Pastoral support and personal coaching, mentoring or case management concepts are relevant here.

List of Conclusions and Recommendations

Below are some summary conclusions and recommendations for New Zealand cross-agency consideration. They are based on the rapid review of evidence that was conducted for this report; previous literature reviews conducted by the report author for her PhD thesis (which closely

aligns to this report focus); and over 15 years of the report author's experience as a provider of New Zealand at risk-targeted programmes.

1. **Intergenerational factors** act as key employability risks, disadvantages or advantages. This happens especially in relation to gaining social network capital and work experience, and non-cognitive skill development.

    a. Youth may not be able to overcome intergenerational disadvantage without intervention that focuses on developing, compensating for, simulating or otherwise responding to these disadvantages.

    b. Parent or wider whānau engagement may be critical to improving some high-risk subgroups' employment prospects, whenever it is feasible to engage them.

    c. Examples of successful education or employment intervention for **Māori and Pasifika** youth subgroups are linked to the strategy of engaging parents or wider whānau but this strategy may also be effective for other youth.

2. **Keep focusing on young parents** who are, or are at risk of becoming, NEET, low qualified, beneficiaries, and those who move in and out of caregiving, low paid and part time work.

    a. Also consider providing forms of support directly to **children of long-term beneficiaries.** Find ways to be proactive about countering intergenerational risks.

    b. Focus on **young mothers** who have been 'mostly NEET'. Interventions have been effective for them and it is a way to invest in two generations of employability risk.[32]

3. Regarding the most at risk:

    a. Consider how to better connect or semi-tailor intervention activities/combinations. For example, might it involve a years-long individual case management plan?

    b. A New Zealand cross-sector response toward improving outcomes among the typically highest risk youth might work better if it involves **fewer, longer and deeper (or more holistically focused)** service provisions. This has implications for the design of case management, educator, 'mentor' or coaching roles, including whether anyone stays on with a young person while they move between other programmes or employment/education/welfare status.

    c. Many children and teenagers in **contact with Oranga Tamariki, MSD, or Police or Corrections** are the same overlapping high-risk subgroups, and are identifiable

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[32] Ministry for Women, Potter, and Macky, 'Mostly-NEET Through 2015: IDI Insights by Gender and Other Important Policy Groupings (Provisional Results Only, LEW 2018 Forthcoming)'.

well before the 15–24-year age period. Consider risks and opportunities for more proactively engaging these youth well before adolescence.

4. Non-cognitive skills:

    a. Start earlier, needs-assess, and coach or give feedback about them to individuals explicitly.

    b. Consider what is and is not being done to help with employer signalling challenges. Revise what agencies or providers already do—and could do—to improve the recognition or reporting of indications about these skills.

5. **Work experience**: Do more to help 15–24 year olds gain and/or be recognised for relevant experiences. However, first analyse lessons learned in more detail about what intervention approaches work, for what purpose and why, and what to count as work experience.

6. Regarding signalling and translating individual capability to employers, as relevant to jobs:

    a. Revise how or which intervention supports this challenge for youth, besides using NCEA as one generic signal of basic work-readiness.

    b. Work experience is also relevant to signalling capability specifics to employers.

7. Consider using indicators or assessments of **individual motivation status or 'attitude'** as a basis for classifying different risk subgroups, and for matching different responses to them. Motivation status might be assessed and estimated in relation to goals such as 'getting any type of work as soon as possible', or in relation to getting particular jobs.

    a. The potential effects of 'sanctions' for different target groups is also relevant to the issue of matching responses to current motivation status, or as triggers of change to motivation status (positive or negative).[33]

8. Compile agency knowledge and research insights about employment for youth who face **mental health or disability** barriers. This could include lessons from some large-scale initiatives that are underway in the UK (led by the health and welfare ministers), as well as lessons from the New Zealand context.

9. **Promote industry training or apprenticeship options to youth with NCEA 2** but not University Entrance, while they are in low paid jobs? Do so in personalised and direct ways?

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[33] Martin and Grubb, 'What Works and for Whom'.

Other Notes

Intergenerational Nature of Many Risk Factors

Much of what distinguishes the youth who are most likely to end up with limited employment outcomes in adulthood, compared to their their peers, **is intergenerational in nature.** Some of the intergenerational disadvantage pertains to either negative or limited states of the young person's own educational and employment/unemployment experiences, or their relationships with contacts from the world of work (workforce networks). Furthermore, young people's attitudes or motivation towards education and employment, and their eventual employment experiences later in life, have also been linked to those of their parents and to other risk flags that describe parents' circumstances.[34] This relates to the concept of *network capital* or *social capital* as a key influence on employment outcome likelihoods. Explicit intervention may be needed to help some youth overcome intergenerational disadvantages, not just in terms of financial disadvantage but social capital disadvantage; including in relation to getting more or better first experiences of work.[35]

Timing of Access to Interventions and a Cross-agency Policy Focus on Transitions

When the term *youth transitions* is proposed as a cross-agency or high-level focus it appears to result mainly in multiple agencies developing interventions that target the same youth subgroups but engage them strictly at different times and as separate intervention delivery relationships. The whole-of-government response to youth who are known to be at risk (often for multiple reasons) ends up involving siloed and sequential intervention provisions; including multiple short or narrowly focused relationships with case managers, educators and other service providers.

Cross-agency interests in improving NEET outcomes is complicated by the fact that 'NEET' defines an outcome status that agencies are meant to prevent. It does not describe the many other types of risk flags or 'interim outcomes' that indicate who is likely to become repeatedly and long-term NEET. It is not the clear responsibility or mandate of certain agencies to provide support to youth who match multiple known risk flags *unless and until* they transition into this negative education or employment status. Furthermore, while being in foundation-level education and training (and thereby not NEET) may be working to address some employment barriers, this outcome status may be temporarily masking the problem of other key employment

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[34] Caspi et al., 'Early Failure in the Labor Market'; Heckman and García, 'Social Policy'; Loughlin and Barling, 'Young Workers' Work Values, Attitudes, and Behaviours'; Ministry for Women, Potter, and Macky, 'Mostly-NEET Through 2015: IDI Insights by Gender and Other Important Policy Groupings (Provisional Results Only, LEW 2018 Forthcoming)'.

[35] As an example, Oranga Tamariki is working on a *supported employment pilot* to understand the needs of care experienced young people in employment, and how they can be supported to access high-quality work experience opportunities. A report on lessons learned will be ready mid-2019.

barriers; that is, barriers that are not really resolved by the outcome focus on getting qualified and enrolled in foundation education and training.

An alternative and potentially more successful approach towards supporting the most at risk youth might involve relatively **fewer, longer, deeper case management, coaching or service relationships**. It might also involve other ways of making combinations of intervention resources, activities or assistance—from potentially more than one government agency— accessible to a young person:

- at the same time (for example, allowing simultaneous enrolment in two services)

- for a period after moving from one official status to another, or for longer (for example, as a settling-in phase to help adapt to new work, education or other life environments)

- more preventatively and sooner in the life of youth who match known risk profiling criteria (for example, activating needs assessments or access to extra support for non-cognitive skills development—or for support to access work experiences—starting before age 15, or before becoming NEET or unemployed again).

For the most at risk youth, it may be worth exploring how or what kind of case manager or coaching role is feasible to *travel with them* from the beginning to the end of a transition phase. For example, the transition of leaving school with low or no qualifications is a high-risk transition. Yet no role exists to provide a wide range of pastoral, advocacy, job seeking, or other coaching and troubleshooting support to these young people *throughout* the years before and after leaving school (for example, from first non-achievement of NCEA to the first six months of employment or unemployment after leaving school). Such a role might be funded by more than one agency or funding pool, and could involve the 'coach' working to connect the young person, and their range of complex needs, to a range of other services or opportunities. This is an idea that would need experimentation, not an evidence-based conclusion. Programme eligibility criteria, including rules about not simultaneously accessing intervention from multiple funding pools, might need to be revised accordingly.

At least two recent New Zealand attempts have been made to design intervention with more flexible eligibility criteria so that it can engage youth while they are enrolled within two education subsectors, and they represent attempts to cross boundaries between government agency mandates (that is, not waiting for a switch in official status to happen before the next agency engages a person). One is **The Dual Pathways Pilot**.[36] Another is the **Youth Services Programme** (including a Young Parent and a NEET programme). There may be lessons to learn from these programmes.

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[36] See https://www.tec.govt.nz/funding/funding-and-performance/funding/fund-finder/dualpathways-pilot/

It may be effective to **time the triggering of some intervention to match certain life experiences**; that is, those that appear to often act as risk-triggering or opportunity-triggering events. This might be done instead of, or in addition to, other interventions being triggered by someone moving from one official education, employment or benefit status to another.

Certain life experiences or events may work as **time-sensitive windows of intervention opportunity**, **or as make-or-break points**. Behaviour change theory is relevant to this point. The chances of influencing, maintaining or improving a young person's work-focused behaviours, attitudes and goals is sensitive to the timing or occurrence of certain life experiences. These experiences do not always relate to a change from being the direct responsibility, and intervention candidate, of one government agency or provider to another.

Examples of what appear to be time-sensitive windows of risk and/or opportunity are listed below. Some but not all currently trigger a change to the interventions New Zealand youth are eligible for. Note that intervention to respond to these flashpoints does not necessarily mean a need for a new 'programme' to be designed. It might instead involve needs-assessment, and activation of eligibility, for wrap-around or supplementary services; for example, while being engaged in mainstream education programmes.

- **Becoming a parent.** This is a known risk factor when also NEET, benefit dependent, low qualified, or youth aged. However, it also appears to often trigger positive changes to some young people's motivation to up-skill, or to gain more or better employment. Some 'education and training' ALMPs work well in particular for welfare-dependent sole parents, females and young mothers.[37]

- **Receiving typical types of 'failure feedback'** as relevant to getting employed or qualified, or learning.[38]

- **Being cut off from Oranga Tamariki** support services and monitoring, and leaving care provision, simply due to age.

- **Transitioning between education organisations**, across all levels and types of education provision. This importantly involves losing and starting key support relationships.

- **Surviving a settling-in phase** upon starting a new job (also involves new **relationships**).

The suggestions provided above are based on the theory that overall intervention for many of the most at risk youth is likely to be more effective if some of it is provided sooner, and if multiple risk factors or needs are addressed intensively and simultaneously. In other words, do

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[37] Martin and Grubb, 'What Works and for Whom'; Ministry of Social Development, CSRE, 'Evidence on Training Opportunities and Related Training Programmes'.

