

Effective vocational rehabilitation team working: An exploration of complexities and practice in Aotearoa-New Zealand

Lisa Margaret McAulay

**A thesis submitted to Auckland University of Technology
in partial fulfilment of the degree of
Master of Health Science**

2020

School of Clinical Sciences

Table of Contents

Table of Figures.....	vi
Table of Tables	vi
Attestation of Authorship.....	vii
Acknowledgements.....	viii
Glossary	ix
Additional Abbreviations.....	x
Abstract	xi
1 Introduction	13
1.1 Background to the vocational rehabilitation team	13
1.1.1 Vocational rehabilitation definition and structures.....	13
1.1.2 Context of health professionals working in teams	14
1.1.3 Team organisation in vocational rehabilitation-specific health professional teams	
15	
1.2 Researcher context and background	15
1.3 Aims and context of the study	16
1.4 Structure of the thesis	17
2 Conceptual Review Methods	18
2.1 The research question	18
2.2 Method for conceptual review.....	18
2.2.1 Definitions	19
2.2.2 Inclusion and exclusion criteria for included articles.....	19
2.2.3 Database search	20
2.2.4 Screening for eligibility.....	20
2.2.5 Quality screen.....	20
2.2.6 Analysis.....	21
2.3 Summary	22
3 Findings: Conceptual Review	24
3.1 Findings from database search, eligibility and quality screen	24
3.2 Team conceptualisation	27
3.2.1 The roles of the employer and the client.....	29
3.2.2 The team decision maker	30
3.3 Intervention	30
3.3.1 Intervention settings.....	30
3.3.2 Impact of environment on intervention	31
3.3.3 Types of vocational rehabilitation intervention	31

3.3.4 Timing of intervention	33
3.4 System level factors	33
3.4.1 Vocational rehabilitation systems in different settings	33
3.4.2 Compensation systems	38
3.4.3 Funding structures	39
3.4.4 Policy structures	40
3.4.5 Competition and opportunities for collaboration	40
3.4.6 Geographical availability issues	41
3.5 Team factors.....	41
3.5.1 Shared culture and values.....	41
3.5.2 Importance of consistent team members.....	42
3.5.3 Openness to collaborative decision making.....	42
3.5.4 Shared understanding about responsibilities.....	43
3.5.5 Professional hierarchies	45
3.5.6 Models of practice for shared understanding	45
3.5.7 Communication	47
3.6 A place for client centred practice in vocational rehabilitation?	47
3.7 Summary	49
4 Stage Two Methodology and Study Design	50
4.1 Methodology	50
4.1.1 Research questions	50
4.1.2 My position as a researcher	51
4.1.3 Theoretical perspective.....	52
4.1.4 Epistemology	52
4.1.5 Qualitative descriptive as a methodology.....	53
4.1.6 Summary of methodology.....	55
4.2 Study design	55
4.2.1 Overview of study design.....	55
4.2.2 Participants.....	57
4.2.3 Sampling.....	58
4.2.4 Participant recruitment.....	59
4.2.5 Sample size	59
4.2.6 Focus group procedures:.....	60
4.2.7 Interview procedures.....	61
4.2.8 Transcription.....	61
4.3 Analysis.....	62

4.3.1 Familiarisation and coding (stage 1-2)	62
4.3.2 Theme development (stage 3).....	63
4.3.3 Reviewing and defining themes (stage 4-5)	64
4.3.4 Producing the report (stage 6)	65
4.4 Quality of research	65
4.4.1 Worthy topic.....	66
4.4.2 Rich rigor	66
4.4.3 Sincerity.....	66
4.4.4 Credibility	67
4.4.5 Resonance	68
4.4.6 Significant contribution.....	68
4.4.7 Ethical.....	69
4.4.8 Meaningful coherence	71
4.5 Summary	71
5 Findings	72
5.1 Participants.....	72
5.2 Context to the themes: Team structures.....	73
5.3 Theme summary	74
5.4 Being human.....	75
5.4.1 Summary	85
5.5 Having the power	85
5.5.1 Summary	91
5.6 Vocational rehabilitation is not for everyone	92
5.6.1 Summary	97
6 Discussion	99
6.1 Being human.....	99
6.2 Are vocational rehabilitation practitioners' specialists?	102
6.3 Stressors for Aotearoa/New Zealand vocational rehabilitation professionals...	106
6.4 Vocational rehabilitation is burn out material.....	108
6.5 Implications for practice	109
6.6 Strengths and limitations of study	112
6.7 Recommendations for future research	113
6.8 Conclusions.....	113
References.....	115
Appendix 1 Ethics approval	123

Appendix 2 Information sheets	124
Appendix 3 Focus group consent.....	128
Appendix 4 Consent form individual interview	129
Appendix 5 Interview guide.....	130
Appendix 6 Focus group guide.....	132
Appendix 7 Critical appraisal	134
Appendix 8 Team diagrams	152
Appendix 9 Team Descriptions	158

Table of Figures

Figure 3.1 Prisma flow diagram	25
Figure 5.1 Team diagram (as described by participants)	74
Figure 5.2 Thematic map.....	75

Table of Tables

Table 1: Summary of origin of research	24
Table 2 Preliminary concepts.....	26
Table 3 Team members.....	28
Table 4 Demographics.....	73

Ethical Approval to proceed with this project was granted by Auckland University of Technology Ethics Committee on 1st July 2019, Ethics Application Number 19/106

Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the qualification of any degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made in the acknowledgements.

Signed

Dated 14.06.2020

Acknowledgements

There are many people I would like to thank for supporting me in my first research endeavour and making this thesis possible. Firstly, I would like to thank my supervisors Dr Joanna Fadyl and Dr Gareth Terry, who were able to guide me with their knowledge and expertise throughout the project. They were very patient with my novice researcher questions and guiding me through the world of research. I also want to thank them for listening to me talk about a topic I am passionate about, and some of the great conversations we have had about vocational rehabilitation. My supervision sessions have been extremely informative, and I have enjoyed diving into the world of research.

I would also like to thank the participants who generously gave their time and shared their insights with me. Thank you for giving such honest and open feedback. I really enjoyed meeting them all and understanding more about other practitioners' experiences. Thanks also goes to the companies for allowing your staff to participate. This includes my own employer for assisting me not only with participants to interview but also for the funding of my study.

My thanks also go to my family for their unwavering faith in me, through some highs and lows. Firstly, thanks to my husband Tim for the endless cups of tea you delivered to my office, your technical support, and for handing over the tissues when a few tears fell. Also, to my parents Karen and Scott, who have always been my biggest supporters and have encouraged me every step of the way. I know this thesis means as much to me as it does to them, and their unrelenting support has been so much appreciated. Finally, to my sisters, Sarah and Katie, thank you for keeping up my morale. I have really appreciated the phone calls, messages, and Sarah the chocolate! Sometimes a little pick me up has really got me through the tough times.

Finally, the last thanks to my friends and colleagues, who have put up with my many conversations about my research and always keeping me in their minds. Your questions about how I am going, and where things were at, were always appreciated. Thank you for putting up with me for the last 2 years!

Glossary

Functional restoration – an inpatient programme, predominantly for clients who have chronic pain. The programme has a strong emphasis on improving function through interdisciplinary team working. Usually, a client receives a combination of activity-based rehabilitation, exercise prescription, and psychosocial interventions. Clients can attend both group and individual sessions. (Cartmill, Soklaridis, & Cassidy, 2011)

Interdisciplinary (IDT)– A group of health and vocational professionals working together to achieve the same goals. The team members' profession-specific roles remain but intervention goals are shared and created by the team. Team roles are often delegated and there can be role emergence across disciplines (Brunarski, Shaw, & Doupe, 2008)

Multidisciplinary (MDT) – The team involves a range of health and vocational professionals from different disciplines. They work together to address the same barriers or problems but maintain their own profession-specific roles and independent decision making for intervention (Brunarski et al., 2008).

Transdisciplinary – a group of professionals working towards a client centred goal, with evolving and changing roles and responsibilities dependent on client need. Sharing of skills and knowledge is commonplace to reduce role boundaries (Brunarski et al., 2008; Cartmill, Soklaridis, & Cassidy, 2011).

Uni-disciplinary – a single professional or group of professionals of the same discipline working towards the same goal.

Work ability – a client's assessed ability to work post-injury or illness. Work ability is usually determined by both individual factors such as injury and illness and contextual factors. Contextual factors can include work culture, work design, and psychosocial factors, sometimes not involved directly with work (Ståhl, Svensson, Petersson, & Ekberg, 2009)

Work hardening – also known as work conditioning. It is performed both as an inpatient and outpatient programme. It requires the client to condition themselves for a return to work through real and simulated work activities (Brewer & Storms, 1993).

Work trial – a work trial is the process of someone trialling an alternative employment role or workplace. It can be either paid or unpaid and give the client an opportunity to get fit for work, on the job. It also enables the client to gain on-the-job skills that they can take to future employment (Marnetoft & Selander, 2000).

Additional Abbreviations

ACC: Accident Compensation Corporation

A-NZ: Aotearoa – New Zealand

CASP: Critical appraisal skills programme

DHB: District Health Board

FG: Focus group

GP: General practitioner

KPI – Key performance indicator

MSD: Ministry of Social Development

OT: Occupational therapist

OP: Occupational physician

Physio: Physiotherapist

PICOT: Population, intervention, comparison, outcomes, timeframes

QD: Qualitative descriptive/Qualitative description (method)

RTW: Return to work

TA: Thematic analysis

VR: Vocational rehabilitation

Abstract

Background: There is limited research in the field of vocational rehabilitation (VR) in the Aotearoa – New Zealand (A-NZ) context. In the international research, there are lots of influences on how effectively VR teams can work together. These include funding systems, the structure of the team, organisational policies and procedures, and hierarchical perceptions. As the existing literature came from outside of the A-NZ practicing climate, it was unclear how transferable this international research is to A-NZ VR. It is important for policy makers, VR professionals, and organisations, to understand how a VR team can work effectively together. If a team can work well together, they are more likely to achieve positive outcomes and team members have better job satisfaction.

Design: The study had a two-stage approach employing a conceptual review of the current literature on VR teams, alongside a collective instrumental case study of two A-NZ VR teams. The focus of stage one was the type of discipline mixes (i.e. transdisciplinary, interdisciplinary or multidisciplinary), which disciplines were involved, what their roles were, and the influences on how the team operated effectively. The findings from the conceptual review informed the focus group and interview schedule for stage two, which explored the specific experiences of VR teams working in A-NZ. Stage two of the research constructed case studies of two A-NZ-based VR teams. A qualitative descriptive methodology guided the overall process, and thematic analysis was used to analyse the data.

Results: Stage one identified many similarities and differences between the systems in A-NZ and other countries, in terms of how VR is accessed and administered. Barriers and enablers to an effective team included client role within the team, team communication, shared language, team trust, hierarchical perceptions, funding, and work culture.

The findings in stage two identified some similarities and unique experiences to practicing in a VR team, in A-NZ. Participants discussed the importance of achieving trusting relationships with their team. This was achieved through seeing everyone as equal, and human. Being equal was particularly important for professionals that were seen to be at different hierarchical levels. It was identified that VR professionals' specialist skills were not recognised, leading them to have little power in VR decision making processes. Most VR professionals experienced competing demands between client drivers and business drivers. Stage one and stage two identified trust as a key facilitator for a successful team and hierarchical perceptions as a barrier.

Conclusions: A-NZ VR teams have some unique needs from other teams described in the international literature. This is largely due to the A-NZ VR systems and how teams are set up by

organisations. Unique issues identified by participants related to funding, finances, meeting key performance indicators, and the stress this caused. The concerns that were the same as international teams included the power play between all stakeholders in VR, needing trust for a cohesive team, and the impact of medical hierarchy. The present research proposed that being human was an important aspect to achieve a collaborative team. This was an insight unique to this study

1 Introduction

The introductory chapter will explore the background of vocational rehabilitation (VR). It will also explore the different types and structure of teams that are utilised, both in VR and in a wider rehabilitation context. I will discuss my own background and interest in the topic area. The purpose of the research will be identified, and then the structure for the rest of the thesis will be outlined.

1.1 Background to the vocational rehabilitation team

1.1.1 Vocational rehabilitation definition and structures

Waddell, Burton, and Kendall (2008) state “vocational rehabilitation is whatever helps someone with a health problem stay at, return to and remain in work” (p 9). They also identify that clients and policy makers aims for VR differ. For policy makers, the most important goal is to assist clients to become independent in work activities, leading to reduced or no financial burden or reliance on the state/community (Stubbs & Deaner, 2005; Waddell et al., 2008). At a client level, goals are often improved health and increased participation in work or occupation (Waddell et al., 2008). VR is considered most successful when it is implemented in the workplace or linked directly to the workplace (Cheng & Hung, 2007; Volker, Zijlstra-Vlasveld, Brouwers, Lomwel, & Feltz-Cornelis, 2015; Waddell et al., 2008).

Worldwide, VR is delivered by a range of organisations including employers (Brunarski et al., 2008), insurance companies (Loisel, Durand, Baril, Gervais, & Falardeau, 2005), and benefit systems (McKinlay, Mackie, Arcus, & Nelson, 2012; Øyeften, Lie, Ihlebæk, & Eriksen, 2014) or funded by a collaboration of these organisations (Sandström, Lundborg, Axelsson, & Holmström, 2007). Who funds the service can have a large influence on the goals of the VR team and how the team operates (Stubbs & Deaner, 2005). It appears from the research reviewed, that there is no consistent mix of professions involved in VR across countries. VR is delivered in a range of environments including inpatient, community, and outpatient settings (Harrison & Allen, 2003; Shaw, Walker, & Hogue, 2008; Streibelt & Bethge, 2014).

In (A-NZ) Aotearoa-New Zealand there are three main funders of VR including the Accident Compensation Corporation (ACC), Work and Income (Ministry of Social Development, n.d.a), and private insurance companies. ACC is a Crown organisation that assists with injury prevention, treatment, and rehabilitation for injuries (Accident Compensation Corporation,

2017b). ACC provides support to those who are injured to return to their pre-injury employment, either in their pre-injury role in the same capacity or in a modified or alternative role with the same employer (Accident Compensation Corporation, 2017a). When a client has been unable to return to their pre-injury employment, support is provided to assist the client to find alternative roles, this could be through training or gaining experience through a work trial period (Accident Compensation Corporation, 2017a). It is a no-fault system which covers A-NZ citizens, as well as short term residents or visitors. The MSD (Ministry of Social Development) also provide a wide range of services to support job seekers, with or without injuries and disabilities, to return to employment (Ministry of Social Development, n.d.-b). This includes support to access training, support to search for work that will meet an individual's specific needs, and access to professionals who can assist with return to employment (Ministry of Social Development, n.d.-b). As well as crown entities, there are also private providers of VR including insurance companies and requests from employers themselves. There is limited information available to the public about the initiatives available from these sources. Whilst the published research I was able to find had limited A-NZ representation, it should be mentioned that both MSD and ACC are likely to produce and fund their own research, which may not be accessible to the public.

Locally and internationally funders select or contract VR providers, to deliver services for individuals (Fadyl, McPherson, & Nicholls, 2015). As VR services are delivered by different providers the structure of the VR teams varies. This impacts on the variety of health professions available to contribute to the team – for example, psychologists, physiotherapists (physios), occupational therapists (OT) and so on. Furthermore, the structure and content of the VR services that are contracted for, are impacted by the social and political goals of the funders (Fadyl et al., 2015).

1.1.2 Context of health professionals working in teams

It is well documented across a range of published articles that working as a team of health professionals, improves client outcomes in VR (Waddell et al., 2008). Team working is also supported and identified in the Code of Ethics for Occupational Therapists' (2015), New Zealand Physiotherapist's Code of Ethics and Professional Conduct (2011), and the Code of Ethics for the New Zealand Medical Profession (2014). There are further statements within these codes that also highlight the importance of team working. A key argument in all of these codes is that professions should refer, liaise, and gain advice from others when a client's needs are not able to be met within the treating professions competencies or scope of practice. They also note the importance of communication and valuing other professionals' roles.

1.1.3 Team organisation in vocational rehabilitation-specific health professional teams

Scientific research, completed by a British vocational rehabilitation (VR) task force, provided evidence for the creation of VR policy in the UK (Waddell et al., 2008). Through their extensive review of the literature, across different populations and approaches to VR delivery, they came to a conclusion that "no single professional group or service can deliver VR for everyone who needs it, so communication and coordination of effort is essential" (Waddell et al., 2008, p. 42). However, which professions should be involved in a VR team or how a team should be structured, is not specifically highlighted. Looking more broadly, throughout the research literature there are many terms used for team working including, uni-disciplinary, multi-disciplinary, interdisciplinary, and transdisciplinary. Each type of team can be used in a range of settings (community, inpatients, group, and so on), in different cultures, and with differing team members. VR goals vary from managing symptoms and optimising function, to increased workability, maintaining pre-injury work roles, and finding new and alternative work roles. A wide range of literature was reviewed for this study. The majority of research explored the involvement of both health and vocational professionals, social supports specific to the client, and client-specific workplace-based professionals or supports. Health and vocational professionals included case managers, family physicians, occupational physicians, occupational therapists, psychologists, physiotherapists, kinesiologists, vocational consultants, and massage therapists. Return to work stakeholders included employers, occupational health nurses, union representatives, and supervisors. Family members, friends, and family physicians were all identified as social supports, with family physicians also falling into the health professional category. The number of team members and team member roles also varied from team to team (Bowyer, Kielhofner, & Braveman, 2006; Brunarski et al., 2008; Cartmill, Soklaridis, & Cassidy, 2011; Harrison & Allen, 2003; Loisel, Durand, et al., 2005; McKinlay et al., 2012; Shaw et al., 2008; Streibelt & Bethge, 2014; Stubbs & Deaner, 2005).

1.2 Researcher context and background

I am an occupational therapist and regional manager who has worked in the area of VR for the past 8 years. My current work has two roles: a clinician and a manager. Due to my current practice, I have seen the impact of teams on client's vocational outcomes. I have also noted the barriers and enablers to utilisation of teams in my own area of practice in the Tasman and Marlborough regions of A-NZ. The team would be classed as a rural team away from the large main cities of A-NZ. Through my work, I have seen teams or team members, not always being utilised, with some practitioners choosing to work in a uni-disciplinary team structure. There seem to be a number of barriers that prevent the use of a multidisciplinary, interdisciplinary, or

transdisciplinary teams, including geographical location of staff, availability of staff in rural locations, use of uni-disciplinary clinics, funding, and time. Looking further in the research, I was able to identify a lot of information from international research about barriers and enablers to effective VR teams, but there was limited research available in the A-NZ context. It was this interest that motivated me to embark on this research.

1.3 Aims and context of the study

Currently, there is limited research in A-NZ specific to VR teams. This study aims to investigate how specific health professional teams that deliver VR in A-NZ compare to the conceptualization of VR teams in the international peer-reviewed literature. The study will focus on the comparison of A-NZ and international VR teams and identify needs, barriers, and enablers. A-NZ has a relatively new VR system in place compared to other countries. Insights into current international VR practice may be able to inform and/or transform current VR practice in A-NZ.