[38] E.g. a cluster of job application rejections (especially to get first jobs?); receiving 'not achieved' NCEA or other education results; losing a first job rather than choosing to leave; adapting to the experience of months of unemployment as 'normal life'.

not ration out or silo the provision of services or resources for these young people, and include more preventatively focused intervention in the mix where possible. Some of the reviewed research indicates that this overall approach can produce greater economic return on investment, or savings. This is partly because changes to 'risky or antisocial' behaviours, attitudes to work, and more general traits regarding self-motivation, self-control and social skills (read non-cognitive skills) can be easier to change earlier in life or before certain negative outcomes are experienced.

Entering Full Time Work with NCEA2 but not University Entrance: Apprenticeship Candidates?

School leavers who gained NCEA 2 but not University Entrance seem likely to fall into what could be loosely called 'medium risk' YARLE categories. Unless they gain higher qualifications— or formalised on-job training that is intended to prepare them for better paid jobs—it is difficult for these youth to compete with qualified (sometimes overqualified) and more experienced applicants for better-than-minimum-wage jobs.

This group (or groups) seems to be left alone by New Zealand agencies while they have left school and entered the workforce. They only become 'picked up again' if and when they go onto a benefit, and if and when they enrol themselves in tertiary-level education and training. While employed full time, they are not eligbile for most ALMPs. They are technically not eligible for most *foundation* tertiary training programmes (being mostly focused on NZQA Level 1–2 qualifications).

Apprenticeships or industry training may be well suited to these youth. It may provide them with achievable and clearly mapped opportunities for progression. Anecdotal evidence suggests that many would not know how or where to get started to connect to a particular, or any, industry training opportunity. They may need help to identify an industry skills shortage or opportunity, or support to identify and approach employers to request opportunities.

There does not appear to be much happening in terms of government agencies directly reaching out to these youth, say with direct marketing strategies. Examples of outreach efforts might exist in the form of TEC's initiatives to provide career support services (that is, what used to be carried out by CareersNZ). However, no direct marketing initiatives are known to this report author. This may be worth exploring, given that *currently being employed* is both a positive signal to potential employers of apprentices and indicates that someone currently has at least a basic level of work *motivation* to leverage off.

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Read this reference list in conjunction with the **Annotated Bibliography**, which is attached to this report as a spreadsheet

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Appendix One: Supplementary Notes on Non-cognitive Skills

Relationships between measures of non-cognitive skills and both education and labour market outcomes are significant, and this is backed by a large body of outcome evidence mainly from the fields of psychology and labour market economics. However, the term non-cognitive skills is not widely known or referred to by employers, and it only tends to be recognised within pockets of the education sector (educational psychology and early childhood education).

Non-cognitive skills are one key *employability factor* that matters to all job seekers but stands out as a possible key barrier or area of intervention need among youth who match other risk profiling criteria (for example, those who leave school with no qualifications). It is emphasised as a key factor in additional literature that has been intensively reviewed by this report author. Yet, it seems to be either overlooked within studies of ALMP outcomes, and within evaluations of New Zealand ALMPs (or MSD-administered programmes) or acknowledged but set aside with a note that little is known about how ALMPs might address this factor effectively.

Key points:

1. **Non-cognitive skills** significantly affect individual labour market outcomes. Measures of them are strong predictors of education and labour market outcomes.[39]

2. Non-cognitive skills **can be improved via intervention** such as education and training, especially during early childhood and into adolescence. Multiple studies support this claim, even though these skills—in the sense of 'traits'—are partly genetically inherited, and otherwise tend to stay stable as years-long behavioural norms.[40]

   o Non-cognitive skills are **still malleable during adolescence**, whereas cognitive skills only tend to be malleable before adolescence. However, it is preferable to focus on developing both starting from early childhood.[41]

3. **The timing of intervention activities** to improve non-cognitive skills appears to be key to their potential to have positive effects. It is unclear what else is a key dependency or characteristic of intervention to develop these skills, and for whom and what end-outcome purposes, although some clues exist in the literature and in programme examples.

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[39] Duckworth and Seligman, in ' inworth and Seligma a/funding/funding-and-performance/funding/fund-finder/du, found that non-cognitive skill measures predict academic achievement even after controlling for socioeconomic variables, including demographics, school attendance and home educational material.
[40] Heckman and Kautz, 'Fostering and Measuring Skills'; Kautz et al., 'Fostering and Measuring Skills: Improving Cognitive and Non-Cognitive Skills to Promote Lifetime Success'.
[41] Kautz et al., 'Fostering and Measuring Skills: Improving Cognitive and Non-Cognitive Skills to Promote Lifetime Success'; Heckman and Kautz, 'Fostering and Measuring Skills'.

- o Some early childhood programmes have improved the non-cognitive skills and adult labour market outcomes of socioeconomically or socially disadvantaged children, relative to comparison groups.[42]

- o *Soft skills (non-cognitive skills) beget hard skills, and lay the foundations for later learning.*[43] Said another way: the development of non-cognitive skills improves the potential to develop or use cognitive or technical skills. Non-cognitive skill development involves learning to be a self-motivated and self-controlled learner (learning to learn).

- o The earlier in life a string of non-cognitive skills interventions start, the greater the economic return on investment is likely to be. Investment should start from early childhood as a critical period. James Heckman and co-authors provide a strong economic argument and evidence for this.[44]

4. There is a need to better identify how to help young people with the challenge of **signalling or translating indications about their non-cognitive skills to employers.** Traditional school qualifications tend to be designed to explicitly signal hard (technical or cognitive) skills and subject knowledge. They may implicitly also provide signals about someone's non-cognitive skills, such as grit or conscientiousness towards achieving academic or career goals. However, employers look to additional sources and types of information (signals), such as feedback from past job referees, to guess the extent of their non-cognitive skills.

5. It is arguably **difficult but not impossible to define and report on measures** of non-cognitive skills—or indicators or signals about them—in ways that could serve New Zealand education and employment policy applications. This can be explained further on request.

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[42] Examples of such programmes and evidence can be described in more detail on request.

[43] James Heckman frequently makes this point and notes that the terms 'soft' and 'non-cognitive' skills are often used interchangeably. For example, see his three-minute talk:
https://www.youtube.com/watch?v=hSmG87MOyV0

[44] Heckman, 'The Economics of Inequality'; Heckman and García, 'Social Policy'; Heckman, Stixrud, and Urzua, 'The Effects of Cognitive and Non-cognitive Abilities on Labor Market Outcomes and Social Behavior'.

Appendix Two: Reviewed Evidence

> Also see the *YARLE Annotated Bibliography* that is attached to this report

The attached Annotated Bibliography spreadsheet is a work in progress. It is intended to help New Zealand officials from multiple agencies compile their existing knowledge and to potentially make future use of the extensive other literature contained in the spreadsheet.

The selected sources have in common that they are relevant to policy thinking and programming about how to improve outcomes for youth at risk of limited employment. Some also have implications for mainstream education provision, and for developing the employment capability or prospects of youth in general, not only relatively at risk subgroups. A majority of the sources are quantitatively focused and deal with programme and/or youth labour market outcome evidence.

Abstracts or notes are included with the referencing details for most of the sources. They are sorted into the following worksheet tabs/labels.

- **ALMP Evidence**—Mainly meta-analyses and other international ALMP outcome evaluations.

- **New Zealand Agency Sources**—that is, all from government agencies. Includes but is not limited to ministerial briefing papers, programme evaluations and risk profiling data.

- **Other Sources_NZ**—this is a draft placeholder with a few sources added so far.

- **Other Sources_Overseas**—this is a draft placeholder with a few sources added so far.

- **PICI Pae Aronui Bibliography**—This is a copy of an annotated bibliography about *educationally powerful relationships*. It was prepared by Peter Broughton in May 2018 for MoE's Parent Information and Community Intelligence group (PICI). Much of it is relevant as an evidence base about the nature and importance of *relationships* between education providers, young people, their families or wider whānau, and potentially other 'key influencers'. While this bibliography is focused on those relationships affecting education outcomes, much of the evidence included also sheds light on what might matter regarding the same relationships being focused on employment goals.

Additional worksheets could be compiled on request as bibliographies regarding **non-cognitive skills** and/or **work experience**, that is, with a focus on their relevance to programme outcomes, employability development or labour market outcomes for youth, especially at risk or disadvantaged youth.

New Zealand Youth and Parent Feedback: What Has Been Captured?

A range of existing studies that focus on capturing youth or parent voices probably do provide insights that are relevant to the focus of this report but their relevance may not be obvious at face value. For example, publication titles may not make it obvious that some of the study's findings are transferably relevant to understanding how to help youth achieve better employment outcomes. Many but perhaps not all are likely to be qualitative and small-scale studies. More time could be spent searching for sources of New Zealand youth and parent feedback; for example, to synthesise its relevance to job-seeking experiences or the development of young people's employment-focused goals or attitudes.

Sources that may be worth investigating further:

- **NZCER** have some studies that capture youth and parent voices, and some NZ employer voices. For example, in relation to vocational training or workplace experience, career navigation and education-to-employment transitions.

- Another relevant source is *School Children in Paid Employment: A Summary of Research Findings* (MBIE, 2010). It is a stock-take of research including large surveys of NZ youth. See: www.mbie.govt.nz/search/SearchForm?Search=school+children+in+paid+employment

- Parent Information and Community Intelligence (PICI) within MoE is a recently established work team. They compiled a large *Annotated Bibliography on Educationally Powerful Relationships* in 2018. A copy of it is pasted into the *Evidence Bibliography* attached to this report (see worksheet labelled 'PICI Pae Aronui').

Appendix Three: ALMP Intervention Evidence

This section is relevant to improving the effectiveness of other areas or types of at risk-youth-focused intervention, not just those that would normally be classified as *active labour market programmes* (*ALMPs*). It covers mainly quantitative evidence on interventions that were classified as ALMPs in the literature. It also weaves in findings and conclusions that were not sourced from studies of ALMPs but that provide evidence about some key factors that young people's employment capability and outcome likelihoods typically depend upon.

See the *Annotated Bibliography* (attached to this report as a spreadsheet), along with the list of references in this report. They collectively include evidence sources that were used to inform the summary of key findings below. Most of the summary comments are based on findings from more than one source of evidence. Many were supported by findings from ALMP meta-analyses.

Most ALMPs focus on helping adults and/or youth target groups, via short intervention activities, to enter or re-enter the workforce quickly. Many target youth across or within the 16–24 year age bracket. Most are not open to youth until a time at which they have left school and are not currently unemployed. So in that sense they are the last bastion of 'employability development intervention'. The terms *programmes* and *interventions* are used interchangeably here. Many of the findings have implications for what could be regarded as mainstream or preventative 'programmes', not just for ALMPs as last resort 'interventions' after leaving school (or not sooner than late adolescence).

On the whole, **ALMPs that target youth have internationally had an average or disappointing track record** in terms of their impact on youth labour market outcomes.[45] It is clearly difficult to identify and implement 'what works' for these types of intervention that are timed at this late stage in young people's lives. Keep in mind that a large proportion of youth who end up being referred to ALMPs matched multiple risk profiling criteria beforehand. Their needs are likley to be multiple and complex.

Evidence: General Types of ALMPs and Their Effectiveness

ALMPs can be grouped into approximately **four general 'types'** of programme design or activity. Meta-analyses of multiple ALMPs tend to contain findings that are high-level generalisations about these 'types' of ALMPs.

The box below contains excerpts from two of many reviewed publications that proposed a way of grouping ALMPs into general types. It shows that the way in which ALMPs are grouped and

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[45] Ibarrarán et al., 'Experimental Evidence on the Long-Term Effects of a Youth Training Program'; Kluve et al., 'Do Youth Employment Programs Improve Labor Market Outcomes?'

defined in different publications tends to be more similar than different. Subsequently, generalisations about a type of ALMP could be compared from multiple evidence sources and synthesised to some extent.

Bredgaard[46] notes that the OECD Database on Labour Market Employment Programmes and Eurostat Labour Market Policy database sort ALMPs into the following types.

- Labour market **training.**

- Private sector incentive programmes.

- Direct employment programmes in the public sector.

- Job search assistance.

Vooren, Haelermans, Groot and Brink[47] provide this similar but not entirely aligned set of classifications.

- **Training** and retraining programmes—aimed at the formation of human capital).

- **Subsidised labor schemes**—including working tax credits and start-up subsidies.

- **Public sector employment schemes**—in which the government attempts to directly hire the unemployed.

- Enhanced services schemes—including **job-search assistance** and regular encounters with **caseworkers**, sometimes accompanied by **sanctions** in case the participant does not fulfil certain participation criteria.

ALMP Evaluation Caveats

The timeframes that are applied to outcome measurement for ALMPs have been found to make a substantial difference to whether they are found to be effective, or to what effect they are found to have on labour market outcomes.[48] A definition of short-run versus long-run outcome measurement timeframes has not been uniformly adopted across ALMP literature. Bear this in mind when comparing evidence about effects of interventions, or intervention types, on labour market outcomes.

Common key terms and caveats regarding the evaluation and interpretation of ALMP results, or their effectiveness, are listed in Bredgaard[49] and Vooren.[50] Several methodologies are commonly

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[46] 'Evaluating What Works for Whom in Active Labour Market Policies', 438.
[47] 'The Effectiveness of Active Labor Market Policies', 3.
[48] Vooren et al., 'The Effectiveness of Active Labor Market Policies'.
[49] 'Evaluating What Works for Whom in Active Labour Market Policies', 439.
[50] 'The Effectiveness of Active Labor Market Policies', 15.

used to evaluate ALMPs, each with their limitations, which further complicates efforts to compare findings across the literature. The theory of *locking-in effects* may help to explain why many training and employment programmes have been found to have negative short-term effects on labour market outcomes but positive effects based on longer-term measures, or based on methodologies that account differently for the time spent 'locked into' training rather than employment or job seeking.

Regarding long-term versus short-term differences in impacts, one meta-analysis from 2019 found that for youth-targeted ALMPs, *"impacts are of larger magnitude in the long-term"*.[51] Further evidence about differences in long- versus short-term impacts is provided in another meta-analysis of ALMPs published in 2018 by Vooren, Haelermans, Groot and van den Brink.[52] The abridged publication abstract is quoted below with emphasis added:

> The analysis is built upon a systematically assembled data set of causal impact estimates from 57 experimental and quasi-experimental studies. We distinguish between the short and longer term impacts in our analysis; at 6, 12, 24, and 36 months after program start.

> After correcting for publication bias and country-specific macroeconomic characteristics, subsidized labor and public employment programs have negative short-term impacts, which gradually turn positive in the longer run. Schemes with enhanced services including job-search assistance and training programs do not have these negative short-term effects, and stay positive from 6 until 36 months after program start.

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[51] Kluve et al., 'Do Youth Employment Programs Improve Labor Market Outcomes?', 237.
[52] 'The Effectiveness of Active Labor Market Policies', 1.

The box below is a summary of findings from multiple evidence sources about the effectiveness of each general type of ALMP. It is largely based on findings from several large meta-analyses of ALMPs.[53] While the reviewed sources did not use identical terminology or classifications for each *type* of ALMP (in the left column), what they used was similar enough to be able to generalise about findings.

Type of ALMP	Notes and Caveats	Findings About Effectiveness
Job search assistance		Most effective or effective
Work experience or on-job training as a core outcome focus / activity.[54] Vocational or industry training is only sometimes classified as an ALMP but involves work-experience and on-job training focus.	Beware that **what gets counted as 'work experience' varies** significantly between relevant studies, programmes and policy settings. *Unpaid work, volunteering, internships* or some *extra-curricular activities* may be relevant here but go beyond scope for this literature review.	Most effective or effective
Subsidies (e.g. wage subsidy to employer). **Public and private forms of job creation.**	Some sources found that schemes involving private sector were more effective than public sector or 'direct job creation' schemes. However, this might not hold for all target groups or circumstances. Further analysis is needed.	Mixed effectiveness
Education and training	This classification is very broad. It refers to programmes that are not very homogenous, e.g. in terms of programme design and target group. Negative results may be partly due to 'lock-in effects' or short timeframes for outcome measurement.	Least effective Not often effective on its own for youth Sometimes harmful

Caveats and further explanation regarding these high-level generalisations about 'what is effective' are provided below.

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[53] Sources include: Martin and Grubb, 'What Works and for Whom'; Card, Kluve, and Weber, 'Active Labour Market Policy Evaluations'; Kluve, 'The Effectiveness of European Active Labor Market Programs'; Vooren et al., 'The Effectiveness of Active Labor Market Policies'; Kluve et al., 'Do Youth Employment Programs Improve Labor Market Outcomes?'
[54] Apply caution when comparing sources of evidence about the relevance or impact of 'work experience' on labour market outcomes. Relevant literature and programme descriptions are inconsistent in terms of what is referred to as 'work experience'.

Job search assistance

Job search assistance stood out as a type of ALMP where there is strong consensus about its effectiveness. Some common forms of job-search assistance might otherwise be called job-outcome-focused *case management*. Specially, one-on-one follow ups with a job seeker, and production of a personal 'action plan' for seeking or gaining employment are types of interaction that might otherwise be classified as case management.

Job search assistance is typically classified as one of the general high-level categories of ALMPs but it can also be treated as a programme 'component' or 'activity'. A variety of programme designs include some form of job search assistance, along with other potentially effective or ineffective activities.

Work experience or on-job training

Work experience or on-job training also stood out regarding what works to improve eventual youth labour market outcomes. Sometimes work experience on on-job training is classified as a 'type of ALMP'. Other sources of ALMP evidence describe it as a programme design detail, or as an activity or component that a variety of programme 'types' could include. Either way, numerous sources of evidence (from New Zealand and overseas) agree that this is a key success ingredient or characteristic of 'what works' to improve labour market outcomes.[55] A caveat is that what gets counted as 'work experience' within intervention designs and evaluations is inconsistent. Caution should be applied when drawing conclusions about the aspects or types of work experience intervention that 'worked'.

An evaluation by MSD on the effectiveness of New Zealand employment assistance interventions (read ALMPs) came up with complementary findings.[56] What it referred to as 'job placement', 'case management', 'job search and information services' and 'work experience' was found to be generally effective.

Subsidies, and public and private forms of job creation

There is a risk of overgeneralising about who job creation and subsidisation schemes are effective or ineffective for, regardless of them involving private or public sector workplaces. Whether some generalised findings hold for particular high-needs, or high-risk groups of youth—ideally based on measurements taken years after intervention—is a question that deserves further analysis.

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[55] Ministry of Social Development, CSRE, 'Evidence on Training Opportunities and Related Training Programmes'; Kluve et al., 'Do Youth Employment Programs Improve Labor Market Outcomes?'; Perry and Maloney, 'Evaluating Active Labour Market Programmes in New Zealand'; de Boer and Ku, 'Effectiveness of MSD Employment Assistance: Summary Report for 2014/2015 Financial Year'.
[56] de Boer and Ku, 'Effectiveness of MSD Employment Assistance: Summary Report for 2014/2015 Financial Year'.

Findings about the effectiveness of labour subsidisation and job creation schemes included some discrepancies between studies. The discrepancies are partly explained by the fact that different studies applied different ways of grouping ALMPs. Some distinguished public from private sector employment schemes. Some distinguished partial subsidisation from full job creation schemes, either or both of which could involve public or private sector employment provision.

The timeframes applied for outcome measurement, or other differences in evaluation methodologies, also explained some discrepancies in findings. For example, the way that so-called 'lock-in effects' are accounted for can affect interpretation of short-term outcomes.[57] Some studies that included longer-term measures of job creation and/or labour subsidisation schemes suggest that these types of schemes may often have a negative or insignificant effect in the short term but more positive and significant effects in the longer term. Vooren et al.[58] observed the following differences in programme impacts, in terms of short- versus long-term outcomes.

> Public sector employment schemes, characterized by job creation in the public sector, as well as subsidized labor, have negative impacts in the short term. These negative "lock-in" effects turn into positive impacts over time. These lock-in effects of subsidized labor programs tend to last shorter than those of public employment schemes. The impact of subsidized labor turns positive after 12 months, whereas with public employment this is the case only after 36 months.

Education and Training: Unpacking its 'Ineffectiveness'

ALMPs that were classified in meta-analyses as **education and training** were, overall, found to be ineffective and sometimes harmful. However, caution should be applied in how to respond to this generalisation. It is too general to be helpful in some respects. There is substantial variation in the design, implementation, outcome focus and targeting regarding what gets counted within this programme classification. In other words, it does not represent a very homogenous set of programme or participants. Some are effective, and some are only assessed as 'effective' when based on years-long outcome measures, rather than roughly 6–24 months after intervention, which is a common timeframe used in ALMP evaluations. Furthermore, in terms of what is in common to the education and training ALMPs that do effectively impact on youth labour market outcomes, the following characteristics have been noted by multiple sources.

- Having a work experience or on-job training component (a key success characteristic).