I conducted the research in two stages. The initial stage of the study was focused on understanding the various ways in which VR teams have been conceptualised in prior research. This was done through an in-depth conceptual review of the peer-reviewed literature. In a conceptual review, the main focus is mapping the various ways in which a phenomenon has been conceptualised (eg. See Fadyl, McPherson, Schlüter, & Turner-Stokes, 2010) – in this case, VR teams. The various conceptual constructs of that phenomenon identified in the review can be used as a framework to guide later data gathering. The second stage was a qualitative descriptive study, using focus groups and interviews to generate data with two heterogeneous A-NZ based teams. I used the data to explore similarities and differences between these teams and teams described in the literature. I also used the data to explore the unique needs associated with VR teams working in local environments.

The majority of VR research has been completed overseas in a wide range of settings but there is limited research in the A-NZ context. This study has the potential to address a gap in the current literature about A-NZ VR teams and how we compare to the conceptual framing of international VR teams. Identifying barriers and enablers to effective teamwork is part of the second research question for this thesis. By exploring how A-NZ VR teams needs compare to international teams, the research has the potential to inform and transform VR team practice. This could be achieved through extending and conceptualising barriers and enablers further and relating these to the A-NZ context. It also has the potential to lead to a review of current practices and implementation of strategies from an organisational level, to ensure effective VR teamwork.

1.4 Structure of the thesis

In chapter one I have provided the background of the study, identifying why I chose this topic area. I have also provided a brief introduction into VR and team working and the aims and context of the study.

Chapter two defines how I undertook the conceptual review of the literature. I also identify the methods utilised for the conceptual review (stage one) of the research, and how I ensured rigour throughout the process.

Chapter three outlines the findings of the conceptual review of the literature. The chapter outlines how VR teams are conceptualised in the international literature. I explore the differences in VR implementation and interventions and how international systems impact on VR delivery.

Chapter four details the methodological considerations and study design for stage two of the research. I explore why and how constructivist, qualitative descriptive methodology was chosen. I then outline the study design and methods. Finally, the chapter explores how I analysed the data using thematic analysis and how I maintained rigour throughout the research.

Chapter five outlines the findings from stage two of the study. I explore the data through three themes; being human, having the power and VR is not for everyone.

Chapter six provides the reader with a discussion of the findings. I also compare information from international VR teams to the A-NZ VR teams. I explore how the findings have the ability to impact on current practice. I identify the strengths and weaknesses of the research and makes recommendations to VR practitioners, organisations, and policy makers about change to current practice, including identifying areas for future research. Finally, I outline the conclusions of the study.

2 Conceptual Review Methods

This chapter will explore the methods I used for my conceptual review (stage one of the research). I will first outline the research question the conceptual review aims to answer. I will then explore how I used a study by Fadyl et al. (2010) to guide the development of my conceptual review. I explore the use of the PICOT (population, intervention, comparison, outcome, timeframe) framework, how I searched for literature, and how eligibility criteria were used. Finally, I explore how quality of literature was assessed and how the literature was analysed.

2.1 The research question

The questions below were developed to focus my review of the literature on an analysis of the various ways in which VR teams are conceptualised and described in the literature – the aim for the first stage of the overall project (see Section 1.3). The following research question was the focus for the conceptual review:

“How are health professional teams, who deliver vocational rehabilitation, conceptualized in the international peer-reviewed literature?”

I used the following further sub-questions to assist in the conceptual review of current literature, allowing me to focus my analysis on the ways in which teams were conceptualised:

- How does the literature define the team or how does the team define themselves? (i.e. transdisciplinary, interdisciplinary or multidisciplinary),
- Which disciplines are involved, and what are their roles?
- How does the team operate effectively?

When reviewing how the team operates effectively, I was particularly interested in exploring the complexities of team-working and whether there is detail about how these complexities are managed. Knowledge of the complexities helps to understand the subtle mechanisms of effective team working, rather than just the broad structures that help or hinder it.

2.2 Method for conceptual review

A conceptual review article by Fadyl et al. (2010) guided development of this conceptual review strategy. The PICOT (population, intervention, comparison, outcome, timeframe) framework (outlined below) was used to identify search parameters, as well as inclusion and exclusion

criteria (Fadyl et al., 2010; Fineout-Overholt & Melnyk, 2005). Only the first four letters (PICO) were used for this study, as (T) timeframe for study publication was not specified, due to the limited amount of VR articles available in the literature.

2.2.1 Definitions

Population: In the research population I included VR teams and teams who were focused on a return to work (RTW) outcome for the client group they were working with. Of particular interest to me, were teams which had the aim of returning clients back to work using a range of interventions. I did not limit teams according to client population, for instance, teams could work with a wide range of clients including those with head injury, chronic pain, musculoskeletal injuries, medical conditions, and mental health issues. I considered teams based in any country in the world, as long as the article was available in English. These wide criteria ensured that a large number of articles were available.

Intervention, prognostic factor or exposure: I considered teams who were inpatient, outpatient, and community-based. I included different team structures – for example, transdisciplinary, uni-disciplinary – with a range of different professionals involved, delivering a wide range of interventions to assist a client to RTW. This included physiotherapy, massage therapy, occupational therapy, psychology, and other interventions which will be outlined later.

Comparison: I completed a comparison of the research between how different countries systems and policies impacted on VR delivery. I also compared how a range of factors impacted on the team. Factors included team structure, communication methods, geographical location, and so on.

Outcomes: I was particularly interested in teams who returned clients to work or were preparing clients to be functionally ready for work. Clients could either return to their current employment or alternative employment. Other outcomes I was interested in were, how VR team communication and functioning was improved, how current factors either became a barrier or enabler to VR team working and research which proposed improvement plans for VR team functioning.

2.2.2 Inclusion and exclusion criteria for included articles

Articles were included in the conceptual review if they met the definitions outlined above and if they met the following criteria. Only articles whose full publications were available in English through the AUT library and AUT external library sources were included in the keyword search.

Articles were limited to English language only, due to time constraints on the project and as I did not have the resources to employ translation services for this study.

During the relevance screen, the following inclusion and exclusion criteria were used. Articles were excluded if RTW was a secondary aim and the participants or team members were not involved in specific RTW intervention such as work hardening, RTW goal setting and participation in work activity. This exclusion criteria ensured that VR specific literature and teams were then analysed at the next stage, rather than rehabilitation or medical teams. Articles that made no reference to a team were also excluded as they would not provide me with the data to explore the research questions and sub-questions.

When I screened full articles, the literature that did not clearly explore who was in the team, what intervention was provided, and how the team worked together were also excluded. These exclusion criteria were used as, without this data, the concept of the team and team working was unable to be clearly defined. The PICO framework was also referred to, to assist with inclusion and exclusion of articles.

Opinion pieces, proposed research, literature reviews, and qualitative and quantitative research were all included. Articles were not excluded by date of publication. Articles addressing a range of physical and mental health disorders were included. These inclusion criteria were used due to the limited amount of VR specific articles available to me, and to ensure that a broad perspective of research could be analysed.

2.2.3 Database search

For the literature search, I identified key words, including: "Work harden*" OR "Work rehabil*" OR "Return to work" OR RTW OR "vocation* rehabil*" AND Interdisc* OR multidisc* OR transdisc*OR unidisc* AND Team*. EBSCO, CINAHL and MEDLINE health databases were used to search for relevant literature using the key words identified above.

2.2.4 Screening for eligibility

After the database search, an assessment for relevance was completed. This required me to manually review titles and abstracts of articles against the inclusion criteria outlined above. The final stage was to manually review full text articles to ensure that they met the inclusion criteria outlined. Quality screening followed eligibility screening.

2.2.5 Quality screen

The critical appraisal skills programme (CASP), critical appraisal tools were used to review strengths and weaknesses of research. The tools also ensured theoretical rigour of articles (Critical Appraisal Skills Programme, 2018). The research fell into the following categories:

quantitative design ($n = 18$), qualitative design ($n = 12$), mixed method ($n = 4$), and other ($n = 12$). Articles which fell into the other section included opinion pieces, historical overviews, comparisons of two VR systems, literature reviews, and systematic reviews. CASP tools were chosen as they are publicly available and have a wide range of checklists for both qualitative and quantitative research methods (see Appendix 7 Critical appraisal for a detailed table of the assessment of each study). Six separate checklists were used in total to assess randomised controlled trials ($n = 11$), case control studies ($n = 4$), cohort studies ($n = 2$), economic evaluations ($n = 1$), qualitative studies ($n = 12$), and systematic reviews ($n = 2$). The CASP tools required me to review validity, if the results were clear, and if the results would assist with my research. There were articles that did not fit with a specific checklist. In these instances, I still reviewed if the research had a clear aim or purpose, the type and appropriateness of the research design, the appropriateness of participant recruitment and sample size if the results answered the research question and the strengths and limitations of the research. For those articles that were opinion pieces, I reviewed the aim of the article, and if the article contributed additional information or knowledge to the research currently available.

CASP checklists enabled a wide range of study designs and sources to be reviewed and incorporated into the conceptual review. Quality assessments with numerical ratings were not used as this would not have allowed for the incorporation of this wide range of data and study designs. A checklist quality tool enables each study design to be reviewed on their own values and quality requirements. Most articles described the concept of the VR team in their introductions, discussions, and methods. Information which was valuable to describing the VR team was included in the conceptual review. If information was gathered from the results of research, this was only included if the research met all the quality criteria within the CASP checklist. Some articles, such as opinion pieces and descriptive literature reviews, did not report on empirical research and so were not assessed for methodological quality. The information in these articles was not excluded but used in a different way – to supplement research-based information where they could add depth to the concept of the VR team.

2.2.6 Analysis

The included articles were read and analysed. The PICO framework was used to structure data extraction, supported by the following questions.

- How is the team conceptualised i.e. what makes it a team, what is the makeup of the team and how is it labelled?
- What is the apparent purpose that the team exists to address?

- What do the team do together?
- How do the team work together/enablers?
- What are the stated challenges and barriers for the team?
- Where is the team located – both physical location and location within a system?
- What if anything about this team makes it particular to the context of VR?
- What if anything, does this team challenge about conventional practice?
- What, if anything, about this team, is particular to their location or context?
- What if anything, is omitted from the description that may be important?

The questions were used as headings, and information from articles that answered these questions were summarised under each heading. If information available in the articles did not fit into the outlined questions, but was relevant or added depth to the concept of the VR team, it was listed under the question “what, if anything, is omitted from the description that may be important?.” I used my experience of working in a VR team to assist in formulating appropriate questions to ask of the literature and identifying relevant answers in the articles. Fineout-Overholt and Melnyk (2005) note that knowledge of professionals is an important aspect of the analysis of articles. I read the articles twice, and answers to the questions were handwritten onto a question sheet for each article. Direct quotes were listed, and speech marks used to indicate when I had taken information verbatim from the text. Information was also summarised into my own words. Information was reviewed from all aspects of the article including from the introduction, results, and discussion. This process was completed for each individual article and then collated onto a summary sheet comprising information extracted from all articles. Duplicate answers were removed from the summary sheet, though it was indicated that the answer was from more than one source. From here the data was reviewed and subheadings or preliminary concepts were made for three questions (as outlined in Table 2).

2.3 Summary

This chapter has reviewed how Fadyl et al.’s (2010) conceptual review assisted with the development of the strategy for my conceptual review. The chapter defined the PICO framework which was used to select appropriate research articles. It explained that timeframe was excluded from the PICOT framework due to the limited number of VR specific articles available. A wide timeframe for articles ensured that a larger number of articles would be eligible for analysis. The inclusion and exclusion criteria which was used alongside the PICO framework was also identified. I also explored how I utilised the CASP checklists to ensure quality of the research analysed. There were some articles that did not fit into CASP checklists such as opinion pieces

or comparisons of VR systems. These articles were included if they added additional information and knowledge to the VR field. Finally, the chapter outlines how I completed the analysis of the articles and the questions I used to extract data.

3 Findings: Conceptual Review

This chapter explores the findings of the conceptual review. First, it will identify the findings of the search and how the content of the search was categorised. The chapter will then begin to review the content of the literature and research that was found eligible for the study. It will initially explore how VR teams are conceptualised in the literature. Barriers and enablers to effective teamwork in VR will then be discussed under the headings, intervention, system level factors, and team factors. Finally, the concept of client centred practice and its implications to VR team operation will be reviewed.

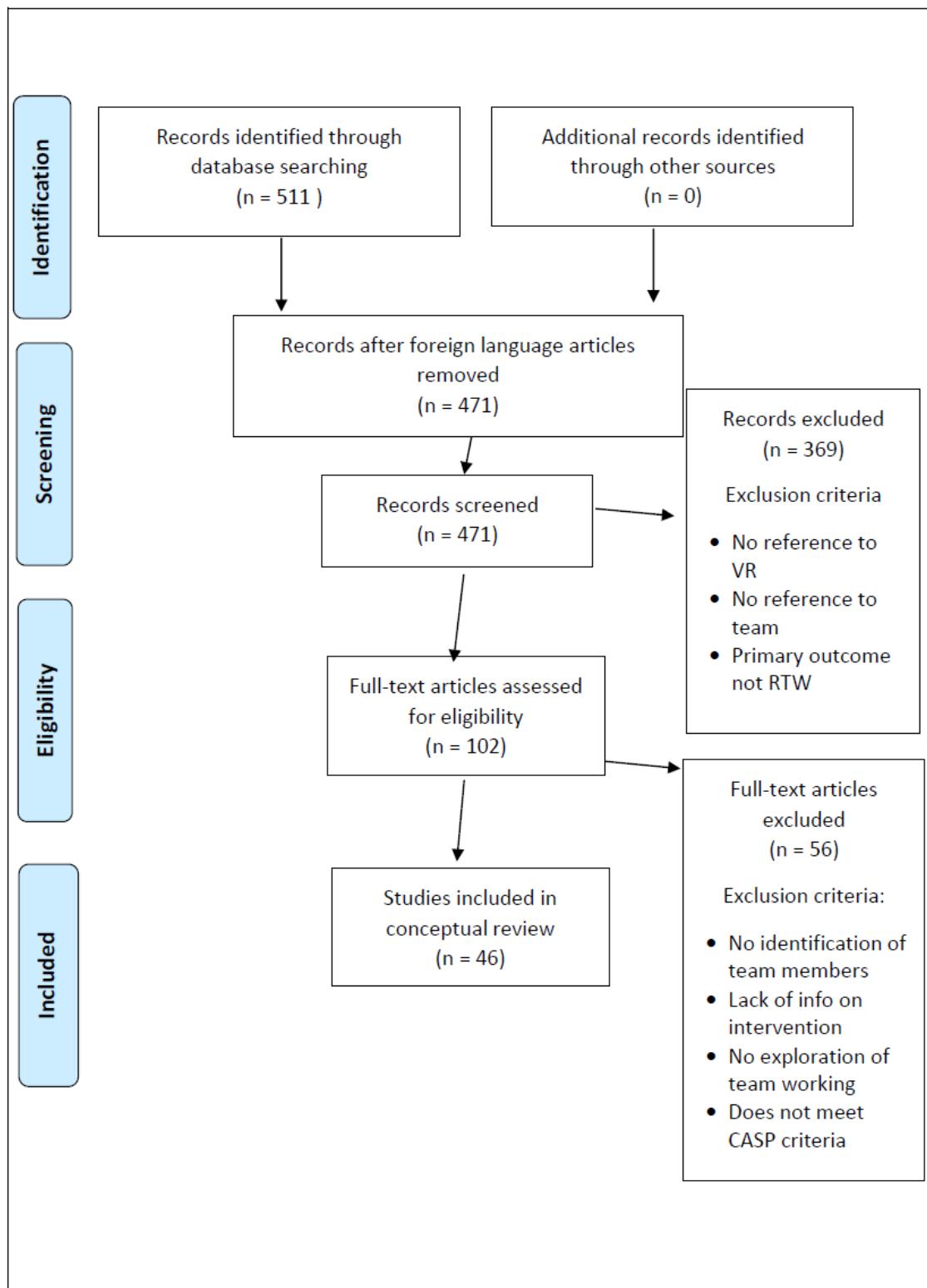
3.1 Findings from database search, eligibility and quality screen

A total of 471 English language articles were returned from the database search. From the title and abstract screening of articles, 102 articles were read and critiqued. Of these, 35 articles met the quality criteria of the CASP tools and 11 were assessed as providing factors important in describing the VR team. After eligibility and quality screening a total of 46 articles were included in the conceptual review (see Figure 3.1 Prisma flow diagram). Only one Aotearoa – New Zealand (A-NZ) specific article was found in the search (see Table 1: Summary of origin of research).

Table 1: Summary of origin of research

Country	Number of articles
Sweden	9
USA	7
Netherlands	3
Canada	3
Denmark	3
Norway	2
UK	2
Australia	1
France	1
Belgium	1
South Africa	1
New Zealand	1

Figure 3.1 Prisma flow diagram



During the analysis, a list of questions were used to extract data from the literature (see section 2.2.6). After the initial extraction, the data was reviewed and subheadings or preliminary concepts were made for three questions (see Table 2). The preliminary concepts covered a large range of topic areas and were not all able to be covered within a master's degree thesis. There were some topic areas that could also be amalgamated with other concepts, an example of this was team conceptualisation and the location of the team. These two concepts were combined as the location of team members impacted on how the team was conceptualised. Barriers and enablers for each topic were also combined to create one concept, to enable the concept to be explored fully. The literature often identified barriers and then solutions to these or vice versa. Reviewing these two concepts together often provided a rounded argument. Concepts were amalgamated to prevent overlap of information and to assist with manageability of data. I also used my knowledge of VR in the A-NZ context, to assist in selecting concepts to explore that would provide a clear understanding of what impacts on team operations.

Table 2 Preliminary concepts

Question	Preliminary concepts
How is the team conceptualised i.e. what makes it a team, what is the makeup of the team and how is it labelled?	Descriptions Roles Team Descriptions Team Members Values/Ideas/Intervention
How do the team work together/enablers?	Case management Communication Compensation system/funding/staffing Employer/workplace Environmental Intervention Leadership Organisation Patient/client/worker/employee/beneficiary Pre-prevention Professionals Team Technology Timing Training/guidelines Viewpoints/ideas/shared views
What are the stated challenges and barriers for the team?	Availability Clients Communication Compensation system Employer/Workplace Environmental Funding Geography Intervention

	Organisation/Timing Provider/professional Team Tools/Technology Training/Experience Workers experiences
--	--

There are a total of five concepts that will be explored throughout this conceptual review. The five concepts enabled similar findings to be grouped together into one topic area. I selected these five concepts as there was correlation to current A-NZ practice. This assisted me to compare and contrast international and A-NZ VR practice. The first is team conceptualisation which explores how the team is made up, including the structure of the team and the professionals within it. It also explores where the team are located and who the decision maker is within the team. Next VR interventions are explored including where intervention is completed, how the environment impacts on what intervention is provided, and how the timing of intervention impacts on client outcomes and the team available. System level factors such as funding, compensation systems, policies, and geographical availability is then reviewed. The fourth concept is team factors, which explores how individual and team beliefs and actions impact on team functioning. It reviews the importance of the team being able to come together as one despite the challenges that they may face, and the effects of when this is unable to happen. The final concept is exploring if client centred practice assists or hinders team functioning.