- Combining with job seeking assistance.

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[57] Vooren et al., 'The Effectiveness of Active Labor Market Policies'.
[58] Ibid. 3.

- Not making academic outcomes the only 'key performance indicator' for providers, or the only programme outcome focus or success measure.

- Being tightly targeted to the needs of a certain group.

- Being aligned to specific skill shortages for identified industries or locations.

- Including a range of supports or activities that holistically address multiple needs or barriers.

  o Individual needs assessment, and semi-tailoring of individual plans or programmes.

  o Pastoral support and personal coaching, mentoring or case management concepts are relevant.

Industry Training and ALMPs: Classifying On-job Training and 'Education and Training'

Vocational or industry training programmes are often excluded from what gets classified as ALMPs. In New Zealand, not all vocational training opportunities at NQF Level 1–4 are meant to exclusively be targeted at those deemed to be relatively at risk of becoming NEET or welfare-dependent. Yet, these 'mainstream' types of training programmes focus on two key characteristics that distinguish the most effective of the other 'education and training' programmes that do get classified as ALMPs (that is, those that are exclusively targeted at NEET and welfare-dependent youth). First, they focus on attaining and formally recognising (read signalling) work experience and on-job training. Second, they explicitly include training content that has been matched closely to an industry-specific set of skill requirements. It stands to reason that New Zealand industry training programmes, and other education and training programmes that get classified as ALMPs (mainly coming from MSD or MBIE), should both be looked at together from a cross-agency perspective. That is, in terms of considering how they might be relevant and/or promoted to youth with low or no work experience, and who are not going to university.

ALMP Evidence: Details on What Works or What Matters

Kluve et al.[59] appear to have published the most recent and large-scale international meta-analysis of ALMPs, in 2019. Unlike other major ALMPs' meta-analyses, this one exclusively reviewed evidence on ALMPs that were targeted at youth. Kluve is a widely cited author/co-author of multiple ALMP studies. Based on reviewing 113 impact evaluations of youth employment programmes worldwide, Kluve et al. (p. 1) found that: "*the unconditional average*

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[59] 'Do Youth Employment Programs Improve Labor Market Outcomes?'

effect size across all [youth-targeted ALMPs] is small, both for employment-related outcomes … and earnings-related outcomes. Other key findings included (with emphasis added below):

1. Programs are more successful in middle- and low-income countries.

2. The intervention type is less important than design and delivery.

3. Programmes **integrating multiple services** are more successful.

   a. Other sources similarly say that **combinations of services or activities** are successful.

4. Profiling of beneficiaries and individualised follow-up systems matter.

   a. Other sources say that individual risk- or **needs-assessment**, and **case management** practices matter.

5. Incentives for services providers matter.

6. Impacts are of larger magnitude in the long term.

Other common characteristics of effective interventions are further outlined below. Some overlap with what was described by Kluve et al. above. These generalisations are based on having compared findings and conclusions from multiple sources of evidence.

7. **Combinations of activities** work better than single-activity or single-focus intervention.

   a. Providing **flexibility to assign selections** of activities or services is linked to effectiveness, rather than a one-combination-for-all approach.

8. Needs-assessment and action plans that are multi-faceted are more likely to work for subgroups who typically present with complex barriers/needs—that is, they **holistically address a range of personal and employment-focused needs.**

9. Details regarding the nature, quality, purpose or 'outcomes focus' of **provider-participant relationships matter** .

10. **Case management and/or personal coaching** provision matters (as a type of provider–participant relationship).

    a. **One-on-one follow-ups** was another description linked to effective programmes. It seems to overlap with concepts of case management, coaching and mentoring.

    b. Coaching or case management for what purposes or needs—or with what discretion allowed to tailor holistic response plans—may be questions worth exploring further.

    c. Being coached or case-managed to **develop goal-setting or 'personal plan-and-review' practices** has been noted outside of ALMP literature as something relevant to developing self-management and self-motivation among youth.

    d. Case management is relevant to Kluve et al.'s identification of **follow-up systems** as a success factor.

11. Inclusion of **job search assistance** matters, which could potentially be framed as a type of case management, or focus of a coaching relationship.

12. **Work experience or on-job training** matters, which can be the main focus, or a component of what gets called an 'intervention'.

10. CONTRIBUTIONS, LIMITATIONS AND NEXT STEPS

10.1 INTRODUCTION

This chapter concludes the thesis by summarising the key research contributions, limitations and proposed next steps for further research or policy experimentation. As was summarised in Chapter 8, the research provided a multi-faceted, multi-disciplinary and original account of individual employability and employment outcomes, context dependencies, contexts of risk or disadvantage, change mechanisms, and a critical analysis of implications for policy responses working to manipulate such outcomes. As an additional country-specific policy contribution, and as a means of further demonstrating the validity and practical applications of the new *employability theory*, an evaluation of New Zealand policy responses towards supporting NEET and YARLE subgroups was also produced. The theoretical framing of research conclusions, and original syntheses of evidence to support them, serve as *a new starting point* which could replace or substitute what existed as the pre-research state of theory and policy practice (which was discussed in Chapter 4).

Some limitations are acknowledged about the syntheses of evidence and theory, and the theoretical conclusions that were produced about: individual employability and employment, risk or disadvantage, programme theory, outcomes, and policy or programme implications. Caveats and remaining uncertainties that deserve further research attention are accordingly noted. Rather than being exhaustively tested and absolute answers, the generalisations that the research conclusions comprise, and their validity or accuracy, should be further tested and potentially refined via future research or policy experimentation.

An explanation was developed about how and why to shift policy thinking and practice beyond what are commonly seen and oversimplistic types of policy responses that are meant to support youth employment attainment or employability development. This includes rethinking programme theory about what individual employment outcomes tend to typically depend upon, and be indicated by, and what range of factors might need an intervention response; in order to change outcome quality or inequalities. The research provides evidence-based argument as to why risk-targeted policy thinking and practice should be moved beyond the current prevalent focus on targeting NEET profiles and unqualified school leavers. Furthermore, it evidences the concept of there being many overlapping subgroups of *youth at risk of limited employment (YARLE),* and associated reasons for being relatively at risk or disadvantaged.

What was identified and generalised about as *key employability dependencies* include: *non-cognitive skills*, *work experience,* and challenges regarding the *signalling* of individual employability, especially in regards to signalling one's abilities, intentions and preferability to potential employers in relation to particular jobs. Work experience was conceptualised and studied both as a variable of *context* (past work experience), and as a *change mechanism* through which employability development and employment attainment could emerge (as the undertaking of new work experience). The terms non-cognitive skills and soft skills conceptually overlap with

many other terms, and skill or trait measures. Many of the semantically overlapping terms, including some that have emerged from academic literature and some from policy practice, and associated outcome evidence about such skills, were extensively unpacked within the research as a major research contribution. This includes a synthesis of evidence which has linked measures of non-cognitive skills or traits to labour market outcomes, including some evidence which has linked later life labour market outcomes to skill or trait measures that were taken years earlier during childhood.

Some of the earliest risk indicators, and seeming reasons for employability disadvantage or risk were found to be identifiable during early childhood and early teenage years. However, more evidence needs to be reviewed to strengthen and clarify these initial conclusions. Based on the shallow but broad review of evidence that was conducted, it appears that there are some common reasons and identifiable indicators of youth being on a YARLE trajectory many years before they become of age to be potentially classified as NEET, or old enough to participate in the workforce, or to be classified as unemployed. Importantly, measures of non-cognitive skills that were taken during childhood have been linked to relatively poor labour market outcomes much later in life.[60] Furthermore, non-cognitive skill development interventions that targeted socio-economically disadvantaged children or teenagers (as early as preschool age) have been linked to measures of relatively improved labour market outcomes later in life. Many of the findings that were provided by the work of the economist James Heckman and co-authors suggest that there is reason and potential to target non-cognitive skill development interventions at disadvantaged youth subgroups, starting from as early as early childhood. Furthermore, other reviewed research indicated that young people's formation of work attitudes, intentions and experiences, and the nature and extent of their exposure to early work experience opportunities, highly depends on their parents' own social connections to and experiences of the world of work. These types of findings suggest that, instead of waiting to target NEET youth, there is reason for a country's suite of YARLE-focused policy responses to include interventions that are implemented as early as early childhood.

The focus topics that the research progressively analysed in light of existing evidence and theory, and eventually clarified as being key employability dependencies each deserve further research and policy experimentation to better test the theoretical claims that were made about them. This includes a need to further investigate context dependencies that may affect whether, how often and in what circumstances a theoretical generalisation matches what actually occurs as an employability outcome. It may be that some more narrowly scoped and intensive systematic reviews of evidence about specific aspects of some focus topics, or about specific theorised cause and effect relationships, could now be designed and conducted with a better defined starting point and focus. This is now more possible, since the research helped to connect and clarify some terminology and concept barriers that previously presented challenges for relating existing

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[60] Evidence in relation to this point is discussed at length in Chapter 5.

theories and evidence to each other, to the outcomes of employability or employment, and to policy language and practice.

10.2 CONTRIBUTIONS

My contributions to knowledge include original syntheses of existing evidence. However, the main contribution is theoretical and evaluative in nature. The research went a step beyond generating theory as details about individual employability and employment outcomes, and about seemingly relevant interaction mechanisms, context dependencies, and risk-related states of context. The additional step involved explaining what policy implications those types of details have, as a basis for evaluating or improving the effectiveness of policy responses that are meant to help improve employability and/or employment among young people. This includes evaluating the ways in which risk or disadvantage is defined and targeted via intervention.

The way in which explanation was structured, as being relevant to describing and explaining matters of employability *contexts, mechanisms, or outcomes* allows for a range of relevant programme types and instances. This way of structuring the reporting of the relevance of existing theory and evidence, and of research conclusions, reflects a realist classification practice. Consequently, one could feasibly pick and choose to further research, refine, and apply all, or only some, of the theoretical conclusions to particular policy review or design tasks. It depends what is deemed most relevant to one's policy intentions, among the set of theoretical conclusions that were produced.

Some policy definitions of problem outcomes or target groups, and policy interpretations of what should be targeted by intervention were reconceptualised. For example, the research conclusions facilitate a conceptual shift beyond the current policy rationale for targeting NEETs, and on targeting low level qualification attainment, as if these two things are the most important and the only identifiable or changeable dependencies that influence young people's eventual labour market outcomes. While changing the status of these two features of personal context could improve the eventual labour market outcomes, or at least the employment capability, of the youth subgroups concerned, a research conclusion is that policy responses might work better to improve the employability and labour market outcomes of these youth by additionally focusing on identifying and manipulating some other features of context; or some other change mechanisms, such as the undertaking of work experience. Furthermore, although more research is needed to validate and refine this claim, it seems that there is potential for a country's combination of policy responses to work better if the range of interventions applied include some that are *timed much earlier in life.*

The generation of the YARLE term (youth at risk of limited employment) is an original concept that has multi-sector relevance to a range of programme types, and to policy definitions of risk and success indicators. The YARLE concept is accompanied by research conclusions about some

common reasons for being at risk or disadvantaged. Reasons include: disadvantages or problems regarding the formation of non-cognitive skills (as a process that could be intervened in from early childhood to late adolescence); personal and parental experiences of opportunities and challenges regarding the world of work; and recruitment challenges regarding competitive signalling capabilities, including prior attainments of work experience. YARLE represents a reconceptualisation of risk and disadvantage, one which accounts for multiple reasons that put certain youth subgroups at risk of years-long stretches of limited employment outcomes (including being unemployed).

As a multi-faceted theory, it was only possible for the YARLE explanation to emerge from having applied an iterative and widely scoped approach towards literature search, synthesis, and theory development. It was a concept that emerged after no such concept previously existed explicating within the reviewed literature and in reviewed examples of policy practice. It was realised partly by piecing together a cross-sector and multi-disciplinary range of evidence and theory.

The YARLE classification includes but extends beyond the pre-existing policy concept of the NEET classification. The latter captures some but not all of the criteria that could be used to better identify and target youth who match one or many of the identified reasons for potentially needing employability development or employment attainment intervention. The reasons are outlined in Chapter 8. Focusing on the notion that there are many overlapping subgroups or reasons for being YARLE creates space for a more comprehensive set of programme theories and targeting practice to be developed accordingly. The research provided an alternative answer about what a more effective range of intervention strategies might comprise and target, compared to overemphasising a policy focus on reducing NEET numbers and on increasing attainment rates for low level qualifications.

At the start of the research, it was noted that policy responses seemed to be typically limited to distinguishing and targeting youth who match the two context criteria of being NEET, or having low or no qualifications (during or after reaching the senior secondary school age range). These characteristics are responded to as if they are the two main indicators, and perhaps the only identifiable indicators, of youth subgroups being more likely than their peers to have limited or no employment outcomes; currently and as a long term trajectory.[61] Furthermore, the emphasis placed on getting youth who match the NEET and low qualified profiling criteria to attain basic secondary school or equivalent low level qualifications, and on engaging them in 'second chance' education and training (thereby making them currently not NEET), indicates a policy expectation

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[61] Sometimes welfare status, or measures of low literacy status, are also used as risk-targeted programme eligibility criteria. Measures of low socio-economic status during childhood have been identified in academic literature as indicators of future employment risk or disadvantage but relevant policy responses seem to be less often focused on recognising and responding to such measures, as reasons for needing employability development support. One exception is the socio-economic measure of being welfare dependent after reaching an age of personal welfare eligibility.

that changing one's qualification and education participation status are the two best available intervention strategies that can be applied in order to improve these young people's employment prospects.

Early life influences on employability development and disadvantage have implications for deciding *when in life* the earliest interventions should be implemented to start supporting employability-relevant developments among 'otherwise YARLE' target groups. In particular it seems that the formation of non-cognitive skills and behavioural tendencies, the formation of work intentions and aspirations, and early life formation of experience or connections to the world of work (and work opportunities), is *intergenerationally transmitted* from parents to children. Some existing programme outcome evidence that was included in the literature syntheses suggests that it is possible to improve non-cognitive skills among target groups of socio-economically disadvantaged pre-schoolers and teenagers, and to improve their academic and labour market outcomes later in adulthood. However, further evidence and further analysis of existing evidence is needed before more confident and specific conclusions can be made about the conditions for non-cognitive skills interventions to 'work' for socio-economically disadvantaged pre-schoolers or teenagers.

There may be value in developing a more targeted synthesis of evidence, or conducting experiments, to identify what and when non-cognitive skills interventions might work specifically for youth who present with *challenging behaviours*; or who struggle with other social or emotional challenges. Those sorts of difficulties do not necessarily present only among youth from low socio-economic backgrounds. For example, a tendency to be highly neurotic, anxious or emotionally unstable is a trait that also appears among some youth from high socio-economic status backgrounds.[62] Such a trait, when no associated coping skills and supports are developed, could create barriers to social, academic and employment achievements regardless of one's socio-economic status.

The potential policy applications of the literature syntheses and theories that are reported in Chapters 5 to 7, and the theoretical conclusions that are presented in Chapter 8, are practically demonstrated by the influence that they clearly had on the later design and production of an evaluation report about New Zealand's policy responses to NEETs and youth at risk of limited employment. This example report is provided as the main contents of Chapter 9. The New Zealand report conveys some evidence in its reference list which is in addition to the sources of evidence that were synthesised within Chapters 5 to 7, and which further support the conclusions that were made in Chapter 8. However, the primary purpose of integrating the New Zealand report into this thesis is to demonstrate the policy applicability and potential merits of

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[62] The Big Five trait spectrum of *neuroticism* relates to this comment, which in turn, overlaps with the overarching concept of non-cognitive skills.

moving policy evaluation and design thinking from a narrower focus on 'responding to NEET youth' to a broader notion of overlapping at risk subgroups, or reasons for being YARLE.

10.3 RESEARCH LIMITATIONS AND NEXT STEPS

The decisions that were made regarding searching, selecting and synthesising existing theories and evidence were focused on 'going wide' rather than 'going narrow and deep' into any particular topic, programme, theory or body of evidence. Researching more narrowly and deeply into one the theoretical conclusions that were produced, or into a particular aspect of one of the focus topics, or into a specific type or subset of employability outcomes (or outcomes for a specific target group), is what future research could more comprehensively address. Additional literature syntheses that are more narrowly scoped and systematically documented could help to further validate and fine tune the accuracy of the holistic and wide-ranging answers that were generated by this research. Indeed, what was studied within this research covered an expansive range literature from multiple academic disciplines, multiple focus topics in relationship to employability outcomes, and multiple types and examples of policy responses.

Further evidencing and refining theory about why, for whom and how employment outcomes occur is only part of what requires further research to better fulfil this project's research aims. The second requirement is a need to test the practical feasibility of designing and implementing programmes that more explicitly target and counter all or any of what this research identified as key employability dependencies, and as associated reasons for risk, disadvantage or development potential. This requirement might be addressed by piloting novel policy responses that are designed to explicitly target risk in relationship to the identified key employability dependencies, and to counter challenges regarding young people's early attainment of employment and work experience. Challenges include what the research reports as signalling challenges, and as challenges or disadvantages regarding young people and their family's experiences of the world of work. It also challenges their exposure to early work experience opportunities (or lack thereof).

As set out in Chapter 2, employability is complex, and no theory can purport to explain it fully. Thus, theoretical conclusions are not proposed as absolute explanatory generalisations about the nature of employability status (contexts and outcomes), employability change mechanisms, and implications for intervention effectiveness. On the contrary, the generalisations that were made as research conclusions about what individual employability depends on (or is approximately relative to), about some of the mechanisms through which employability and employment can change, and about implications for policy responses being likely to work (and for whom or in what contexts), are qualified by an acknowledgement. This acknowledgement is that the accuracy and reliability of such conclusions are limited by the fact that employability and labour market outcomes emerge from complexity. They appear to be highly context dependent. These types of outcomes, as well as the designs and implementations of relevant programmes, involve

and depend on *dynamic* social interactions. The nature of the outcomes that emerge also depend on the status of an uncountable number of contextual variables that comprise each individual's real world overall context This could include their past experiences, interim outcomes and perceptions and intentions to date.

Implementation of the same programme design within different contexts could result in different types or extents of change to employability indicators or employment outcomes. They could work better for some types of individuals or target groups, or within some types of labour market contexts, or only when the goal is to achieve certain types of employment outcomes. It was accordingly unfeasible, within the limitations of this research project, to produce more absolute and accurately predictive answers about *what works* and *what matters,* and for which target groups or intervention contexts. Having said this, more work could be done to further test, validate and refine the accuracy or predictive reliability of what was concluded in this research about certain indicators of employability risk and of outcome likelihoods.

The transferability of findings and conclusions, and judgements about whether the generalisations are accurate enough for informing other policy decisions, would benefit from further experimentation. Specifically, the theoretical generalisations in Chapter 8, and more detailed findings and conclusions presented in Chapters 5 to 7, could be further validated or challenged by attempting to apply them to other country contexts, and to specific instances of programmes or higher-level policy outcome agendas, and associated outcome patterns. The extent to which policy actors might be able to make practical use of the research conclusions, and of the accuracy of the theoretical generalisations has only been demonstrated in relation to the New Zealand NEET-focused policy context, as was reported in Chapter 9.

10.3.1   *Non-cognitive Skills and Work Experience: Further Theory Refinement Needs*

Conclusions about the importance of work experience and non-cognitive skills were based on an extensive range of evidence reviewed within Chapters 5 to 7. While non-cognitive skills and work experience were identified as two key employability dependencies for all youth, and as two common reasons why some youth are more likely to have relatively limited labour market outcomes, the nuances and conditions regarding their influence on eventual labour market outcomes needs further unpacking.

Further clarification is also needed about the description of certain types of non-cognitive skills, their relevance to employability and employment outcome patterns, and the potential and conditions for changing them via intervention. The predictive reliability of associated non-cognitive skill measures, and the practical challenges and potential for *measuring* these kinds of skills via intervention—and for *reporting or signalling* these skills to potential employers—deserves further analysis. It is possible that certain types of non-cognitive skill performance, or higher levels of sophistication or adaptation skill in terms of their application, are more

important or highly sought after for certain types of occupations or organisational contexts. More research could serve to clarify the nuances of dependencies regarding non-cognitive skills, different types or occupational demands, and differences regarding types of labour market outcomes or recruitment demands. More specific and additional evidence is needed to support such clarifications.

10.3.2 OECD Social and Emotional Skills: A Way Forward for Non-cognitive Skills Policy?

The OECD recently started publishing research and policy thinking on what it has redefined overall as *Social and Emotional Skills*. This work includes a survey of social and emotional skills that is being carried out internationally during 2019 and 2020. The survey findings, and future publications and resources from the OECD about Social and Emotional Skills look to be highly relevant and aligned to what was described as non-cognitive skill concepts in Chapter 5. For example, the OECD notes that its own descriptions of social and emotional skills overlap conceptually with the Big Five trait descriptors that have been established for decades within psychology literature, and Chapter 5 similarly relates the Big Five descriptors to other non-cognitive skill descriptors and key terms. For an overview of the current OECD work on Social and Emotional Skills, including information about conceptual overlaps with the Big Five traits and other non-cognitive skill concepts, see the following sources (Chernyshenko et al., 2018; OECD, 2015, 2019b).