3.2 Team conceptualisation

The literature conceptualised the team in varied ways, but the majority listed or described teams as uni-disciplinary, multidisciplinary, interdisciplinary, or transdisciplinary. Many conceptualised and discussed who was involved in the team in different ways. Some articles conceptualised the team as the immediate team who worked directly together in one building (Brunarski et al., 2008; Catlett, 2014), whilst others detailed the wider team (i.e., teams who could be separated by geography or worked for different organisations) (Jensen, Jensen, & Nielsen, 2012; Marnetoft & Selander, 2000; Proctor, Mayer, Theodore, & Gatchel, 2005). Table 3 details the breadth of terminology and types of professionals that were involved in a VR team in some aspect throughout the literature reviewed. Teams could include one of these professionals (uni-disciplinary) or a mixture of these professionals in a range of contexts.

Table 3 Team members

Allied health
<ul style="list-style-type: none">• Chiropractor• Cognitive Behavioural therapist• Community mental health worker• Ergonomist• Exercise physiologist• Kinesiologist• Medical social worker• Neuropsychologists• Occupational Therapist• Physiotherapist• Psychologist• “Psychological counsellor”• Psycho-physiologist• Social worker• Speech and language therapists• Vocational social worker
Career support
<ul style="list-style-type: none">• Employment counsellor/vocational counsellor• Rehab counsellors• Vocational evaluator
Case co-ordinator/case manager
<ul style="list-style-type: none">• Case manager• Case manager – contact with workplace and job centre• Case Manager (sickness beneficiary office)• Coordinators (usually nurses)• Physiotherapy RTW co-ordinator• Program manager• Resource specialist and clinical lead• RTW coordinator (non-discipline specific)• Team co-ordinator
Client:
<ul style="list-style-type: none">• Beneficiary• Client• Employee• Injured worker• Patient• Sick listed person
Doctors/specialists/medical:

<ul style="list-style-type: none"> • Attending physician (chosen by client) • Clinical units (psychiatrist, physicians, Occupational Physician/Social or internal) • Company physician • Consultants • GP (General Practitioner) • Neurology specialists • Nurse • Occupational physician • Orthopaedic specialists • Rheumatologists
Governing body/Referrer:
<ul style="list-style-type: none"> • Healthcare system • Insurer • Insurance agency • Municipal • Social insurance representative • Welfare officer • Workers compensation board
Other Rehabilitation Provider
<ul style="list-style-type: none"> • Massage therapists • Physical education instructor • Social scientist • Work environment engineer • Work conditioning technician
Workplace:
<ul style="list-style-type: none"> • Employer • Office representative • Representative from employers personnel department • Supervisor at workplace
Other:
<ul style="list-style-type: none"> • Attorney • Occupational health practitioner (any health profession) • Partner • Secretary who considers referrals • Support person • Union rep

3.2.1 The roles of the employer and the client

The articles reviewed positioned the roles of employers and clients in varying ways. Some detailed the client as an integral part of the team, assisting with goal setting and determining ongoing rehabilitation plans (Bültmann et al., 2009; Ejelöv, Bergström, Stålnacke, & Mattsson, 2016; Faucett & McCarthy, 2003; Kärrholm et al., 2006). Others did not interpret or detail the client as part of the team, focussing predominantly on rehabilitation and medical professionals' views for shaping rehabilitation (Andersen, Nielsen, & Brinkmann, 2014; Aust et al., 2012; Marnetoff & Selander, 2000). Whilst all of the teams had the aim of returning the client to work,

some teams had no involvement with the employer or did not complete any workplace-based intervention (de Buck, Breedveld, van der Giesen, & Vliet Vlieland, 2004; Lytsy, Carlsson, & Anderzén, 2017; van den Hout, de Buck, & Vliet Vlieland, 2007). Other teams only completed rehabilitation on the worksites, involving the employer, supervisor, and union representative (Catlett, 2014).

3.2.2 The team decision maker

The decision maker in the team varied dependent on the team structure, organisation, funding source, and referral processes (this will be discussed in further depth in the next section). For some, the doctor/physician had the ultimate say in determining the client's fitness for work or ongoing rehabilitation plan (Brendbekken et al., 2017; Ståhl et al., 2009). In other teams, the whole team, inclusive of client and employer involvement, decided how to proceed or move forward (Aust et al., 2012; Shaw et al., 2008). As detailed above, some decisions were made for the client by the VR professionals with no consultation with the client (Andersen et al., 2014; Aust et al., 2012; Marnetoft & Selander, 2000). For some clients, the decisions come at the point of referral where their case manager from an insurance or social security provider determines who and what team they are referred to/for (Faucett & McCarthy, 2003; Hart et al., 2006). As noted above, this will be explored further in the next section. Appendix 8 Team diagrams gives diagrammatic illustrations of the structure of the teams described in the literature.

3.3 Intervention

3.3.1 Intervention settings

Teams comprised of inpatient teams from a range of settings including acute care, rehabilitation hospitals, and specialist rehabilitation centres. The teams focussing on RTW predominantly provided intensive work hardening programs to assist clients to return to their pre-injury employment (Cartmill, Soklaridis, & Cassidy, 2011; Karjalainen et al., 2001). Désiron, Onceel, Godderis, Van Hoof, and Rijk (2015) explored the need for occupational therapists and other rehabilitation professionals to be involved in RTW with breast cancer patients in the acute stages of their recovery. Additional settings included outpatient programmes, that provided rehabilitation from short one hour sessions with a health/rehabilitation professional (Brunarski et al., 2008), to intensive programmes where clients attend during normal working hours (Jousset et al., 2004; Shaw et al., 2008). Some teams were purely community based, predominantly meeting clients at their workplace (Catlett, 2014) or at meetings in a range of settings, from specially organised RTW meetings (Ståhl et al., 2009) to healthcare appointments (Aust et al., 2012; McKinlay et al., 2012)

Sweden had a specific intervention location for “sheltered work, Samhall” (Marnetoft & Selander, 2000, p. 274). This was unique to the Swedish system, giving opportunities for clients to train in a range of different work types, in a safe, rehabilitation environment (Marnetoft & Selander, 2000). Medical or rehabilitative guidance is provided by a visiting rehabilitation professional and ensured client specific work accommodations were made (Marnetoft & Selander, 2000). Sweden was the only country identified in the literature that offered this support to clients who were unable to return to a previous work role.

3.3.2 Impact of environment on intervention

Intervention and assessment vary in VR dependent on the location of the rehabilitation. Some teams complete the majority of their rehabilitation on worksites or have the workplace heavily involved, whereas others are focused on improving function in a gym or clinical environment with minimal involvement of a workplace (Braathen, Veiersted, & Heggenes, 2007; Ejelöv et al., 2016; Won & Stergiou-Kita, 2012). Having the worksite involved increased the number of stakeholders contributing and participating in the RTW planning. Rehabilitation occurring onsite, ensured the client was able to maintain the advice they received once discharged (Feuerstein et al., 1993). de Buck et al. (2004) noted that those who were treated in an inpatient clinic environment often struggled to transfer the skills and strategies they had learnt to a workplace environment. Rehabilitation in healthcare settings were documented as often preventing the involvement of team members such as occupational physicians (OPs) and the employer (van den Hout et al., 2007).

3.3.3 Types of vocational rehabilitation intervention

The types of intervention completed by the VR teams impacts on the makeup of the team. For instance, in A-NZ functional rehabilitation is usually undertaken by physiotherapists, or exercise physiologists, and worksite assessments by occupational therapists. If only one type of intervention is provided this has the potential to mean a uni-disciplinary approach is being utilised. The research reviewed, identified a wide range of intervention options provided by international VR teams. There was also argument about the best interventions for VR. Fisker, Langberg, Petersen, and Mortensen (2013) argued that a combination of the following inputs was the most effective; a multidisciplinary team, job modification based on worksite visit, and physical exercise with a focus on fear avoidance. Loisel, Durand, et al. (2005) argued that effectiveness of “traditional treatments” such as massage and surgery were questionable. This statement had the impact of excluding massage therapists and surgeons from the VR team. Skouen, Grasdal, Haldorsen, and Ursin (2002) found that physical exercise alone was found to have minimal impact on RTW outcomes for clients with low back pain, who had been on long

term sick leave. There were more positive outcomes for those clients who completed rehabilitation at work. It was noted that graded activity and occupational intervention generally assisted to increase a client's functional ability to complete their work tasks (Skouen et al., 2002). Won and Stergiou-Kita (2012) noted the importance of a jobsite analysis to ensure that rehabilitation goals were targeted and a client's ability to work was based on performance of actual task rather than simulated activity, this could only be performed on a worksite (Ejelöv et al., 2016; Fisker et al., 2013; Won & Stergiou-Kita, 2012). Brendbekken et al. (2017) argued that lack of information about functional work demands often meant physical rehabilitation was not targeted and therefore did not support an RTW. These arguments highlight how one VR intervention alone will not provide good RTW outcomes. Whilst the research did not describe the makeup of the team, it could be argued that each individual intervention is provided by different professions and multiple team members. The arguments together, also show that unidisciplinary teams are not utilised as frequently as teams with multiple professionals. Two articles argued that physical treatment alone (usually provided by physiotherapists or exercises physiologists in A-NZ) were not enough to return a client to employment (Loisel, Durand, et al., 2005; Skouen et al., 2002). The literature also argues that onsite assessments (usually completed by occupational therapists in A-NZ) are more successful in returning clients to work and are required to ensure a functional programme is targeted to specific work tasks (Ejelöv et al., 2016; Fisker et al., 2013; Won & Stergiou-Kita, 2012). The research supports a more multidisciplinary, interdisciplinary, or transdisciplinary team structure due to the requirement of multiple interventions.

Whilst most of the research focused on rehabilitation for physical injuries there were three which focused on different interventions. Faucett and McCarthy (2003) identified the importance of pain medications and ensuring that these were reviewed and were appropriate for the role a client was working in. One example of this may be ensuring medication or its side effects does not impact an employee's ability to drive. van Staden, Kemp, and Beukes (2011) and Feuerstein et al. (1993) also noted the importance of addressing psychological and behavioural issues through VR to ensure a successful RTW. Though not explicitly discussed these interventions identify other professionals that contribute to the VR team. In A-NZ medication is usually managed by occupational physicians or nurses, and psychological intervention is provided by psychologists or counsellors.

Most of the research focused on individual assessments and interventions including meetings with or without the client to explore ongoing rehabilitation options. Three research articles identified the importance of group intervention in the RTW process (Andersén et al., 2018;

Andersen et al., 2014; Proctor et al., 2005). Proctor et al. (2005) noted that clients completing group intervention had a higher chance of RTW and job retention. Andersen et al. (2014) documented that being with other sick listed people with the same symptoms assisted in restoring the self-confidence of clients who were participating in the RTW process. Group education was also utilised to implement psychological and behavioural management strategies such as motivational interviewing and acceptance and commitment therapy (Andersén et al., 2018; Andersen et al., 2014). Those research articles adopting individual appointments did not address why they performed their assessment or intervention in this way or if groups could have been beneficial in their setting. It is likely this could be linked to a number of reasons including if funding comes for individuals or groups, if the environment is set up for group work, and gaining consent to complete activities in a group. It could be argued that group works enables the client to become an active member of the team. It also supports the client being an expert in their own care as they are able to seek advice and support from others experiencing similar injuries, illnesses, or life events.

3.3.4 Timing of intervention

Timing and length of intervention was noted to be just as importance as the intervention itself. Early intervention and quick access to services were noted to impact on successful return to work options (Aust et al., 2012; Catlett, 2014; Zeller, Sturm, & Cruse, 1993). Ejelöv et al. (2016) identified that an early RTW start date which the client has some control over often resulted in a more successful RTW for the client. Aust et al. (2012) noted that delays in the first consultation with VR professionals often reduced the chances of close contact with the employer and the development of an RTW plan involving the workplace. Short time frames for intervention, and lack of follow up, were linked to clients not maintaining rehabilitation strategies once VR professionals were no longer involved (Koopman et al., 2004; Lambeek, van Mechelen, Buijs, Loisel, & Anema, 2009).

3.4 System level factors

3.4.1 Vocational rehabilitation systems in different settings

Table 1, identifies the countries where research was completed. From the literature identified, there was description of a range of client support options internationally. In the US, each state is responsible for providing services to their residents. Due to the state controlling services, there is variation to US citizens in what VR they receive (Hart et al., 2006; Stubbs & Deaner, 2005). In the majority of states, private insurance companies are responsible for the provision of VR if the injury happened on the job, through the workers compensation system (Stubbs & Deaner, 2005). The workers compensation system allows an employer to select and identify a team of health and rehabilitation professionals for the first thirty days of care post injury

(Faucett & McCarthy, 2003). This enables the employer to select which professionals are involved in the team and the type of intervention that is received. It ultimately places the power of funding into the hands of the employer. Whilst the employer has the funding, it does not discuss if this funding is controlled by someone with medical background or if it is just managed by a lay person within the organisation. If the injury did not occur at work, funding for VR can come from a range of sources dependent on where the injury occurred. Funding sources include Medicaid, automobile or other private insurance companies, charity, hospital endowment funds, and state funds (Faucett & McCarthy, 2003; Hart et al., 2006; Proctor et al., 2005). In these cases, it is likely that the client has a case manager, and potentially could have more than one, dependent on if funding comes from more than one source. Having more than one organisation funding VR could cause complexities, as there were many stakeholders involved in the RTW plan unless individual funders were working together. The literature did not provide the level of detail about if and how funding services worked together. However, whether the claimant's injury happened at work or not, all employers are required to reasonably accommodate employees regardless of the cause of their injury. This is a requirement of the Americans with Disabilities act and also extends to those who are unemployed seeking employment (Stubbs & Deaner, 2005). Due to the wide range of sources for funding, and due to states having control of funding, support that is available to clients is variable (Faucett & McCarthy, 2003; Hart et al., 2006; Proctor et al., 2005; Stubbs & Deaner, 2005). Funding has a significant impact on what is provided to a client. This can include access to providers (i.e. the referrer may have a preference for certain professionals or companies), as well as the time that it provided for rehab (Faucett & McCarthy, 2003; Hart et al., 2006). In the US, if you are funded by a private insurance company or have a workplace injury VR support is more comprehensive and there is less support if you are reliant on the state or other funding sources such as charities (Hart et al., 2006; Proctor et al., 2005; Stubbs & Deaner, 2005).

In Norway, all residents are entitled to full pay for twelve months when payments are then reduced to 40% of their wages (Braathen et al., 2007; Brendbekken et al., 2017). An employer is responsible for the first 16 days of work disability before the state takes over (Brendbekken et al., 2017). A general practitioner (GP) will identify a client is not fit for work and provide a client with the appropriate documentation i.e. medical certification (Brendbekken et al., 2017). In A-NZ if you are covered by ACC you earn 80% of your earnings whilst you are unable to work due to injury (Accident Compensation Corporation, 2019a). In A-NZ, your GP is also responsible for identifying your ability to work. If you are unable to work for 7 days or more ACC will consider your application for entitlement (Accident Compensation Corporation, 2019a). If you are covered by MSD (due to sickness or disability not covered by ACC), you are entitled to benefits,

which are means tested. How much entitlement you receive is based on a range of factors including your living situation and how much you are earning (Ministry of Social Development, 2019). As noted, when discussing the US system ACC rehabilitation tends to be more comprehensive than that provided under MSD.

Unlike A-NZ and Norway, in Denmark, the sickness benefit scheme covers wage earners, self-employed people and the unemployed (Aust et al., 2012; Aust et al., 2015; Bültmann et al., 2009; Jensen, Nielsen, Jensen, & Petersen, 2013). Employers pay full wage or partial compensation for the first 30 days. State sickness offices are responsible for assessing and monitoring beneficiaries and ensuring initiation of RTW activities or VR when appropriate (Aust et al., 2012; Aust et al., 2015; Bültmann et al., 2009; Jensen et al., 2013). The sickness offices categorise beneficiaries into three categories; RTW in three months, not likely to RTW in three months but able to participate in RTW/VR, not likely to RTW in three months and unable to participate in VR (Aust et al., 2012; Aust et al., 2015). State offices are responsible for developing RTW plans including goals and activities, it is within the case manager's discretion if they decide to refer on to a VR team (Aust et al., 2012). It was noted that in Denmark dismissal protection is high for the employee so many return to their previous employment or alternative roles despite long periods of not being able to work (Jensen et al., 2012). As VR funding comes from one source the provision of services should be consistent for all clients who participate in a VR programme. However, it could be argued that as clients will be managed by different case managers there will still be some individual and opinion-based choices that are made. This could still lead to variation in VR services and professionals who make up the team. As noted it is at the case managers discretion if the client is referred for VR (Aust et al., 2012).

Stubbs and Deaner (2005) stated that in 1999 VR was a new concept for Sweden. At that time, the state assisted with VR for the unemployed, but it was provided to the minority. It was also noted that employers were responsible for the rehabilitation of their employees (Kärrholm et al., 2006; Nordmark et al., 2006). As noted under the US system, it is likely that VR provided by each employer will be variable. The literature was not clear if VR was managed by someone with a medical or rehabilitation background. VR input was not determined by a workplace injury (Stubbs & Deaner, 2005). Like the system documented in Denmark, the social insurance office is responsible for supervising and co-ordinating VR for both the employed and unemployed (Marnetoft & Selander, 2000). Lytsy et al. (2017) reported that in 2008 the Swedish health insurance system was changed. It was noted that private insurance would cover an employee for 365 days in a 450-day period, at which time the employee would be transferred to the public system. It should be noted that it was not explained why this change was made, nor was it explained if there was more than one insurance company (Lytsy et al., 2017). Moving case

management to an insurance system potentially meant that the client would be managed by an independent party, with more medical and rehabilitation knowledge. This would be likely to impact on the type of intervention and team utilised for VR. It also has the potential to create more consistency but takes some of the VR decision making away from the employer. Nordmark et al. (2006) noted that employers are required to provide employees with an adapted job they can perform but if this is unable to be accommodated, they are transferred to the state system. As in the A–NZ and Danish system, GPs are responsible for signing off workers, but they are able to provide four different levels of support: 25%, 50%, 75% and 100%. These levels of support indicate the hours of work a client is able to complete i.e. the client will work 25% of their normal day and receive 75% compensation (Nordmark et al., 2006). This gives a high level of VR or workability decision making responsibility to the GP. In A - NZ, if a client has an injury ACC is responsible for rehabilitation despite if they are employed or unemployed (Accident Compensation Corporation, 2019b). ACC will provide financial and VR support if the client is a wage earner, but an unemployed person will continue to receive entitlement and VR support from MSD (Accident Compensation Corporation, 2019b; Ministry of Social Development, n.d.-a). If the client is not a wage earner they are still able to access healthcare support and general rehabilitation through ACC (Accident Compensation Corporation, 2019b). The support provided under ACC is often more comprehensive than that provided under the MSD. As ACC is semi-privatised there is likely to be increased funding available to clients under this care. This may also be comparative to the Swedish system.

A unique aspect of the Swedish system is access to Samhall a sheltered work environment to assist people with disability or injury back to work (Marnetoft & Selander, 2000). Only one Swedish study recognised that this was available to the Swedish population. Marnetoft and Selander (2000) discussed that Samhall provided training in a supportive environment for a range of industries. Training was intertwined with rehabilitation processes including graduation of hours and duties. A client's progress was reviewed by a Samhall supervisor as well as a VR team who had regular meetings both on and off site to review the rehabilitation process. This opportunity enabled clients to increase their function, confidence in their ability to work, gain knowledge about the abilities they had in the current job market and to gain recent references. The time clients stayed at Samhall varied dependent on their physical, psychological, and psychosocial needs (Marnetoft & Selander, 2000).

Canada was noted as having an insurance-based scheme for VR, but limited information was documented about how this was implemented (Brunarski et al., 2008; Cartmill, Soklaridis, & Cassidy, 2011; Lacroix, 1995; Loisel, Durand, et al., 2005; Loisel et al., 1994; Loisel, Falardeau, et al., 2005; Shaw et al., 2008). The research from the Netherlands also provided limited

information about support provided when unable to work (de Buck et al., 2004; Koopman et al., 2004; Lambeek et al., 2009; van den Hout et al., 2007). It was noted that all companies were required to have an occupational health program, but it was unclear if this was only for prevention or also used to co-ordinate VR post injury or disability (de Buck et al., 2004). As in Denmark, the Dutch labour system makes it difficult to dismiss employees (van den Hout et al., 2007). The Belgium system also had limited information available about how the occupational health programme works. However, it was noted that there was a lack of financial support for VR (Désiron et al., 2015). There was only one research article based on the A-NZ VR system, which may be indicative of the size of the VR community here. McKinlay et al. (2012) was the only A-NZ specific article which was identified in my search for literature. The research is based on a very specific area of VR in the A-NZ climate. The research focuses on nurse's involvement in the A-NZ Providing Access to Health Services (PATHS) programme. The PATHS programme supports people in receipt of benefits, for sickness or disability, to access health services. It is a programme that has been set up by the MSD/Work and Income (WINZ), A- NZ's primary social support mechanism.

Whilst some similarities and differences can be identified from the research available, there was limited information about the majority of systems for a comprehensive comparison to be made. As with the A-NZ system, it is also likely that availability of services fluctuates regularly with changes in government leadership and their strategies and incentives. Support can also change locally to adhere to best practice and current research trends. Therefore, descriptions of how a country provides services within the literature may not be current at the time of the completion of this thesis. Most countries had some support available for VR through either state funding (such as MSD equivalent) or private organisations such as insurance companies. A-NZ appeared unique, in that the majority of VR support is provided by ACC. ACC could effectively be described as a state-run/government-led insurance system. Funding could be managed by case managers (insurance companies, charities, or social security) or employers, this could lead to variation in VR provision. It was unclear from the literature how employers made decision about VR, particularly if they had no medical or rehabilitation background. If funding came from more than one source it was unclear how VR was structured and if the agencies liaised together about what was provided for a client. GPs were also documented as being able to make the decision about RTW or workability in several countries (A-NZ, Sweden, Norway). It was unclear how the GP made this decision and if any VR practitioners were involved. It was noted that funding and provision of funding would always be variable due to the dependency on the individual making the decisions.

3.4.2 Compensation systems

Each country detailed in the research has differing compensation systems. The amount of money a person receives and how they can access this impacts on VR availability and how engaged a person is in their VR (Cartmill, Soklaridis, & Cassidy, 2011; Ejelöv et al., 2016). In Norway, clients receive their full wages for the first year before this is reduced by approximately 40% (Brendbekken et al., 2017; Skouen et al., 2002). Some authors have argued that if a client is receiving their full income whilst not at work, they may not have as much motivation to return to work than someone earning less than their normal income (Bültmann et al., 2009; Lytsy et al., 2017; Proctor et al., 2005). This would mean that the client does not become an active member of the team. Potentially the client could have a different end goal to a VR professional causing and creating conflict within a team. The client as a team member is explored further in section 3.6. Bültmann et. al.'s (2009) study supported this notion further by demonstrating a correlation between reduction in wages/compensation and increase in RTW. Lytsy et al. (2017) reported that clients whose sickness benefits were to be cut often identified more motivation to engage in VR. In Denmark and Norway, the employer would pay the clients full wages for set periods of time, whilst this could be seen as reducing motivation for RTW, for others, this may be a motivation (Brendbekken et al., 2017; Jensen et al., 2013). This may cause improved client engagement if the person has a good relationship with their employer and would like to return to the same workplace (Jensen et al., 2013; Loisel, Durand, et al., 2005). It may also require the employer to be more engaged with the client's VR, as they would have a vested interest in returning the client to work. As discussed in 3.4.1 employers can be responsible for the provision of VR (Stubbs & Deaner, 2005). This raised questions around who made VR decisions within a company particularly if the employer had no medical background. Section 3.4.1 also discussed how this meant that there was no consistency in VR provision which impacts on the mix of professionals involved and intervention received.

In the United States, it was noted that often insurance claims adjusters could be "overly conservative in awarding benefits or coverage of medical treatments" (inclusive of VR) which meant the client did not receive timely delivery of services (Faucett & McCarthy, 2003, p. 513). Whilst the researchers discussed timely delivery of services they did not comment on if services were restricted. The literature highlights the view that how funding is used is still an individual choice and in the power of the person who holds the 'purse strings'. It also raises the question if the case manager has the appropriate medical knowledge to prevent treatments going ahead and on what information these decisions are made. The US has a unique system in the world healthcare climate, as it has one of the only fully insurance driven systems, unlike other countries who often provide healthcare through state funding. This could often impact on the success of services and is discussed further in section 3.4.4. It was also reported that sometimes

clients found the claim process “confusing, frustrating and alienating” which meant that they struggled to fully engage as part of the team (Cartmill, Soklaridis, & Cassidy, 2011; Désiron et al., 2015; Faucett & McCarthy, 2003, p. 512). Other clients discussed that they felt they were not provided with clear information about what was available to them under the compensation system (Andersen et al., 2014). Lack of information meant that they, therefore, had limited knowledge or access to services which could assist them to RTW (Loisel, Durand, et al., 2005). The clients’ role in VR is discussed further in section 3.6.

3.4.3 Funding structures

Funding and affordability for VR also has a major impact on the way a team operates. In Sweden, employers pay for VR. If you are employed by a small company there can be financial implications, as the resources available within these companies can be limited (Stubbs & Deaner, 2005). There are also wider factors for funding, such as different insurers providing different levels of funding for services or preferring to fund certain professionals over others. In these cases, the funder creates the team rather than basing funding on individual need (Aust et al., 2015; Hart et al., 2006; Stubbs & Deaner, 2005). Funding was also linked to poor communication between different organisations and systems, such as between healthcare and social systems (Ståhl et al., 2009). A change in policy required general practitioners to liaise with RTW teams, but no financial resources had been provided to cover this service. Whilst general practices provide client based services, they are often also run as private business gaining funding for all or part of appointments that are completed (Ståhl et al., 2009). In addition to the business aspects of funding, it was also noted that each funding source had different agendas or goals causing friction between providers at each organisation. In this instance, the social funding system was keen to return clients to work in any capacity, whilst the health care sector was more focused on the physiological factors often causing clients to be listed unfit for any work (Ståhl et al., 2009).

It has been argued that if there is competition to have more clients and provide better outcome, there can be a willingness for a professional to work with a client even where it is not in the client’s best interest. Removing competition from a team environment often promotes more client centred work and can facilitate rehab, by putting the client with the professional who they may have the most rapport with (Cartmill, Soklaridis, & David Cassidy, 2011). This argument also identifies the importance of a trusting relationship between the client and the professional (Cartmill, Soklaridis, & Cassidy, 2011).

3.4.4 Policy structures

The research identified that policy makers are pushing for teams to become IDT's (interdisciplinary teams), but that these teams can be difficult to build and establish (discussed under 3.5 Team factors). Often policy makers strive for an IDT, but there is not always discussion with the affected staff about how this style of team could be implemented into current practice (Shaw et al., 2008). The research also documented that whilst policy makers wanted to establish IDTs, there was no review into the current team issues, in particular, what worked and what did not and what could be done to support development of an IDT. This approach is often described as a top down approach. For instance, Désiron et. al.'s (2015) qualitative article detailed that rehabilitation providers felt that they were required to work within remits dictated by policy makers, and this prevented them from working in the way they were trained to provide rehabilitation. Désiron et al. (2015) noted that if team members were involved in the process of change through discussion and feedback, change was more likely to happen. What was highlighted throughout the literature, was that one of the ways teams evolve and grow is to spend time with each other and build relationships (Cartmill, Soklaridis, & Cassidy, 2011). Time and relationship building happened more if a team felt supported by their organisation to do this (Shaw et al., 2008).

Some of the identified policy issues included: organisations not set up to talk to one another, a lack of staffing and mix of professionals in the current team, and there was no guidance from external sources on how to move from an MDT (multidisciplinary team) to an IDT (Kärrholm et al., 2006). This often led to tension between policy makers and workers (Désiron et al., 2015; Shaw et al., 2008). When different team members were in the same organisation, this created more team cohesion as the participants' goals, values and policies are consistent (Désiron et al., 2015; Kärrholm et al., 2006; Shaw et al., 2008).

3.4.5 Competition and opportunities for collaboration

Where there is no formal policy or funding for interorganisational professionals to work together, individuals can overcome this to work in the best interest of the clients (Brunarski et al., 2008). Brunarski et al. (2008) described a case study where a doctor in the accident and emergency department contacted a chiropractor to support ongoing rehabilitation. It was noted that the doctor went "outside of his comfort zone" to ensure the best results for the client (Brunarski et al., 2008, p. 332). This led to reduced time off work and further assessment at the workplace to prevent further recurrences of the client's condition. This study highlighted how despite the funding barrier the team were able to communicate effectively. Other studies also

demonstrate how having access to funding for multi-organisation communication can create multiple opportunities for a client and team (Hart et al., 2006; Stubbs & Deaner, 2005).

3.4.6 Geographical availability issues

Another feature of the international research was that sometimes it was recognised a referral to another professional was needed for a client, but there was limited availability or access to particular professionals or services (Ejelöv et al., 2016; Fisker et al., 2013; van Staden et al., 2011). Internationally, this has been known as postcode lottery where certain services are available in some areas, but not in others (Aust et al., 2015). Aust et al. (2015) identified that psychologists could often be difficult to access, and this was particularly true in rural areas where it can be harder to recruit certain professional groups. Some research articles noted how the rehabilitation provided to a client could vary dependent on the client location (Brunarski et al., 2008; Ejelöv et al., 2016; Hart et al., 2006). Often clients who lived in more rural locations or smaller towns had reduced access to all the rehabilitation services that could be offered to them in a large city (Brunarski et al., 2008; Ejelöv et al., 2016).

Brunarski et al. (2008) noted that geographical barriers often prevented the team from meeting regularly, but both Loisel, Durand, et al. (2005) and Brunarski et al. (2008) also found ways to overcome these barriers. Brunarski et al. (2008) notes the importance of being inventive with team communication and using available technology, allowing for more frequent communication.

3.5 Team factors

3.5.1 Shared culture and values

Unity, credibility, and shared, clearly defined values were a common requirement for a team (Aust et al., 2012; Loisel, Durand, et al., 2005; Loisel, Falardeau, et al., 2005). The focus of teams was wide and included shared views of health, wellbeing and functioning, and a focus on function (Shaw et al., 2008). In Loisel, Falardeau, et. al's (2005) research the team's shared value was that work is therapeutic and therefore interventions were centred around the workplace. The shared goal was returning the worker to their job. This meant the team were presenting a unified message. An example of an ununified approach is if one professional is saying a client has a disc prolapse and the other side of the team is saying there is no further treatment options and you need to get back to work, this creates difficulties with moving forward in rehab (Faucett & McCarthy, 2003; Loisel, Durand, et al., 2005). The client then receives conflicting messages with team members reassuring them there is a 'fix' to their ongoing issue whilst the other team members noting a long-term self-management approach with an emphasis on RTW (Faucett & McCarthy, 2003; Loisel, Falardeau, et al., 2005). This can sometimes challenge the VR

professionals' beliefs or models of practice. Shaw et al. (2008) highlighted the importance of teams having open discussions to debate approaches and come to a consensus about the best way forward for an individual client. If the team were all in agreement, it means that the same approach is being used which promotes credibility and team unity (Loisel, Durand, et al., 2005; Shaw et al., 2008).

3.5.2 Importance of consistent team members

Cartmill, Soklaridis, and Cassidy (2011) argued that a consistent team assists with building trust and respect, strong relationships, and team identity, all of which are required for a successful IDT rather than an MDT (multidisciplinary team). Shaw et al. (2008) identified how policy makers were striving to move from MDTs to IDTs as the preferred way of working. New research suggests that IDT working provides better outcomes than MDTs within health and rehabilitation teams (Moliner, Durand, Desrosiers, & Coutu, 2007; Shaw et al., 2008; White et al., 2013). High turnover of staff and lack of ability to recruit VR professionals often meant a consistent team membership could not be achieved (Aust et al., 2015; Cartmill, Soklaridis, & Cassidy, 2011). Cartmill, Soklaridis et. al.'s (2011) study identified that a consistent team enables blurring of boundaries, as there is trust that another professional within the team may be able to provide similar services for the client. It enables inter-professional trust that their colleagues can provide an intervention, which may traditionally have been their scope of practice (Cartmill, Soklaridis, & Cassidy, 2011). O'Halloran (2002) also identified that some VR service providers use contractors for all or part of their service. They identified that this could create a barrier as they were not an inherent part of the team, and also that providers had less control over the quality and overall services provided (O'Halloran, 2002).

3.5.3 Openness to collaborative decision making

For RTW to be successful, collaboration needs to occur between a range of professionals (Waddell et al., 2008). Brunarski et al. (2008) noted that some community professionals independently interact with the same worker, but do not always see themselves as part of the formal team with the responsibilities that come with this. Responsibilities included communication, collaboration, and information sharing. There is often no policy indicating individual clinicians, clinics, or organisations need to information share with others (Brunarski et al., 2008).

Ståhl et al.'s (2009) research described two types of physician, the *cooperative physician* and the *traditional physician*, and noted the differences these types made on the team. The *cooperative physician* was open to team communication and listening to others' views which led to shared

decision making and cooperative working environment. The *traditional physician* did not want to engage or receive assistance from others and was unable to see the value of this. Whilst this is linked to hierarchical perceptions there are also barriers from organisation, such as lack of communication between professionals in health care systems and insurance companies, and lack of funding for liaison (Brunarski et al., 2008; Ståhl et al., 2009). Individual professionals were able to overcome these barriers by contacting and liaising with each other for the best quality of care for the client (Brunarski et al., 2008; Ståhl et al., 2009).

3.5.4 Shared understanding about responsibilities

With many professionals involved in teams, there can be conflicts around who is responsible for what aspects of the RTW. Loisel, Durand, et al. (2005) noted in their study, that creation of RTW plans could often be difficult, as health care professionals and case managers were responsible for their progression and rehabilitation planning. However, the case manager and rehabilitation professionals would take different approaches to rehab and had both clinical and non-clinical reasons for what should be included in an RTW plan. This could lead to conflict in who was finally responsible for the RTW plan (Loisel, Durand, et al., 2005). Other teams found solutions to barriers. These solutions included providing case managers with training in awareness of how interventions or services may assist their client, what a work site assessment entails, and how equipment can assist (Faucett & McCarthy, 2003). Some organisations tried to develop guidelines for meetings between the client and the RTW team to assist to overcome this barrier (Aust et al., 2012).

Training is also argued to support staff to understand responsibilities. Désiron et al. (2015) identified that there was lack of training about RTW for professionals working in VR or healthcare. RTW training is not common in undergraduate programmes for health and rehabilitation professionals and is classed as a specialist area which requires further postgraduate training. It was also noted that often hospital-based staff did not have a good knowledge of VR or what services may be available to clients on discharge (Brunarski et al., 2008). In Denmark, it was noted that the teams do not usually work in an interdisciplinary way for VR services (Aust et al., 2015). This was due to a number of reasons, including lack of training at university level to work with a team in this way, others included previously mentioned barriers such as geographical location and working for different organisations (Aust et al., 2015; Désiron et al., 2015). Training of healthcare professionals to work in an interdisciplinary, transdisciplinary, or multidisciplinary team was also seen as important (Aust et al., 2015). In order to change the current workings of teams, some researchers provided training to the professionals involved to assist them to move towards more collaborative working. This included

training on biopsychosocial approach, the role of co-ordinator, and how to work as the desired team (Aust et al., 2015; Lambeek et al., 2009). These approaches provide professionals with a guideline of how to work together. Once trained, some teams were unable to continue working in the collaborative model, suggesting there was a lack of resources or tools to enable this higher level of collaboration (Brunarski et al., 2008). Other teams invested in more shared interventions, meetings, or ongoing training for their staff, to ensure that they had a good knowledge of the other disciplines they are working with which enable more collaborative working (Cartmill, Soklaridis, & Cassidy, 2011; Lambeek et al., 2009). Cartmill, Soklaridis, and Cassidy (2011) noted that education and learning was an integral part of the team environment.

Education for employers and employees, or all stakeholders, was also identified in other research as assisting with understanding responsibilities (Brunarski et al., 2008; Lacroix, 1995; Loisel et al., 1994; Nordmark et al., 2006). Some training was formal such as a two-day course (Lambeek et al., 2009) others involved informal training on the worksite during meetings (Faucett & McCarthy, 2003; Sweet, 1995). The justification for this training was to ensure that all stakeholders had knowledge of the RTW process and what this entailed (Lambeek et al., 2009; Loisel et al., 1994; Nordmark et al., 2006). It also gave each team member the knowledge of what was available to them and expected of them, throughout the process (Lambeek et al., 2009; Loisel et al., 1994; Nordmark et al., 2006). This seemed to assist with having a shared language and shared goals, which helps create a successful VR team (Loisel, Durand, et al., 2005; Loisel, Falardeau, et al., 2005). Loisel et al. (1994) also indicated that this was often a successful approach in assisting employers to implement recommendations into the workplace.

Ståhl et al. (2009) identified how it was important specifically for GPs to understand the responsibilities of VR team members. They argued that physicians who understand the roles, valued and communicated with the VR team, were able to give a more realistic interpretation of ability of work and supported VR principles (Ståhl et al., 2009). They discussed that interaction with VR professionals only occurred when a physician valued their increased knowledge of worksite duties and knowledge of RTW opportunities. Value can only be achieved through the understanding of the VR professional's role. Brendbekken et al. (2017) presented how GPs chose not to discuss the case with other professionals, as they were unsure of how other professionals may assist them in their decision-making. Further, there was a common belief amongst GPs that they had the necessary knowledge, without needing the advice of other professionals (Brendbekken et al., 2017).