The first publications by the OECD on Social and Emotional Skills were only released after the literature syntheses and theory development work had been completed for this research project (as of early 2020). Thus, this body of work by the OECD, which is still underway, is hardly mentioned within the thesis. A valuable next step for future research would be to evaluate the ways in which the OECD's conclusions, evidence and skill concepts align or do not align to the concepts and conclusions that were developed in this thesis research about non-cognitive skills.

10.3.3 Work Experience: Further Clarifications Needed

Recall that work experience was conceptualised in the research as being potentially relevant to understanding and changing employability and employment outcomes in two ways. Firstly, the act of engaging in a particular work experience, including the work-focused social interaction that such experience involves, might work as an employability change mechanism. It might work to change the employment abilities or intentions of an individual. It might work to increase one's opportunities for getting noticed, or otherwise signalling one's employment capabilities and intentions to potential future employers. Secondly, what one has already experienced in the past as previous work experience, was framed as description about one's context or life outcomes to date, which is a hypothetical starting point from which an intervention might be introduced.

Inconsistent definitions regarding what was defined and studied within reviewed literature as work experience, poses a significant problem for developing more accurate theory about both the links between work experience and labour market outcomes. Reviewed literature was also inconsistent with regard to what was counted as a provision of a work experience component, as a programme type, activity or outcome. This limited what could be done to address the research aim of synthesising evidence and developing theory about the relevance or influence of work experience on what emerges as employment outcomes; especially the outcome type of job attainment in the first place (read recruitment behaviours and outcomes). More research is needed to compare and contrast differences within available evidence in terms of *what types* of work experience provision work, and under what conditions.

Evaluations and meta-analyses of the effectiveness of programmes, which included a focus on helping youth to gain so-called work experience, varied in terms of what the studied programme/s were expected to deliver as work experience criteria. Some counted paid or unpaid types of experience attained as work experience while others did not. Some counted the attainment of volunteer or community service duties as work experience. Some included on-job training as a programme design component and referred to it as a form of work experience, while others described on-job training as a *training* programme (or component of a programme), not as a work experience. Further research is recommended, firstly, to better define one or multiple classifications of work experience, secondly, to better define what counts as a 'work experience' outcome requirement within programme designs, and thirdly, to synthesise or produce better evidence about theorised relationships between work experience, youth labour market outcomes, and intervention effectiveness.

Having noted the definition problems that remain unresolved, the relevant reviewed literature led to some general interim conclusions. Firstly, the nature and extent of young people's work experience to date appears to be a key context feature that distinguishes those YARLE from not-YARLE. Secondly, the explicit inclusion of some kind of work experience activity or provision within a programme design is something that distinguishes which active labour market and second chance training programmes work more than most on average. Thirdly, the inclusion of some kind of work experience programme component is more specifically linked to success in improving the labour market outcomes of NEET, unemployed, and unqualified or low qualified youth after they have left school. This has implications for the selection and programme outcome focus of second chance training, and other active labour market programmes, which are meant to improve eventual labour market outcomes for at risk youth in particular.

10.3.4 *Employer Survey Evidence: Limitations and Caveats*

The evidence reviewed and selected regarding employer surveys was restricted to mostly surveys of employers recruiting for low-level, or unskilled jobs. In contrast, a large body of other employer surveys and studies exclusively focus on the recruitment demands or behaviours of

employers regarding professional, business sector, above-entry-level, and above minimum wage occupation types in particular. Most of this body of literature is more specifically relevant to understanding outcomes among university graduates, being those who are not the YARLE and lower qualified types of youth subgroups that this research was focused on. The theory drafted within this thesis about what employers demand most and what they look for, as a basis for their recruitment decisions (or at least what they claim to want or look for)—including what types of signals they look for, consciously or unconsciously—could be expanded in scope. It could also become better refined by relating evidence to the identification of context conditions that distinguish certain types or level of qualifications or experience held by job candidates, and associated recruitment outcomes regarding certain types or levels of occupations.

10.3.5 *Qualifying and Education-Employment Interrelationship Theory*

The research started to unpack the conditions in which formal qualifications have an influence on individual labour market outcomes. To what extent, why or how, for attaining what types or levels of occupations, and for which types of individuals or circumstances a qualification attainment *works* to improve labour market outcomes is highly context-dependent. The contextual makeup of a labour market, including the experience, intentions, qualifications and other signalling capabilities of competing job seekers, and the finite number and type of occupations on offer, are among those many context conditions. Further research is required to continue what this research started, as a process of synthesising evidence, and refining or correcting theoretical conclusions about what context conditions tend to affect the influence that qualifications attainments do or do not have on labour market outcomes for individuals. In particular, there is a need to refine or replace the policy conclusion that the best way to improve labour market outcomes among youth who left school unqualified, and who then became long-term NEET or unemployed, is to prioritise their eventual attainment of a secondary school or equivalent low level qualification. The theoretical rationale for the kinds of NEET and YARLE-targeted interventions that prioritise low level qualification attainment, as the key programme success measure, and that mainly comprise lengthy classroom-based training without including some sort of work experience or 'work experience in kind', is questionable. It is challenged by the reported syntheses of existing evidence.

Having said this, a practical programming challenge lies in finding employers or other providers of work-relevant experience who are willing to take risks, and spend time, engaging unqualified and inexperienced youth in their organisations' work. When youth have been recently tagged with the negative signals of being currently NEET, a recent school 'drop out' who did not manage to complete a qualification, or as long-term unemployed, it follows that employers may be hesitant to trust and rely on such an individual…unless there are incentives and/or other trust-building signals in place to persuade them.

10.3.6 *Applying the New Theory to Careers Information, Advice, Guidance and Education*

Little attention was given to reporting on the implications of research findings and conclusions for better evaluating or designing the CIAGE subset of employability policy responses, and vice versa. This is simply because the research project and discussion needed to be restricted to a manageable size and scope.

It was decided that other subsets or types of employability policy responses were more important to focus on describing, when a range of programme evaluations were being shortlisted for inclusion within the reported evidence syntheses. CIAGE programmes, and associated evidence and theory, are highly relevant to the policy agendas of recognising and improving youth employability and labour market outcomes. However, CIAGE includes a range of general and targeted resources for youth and adults, and the bulk of what was located about examples of CIAGE resources and careers theory did not seem to exclusively target or prioritise NEET or YARLE outcomes. Targeted CIAGE initiatives do exist but the CIAGE term refers to a mixture of employment attainment and other 'career development' types of resources. Many of those resources are designed for youth in general, rather than for risk- or needs-defined potential users. Given the research aim of eliciting implications for making policy responses work well for YARLE subgroups in particular,—the decision was made to sacrifice the inclusion of CIAGE programme evidence and careers theory literature. This was in order to make more room for discussion about other compulsory education and explicitly risk-targeted programme types.

A body of academic and grey literature about CIAGE types of programmes, and about *careers theory*, had been scanned during the early search phase. New Zealand examples of government-funded career support services and resources were also known about prior to having started this research project, due to having been contracted to research CIAGE service provisions and give advice to CareersNZ (the former New Zealand career services agency).

Now that an initial set of evidence-based employability theory and policy conclusions has been produced, further research could utilise it as a basis for evaluating how well certain CIAGE initiatives are likely to work to account for or respond to the range of key employability dependencies that were emphasised by the research. In particular, understandings about how or what to target, what to provide, or how, as specifically YARLE-subgroup-tailored CIAGE could be advanced by applying the research conclusions to future reviews and designs of CIAGE.

10.4 CONCLUSION

What emerges as an individual state of employability, and as employment outcomes, depends on individual abilities, intentions and experiences to date. It also depends on the nature and extent of one's social relationships (read social network dependencies), as mechanisms of potential through which work-relevant experiences, new employment or other work-relevant interactions

and outcomes can emerge. Furthermore, the make up of a labour market context, including sub-markets, in any given time and place, also influence the nature and extent of an individual or type of individual's employment outcome likelihoods. So too do one's personal and family life commitments at a given period in time. All of these types of employability dependencies are factors that could be more comprehensively accounted for within employability theory, and responded to accordingly via relevant policy and programmes. Indeed, a multi-disciplinary explanation of employability development, employment outcomes and change theory, and a multi-faceted policy response which draws upon multi-disciplinary insights, seems more likely to succeed in improving eventual outcomes than applying a siloed policy approach.

Understanding how to more effectively identify and then respond to the multiple factors that limit or improve young people's labour market outcomes is likely to be an ongoing policy improvement challenge. The evidence-based theory and evaluative conclusions that this research contributes to could be used to help with such refinement. It could be used as a basis for experimenting with alternative forms of intervention, and alternative programme outcome or output definitions and priorities.

The research produced an orignial, evidence-based and multi-faceted explanation of individual employability, reasons for employment outcomes, some relevant change mechanisms and risk contexts, and implications for policy responses to influence youth employability and employment. In particular, the research clarified some implications for policy responses to effectively target and improve outcomes for subgroups of youth who are relatively disadvantaged or more at risk of limited employment (YARLE).

The NEET policy classification (for youth who are not in employment, education or training) captures many of youth who are also likely to match other potential YARLE profiling criteria. However, the thesis provides an argument as to why the NEET term is problematic, why policy makers should consider moving towards the broader YARLE concept. The characteristic of being officially NEET during a short period in life is an inadequate indicator of long term employment risk when used on its own. As a measure of 'employment, education and training status', a focus on NEET numbers does little to help policy makers identify *what else* tends to hinder, or what else might help to change, young people's employability and eventual employment outcomes. Some other *employability dependencies* and associated risk indicators (types of context or charcteristics) also deserve policy and programme practitioner attention, and they are accordingly emphasised in the research conclusions, as part of a new Theory of Employability.

By no means is the Theory of Employability that was produced, and the subset of conclusions about implications for improving YARLE outcomes, a finished project. However, a refined theoretical starting point and a reframing of the policy problems and potentials concerned was produced, which future evidence syntheses, other forms of research, and policy or programme

experiments could build upon. The research conclusions challenge some of the generalisations and outcome expectations that are reflected within common education, careers and employment-focused policy and programmes; especially NEET-focused intervention.

The reasons why policy and programmes trigger, or fail to trigger intended outcomes are multiple and complex. The outcome types of research concern are particularly context-sensitive. It is hoped that this thesis can be used to improve the guesswork involved in making policy responses 'work' to improve employability development, employability recognition and, ultimately, employment outcomes for various target groups.

11. REFERENCES

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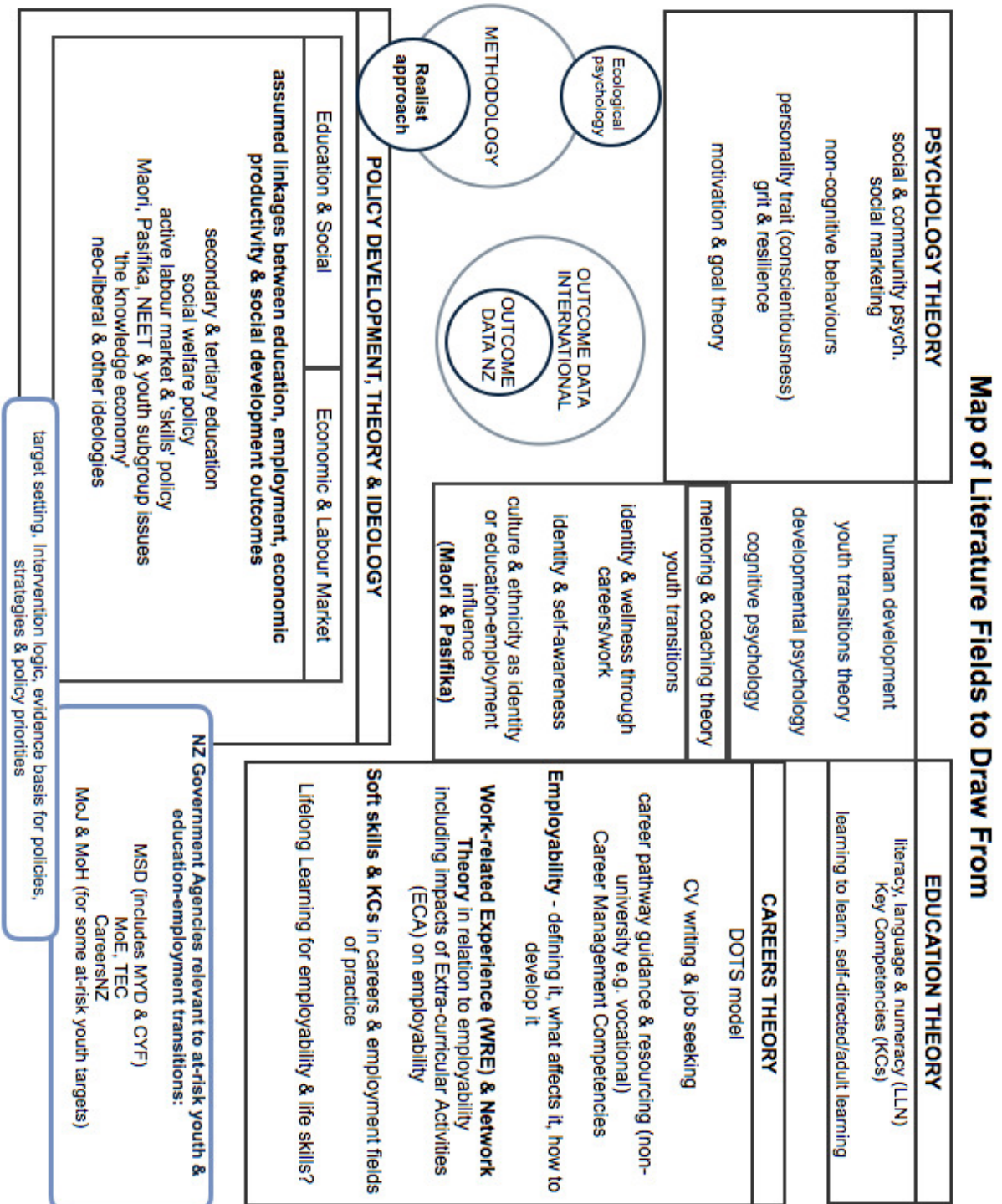
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APPENDIX A: MAP OF LITERATURE FIELDS TO DRAW FROM

Appendix A gives an idea of what early rounds of literature searches were focused on. Multiple rounds of literature searches were conducted iteratively during the research process. Later searches included additional topics and fields of literature that are not covered on this map. The map gives an indication of the breadth of literature that was initially considered to be potentially relevant to answering the research questions, as well as informing research design decisions.

Map of Literature Fields to Draw From

METHODOLOGY — Realist approach; Ecological psychology; OUTCOME DATA INTERNATIONAL — OUTCOME DATA NZ

PSYCHOLOGY THEORY
- social & community psych.
- social marketing
- non-cognitive behaviours
- personality trait (conscientiousness) grit & resilience
- motivation & goal theory
- human development
- youth transitions theory
- developmental psychology
- cognitive psychology
- mentoring & coaching theory
- youth transitions
- identity & wellness through careers/work
- identity & self-awareness
- culture & ethnicity as identity or education-employment influence (Maori & Pasifika)

EDUCATION THEORY
- literacy, language & numeracy (LLN) Key Competencies (KCs)
- learning to learn, self-directed/adult learning

CAREERS THEORY
- DOTS model
- CV writing & job seeking
- career pathway guidance & resourcing (non-university e.g. vocational) Career Management Competencies
- Employability - defining it, what affects it, how to develop it
- Work-related Experience (WRE) & Network Theory in relation to employability including impacts of Extra-curricular Activities (ECA) on employability
- Soft skills & KCs in careers & employment fields
- Lifelong Learning for employability & life skills?

POLICY DEVELOPMENT, THEORY & IDEOLOGY
- Education & Social
- Economic & Labour Market
- assumed linkages between education, employment, economic productivity & social development outcomes
- secondary & tertiary education
- social welfare policy
- active labour market & 'skills' policy
- Maori, Pasifika, NEET & youth subgroup issues
- 'the knowledge economy'
- neo-liberal & other ideologies

NZ Government Agencies relevant to at-risk youth & education-employment transitions:
- MSD (includes MYD & CYF)
- MoE, TEC
- CareersNZ
- MoJ & MoH (for some at-risk youth targets)

target setting, intervention logic, evidence basis for policies, strategies & policy priorities

APPENDIX B: KEY SEARCH TERMS AND TYPES OF LITERATURE REVIEWED

Key search terms

Below is a list of key terms that were used in literature searches. This is not a complete list of every term that was used within all of the iterative rounds of searches that were conducted. It would be impractical to present such a list.

The purpose of providing this list is to give an indication of the range of literature and concepts (including theory, empirical evidence and grey literature on policy) that were taken into consideration. The search terms and associated literature come from multiple academic disciplines, and fields of policy and practice.

non-cognitive skills

soft skills

traits

personality

Big Five traits

character

socioemotional skills

social and emotional skills

emotional intelligence or EQ

cognitive skills (to compare to non-cognitive skills)

key competencies

employability skills

essential skills

core skills

key skills

21st century skills

work experience

work history

on-job training

work-based training

vocational training

TVET (technical and vocational education and training)

apprenticeships

internships

volunteering

unpaid work

referees (as relevant to job outcome evidence, or to theory on work experience as an employability mechanism)

career skills

career competencies

CIAGE (careers information, advice and guidance)

careers theory

human capital

human capability

social capital

network capital

network theory

signalling

signalling theory + qualifications

signalling theory + human capital theory

signalling + labour market	drop out
signalling + education	underemployed
	graduate outcomes
economics of education	school leavers
education + employment	secondary tertiary transitions
qualifications + employment	school + work
labour market outcomes	qualifications (searched about different
employment	secondary and tertiary types/levels from
youth unemployment	several countries)
NEET	
at risk youth	

Connecting semantically similar key terms, descriptions, evidence and policy concepts

Some key terms for equivalent or very similar concepts were searched for in relationship to another concept, theme, or in the search for relevant empirical evidence. As an important example of this practice, multiple non-cognitive or soft skill related key terms were searched for in conjunction with another key search term or phrase that referred to a particular body of literature on potentially relevant evidence or theory.

A note on searching about childhood-to-teenage relationships, experiences or contexts

Searches that included the keyword 'relationships' were mainly focused on scanning literature about children or young people's relationships with their parents, or with education or intervention providers. More specifically, the focus was on scanning for clues about the theorised relevance of these types of relationships to (a) the development of non-cognitive skills, or (b) work experience attainment, or work attitudes or aspirations, or knowledge about work opportunities, or (c) educational or labour market outcomes among young people.

Search terms and included: relationships (in childhood and teenage years); non-cognitive skills; work experience; school-mediated work experience; socio-economic status (of children, youth or their parents); parent background or characteristics; family background or characteristics.

Eventually, the search was narrowed to locating evidence on links between *work experience, work attitude or aspirations* or *non-cognitive skills*, in connection to empirical evidence about the nature of an individuals' *interactions with their parents*, or with *school-mediated work experience interventions*, or the nature of their first or *early experiences of the world of work.*

The terms *socio-economic status* (during childhood or teenage years), *parent background* or *characteristics,* and *family background* or *characteristics* were also a focus of some searches and snowballing efforts. Literature that focused on these terms, or on associated profiling measures, were investigated in conjunction with the terms *relationships, work experience, non-cognitive skills*, and the terms *labour market outcomes* or *employment*.

Locations and types of literature

The search engines, online repositories and databases that were searched for academic literature include but are not limited to those listed below.

- Google Scholar search engine

- Te Wahoroa (Victoria University of Wellington Library search engine)

- Taylor and Francis Journals

- SAGE Publishing

- JSTOR

- Emerald Journals

- ProQuest Psychology

- Social Science Research Network (SSRN)

- Elsevier (a publishing house and owner of SSRN)

The identification of relevant publications, via keyword searches and the snowballing of reference lists, led to numerous journals and institution's websites being searched; a large number of which are listed below.

The following multilateral and international agency websites are among those that were scanned for policy-focused literature, frameworks, indications of policy theories and assumptions, and policy-focused evidence and insights. These websites yielded particularly useful literature.

- OECD

- World Bank research reports

- International Labour Organisation

Websites of the government agencies and research institutions were also searched in order to locate grey literature about government-funded examples of programme types, policy frameworks, outcome expectations, and eligbility criteria or targeting practices. Below is an example rather than an exhaustive list of government agencies and research organisations whose

websites or publications were scanned. Most of those scanned were from the UK, USA New Zealand.