The client having an understanding of each team member was seen as important throughout the research and was consistently identified as assisting a client to engage in rehabilitation and

achieve rehabilitation outcomes, such as a successful return to work (Aust et al., 2012; Braathen et al., 2007; Loisel, Durand, et al., 2005; Loisel, Falardeau, et al., 2005; Shaw et al., 2008). Suggestions to increase understanding of professionals included, ensuring the client attended team meetings and was involved with decision making in their return to work plan (Marnetoff & Selander, 2000). Joint decision making often enabled the client to see how each professional would be able to help and support them throughout their RTW.

3.5.5 Professional hierarchies

Brendbekken et al.'s (2017) Norwegian study, described the hierarchical perceptions of GPs. They identified GPs as the gatekeepers of access to sickness benefits, yet often their assessments were based on subjective information, and they had limited information about work or availability of RTW options. This was a problem created at both policy and professional levels. The social security system required GPs to detail and sign off a client's current functional ability to work, but individual GPs also chose not to have discussion with other health professionals involved in the client's care. Further, there was a common belief amongst GPs that they had the necessary knowledge, without needing the advice of other professionals. Hierarchical perceptions were commonly identified throughout the literature and have a negative impact on the team and their ability to work effectively together (Brendbekken et al., 2017; Brunarski et al., 2008; Loisel, Durand, et al., 2005). Hierarchical perceptions can come from the professionals themselves, the system the team works within, and the professionals within the team. These backgrounds often lead to the belief that one professional's decision ranks above another professional (Brendbekken et al., 2017; Brunarski et al., 2008; Cartmill, Soklaridis, & Cassidy, 2011). Ståhl et al. (2009, p. 269) noted the importance of "moving away from the idea of being some kind of almighty person who nobody questioned." One team in Braathen et al's (2007) research went so far as removing professional titles, instead designating all professionals as 'counsellors,' to prevent hierarchical perceptions from all aspects of the team.

3.5.6 Models of practice for shared understanding

As noted above, consensus across the studies reviewed is that a team must have shared values and ideas in order to create a successful collaborative team. This led to some teams identifying a model of practice to work within, whilst others had a shared view, focus, or goal. Loisel, Falardeau, et al. (2005) documented that this meant the opinion of one team member was then reflected in the whole team. Approaches to rehabilitation were often formal with some teams adopting well known approaches to practice, such as taking a cognitive behavioural approach (Braathen et al., 2007), disability management approach (Ejelöv et al., 2016; Proctor et al., 2005), holistic (Feuerstein et al., 1993), or self-management approach (Faucett & McCarthy, 2003).

Ståhl et al. (2009) described a holistic approach delivered by the whole team. They noted that this approach required looking at the whole person and taking time to understand their RTW barriers (Ståhl et al., 2009). The majority of teams also resonated with this approach, noting that RTW should be looked at from different domains and principles (Désiron et al., 2015).

Other teams used recognised models of practice including the biopsychosocial model (Aust et al., 2012; Aust et al., 2015; Brendbekken et al., 2017; Fisker et al., 2013; Karjalainen et al., 2001; Lacroix, 1995; van Staden et al., 2011), International Classification of Functioning Disability and Health (ICF), Biomedical model, Case management model (Marnetoft & Selander, 2000), Strength model (Marnetoft & Selander, 2000), Sherbrooke model (Loisel et al., 1994), and Person-Environment-Occupational model (Won & Stergiou-Kita, 2012). Occupational therapy specific models such as the Canadian Model of Occupational Performance or the Model of Human Occupation were also detailed as working well within the practice of VR (Désiron et al., 2015). Some researchers used a combination of these models or discussed the difficulties that these models could have on practice. An example of this was Fisker et al. (2013) noting that over medicalisation of VR often led to unsuccessful RTWs (use of biomedical model). The biomedical model can prevent cohesive teamwork through supporting hierarchical perceptions and devaluing the impact of psychological, environmental, and social factors on RTW (Brendbekken et al., 2017; Loisel, Durand, et al., 2005b; Ståhl et al., 2009). It is well known that traditional doctors and specialists come from a biomedical background (Ståhl et al., 2009). Feuerstein et al. (1993) noted the biomedical approach does not assist with all treatment barriers of clients who may need a multifaceted approach to their VR. Barthel et al. (1998) argued moving to a biopsychosocial model when the traditional biomedical and uni-discipline intervention had ‘failed.’

The biopsychosocial model is used to take into consideration biological factors, as well as environmental, psychological and social factors impacting on health and wellbeing (Feuerstein et al., 1993). This can be seen in research that identifies the importance of evaluating workplace culture, workplace relationships, client’s motivations and psychological barrier for RTW (Aust et al., 2012; Catlett, 2014; Proctor et al., 2005). Interestingly, some articles advised following a biopsychosocial model of practice but noted only professionals who traditionally come from a biomedical model and did not clarify how or if they had received training in this new approach (Fisker et al., 2013; Stubbs & Deaner, 2005). As noted above, Barthel et al. (1998) detailed that the biopsychosocial model was more successful in returning clients to work (Karjalainen et al., 2001).

3.5.7 Communication

It is not just professional and formal communication that builds a team, but also the ability to have informal communication and “venting” with teammates, which can assist with shared and unified communication (Cartmill, Soklaridis, & Cassidy, 2011, p. 4). Both formal and informal communication allow trust to be built. Informal communications often assisted shared decision making and further understanding of other professionals’ roles (Cartmill, Soklaridis, & Cassidy, 2011). Shaw et al. (2008) argued that to achieve consensus, professionals needed to challenge each other, debate the best way forward, and present all available information ensuring the best decision could be made for the client. One of the team members interviewed for the research noted that sometimes a “compromise” was needed to take all approaches into consideration (Shaw et al., 2008, p. 302).

Another important factor about communication was regularity of team communication. Loisel, Durand, et al. (2005) noted that often teams did not meet regularly or have plans to meet regularly, relying instead on informal conversations. Regular team contact encouraged a shared language and ensured all parties had knowledge of the return to work plan. More frequent collaboration also meant that MDT barriers start to break down and teams move to a more IDT approach (Brunarski et al., 2008; Loisel, Durand, et al., 2005). Clients credibility and often confidence in clinicians came from having the same language and shared expectations (Cartmill, Soklaridis, & Cassidy, 2011; Shaw et al., 2008).

The inability to liaise with other professionals encourages the use of different language (jargon and terminology) between professionals. For instance, a GP may identify a client is unfit for work but then a VR professional may identify that the client is fit for light duties or some work. The VR professional may have identified the client’s ability to complete light duties from their liaison with the workplace and identifying alternative duties, and also having knowledge of the client’s current functional abilities (Brendbekken et al., 2017). As discussed previously, Brendbekken et al. (2017) reported that GPs often made assumptions of a client’s ability to work based on subjective information.

3.6 A place for client centred practice in vocational rehabilitation?

There were a lot of different thoughts about client centred care in VR. As noted under team conceptualisation, there are varied positions about where the client sits within a team. Some believe that VR is centred around the client, whilst others only document the professionals as the team (Bültmann et al., 2009; Ejelöv et al., 2016; Faucett & McCarthy, 2003; Kärrholm et al.,

2006). The literature, however, noted both positive and negative factors for client centred care in VR.

Client centred care is often a common goal or value for healthcare and rehabilitation professionals, but often clients feel that they do not have ownership of their rehabilitation (Faucett & McCarthy, 2003). There are articles and professionals who identify they are coming from a client centred perspective, but do not actively demonstrate this in their practice (Andersen et al., 2014; Aust et al., 2012; Marnetoff & Selander, 2000) Faucett and McCarthy (2003) and Kärrholm et al. (2006) remind us of the importance of clients having a voice in their return to work and not being dominated by the healthcare and rehabilitation professionals. Kärrholm et al. (2006) suggests that clients should be actively involved in team meetings, as part of the team to discuss managing their own return to work. Having the client present also shows the team is in agreement to the same approach and same rehab process, increasing unity and credibility.

It was noted that if a client has more control of their RTW planning they are more likely to have a successful return to work (Proctor et al., 2005; Stubbs & Deaner, 2005). Suggestions for enabling a team to be more client centred included clients having a voice in their own care and therefore taking ownership of their plan (Jensen et al., 2012; Shaw et al., 2008; Zeller et al., 1993). If clients were actively involved in planning their VR it ensured that they were using the same language as the team (as discussed under Team factors). This increased the likelihood of a shared understanding of the goals (Marnetoff & Selander, 2000). A shared understanding was often achieved with regular meetings with the VR professionals and the client and also through VR professionals tailoring each treatment plan for each client (Jakobsson, Ekholm, Bergroth, & Ekholm, 2010; Lambeek et al., 2009; McKinlay et al., 2012). It also included ensuring that all clients were provided with the rehabilitation options open to them at the beginning of their VR (Feuerstein et al., 1993). However, some studies noted that meetings including the whole team were often reserved for the most complex clients (Jakobsson et al., 2010). Employers were documented as being able to assist in client centred VR through having a client/employee lead initiatives at the workplace for both prevention of injury and also to assist with RTW planning, for example, identification of light duties (Brendbekken et al., 2017). It was noted that this client led planning, based in the workplace, led to the client feeling like they were contributing to the workplace and assisting their colleagues, rather than being a burden (Brendbekken et al., 2017).

However, Andersen et al. (2014) noted that often VR professionals did not employ client centred approaches. This was demonstrated by clients noting that they were often unclear about the aim of consultations they had with VR professionals (Andersen et al., 2014). It was also noted

that client centred work did not work for all clients as some clients struggled to verbalise the issue they were experiencing and where they may require assistance (Schult & Ekholm, 2006). Kärrholm et al. (2006) also argued that some clients did not enjoy engaging with multiple professionals during a meeting and thought about these meetings as negative. In these cases, often clients preferred individual meetings (Kärrholm et al., 2006).

3.7 Summary

The concept analysis identified many similarities and differences between the systems in A-NZ and other countries, in terms of how VR is accessed and administered. The research available in A-NZ was extremely limited, with only a nurse's role in an MSD program being detailed. This is a very specific area of VR in A-NZ and does not provide a full insight into the current A-NZ climate. The research also identified international barriers and enablers to VR due to a variety of factors. These included the client role in the team, team communication, shared language, trust within a team, funding, work culture, and physical aspects of role and worker function. There was no consensus on who should be involved in a team or how a team should be structured or run, with a range of positives and negatives for a range of factors highlighted. Where VR was delivered was also variable, with a range of services in various locations. There was research that indicated that some contact with the workplace improved RTW outcomes, but some teams did not choose to incorporate this aspect into their plans. Geographical location could also make a difference to what was available to a client for VR. Rural locations often provided less support due to difficulties with recruitment and resources, though access to services could also be limited by funding. Overall, the research provided an in-depth view of challenges and enablers to VR but continued to identify the need for this research in A-NZ, with minimal representation of A-NZ VR teams available in the literature.

4 Stage Two Methodology and Study Design

This chapter will outline the methodology and methods used in stage two of the research, including the rationale for these selections. This chapter will first explore the epistemology and theoretical orientation of qualitative descriptive methodology. I then move into a more detailed consideration of qualitative descriptive methodology itself, including how the methodology shaped and influenced the research project. Further, I will explore my position as a researcher. An important component of qualitative descriptive methodology is the use of reflexivity, and to be able to do this effectively a researcher must identify and acknowledge their own worldviews. How I used reflexivity will be reviewed throughout the methodology section, to clarify how it was applied in data collection and analysis. In the methods section, I will detail the sampling and data collection methods I used for this project and how quality was upheld.

4.1 Methodology

Mills and Birks (2014) argue that it is important for researchers to clearly identify their research methodology. They reported that methodology “determines how the researcher thinks about and positions themselves in relation to the study” (Mills & Birks, 2014, p. 15). Crotty (1998) also outlines that methodology provides the researcher with a plan for their research. Researchers will then use methods (tools for research) that fit with their chosen methodology (Crotty, 1998). Methodologies are sometimes chosen after writing the research question and are selected purposefully to provide the best answer and outcomes (Mills & Birks, 2014). In this chapter, I will first re-state my research questions, then consider my own position as a researcher. Stage two of the research aims to answer the second research question. Following this, I will outline the epistemology that drove my approach, the theoretical position that made most sense to apply, and the methodology that guided the study.

4.1.1 Research questions

1. How are health professional teams who deliver vocational rehabilitation conceptualized in the international peer-reviewed literature, particularly regarding which professionals they include and how they operate as an effective team?
2. How do specific VR teams based in Aotearoa New Zealand compare to teams described in the literature, and in particular, how are their needs the same or different?

The importance of question number one was discussed in section 2.1. The importance of research question number two will be outlined in this paragraph. VR practice is a specialised area that is relatively new to the A-NZ. As with all new services, there can be a growth and development periods where services are shaped and changed to meet the needs of clients and

stakeholders. More established international teams may already have identified barriers and needs and created solutions to these. The comparison of A-NZ and international teams could influence current practice through incorporating proven solutions to the same barriers or prevent barriers being created. The comparison also enables unique needs, barriers, and solutions of A-NZ VR practice to be outlined.

4.1.2 My position as a researcher

Outlining of my background and assumptions is important to ensure the credibility and validity of my research. As a regional manager and occupational therapist working in the field of VR, I held preconceived ideas about how VR teams work together and what their barriers and enablers were. Having a background in VR was useful in some aspects of the research but in others presented as a challenge. My background enabled participants to openly interact with me about VR. VR is a specialist field in rehabilitation and there is a limited population of rehabilitation professionals who work in this field. When professionals speak and describe VR, they often need to give very expanded explanations of their roles, as it is very different to traditional allied health roles. Having a VR background allowed practitioners to freely discuss how VR works and its challenges and barriers, without needing to explain the basics of this practice. Participants realised that I would be able to relate to the same issues that they experience. However, it also caused some issues with some participants assuming I knew the abbreviations they used, or not fully disclosing processes as they assumed I would know how they worked. Participants were regularly asked to expand on explanations or to tell me further information on aspects of their practice so that I was able to make a full picture, in their words rather than my own.

It was also important that I acknowledged my own assumptions and perspectives, to ensure that I did not guide participants to meet my own expectations, rather than tell their own story. This was achieved through open ended questioning and careful selection of the language used. I completed an interview with my supervisor, identifying my presumptions and current knowledge of the topic area. In my interview, it was noted that my perceptions as a manger were different to my perceptions as a clinician. In effect, I wear two hats, and these two hats would come with me to the research. An example of a pre-existing perception was that we are told what type of team we are i.e. interdisciplinary, but we may not actually be working in that way, or that there is an ethical pull between what we want to do as clinicians versus maintaining a business. The interview also acknowledges my previous knowledge and experiences of working in a VR team and how this would support me to identify appropriate questions, whilst being

mindful to allow participants to express their own views. Throughout the analysis stage of research, I also had regular supervision to challenge, support and review my own lens.

4.1.3 Theoretical perspective

I would define my theoretical stance as broadly post-positivist. Post-positivism asserts that data should be a representation of the participants world or reality and one that they themselves would see or understand (Fox, 2008). To achieve this, it requires a reflexive perspective in that the researcher must take steps to understand their personal impact and also the participants' influence on the interpretation of the data (Fox, 2008). Post-positivism acknowledges that nobody comes to research without prior knowledge or beliefs, and these need to be acknowledged, and at times utilised, to provide an accurate representation of a phenomenon (Fox, 2008; Sandelowski, 2010).

Post-positivism strives to ensure that interpretations made are as consistent to the participants meanings as possible (Crotty, 1998; Fox, 2008; Grant & Giddings, 2002). Post-positivism also supports qualitative research, unlike the positivist paradigm which supports a more quantitative, experimental approach (Fox, 2008; Grant & Giddings, 2002). The positivist approach does not require any direct contact with participants (Grant & Giddings, 2002). Positivism is often seen as not valuing the human perspective due to its focus on measurable outcomes that are influenced as little as possible by the researcher (Fox, 2008). Post-positivism supports the methods I used in my research of interview and focus groups to really understand and gain the varied insights of participants. Post positivism allows the researcher to describe a phenomenon without over abstraction of the data (Sandelowski, 2000, 2010).

4.1.4 Epistemology

Epistemology refers to knowledge and how we gain the understanding of the world (Bradshaw, Atkinson, & Doody, 2017; Crotty, 1998). Epistemology shapes the theoretical perspective and therefore the methodology that researchers use. For the purpose of this study, I have chosen to use constructivism. The argument for use of constructivism will be discussed in the following paragraphs.

The constructivist position is that there are multiple realities that are created by the complexities of being human (Fox, 2008). The things that we see, do and believe, do not exist without the understanding that we bestow to them (Bradshaw et al., 2017; Scotland, 2012). Constructivists argue that the choices of participants language and words provide us with their reality (Fox, 2008). Constructivism supports the idea that reality is subjective to the individual, however, knowledge, culture, and experience shape these realities (Bradshaw et al., 2017). For my project, a constructivist epistemology seemed most fitting because it would allow me to recognise differing world views of participant's. As one of the research aims was to review how being in a

rural or urban team or a different organisation can impact on a team, it was important to acknowledge the differing views from these regions, and not generalise into one whole national perception. It was also valuable to recognise how different participants interpret differing demands and how these individual world views impact on the team. Constructivism enabled these varying world views to be acknowledged and accounted for throughout the analysis and presentation of data.

4.1.5 Qualitative descriptive as a methodology

Qualitative Description (QD) is described as a methodology that “provides a comprehensive summary of events in everyday terms” (Sandelowski, 2000, p. 334). The following paragraphs will provide further information on QD and how I used this methodology within my research. Sandelowski (2000) noted that QD has been one of the most commonly used, but underappreciated approaches of qualitative researchers. She described how many researchers will force their studies into other methodologies, as they feel that QD is limited in its theoretical or philosophical underpinning (Sandelowski, 2000). Researchers should value a QD methodology and use it in its own right (Bradshaw et al., 2017; Sandelowski, 2000, 2010). The theoretical position that the researcher takes up (in this case post-positivist), is seen as an important underpinning to interpreting the data. This personal theory is seen as important as the philosophical perspective that is used by the researcher (Bradshaw et al., 2017; Sandelowski, 2010). QD acknowledges the worldview of the researchers and how this can impact on interpretation of the data (Sandelowski, 2000, 2010). QD is not free of interpretation and a reflexive approach is needed to use the knowledge of the researcher to interpret, but not rely on assumptions. This allows the researcher to come to an understanding of how the participants experience the phenomenon (Bradshaw et al., 2017; Sandelowski, 2000, 2010).

As noted, QD does not lack interpretation of the data but the interpretation that occurs should still be true to the “meanings participants attributed to those events” (Sandelowski, 2000, p. 336). Sandelowski (2010) describes QD as providing researchers and readers with an authentic account of an event or experience. She goes further to say that those involved in the research should all understand the way the event or experience is represented in the end product (themes, findings), even if this represents the differing views of participants (Sandelowski, 2000). Given the limited research available in VR in the A-NZ context, it was important that the research reflected what was close to the interpretations of the experiences by participants themselves as a starting point to develop experienced-based research in the VR field. It was important to me as a researcher that the findings reflected the experiences of and could be understood by the vocational practitioners, and was not too far removed from their accounts. Alignment with

participants' original meanings was important to enable VR practitioners, organisations, and insurers to understand the findings that are presented. Within post positivism, language is seen as a transparent reflection of participant's thoughts, attitudes, and perspectives. This transparency assists during the analysis in articulating the current climate that shapes VR as a starting point for inquiry and possible change.

Constructivist post-positivism was described by Fox (2008) as an "assessment of the nature of reality" (p2). As humans, we construct our own realities based on previous experience, knowledge and interactions with others and the environment (Crotty, 1998; Scotland, 2012). Our language, choice of words, naming of objects, and interpretation of those words also shape our realities (Crotty, 1998; Scotland, 2012). The QD methodology supports this by trying not to manipulate and abstract the data gained from interviews. It acknowledges the researchers' and participants' backgrounds (realities) and identifies that this impacts on the data presented. However, it also ensures that whilst people's description varies i.e. in their choice of language or the parts of the event described, this should come together as one whole (Sandelowski, 2010). Many of our 'ideas' are patterned and shared within groups, so it is important that the researcher can bring these together to create a thick description of the context. The use of thematic analysis supports the researcher to make these connections and create themes from the data for all participants to be able to understand (Sandelowski, 2010; Terry, Hayfield, Clarke, & Braun, 2017). The researcher will also look at the data and analyse it from their own social position, but Sandelowski (2000) argues that QD methodologies should be less interpretive and more descriptive. Fox (2008) also describes how post positivist research values participants and researchers as "active subjects" (p. 3), and that the researcher's role is to ensure that the participants' and researchers' knowledge and intentions are "acknowledged and understood" (p. 4).

As noted above, QD acknowledges the world view of the researcher and the participants. It acknowledges different world views through writing descriptions of what the participants have said and not trying to move to one true reality, as would be seen in positivism. Whilst the purpose of the research is to bring the data together into one whole, it still acknowledges the different world views and perspectives of participants. It does not merge these perspectives together to make one reality. As I had a similar background to participants, we could be seen as coming from similar realities. However, we would all see the world through different eyes. Fox (2008) states constructivists believe that "truth depends entirely upon point of view" (p. 8). QD also recognises that there is some interpretation from the researcher, in that the data is always made sense of through the researcher's eyes (Sandelowski, 2000). In order to apply a researcher's knowledge to the data, this knowledge must first be defined and outlined to

readers and to the researcher themselves (reflexivity). To begin the process of reflexivity, I completed an interview with my supervisor identifying my presumptions and current knowledge of the topic area (as discussed further under 4.1.2).

4.1.6 Summary of methodology

In summary, I used QD as my methodology. This methodology is shaped by the theoretical perspective of post-positivism. A constructivist epistemology also informed the approach adopted in the theoretical perspective and methodology. The post-positive perspective allowed me to study the phenomenon of the VR team in the A- NZ environment. The participants of my study were selected as they had the appropriate knowledge of this phenomenon. I also hold knowledge of the VR team and the A-NZ environment. This allowed me to use interpretation based on my own theoretical and practicing background. As my knowledge and background is similar to the participants, my interpretation of their interviews (the data), is likely to retain awareness of the intended meanings of the participants. I completed interpretation with reflexivity throughout to ensure I followed both QD and constructivist- post positive strategies. This was assisted by the use of a pre-assumptions interview to identify my existing ideas and assumptions with my supervisor. This assisted me to identify any strong feelings that I had about VR and to ensure that I did not impose these on participants. Using post-positivist QD enabled me to understand how others see the world of VR teams and to question my own assumptions and experience. Studies using QD methodologies can provide healthcare workers, rehabilitation providers, and organisations important insights into practice scenarios (Bradshaw et al., 2017; Sandelowski, 2000).

4.2 Study design

This section will outline the study design undertaken in stage two of the research. It will provide information on participants including recruitment and sampling. I will discuss the rationale for my sample size and how this rationale was maintained during recruitment. I will then go on to describe my procedures for both the focus groups and individual interviews. I will also provide the reader with an outline of my analysis, with focus on how I used thematic analysis. Finally, I will discuss how I maintained the quality of my research.

4.2.1 Overview of study design

A study design of collective instrumental case study was chosen to answer the research questions. Instrumental case study designs are used to understand “a theoretical question or problem” (Hancock & Algozzine, 2017, p. 38). In the case of my research, it is being used to find out how A-NZ VR teams compare to what is reported in the international literature, and how A-NZ VR teams needs are the same or different to their international counterparts. An instrumental case study design will enable greater understanding of VR teams in the A-NZ

context and provide insight into how and why the teams function as they do (Hancock & Algozzine, 2017). The term collective is used to identify that data will be obtained from more than once source (Creswell, Hanson, Plano Clark, & Morales, 2007). In this research two companies were used for data collection. Case study designs use several data sources to create a rich description and understanding of events, this supports post-positivist theoretical perspective and QD methodology (Creswell et al., 2007). Several data sources are utilised so that points of view and opinions can be used to answer the research question (Creswell et al., 2007). Hancock and Algozzine (2017) identify that case study designs can support a descriptive approach.

The study design used purposeful sampling to identify appropriate participants for the study. Given VR is a specialist practicing area, purposeful sampling was one of the most appropriate methods. Once participants had been approached, inclusion and exclusion criteria were used to ensure participants with the appropriate knowledge of the phenomenon being researched were selected. Participants were then invited to attend a focus group (FG) and/or an individual interview. Sondergaard, Andersen, Olesen, and Neergaard (2009) support the use of FGs in qualitative descriptive methodologies, discussing that they provide the researcher with a “broad insight into a subject” (p. 2). They also promote discussion between participants which can create data that would not be generated through individual interviews (Merriam & Tisdell, 2016). Interviews were completed after the FGs. Interviews are described as the most common form of data collection in qualitative descriptive studies (Bradshaw et al., 2017; Kim, Sefcik, & Bradway, 2017; Willis, Sullivan-Bolyai, Knafl, & Cohen, 2016). Semi-structured interview questions were used both in the FGs and interviews (see Appendix 5 Interview guide and Appendix 6 Focus group guide). A semi-structured interview schedule allowed me to follow a list of prewritten questions but add additional questions to follow up as needed. Semi-structured interviews enable the participants to discuss their world view “openly and freely” (p. 47), without the researchers views shaping their language (Hancock & Algozzine, 2017). This is important in the constructivist post-positive approach as it acknowledges that participants choice of language and words shapes their realities (Fox, 2008).

Finally, analysis was completed using Braun and Clarke’s (2006) six phase thematic analysis (TA) model. Braun and Clarke’s (2006) TA approach is reflexive, enabling a fluid process to data analysis (Bradshaw et al., 2017; Braun, Clarke, Hayfield, & Terry, 2018; Sandelowski, 2000). Because the QD methodology has a flexible rather than fixed orientation, having an analytical method that is similarly flexible is ideal. Both QD and TA acknowledge the role of the researcher, identifying that the researcher will bring their own lens to the analysis process (Bradshaw et al., 2017; Braun et al., 2018). This also supports the theoretical perspective used within this

research, post-positivism. Post-positivism supports the idea that “no one reality can exist” as each person will make their own interpretation of data (Bradshaw et al., 2017, p. 2).

4.2.2 Participants

Participants were all required to be working in the field of VR for a minimum of six months prior to being part of the research. I encouraged a wide range of clinicians to participate and did not exclude any profession from participating. GPs, specialists, and case managers were not approached to be participants. I felt at this stage of the study, gaining further information from these professional groups would be of benefit, but it could be an area of future research. I did not include these professions as there were few studies in the concept analysis that used these disciplines. Whilst GP's, specialists, and case managers are part of the team they are not usually directly linked by the team i.e. they work independently in different buildings and for different organisations. VR is also an extension of their roles rather than being a primary focus of their jobs. Occupational therapists, physiotherapists, vocational consultants, exercise physiologists, and managers were all working daily in the field of VR.

Inclusion criteria included teams of professionals, currently working in the VR field, who predominantly work with clients who have musculoskeletal injuries preventing a client's ability to work. I also chose to focus on rehabilitation teams who assist clients to remain in their same job post injury. I excluded professionals who had been part of the VR team for less than six months. I had these inclusion and exclusion criteria to ensure that professionals participating in the study had a good knowledge of VR and the requirements of their team. The criteria also ensured that participants had good knowledge about how the team operates, who is involved in the team, which professionals they have access to, and clear knowledge of barriers and enablers to ensuring an effective team.

To have a good understanding of the range of A-NZ practicing contexts I choose two teams to participate in the study. I specifically chose one North Island¹ and one South Island team, and one urban and one rural team. The teams were chosen in these categories to assist with finding out if and how organizational policy and structure impact on a team, and if rural and urban teams have differing demands. These were two areas which were highlighted as barriers and enablers in the concept analysis of the literature and would help identify if A-NZ had similar demands.

¹ A-NZ geographical context: A – NZ comprises of two main land masses the North Island (NI) and the South Island (SI), separated by the Cook Strait. Whilst the SI is the largest of the two islands under one quarter of the entire population live on this island. This is predominantly due to the central part of the island being a mountain range – the southern alps. The NI is where the majority of the population lives. The NI is also home to the largest city in A– NZ Auckland. The capital city of Wellington is also in the NI.

I excluded professionals who I had previously managed or who I was currently managing. I chose not to complete research with staff that I had previously managed or was currently managing as I thought that my presence may prevent full disclosure on all topics. For example, a team member may not want to disclose good or bad examples of leadership or organisational input. It also meant that I did not have prior knowledge of a team when collecting data. This enabled me to be reflexive throughout the research, as I was an independent observer of the team and not an active member.

Other inclusion criteria included that all participants in the FGs were invited to attend individual interviews. However individual interviews were also extended to team members who were unable to attend the FG. Some participants were unable to attend the FG as they were separated by geographical location. Regional managers and direct managers of the teams being researched were not invited to the FGs but were invited to individual interviews. I choose to exclude managers being present during FGs due to the power imbalance their involvement would cause. Having a manager present could cause team members to constrain what they disclose, affecting the conversational flow in FGs.

4.2.3 Sampling

I used purposeful sampling to access teams of practitioners who worked in the field of VR throughout New Zealand. Purposeful sampling enables the researcher to sample for heterogeneity, selecting teams based on their knowledge of the area they are researching (Shenton, 2004). Shenton (2004) notes purposeful sampling is most suitable for qualitative research projects, to sample for diversity and ensure that participants have experience in the area being researched. It is also a good sampling method for targeting specific “characteristics of interest” (Turner, 2020, p. 10). In my case, the area of specific interest was VR. As VR is a specialist practicing area there are limited teams of professionals that are able to be accessed to research. Turner (2020) acknowledged that whilst this sampling method may not capture a true representation of the general population, it is an excellent way to sample, to gain specific information on a topic area.

I was able to recruit a rural South Island team from my current employer for the study. I also approached an unaffiliated urban North Island team to participate. It should be noted that the company I work for have relationships with providers in the North Island, but the North Island team do not work directly with my company. Using purposeful sampling ensured that teams from different organisations were selected, giving a heterogeneous sample from the A-NZ context. As noted in the literature review, organisational policy can impact on teamwork, therefore teams from two different organisations may work in different ways and have

different barriers and enablers. In the current environment, VR is a competitive industry. Approaching my own organisation and other organisations who they work in collaboration with (rather than in competition), assisted with professionals feeling they can share and disclose information with me as there were no perceived conflicts of interest.

Two teams were selected that operate in different areas of the country to establish a current view of VR teams in A-NZ and the barriers/enablers which can occur for these teams. Each team was likely to have differing demands and a more diverse selection of teams provided clearer information about practicing in A-NZ.

4.2.4 Participant recruitment

I initially contacted my organisation's (South Island based) clinical manager and asked for contact details of a team that may be suitable for the research project. The initial contact was with the team's regional manager and/or team leaders. To find a North Island team I contacted a member of my organisation's management team who had access to North Island teams. As noted previously, my company have relationships with North Island providers, but they do not work directly for the company. The manager of the company was contacted to gain consent for participation. Both management teams were provided with a research information sheet (Appendix 2 Information sheets).

Once an agreement with the company's management had been obtained, I contacted the regional manager and team leader of the teams. At this stage, they were provided with an information sheet via email. I then followed up with a phone call to discuss the project further and to outline the requirements. Once they had agreed for their teams to participate, individual team members were invited to be part of the project. Initially, I was planning to contact all individual participants myself, but the regional managers and team leaders were keen to offer participation in the research during a staff meeting. They then agreed to send the information sheets out to interested people and collated the participants. The South Island team replied with their consent (Appendix 4 Consent form individual interview) to participate directly to me, but the North Island team went through their team leader.

4.2.5 Sample size

There were more people keen to participate than my original sample aim. I aimed to have 3-6 total number of participants per team to be involved in both FGs and individual interviews (Terry et al., 2017). I used Terry et al.'s (2017) advice on recommended project sizes for thematic analysis. None of the participants were excluded as all applicants met the inclusion criteria and a good variety of participants agreed to participate in the research. I proceeded with the willing participants as there was a good range of professional backgrounds and length

of time in both practice and VR, and this provided me with a rich data source. I also still kept in mind my original sample size with only a minimal extension of 2 participants in total. This showed that participants numbers were still kept under control and at the right level for a Master's degree research project. Sample size is often described as an issue for those starting in research as there are no right or wrong numbers (Merriam & Tisdell, 2016; Terry et al., 2017). The sample size is usually dependent on the research question and how much information is needed to answer it (Merriam & Tisdell, 2016)

4.2.6 Focus group procedures:

The focus groups were completed prior to the individual interviews. Prior to starting the FGs, participants were given the opportunity to review the research information sheet (Appendix 2 Information sheets) and were asked to complete a FG consent form (Appendix 3 Focus group consent). FGs were held at the participants' workplace and were scheduled at appropriate times for the team. Interview times were selected by the team leaders and provided to me. I travelled to both the North and South Island clinics to complete the research face to face. The FGs were held in a private space, large enough for all participants.

On starting the FG, I outlined my professional role and background and the purpose of the study. I explained to participants that the FG would be recorded and that the raw data would only be available to myself and my supervisors. I discussed with them how I would keep their privacy and confidentiality mainly with the use of pseudonyms or not using data that had the potential to disclose their identities.

Prior to the FGs, I had made a list of semi-structured questions (Appendix 6 Focus group guide) to assist me in guiding the FG. I had also discussed with my supervisors how being a clinician has taught me to interview in a different way to a researcher. It was important for me to learn how to interview from a researcher perspective. My supervisors provided a lot of guidance around interviewing for research within supervision sessions. I also completed a practice FG with some of my team members. I recorded the interview and played it back to myself, deleting the recording afterwards as it was not going to be used for the research. This enabled me to identify areas that could be improved, including further questioning to participants to gain deeper understanding of their thoughts and avoiding leading questions. The practice session also prompted me to make slight changes to my question guide so that participants could understand what I was asking them.

During the FG's I encouraged participants to share their perceptions and experiences of team participation through open ended questioning techniques, enabling participants to provide information that they felt safe to share. Open-ended questioning and semi structured interviews

are also supported by the qualitative descriptive methodology (Bradshaw et al., 2017; Sandelowski, 2000). The semi-structured focus meant that participants had a degree of control over what was being discussed and direction of the FG. I used my research interview skills to explore topics further with participants. The participants were also provided with definitions of types of teams (Appendix 9 Team Descriptions) and some team diagrams (Appendix 8 Team diagrams). These helped to guide discussions within the FG. The FGs also allowed me to observe nuances that were not able to be captured on the audio recording such as team dynamics, approaches to topic areas, and interactions between team members. During the FGs, I kept notes of my observations and early codes for review in the analysis stages.

4.2.7 Interview procedures

Prior to starting the individual interviews, each participant was provided with the research information sheet (Appendix 2 Information sheets) and a consent form to compete (Appendix 4 Consent form individual interview). Participants were also informed the interview would be recorded and how confidentiality and privacy would be maintained. The same questions were utilised for both the FG and individual interviews (see Appendix 5 Interview guide, Appendix 6 Focus group guide). The participants were also provided with definitions of types of teams (Appendix 9 Team Descriptions) and some team diagrams (Appendix 8 Team diagrams) as provided in the FGs. The semi-structured format allowed me to explore topics that were brought up by participants. Whilst I had the initial questions they were often changed to adapt to the responses of the participant or gain further insight into a topic area. Guiding questions were asked such as “earlier you discussed stress and pressure. How do you think this impacts on the team?”

The question around organisational support was difficult for most participants and I needed to alter questions to the participants during interviewing. Questions were changed to be more specific; how does your company support you to work as a team? and how does the insurance provider or ACC support you to work as a team? This often provided me with richer data to review. During the interviews, I continued with my note taking documenting potential codes and observed behaviours from the interview.

4.2.8 Transcription

I completed all transcriptions of FGs and interviews prior to moving to the formal TA process. A mixture of intelligent and verbatim description was used. Filler words such as umm's and ah's were excluded but laughter and pauses noted. This was the first stage of my analysis and enabled me to become more familiar with the data (discussed further in 4.4 Analysis). During transcription, I started reviewing identifiable information and changing this into pseudonyms to protect the identity of participants. I also made notes throughout of any interesting details that

could be picked up in an audio recording but may not be so apparent in a written document. This included tone of voice, conversation between participants, and any innuendos that may be picked up in speech. I also started writing down initial ideas. These initial findings were reviewed during supervision.

4.3 Analysis

TA was used to analyse transcripts and recordings of interviews and FGs (Terry et al., 2017). Braun and Clarke's (2006) six-phase process was used to analyse data. The six phases include familiarisation and coding, theme development, reviewing and defining themes, and producing a report (Terry et al., 2017). Though Braun and Clarke (2006) use a 6 phase model, this model of TA encourages the researcher to complete continuous review of the data (familiarisation), and analysis (coding and theming) stages (Bradshaw et al., 2017; Braun et al., 2018; Terry et al., 2017). This continuous process allows the researcher's understanding of the data to develop through time and increasing engagement. It is expected that codes and themes will change and evolve through this engagement, becoming better at capturing meaning. This analysis section will review how the six-phase model was used for this research project.

4.3.1 Familiarisation and coding (stage 1-2)

Familiarisation is described as the way the researcher can become "immersed" in their data, having a deep knowledge of the data available to them (Braun et al., 2018, p. 10). It is the first stage in the process of analysis. The familiarisation stage allows the researcher to start making notes on the data, detailing the links or things that stand out from the data set (Braun et al., 2018; Terry et al., 2017). Stand out information would be described as data that may answer the research question. My first stage of familiarisation was transcription of audio recordings and making notes about patterns or repetitions that had been seen throughout the interviews. After transcribing I read and reread the transcriptions several times and finally listened to the interview and FG recordings while making loose casual notes. During the reading of data and listening to audio recordings I began generating codes. Coding is described as a methodical and concise process used for the "creation of meaningful labels" for chunks of data (Terry et al., 2017, p. 26).