- US Department of Education (mainly on frame-working Employability Skills)

- UK Commission for Employment and Skills website (UKCES)

- UK Centre on Skills, Knowledge and Organisational Performance (SKOPE) research papers from the UK

- New Zealand Ministry of Education

- New Zealand Tertiary Education Commission

- New Zealand Ministry of Social Development

- New Zealand Treasury

Below is a list of most but not all of the academic journals from which at least one publication was eventually selected and cited within the literature syntheses (which are reported in Chapters 5 to 7). A number and author names are noted in brackets beside most of the journals listed below. The numbers show how many articles were cited from that journal. The author names are included to give a quick indication of who was among those cited, and to indicate what academic disciplines or fields of literature their publications came from. This list may be missing a small minority of citations that were additionally woven into the thesis discussion. This list illustrates the multi-disciplinary range of literature that was reviewed and eventually cited, and the range of authors whose work was deemed to be particularly relevant to addressing the research aims.

BioMed Central (BMC) – mainly for research methodology literature
Ecological Psychology (2 – Marsh et. al. 1, Read & Szokolszky 1)

Journal of Economic Surveys (1 – Vooren et. al.)
Journal of Comparative Economics (1 – van Ours)
Quarterly Journal of Economics (2 – Spence 1, Chetty et. al. 1)
Economic Inquiry (2)
Applied Economics (1 - Borland et.al.)

National Bureau of Economic Research website (NBER)
American Economic Review (3 – Heckman 2, Calvo-Armengol & Jackson 1)
European Economic Review (1)

Journal of Public Economics (1 – Heckman et. al.)
Journal of Political Economy (2 – Becker 1, Clark & Martorell 1 on signalling and secondary school qualification)

Labour Economics (3 – Cobb-Clark & Tan 1, Heckman et. al. 1, Heineck & Anger 1, Kluve 1)

Journal of Human Resources (4 – Belfield et. al. 1, Borghans et. al. 1, Cunha & Heckman 1, Larsson 1)

Journal of Occupational and Organizational Psychology (1 – Loughlin & Barling)

Industrial and Organizational Psychology (1 – Hogan et. al.)

Fundamentals of Management

Journal of Economic Behavior and Organization

Nature Human Behaviour (2, Heckman)

Work, Employment and Society (1 – Weiss et. al. on work experience and labour market entry)

Perspectives on Psychological Science (1 – Roberts et. al.)

Psychological Bulletin

Psychological Review (1 – Greeno)

At least one article from each of the journals below were cited for Duckworth and co-authors' work on grit, self-control and self-discipline as non-cognitive concepts:

Journal of Personality Assessment

Psychological Science

Journal of Personality and Social Psychology (2 – Duckworth et. al. 1, Roberts et. al. 1)

Current Directions in Psychological Science (1 – Duckworth et. al.)

Frontiers in Psychology

European Journal of Social Security (1 – Bredgaard on Evaluation of What Works for ALMPs)

Public Management Review

Public Administration (Gerrits & Marks on complexity theory)

Political Studies Review (1 – Cairney on complexity theory)

Research in Social Problems and Public Policy

Journal of Social Policy (1 - Yates)

American Journal of Sociology (1 - Coleman on Human Capital)

American Sociological Review (1 – Caspi et. al on childhood and adolescent predictors of unemployment)

Journal of Youth Studies (1 – Kintrea et. al. on youth aspirations and disadvantage)

Youth Studies Australia (1- Carson et. al.)

Journal of Education Policy (2 – Archer et. al 1, Keep 1)

Journal of Education and Work (4 – Brown & Hesketh; Ahier et.. al., Mann & Percy 1, Nickson et. al. 1)

Research in Comparative and International Education (1 – MaGuire)

Journal of Psychology and Education (1 – Lipnevich & Roberts)

Education Economics (1 - Heywood & Wei)

Economics of Education Review (1 – Hussey)

APPENDIX C: INVENTORY OF NON-COGNITIVE OR SOFT SKILL-RELATED FRAMEWORKS AND DISCOURSES

Appendix C is a table of a selection of publications that were compared when developing a thesis definition of non-cognitive skills and analysing existing attempts to recognise these skills or target their development. It is only one example from several literature search and analysis rounds that were undertaken in relation to non-cognitive skills. This is example was focused on selecting and comparing sources that exemplified policy actors' and academics' attempts to capture or itemise non-cognitive skills within skill lists, frameworks and sets of descriptors. The selection is also particularly relevant to illustrating the plethora of overlapping umbrella terms and policy work areas or initiatives that have been invented by policy makers for policy purposes; especially for education sector practice.

Source	Framework or Publication Name	Country	Government initiative (Govt.), Academic, Article, Other	Quotes & Notes
(OECD, n.d.-a, n.d.-b)	**PIAAC**: Main elements of the **Survey of Adult Skills** Summary of Assessment Domains in the Survey of Adult Skills (PIAAC)	OECD		**LLN** is the focus – but soft-related skills and ICT interaction/literacy is also included
(Office of Career, Technical and Adult Education, U.S. Department of Education, n.d.)	**Employability Skills Framework**	USA		nine key skills, organized in three broad categories: Applied Knowledge, Effective Relationships, and Workplace Skills.
(Southeast Michigan Council of Governments, 2012)	**Lifelong Soft Skills Framework**: Creating a Workforce That Works	USA	Govt.	identifies **basic or foundational** skills for workplace success…focuses on identifying **soft-skills** development as a lifelong effort

(Ministry of Education, 2007)	**Key Competencies** in the NZ Curriculum for secondary schools	NZ	Govt.	
(Ako Aotearoa National Centre for Tertiary Teaching Excellence, 2014)	**Core Capabilities** within the Graduate Profiles for Level 1 and 2.	NZ	Govt. (unofficial) Academic lists	(p2) Within these profiles are a common set of Core Capabilities that collectively describe what a person with a Level 1 or 2 qualification needs to know, do, and be in order to progress to the next level of learning. These capabilities are: literacy, numeracy, learning, work, community and cultural, and progression.
(ACT Government, Education & Training Directorate, 2014; Business Council of Australia, 2014; Commonwealth of Australia, 2013a, 2013b) (Employability Skills for the Future, 2003 in Taylor, 2005, p. 206) (Commonwealth of Australia, 2012)	**Core Skills for Work (CSfW) Developmental Framework** 2013 NOTES**:** CSfW is a revamp of the **Employability Skills Framework.** The latter was proposed by the Australian Chamber of Commerce and Industry, and the Business Council of Australia in 2002, then endorsed by the National Quality Council to replace Key Competencies in 2005 for all VET (Brennan Kemmis et al., 2014). **Australian Core Skills Framework** also exists for skills in learning and LLN. Australia recently also refers to **foundation skills** as both basic LLN and	Australia	Govt.	(p1 Overview doc) This set of non-technical skills, **often referred to as generic** or **employability skills**, contribute to work performance in combination with technical or discipline specific skills and core language, literacy and numeracy (**LLN**) skills Australia recently also refers to **foundation skills** as both basic LLN and employability skills. See Brennan Kemmis et. al. (2014): *Transferable skills in Vocational Education and Training (VET)1: Implications for VET teacher policies in Australia*

(Brennan Kemmis, Hodge, & Bowden, 2014)	employability skills. See Brennan Kemmis et. al. (2014): *Transferable skills in Vocational Education and Training (VET)1: Implications for VET teacher policies in Australia*			
(Ithaca Group, 2011)	**Employability Skills and Attributes Framework** Project – Background Paper	Australia	Academic lists for Govt.	
(Hillage, Pollard, Great Britain, & Department for Education and Employment, 1998)	Employability: Developing a Framework for Policy Analysis	UK	Govt.	
(Nickson, Warhurst, Commander, Hurrell, & Cullen, 2012)	Soft skills and employability: Evidence from UK retail	UK	Academic lists	
(Carblis, 2011)	Assessing Emotional Intelligence: A Competency Framework for the Development of Standards for Soft Skills	?	Academic article?	
(Spencer & Spencer 1993 in Rainsbury, Hodges, Burchell, & Lay, 2002, p. 15)	**Generic Competencies** that account for 80-95% of the distinguishing features of superior performers		Academic lists	Spencer & Spencer's Generic Competencies list includes motivation, soft and hard skill criteria. Clustered under: Achievement and Action, Impact and Influence, Managerial, Cognitive, Personal Effectiveness.
(Hampson & Junor, 2009)	Employability and the substance of soft skills	Has NZ focus. By University	Academic lists Govt.	**(Caveat on academic rigour. Unpublished manuscript)**

		of New South Wales (Australia)		(p3) Generic skills are known by different terms in different countries: in the UK as 'core skills', 'key skills', 'common skills', in New Zealand as 'key competencies' or 'essential skills', in Australia as 'key competencies', 'employability skills', 'generic skills'; in the USA as 'basic skills', 'necessary skills', in France as 'transferable skills'; in Germany as 'key qualifications' (see NCVER, 2003; ACER, 2008: 28). The OECD subsumes them within a 'vast agenda' of 'lifelong learning', which 'covers all purposeful learning activity' and 'all forms of formal, non-formal, and informal learning' (OECD, 2007:10). Identified three sets of skills – awareness shaping, interaction and relationship shaping, and coordination – at five levels – familiarisation, automatic fluency, proficient problem solving, creative solution sharing, and expert system-shaping.
(Rainsbury et al., 2002, p. 15)	**Competency Descriptors.** NZ **higher education** students ranked them by importance for **business graduates** entering the workforce – based on Spencer & Spencer 1993 Generic Competencies list	NZ	Academic lists	Descriptors were developed based on Spencer & Spencer 1993 Generic Competencies list.

(Andrews & Higson, 2008)	Graduate Employability, 'Soft Skills' Versus 'Hard' Business Knowledge: A European Study. Transferable soft skills and competencies for European **higher education graduate** employability**, especially **business graduates**	EU/UK	Academic lists	(p1) analyses graduate and employer perspectives of graduate employability in four European countries (UK, Austria, Slovenia and Romania). Emphasises need for **written and verbal communication, problem-solving, team work**. Also ICT, creativity, willingness to learn.
(Robles, 2012)	Executive Perceptions of the Top 10 Soft Skills Needed in Today's Workplace	USA	Academic lists	Surveys business executive perceptions of skills needed by higher education graduates. Includes words regarding values, qualities, attributes – pg458 says soft skills "encompass the character traits". Motivation, conscientiousness and initiative related terms are woven into a Work Ethic cluster. No innovation, creativity, enterprising related words included. Lifelong learner included within a Flexibility cluster. Sense of humour included.