There are two options for researchers when coding: inductive and deductive. For the purpose of this research, I used an inductive approach. An inductive approach to coding means that the data is the focus. Meaning is then made by the data, rather than theoretical knowledge driving the data (Terry et al., 2017). However, an inductive approach does acknowledge that the researcher brings with them their own lens. The reflexive approach of TA also acknowledges this and ensures that this is addressed throughout the analysis process (Braun et al., 2018; Terry et al., 2017). Another consideration was whether I would use semantic or latent codes. Early in the

coding process, the majority of the codes were semantic i.e. direct quotations from the data. As I familiarised myself further with the data and developed and refined my codes, they became predominantly latent. A latent code can also be called an interpretative code, in that they go beyond the surface meaning given by a participant and attempt to give more explanation to the data. Explanation often comes from theoretical knowledge of the researcher and bringing together patterns that are seen throughout the data set (Terry et al., 2017). My coding contained both semantic and latent codes with semantic codes being more predominant.

I regularly attended supervision sessions throughout the analysis stages where I discussed how I had interpreted the data and reflected on the lens that I brought with me as a manager and vocational practitioner. Questioning from my supervisors enabled me to be reflexive with the data and my own interpretation enabling me to broaden my views on how I looked at the data. QD methodology also acknowledges that descriptions are shaped by the describer (Sandelowski, 2000). Analysis methods used within QD methodology should be descriptive in that the data is interpreted and presented with “low-inference” (Sandelowski, 2000, p. 335). This approach should ensure that there is resonance between multiple researchers and readers on codes and themes produced from the data (Sandelowski, 2000). A QD methodology, therefore, supports an inductive rather than deductive approach to TA.

On beginning the coding phase, I reviewed my research questions to ensure that codes were meaningful and pertinent to the research. The coding phase was again reflexive, reviewing initial codes first independently and then with my supervisors. Reviewing codes with my supervisors helped me to interpret them, further developing some codes from semantic to latent using my world view to bring meaning to the them. To develop my ability to code data I attended a TA workshop run by Gareth Terry (also my supervisor) through AUT focusing on reflexive TA. I completed coding manually by initially writing codes in a list format, on a word document and highlighting corresponding sections within the transcripts. I continued reshaping and developing codes as I moved through and continued engaging with the data. Ongoing discussion with my supervisors throughout the analysis stage ensured I maintained a reflexive and inductive approach. Once I was satisfied that I had coded the data and developed and refined my codes to the full potential I began to move more formally into the theme development stage. As previously noted, TA is a fluid approach and I moved backwards and forwards through each phase and completed some stages consecutively.

4.3.2 Theme development (stage 3)

Theme development is the starting point of creating themes. Terry et al. (2017) argue that themes do not just appear from the data but are actively constructed through finding connections and similarities between the codes. Themes created in this phase of TA are

provisional and may not be the themes used in the final reporting stages (Braun et al., 2018; Terry et al., 2017). It is suggested that good themes should provide a clear story about how the data fits together to answer the research question (Braun et al., 2018). Grouping similar codes together is often the starting point of theme development (Braun et al., 2018; Terry et al., 2017). Braun et al. (2018) recommend when using this process for constructing themes the researcher needs to ensure that they are identifying “meaning-based patterns” (p.13) rather than just a characteristic of the data or topic summaries. Themes are then often developed further through thematic mapping. Thematic mapping provides the researcher with a visual guide to identify how themes fit together (Braun & Clarke, 2006; Terry et al., 2017) (see Figure 5.2).

The starting point for my theme development phase was once again to go back and review my research question. I also reviewed my initial notes from the familiarisation stage and made further notes on codes that had similar meaning. This provided me with some basic initial themes. These themes were taken to supervision and both supervisors discussed further other provisional themes that they had seen throughout the data. This assisted further with the reflexive approach to TA by bringing different world views and lenses to the topic area. This supervision session broadened my thinking and I went back again to review and develop my provisional themes. I used hand drawn thematic diagrams for a range of proposed themes, which helped me refine themes and allowed me to lose some themes that did not assist in telling a story.

4.3.3 Reviewing and defining themes (stage 4-5)

After collating codes and completing an initial thematic map of provisional themes (Figure 5.1) I began the process of reviewing and defining the themes. Terry et al. (2017) describe this phase as an essential part of the TA process to understand and refine the themes created. Through this process, some themes are lost, replaced, or redefined. During this phase, it is important the researcher re-addresses their research question and the whole data set to ensure that codes and themes answer their question, as well as describe what has been found in the data as a whole (Terry et al., 2017). This process ensures that a QD methodology continues throughout the research, as the data should give an accurate representation of what the participants have said, whilst acknowledging the role of the researcher (Bradshaw et al., 2017). This stage of the process ensures themes are inductive i.e. come from the data and are not created only by the researcher’s theoretical knowledge of their topic area (Terry et al., 2017).

I began this phase by again reviewing my research question and my list of codes. From here I listed my provisional themes into a word document and copied and pasted relevant codes under the themes. After this process, I reviewed the codes alongside the themes. I found that some themes were not strong enough on their own and placed these within the other themes to

further strengthen their meaning. I then reviewed the themes and their codes again. On reviewing of the three remaining themes I felt the titles did not quite express the depth of information that they held so I began renaming them. The renaming of the themes was assisted by starting to define the theme and the codes that it held. I gave each theme a brief definition which assisted me to mould and shape the themes names through the defining process. I then went back to the data and reviewed the coding process alongside the themes, identifying some new codes in the process. At the end point of this phase I had coded transcripts, a list of theme names with codes listed underneath, and a new thematic map was produced (Figure 5.2).

4.3.4 Producing the report (stage 6)

The final stage of TA assists with the ongoing analysis of the data. Writing the report ensures that the themes and names selected answer the research question and depict what is important about the data (Braun et al., 2018; Terry et al., 2017). Effectively, this final stage brings everything together. This means that the conceptual review I have completed and the notes, recordings, and raw data I have collated through data gathering stages are combined to provide my reader with a full picture (Braun et al., 2018; Terry et al., 2017). It also ensures that data is presented appropriately, representing the methodological considerations. My results needed to be descriptive and reflect that I used a QD methodology.

Terry et al. (2017) identify that this is also the stage where the researcher identifies if they will use an illustrative or/and an analytic approach in presenting the findings. QD supports both presentations of data (Sandelowski, 2010). The QD approach acknowledges the analytic input from the researchers own knowledge. The final stage of TA enabled me to compare and contrast the data with my own experiences and the research I had already gathered as part of the conceptual review (Sandelowski, 2010; Terry et al., 2017). The results clearly outline how I have analysed the data and the interpretations I have made. Specific data extracts also show the exact wording provided to me by a participant followed by analytic connotations.

4.4 Quality of research

There continues to be debate in the field of qualitative research about how studies should be assessed for quality (Finlay, 2006; Merriam & Tisdell, 2016). One aspect qualitative researchers do agree on is that the quantitative research quality checks do not meet the needs of qualitative research (Finlay, 2006). Lincoln and Guba (1985) proposed one of the first sets of criteria for ensuring quality in naturalistic research. Their criteria included credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Since then several other researchers have proposed a range of criteria to test the quality of qualitative research (Finlay, 2006). Whilst there are varying views on the criteria required, most agree that validity and reliability of a study need to be summarised by the researcher (Merriam & Tisdell, 2016). As research should be

measured against some criteria, I have chosen to use the eight “big tent” criteria proposed by Tracy (2010). Tracy (2010) proposes a criterion that can be used for any qualitative study which is particularly helpful for the novice researcher. Her model is based to fit a range of “methodological best practices” (Tracy, 2010, p. 838) and she argues that it is sensitive to the complexities of various theoretical perspectives. The eight criteria she proposes are worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethics, and meaningful coherence (Tracy, 2010).

4.4.1 Worthy topic

Tracy (2010) argues that good research is pertinent to the current times and should meet the current needs of the reader. I have chosen to research the field of VR in A-NZ. This is timely as there is limited research on this topic area worldwide but particularly in A-NZ. Through my concept analysis, I was able to identify only one A-NZ specific research article which was focussed on a very specific area of VR. It is also a relatively new practicing area for a range of health and vocational practitioners.

4.4.2 Rich rigor

Rich rigour is achieved through the researcher showing that they have completed careful consideration in their methods and ensured that these meet their theoretical perspectives (Tracy, 2010, 2020). In this chapter, I have clearly outlined the methods I have chosen to collect data, including how I selected participants (purposeful sampling) and how I chose my sample size. I chose FGs and interviews as they enabled me to collate descriptions of participant experiences which is supported by a QD methodology (Sandelowski, 2000, 2010). FGs and interviews also allow the participants’ individual views to be recorded, which supports a constructivist post-positivist approach. I have also discussed the use of TA to analyse the data and identified the approach that I have chosen, following the method described by Braun and Clarke (2006). I have clearly outlined how this approach was used to sort and organise data. Tracy (2020) argues that to meet rich rigor guidelines a researcher must clearly define how “data were transformed and organised into the research” (p. 272).

4.4.3 Sincerity

Sincerity has two main components, self-reflexivity and transparency (Tracy, 2010, 2020). All qualitative research studies and criteria report these components as a key criteria for meeting quality (Bradshaw et al., 2017; Finlay, 2006; Merriam & Tisdell, 2016; Savin-Baden & Fisher, 2002). Sincerity also needs to demonstrate and detail the impact of the researcher on the research (Tracy, 2010). Post-positivism identifies that the researcher plays a key role in data collection and analysis (Fox, 2008; Sandelowski, 2000, 2010). I have acknowledged my position as a researcher clearly in section 4.1.2. Throughout the data collection, I also completed regular

supervision sessions. My supervisors had opportunities to review transcripts and recordings of my interviews and provide feedback as needed. Reflexivity is an important aspect of both QD methodology and TA (Braun et al., 2018; Sandelowski, 2010). I used reflexivity to ensure that I addressed my assumptions throughout data analysis and data collection (Willis et al., 2016). As clinicians, we are taught about reflective practice and I was able to use some of these skills to assist with reflexivity in research. I would describe myself as a reflective person and I was often able to identify areas that needed to be improved or topic areas of interest. However, these points were always brought to supervision and discussed pragmatically to ensure they fitted with research practice. Throughout the data collection stages, I also kept brief notes on nuances that might not be heard on recordings or seen in transcriptions. In addition, I recorded interesting topic areas or potential codes to assist with expanding my thinking and assist with reflexivity throughout the process.

I have identified throughout this chapter how I have managed my position reflexively throughout each stage of my research. This was achieved through regular supervision, careful selection and consideration of interview questions, and learning to interview as a researcher. I have also provided transparency to my research practices by outlining how I came to be in contact with the companies I utilised to gain access to participants. Transparency was also achieved by providing the reader with an account of how I completed my research (Tracy, 2010)

4.4.4 Credibility

Tracy (2020) described credibility as “dependability, trustworthiness” (p. 275) and documentation of a reality that is understandable. Credibility is achieved by four concepts; thick description, triangulation or crystallisation, multivocality and partiality, and member reflections (Tracy, 2010, 2020). QD alone encourages the use of thick description from participants (Sandelowski, 2000). QD within a constructivist post-positivist theoretical perspective also promotes the idea that language shapes reality (Fox, 2008). With this viewpoint, it is particularly important that I present data that is recognisable to the participants and conveys their realities of VR. Due to my background as an occupational therapist working in VR, I was also privy to understanding certain terminology and processes that may not be available to every researcher. However, there were times when participants used acronyms or described processes that were different to what I was familiar with and I sought further clarity with the participant(s) during the FG or interviews. This ensures that a rich description is gained and transferred into the analysis.

Triangulation is not a method supported by constructivist post-positivist theory (Fox, 2008). Triangulation assumes that there should be one reality, whereas proponents of constructivism believe that there are multiple realities (Fox, 2008; Tracy, 2010). However, throughout the

research, I used reflexivity and the support and input of my supervisors to assist me with different viewpoints and positions. This often challenged the perspectives that I would bring with me to my analysis or provide additional ideas or insights into data analysis. The findings and research were also embedded within the literature, in particular, the conceptual review (Chapter 2). This helped ensure that the findings resonated with existing work in other countries while taking account of the distinctiveness of A-NZ.

Through the choice of my participants, it could be argued that I achieved multivocality. My participants included a range of professional disciplines as well as team leaders and managers. This provided me with a wide source of data from varied perspectives. The choice of open-ended, semi-structured questions also enabled wide ranging viewpoints and different realities to be discussed throughout data collection. These methods also ensured that I was not imposing my own views on participants. I also identified the impact of culture at the time of designing the research project and was open to managing cultural considerations throughout the process. Due to the size and purpose of the study, and lack of congruence with the constructivist postpositivist perspective, member reflections were not sought, but participants were always given the opportunity to add additional comments or points for consideration at the end of interview or focus groups.

4.4.5 Resonance

Resonance can be achieved in a variety of ways including through aesthetic merit, transferability, and naturalistic generalisations (Tracy, 2010, 2020). The aim of my study was to provide insight into A-NZ VR teams and the barriers and enablers to them. I hope that this study will be valuable to practitioners currently working in VR. It also has the ability to provide insight into teams which could be valuable to a range of healthcare and rehabilitation teams. For example, whilst the focus is on VR, a lot of the outcomes may also be appropriate to rehabilitation professionals who work in private practice. If a reader can see themselves in the data I am presenting, then transferability has been attained (Tracy, 2010).

4.4.6 Significant contribution

I have completed a conceptual review of current literature and have an in-depth knowledge of current literature available in the VR field. Currently, there is limited literature available about A-NZ VR teams, particularly working in the field of return to work. The international research is limited in assisting the A-NZ context due to the differences in systems, organisations, and delivery of VR. My research has the ability to provide clearer understanding of the VR team phenomenon. Therefore, this research acts as a starting point for further research into the field, whilst also providing practical insights for a range of professionals and VR organisations to develop VR teams and improve services.

4.4.7 Ethical

Reflexivity and multivocality (which have been discussed) go part way to meeting ethical standards for quality (Tracy, 2010, 2020). A good ethical description should include procedural ethics, situational ethics, relational ethics, and exiting ethics. Ethical approval for the research was gained through the AUT University Ethics Committee on 1st July 2019 (Appendix 1 Ethics approval). The ethical approval process helps ensure the safety of the researcher and participants. An ethics application is used to explore the methodology and methods used for the data collection, to ensure participant safety and ethical research practices are upheld. In A-NZ specifically, it also encourages researchers to consider cultural safety within a bicultural society and equity of research for promoting the rights and interests of the Māori population.

Ethical considerations within my project included the type of data collection used (open ended questioning) and the right to decline to answer any questions. Participants were also given the right to withdraw from the research until the start of the FG or interviews. They were also able to participate in either the interviews or FGs alone. I provided all participants with my practicing background to ensure that they were clear about my role but made it clear that I was present in the FGs and interviews as a researcher, and not as a practitioner or manager. As the study was completed in A-NZ, the ethics application also documented how the Treaty of Waitangi principles of partnership, participation, and protection were considered and implemented within the research.

Participants were given the opportunity to contact a cultural advisor should they need to explore any cultural issues specific to the research. The cultural advisor is employed by the company I work for as an independent consultant. The cultural advisor has an in-depth knowledge and understanding of Te Ao Māori², including Te Reo Māori³ and Tikanga⁴, and has demonstrated experience related to the implementation of Māori models of practice. He has strong community networks developed with local Iwi⁵ and marae⁶ and wider community groups throughout his working region in the South Island. His knowledge assisted in identifying the impact of research on Māori and how the research and researcher could ensure Māori cultural values are taken into consideration throughout the research process. The cultural advisor was also able to advise in the event that a separate North Island cultural advisor would be required.

² Te Ao Māori is the Māori world view and acknowledges the interconnectedness and interrelationship of all living and non-living things

³ Te Reo Māori is the indigenous language of Aotearoa-New Zealand

⁴ Tikanga is a Māori concept with a wide range of meanings – culture, custom. Ethic, etiquette etc. Often translated as the Māori way of doing things

⁵ Iwi is a large social unit, in Māori its meaning is people or nation but is often translated to tribe

⁶ Marae is a communal or sacred place that serves religious and social purposes

All participants were informed of the cultural support they were able to access through an information sheet provided to all participants (Appendix 2 Information sheets).

Due to the format of FGs, anonymity was not able to be guaranteed but participants were advised to keep participation and shared information confidential, to provide a safe environment to all group members. Members of the FGs had a pre-existing relationship and managers were not invited to participate in FGs to ensure that effects of power imbalances between team members were as minimal as possible. FGs can help diffuse the power dynamics that exist between researchers and participants with information sharing and discussion occurring across a number of people (Merriam & Tisdell, 2016). Individual interviews remained confidential between myself and the participant and allowed for disclosure of information and experiences that participants felt uncomfortable sharing in the FG setting.

The ethical considerations also included the privacy and confidentiality of participants. Considerations included that only the primary researcher and supervisors would see the raw data. It also included that all information gained from interviews was confidential and was not shared with other participants. All data was anonymised when transcribed, in that no names or designations were documented on transcripts. Important details such as locations were also replaced with suitable generic descriptions (such as “South Island rural team” or “Area 1”). A note on ethics with regard to the findings section. Participants have been provided with pseudonyms to protect their identities. Through the findings chapter (chapter 5) team members will not be described as rural or urban. The rural team come from a small community and by describing them as rural it could enable their identities to be discoverable by others, outside of the research project.

Storage of data was also considered. Hard copies of documents with identifying features were stored in a lockable filing cabinet on University premises. Soft copies were also stored on a password protected Sharepoint page, accessible by myself and my supervisors only. Other considerations included risk to participants, which was minimal to none in this study. It also included conflict of interest considerations. The main conflict of interest for me was that as a regional manager I would not use my own team for the research due to the power imbalance that this may cause. My role as a regional manager and occupational therapist was also disclosed to all participants through the information sheet and at the time of interviewing. There was no advantage for participants to participate in the research other than to receive a summary of the findings. Teams were provided with a café voucher of approximately \$10 per participant that was offered as a small gift after participation was completed.

4.4.8 Meaningful coherence

Meaningful coherence is a term used by Tracy (2010) to describe that the researcher has done what they have told the reader they are going to do. Sandelowski (2000) also notes that this is important in QD methodology. She acknowledges that QD is not atheoretical and that it can be a methodology used alongside a range of theoretical perspectives. It is the researcher's role to ensure that they outline their theoretical perspective, epistemology, and how the methods used meet the theoretical and methodological standpoint they identify (Sandelowski, 2000, 2010; Tracy, 2010). The researcher also needs to ensure that their writing style reflects the approach that they have chosen.

Meaningful coherence also shows that the researcher has achieved what they intended to, or in other words that they have answered their research question (Tracy, 2010). Tracy (2010) acknowledges that research can provide surprising answers and does not always follow the path a researcher intended. She also goes further to state that in general the research should fit together well. The literature should shape the research project and its questions and assist with influencing how the results are presented. Further, the methods should be congruent with the approach and suitable to answer the research question.

This chapter was designed to provide meaningful coherence for the reader, outlining my theoretical perspective of constructivist post-positivism to the QD methodology. I have clearly outlined my methods and how they interlink with this theoretical and methodological approach. In the following chapters (findings and discussion) I will provide the reader with further examples of meaningful coherence by maintaining my theoretical and methodological stance.

4.5 Summary

In this chapter, I have outlined my approach to methodology. I have provided information on the ethical considerations I made at the time of considering, implementing, and completing this research. The chapter has also outlined my methods including sampling, data collection, and analysis. I have provided a guide on how I used Braun and Clarke's (2006) six-phase model of TA, which is a reflexive approach to analysis. Finally, I have outlined how I have achieved quality in my research using the eight "big tent" criteria proposed by Tracy (2010). In the next chapters, I will provide you with information on my findings, including the themes that I developed through the TA process.

5 Findings

This chapter outlines the unique needs of VR teams working in the A-NZ climate. In the chapter, I discuss how three themes were developed through the analysis process and why they were chosen. Finally, I explore the detail of the three themes and how these address the research question; How do specific VR teams based in Aotearoa New Zealand compare to teams described in the literature, and in particular, how are their needs the same or different? The three themes developed throughout the research were; **being human, having the power, and VR is not for everyone.**

5.1 Participants

As outlined in the methodology and study design chapter, I completed interviews and FGs to collect data. Participants included occupational therapists, physiotherapists, an exercise physiologist, regional managers, a vocational consultant, an administrator, and an occupational physician. This gave a wide range of professional perspectives in the data. There were also professions that (although not interviewed) were discussed by participants as being part of the wider VR team, including, case managers, GPs, specialists, and psychologists. The invitation had been open to psychologists, who are part of VR teams, but none volunteered to participate. Table 4 Demographics below, provides details of the participants' demographics and characteristics. There is missing information from two participants who did not return their demographics questionnaire. Professional background was collated at the time of interviewing, so this category contains information from all participants.

Fourteen people participated in the research. Nine participants took part in FG discussions across two FGs – six participants in one FG (North Island urban setting) and three participants in the other (South Island rural setting). While four participants were confirmed for the South Island FG, one participant withdrew on the day due to being too busy to attend. Twelve individual interviews were completed in total (seven from North Island urban setting and five from South Island rural setting). One FG participant was unavailable for interview at the times allocated, the participant was offered another time but chose not to participate. There were four additional participants who participated in only the individual interviews. Those interviewed who did not participate in FGs included: regional managers, who were excluded from the FGs for ethical reasons, and people who were geographically separated from the rest of the team and unable to be present on the day of the FGs. There were also more participants available in the urban team compared to the rural team, as there was a larger team in the urban area.

Table 4 Demographics

Profession	Administrator	1
	Exercise Physiologist (EP)	1
	Occupational Therapist (OT)	7
	Occupational Physician (OP)	3
	Vocational Consultant (VC)	1
	Physiotherapist (PT)	3
Cultural identity	European	2
	New Zealand/European	7
	New Zealand/Māori	1
	Other	2
Gender identity	Female	8
	Male	4
Age range	25 – 55 years (median 35 years)	
Number of years in their profession	1 – 41 years (median 12.5 years)	
Number of years in vocational rehabilitation	1 – 15 years (median 6.5 years)	

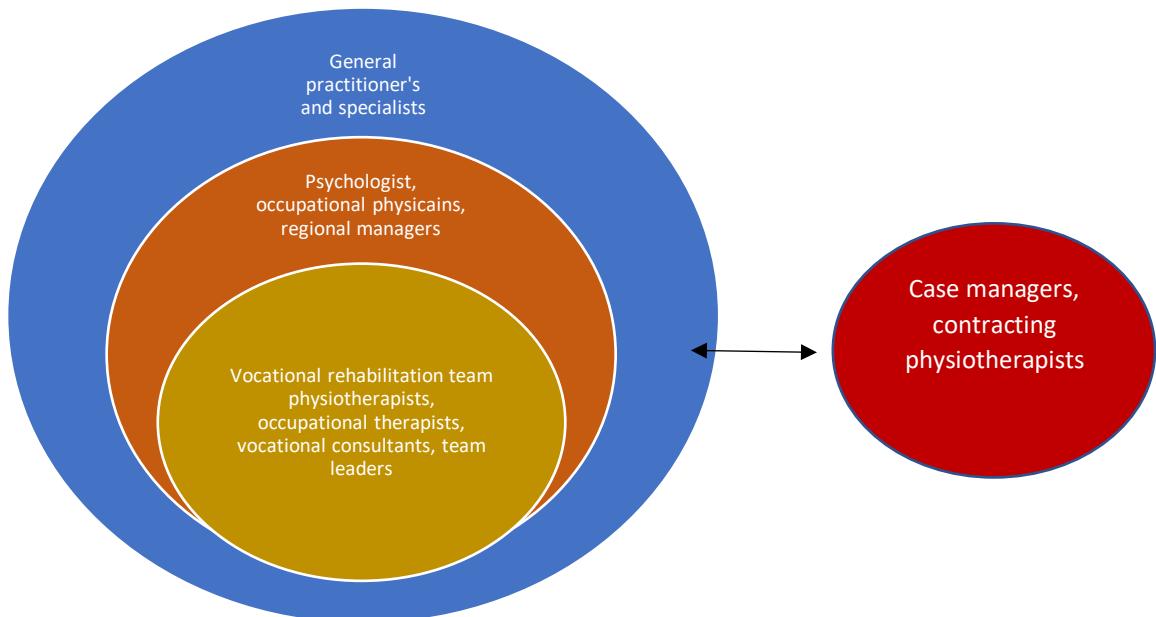
Most of the participants took part in both a FG and an individual interview. I observed through the interviews that the participants who had participated in the FGs often explored ideas more deeply in the individual interviews. For some participants, articulation of their own views became stronger, with some wanting to ensure their voice was heard when it had not been as prominent in the FG. For others, their views had changed, or they had thought about the topic area in more detail. Some referred to the FG in their interview, identifying that the FG had made them think more about the way they do things or why they do things.

5.2 Context to the themes: Team structures

Figure 5.1 shows the team diagrams as discussed and collated from participants data. During FGs and interviews, teams were first asked to describe their teams. For most participants, their teams were defined as the people that they work with directly (i.e., those that were in the same building as them and they worked with on a daily basis). All participants were then shown diagrams of teams (Appendix 8 Team diagrams), these team diagrams were based on how teams were described in the articles in the conceptual review. It was relatively easy for participants to talk about their direct team, but they often needed to think about the diagrams before they could begin describing other layers of the team.

One participant, Ben described the team as like “layers of an onion.” Other participants also used similar language to describe their team. The layer outside of the direct team were people who worked with the team but may not be directly involved, such as regional managers or psychologists. Participants often independently identified managers and regional managers as the next layer but required the diagrams to identify additional layers and professionals. The outer layers of the team were discussed after participants were prompted by the diagrams. The next layer held people removed from the direct team such as contracting physios and case managers. GPs and specialists, though recognised as part of the team, were often seen as the very outer layer with limited interaction or involvement. Employers and clients, whilst acknowledged as needing to be part of the team, were not generally discussed as a team member. This may be due to the focus of the questions being aimed at the VR team and how it functions.

Figure 5.1 Team diagram (as described by participants)

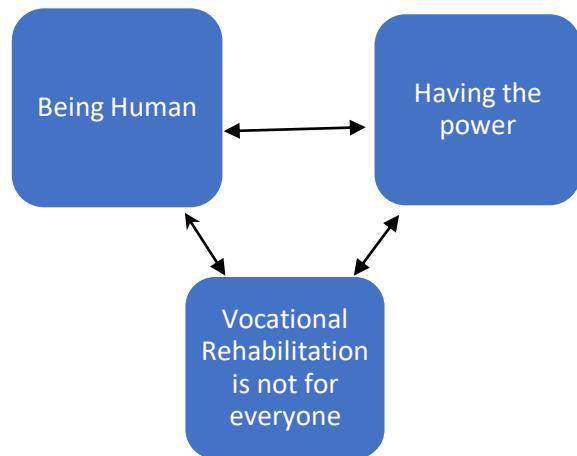


5.3 Theme summary

Three themes were generated from the accounts of professionals working in a VR team. Each theme describes a key idea that assists with explaining the findings of the data; **being human**, **having the power and VR is not for everyone** (Figure 5.2). The themes explore participants' understandings of VR, their perceptions of the team, and what barriers and enablers are present in the current practicing climate. They identify how national and organisational

pressures, and the need to find your own role in VR, impact on the number of professionals who remain in the VR field. Many participants described the interviews and FGs as like supervision or a “venting session,” indicating they had a lot to share about their experiences. Throughout this chapter, data extracts will be given as examples of participant discussion, alongside my interpretations of the data.

Figure 5.2 Thematic map



In this final thematic map (Figure 5.2 above), you can see the relationship between the three themes. The relationships between the themes will be explored throughout this chapter. The three themes each provide insight into a distinct aspect of the data. **Being human** discusses how the team and individual team members were not judged or defined by their professional background. This suited some professionals whilst creating personal and professional tensions for others. **Having the power** explores how VR specialists often do not have the power to make clinical decisions about VR, despite their specialist skills. It explores how the doctors, clients, and case managers often hold all the power leaving VR professionals feeling like the “middleman” (sic). **Vocational rehabilitation is not for everyone** further explores how these two themes impact on who works and remains in the VR field. It also explores the type of person and professional who chooses to remain in the role of a VR professional.

5.4 Being human

This theme explores the importance of knowing your team on a personal level. It particularly focuses on how teams can be segregated by their professions unless they can find a common ground or understanding. The theme discusses how “being human” could be a common understanding amongst team members. The tensions created by role mergence are also explored. Professionals identified role mergence or transdisciplinary team working as their best

way of working but discussed how they were not always able to achieve this. Being in a rural team also brought with it some common human experiences such as working in a small community and how this impacted on the team. Team conflict had the potential to bring the team together as well as fracturing the team. Ultimately, all the individual team members sought how to become equal, how to create a supportive and understanding team, and this was achieved through “being human.”

The need to know your team mates on a personal level was well discussed throughout the interviews and FGs. Most team members believed that to work effectively as a team you needed to know some personal things about each other. These personal aspects often encouraged more relationship building between team members over common interests. This, in turn, created trust between the individual team members. Ben describes this in his own words below.

Ben: Well partly it's just on a social level, just how are things going? what you been up to? Part of that is about team dynamics. I do fundamentally believe that teams work more effectively together if you have a degree of understanding about people ... It's about what motivates them, what demotivates them, the sorts of things they are interested in because if you make that connection, it then starts to build a team dynamic which is around trust

Knowing a team member socially seemed to be as important as knowing a person professionally. These two aspects of team members combined to identify a team member's strengths. Participants discussed how they would select team members to work with, or to seek advice from, based on these personal and professional factors. Those teammates perceived to be more approachable were often chosen to work with over others. This sense of approachability was developed by spending time with each other personally and professionally and building trust. Other participants discussed going to a wide range of team members but selecting the advice that they liked. Most participants described having favourite people that they would regularly work with as they felt that they had a better understanding of their role, or just generally had a better personal relationship with them. With the rural team, there was a comradery in working with people who had experience working rurally, so there was an understanding of their unique challenges.

Many participants described the importance of interactions outside of the workplace to understand a work colleague personally. It often meant that professionals could put their guards down and talk about their personal likes and dislikes without being judged. It also allowed them to ‘let their hair down’ and show their true personality. In the constraints of a work environment, this could be difficult as there is a requirement to be seen as professional. Outside of the work environment, professionals were free to be themselves without the constraints of their

profession. Whilst most participants found this social interaction beneficial there were some who struggled with mixing a work and social life. Paul describes his struggles with this.

Paul: ... all of a sudden Monday, I am meant to sit back with you in a meeting, and just what happened on the weekend. We need to put that past [behind us] because that's personal, that was after hours, and now we need to be strict and professional again ... If we go and cross the boundary of being too casual, too personal, it might affect how we work together.

Paul had created his own boundaries to make him feel safe within the team. Paul came from a background where he had worked independently and had not been part of a larger team. This may explain why he struggled to separate both the personal and professional lives of his colleagues. He would also not have experienced working with managers or leaders or have previous experience of negotiating professional boundaries. These factors could provide some explanation to his concerns about mixing professional and personal lives. The majority of participants did not feel the mix of knowing someone personally and professionally was a barrier. Most discussed how they enjoyed the personal interaction with team members, outside of the work environment, to gain a greater understanding of who they were working with. Knowing who you were working with assisted in building positive team dynamics. The human aspects of a person brought the team closer together and assisted with all team members feeling on one level. Managers also discussed interacting with the team on a personal level and sitting in hot spot rooms (multidisciplinary offices with shared desk space) to allow staff to interact with them. This interaction was often described as allowing the team members to have a laugh or a moan about their current situation. These interactions again brought the manager back to a human level, equal with their colleagues.

Many of the professionals interviewed could see the benefits of merging traditional roles to support the client in the best way that they could. For team members to agree to merging their role with other professions, there were two necessary 'human' conditions. First, was feeling that some of your professional abilities were shared with the profession you were merging into (feelings of being equal). Second, was that you knew the other profession and professionals and there was a trusting relationship between you. This trusting relationship meant when you started taking on someone else's role it was not seen as negative. Sharing your professional abilities and trust assisted with the feeling of being equal.

Another condition of role mergence was more closely related to team structure. One of the questions asked in both the FGs and interviews was what model of practice participants felt their team worked in: uni-disciplinary, multidisciplinary, interdisciplinary, or transdisciplinary. Transdisciplinary and interdisciplinary teams support the idea of role mergence. Most teams

were unable to identify one specific model of practice that they used and described a fluid approach to team modelling, dependent on client need. Participants described how they felt that they were working at their best when they were using a transdisciplinary or interdisciplinary approach. What participants wanted to do was not always possible in practice.

The personal aspects enabled professionals to be seen as human and not defined by their profession or role within the team. Zoe describes how being human put all team members on an equal level, despite profession or hierarchical positioning.

Zoe ... so you know everyone is human as well, even though they're professional at work, outside of work they still go through what you go through. Sometimes, because everyone presents to be doing so well, so great, but you do have other things going on with you. That's nice to see, everyone is actually just getting by, just like you ... So doctors, psychologists, we are all on the same page, we are all supporting each other, and going through things together, so yeah its actually quite nice to have ...

'Being human' was the one common aspect that all team members had despite their differences (i.e. professional background, experience, age). Being able to see a teammate as human helped to overcome barriers to working together. The aspects of "being human" (i.e., the personal struggles we experience both at home and in the workplace) brought each professional to the same level. It broke down typical and traditional medical hierarchical boundaries. The doctors and psychologists were therefore not seen as a higher level of being, who were unaffected by the everyday challenges faced by others. The struggles that they experienced in their personal lives were the same as their work colleagues and teammates. They were no different from the people that they worked with. "Being human" enabled people to see in others what they could see in themselves.

As well as personal struggles, people found that they related to each other through a range of media. One participant described how being healthy and focussing on health brought the team together. These commonalities assisted the team to see not just the professional but the person behind the professional. It assisted the team to break down feelings of superiority amongst the professions and even the leaders and managers. These created an approachable environment where team members felt they could discuss issues, without judgement of their skills or abilities. Those that could not see common denominators often struggled to work with all team members or mix professional and personal backgrounds.

Chloe: I have built up some rapport with the physios and it's good to get their opinion on things and vice versa I think [pause]. Yeah, just more approachable. ...We are a bit more on the same level. I find it a little intimidating to go and talk to, for example, I wouldn't really feel comfortable popping into the OPs [occupational physicians] office and

chatting about a client, off the bat like that, I just feel like that hierarchy is there

Chole's work colleagues described different scenarios where they felt that they could have a discussion with the occupational physician (OP) as needed and often had joint meetings. Speaking to doctors and specialists was often found to be more intimidating for junior professionals which was more likely linked to their confidence. One of the companies described having the OPs available in open plan offices to encourage more regular communication between OPs and team members, again reinforcing the need for everyone to be seen as human. Segregating some professionals into their own offices, whilst others were in an open plan environment, created feelings of hierarchy or that one profession is different from the others. Treating team members differently based on their profession created a hierarchy or segregation between the professions. Treating all team members in the same way, despite profession, puts everyone on an equal playing field. Another hierarchical issue was the need to make referrals to OPs.

Dan: I think there is definitely intention from the company to make people like the OP and the psychologist more accessible, but it's still a process. It's a lot of admin work on us [VR professionals], to get someone to see the OP, just because they want so much information

No other VR professionals within the team required a referral form to be completed. Participants described being able to approach each other in the clinic or ask an administrator to book their client in for an appointment. Referrals created another barrier to interaction and supported the belief that the OP or psychologist were deemed superior. Seeing the doctor as superior prevented interaction between the team members. Zoe and other team members were able to normalise communication with professionals through noting that they were all human.

When participants described the potential to merge with the role of psychologists, they often described the situation and then retracted or re-explained their positions. A common defence to not merging into another profession's role was saying that they were not trained to provide this kind of support. However, they had previously described providing an aspect of the psychologist's role. Many team members felt they needed to understand or provide some practical support to their clients to manage psychosocial needs but struggled to clearly discuss this. There was often a struggle in thinking about what a professional should be doing versus what they are doing. Occupational therapists (OTs) described performing functional assessments but needing to find reassurance to make sure that they were doing the right thing or if they should be doing the assessment.

Reluctance to identify role mergence or moving out of your own, traditional, scope of practice was more often displayed in junior team members. Senior members of the team tended to more

easily merge or blend their roles. One senior team member [Mary] described not being “precious” about her role and letting others step into it as needed. This identified the self-assurance in her own role and confidence that she was completing her role correctly. This is in contrast to Gill’s perceptions below. Managers, senior team members and team leaders identified that lack of confidence in junior team members was also an issue for merging roles.

Gill: I would always read physios notes, and naughty me, I would copy and paste [laughter] because I figured they are a physio, they do this job, you know, day in, day out. They have had how many years of experience. Their information will be a lot more accurate about strength and ROM [range of movement] compared to me. ummm so in that I have learnt from my regional manager to have a bit more confidence

Feeling like you are allowed to merge into another professional’s role was also a very important aspect. If you felt your team members supported you to work slightly outside your scope of practice this made things more straightforward. Being allowed to work in a role often followed an unwritten set of rules followed by the team. It was important for team mates to feel that there were not hurting another professional’s feelings or putting themselves in the path of conflict. Some of the unwritten rules were, for example, the OT was allowed to work in the physiotherapists (physio) role but not in the psychologist’s role, or one physio was allowed to work in an OT role, but the others were not. However, many of the professionals discussed role mergence into other professionals’ roles but did not want to highlight that they were doing this. Many participants realised it was an important part of providing the best VR to clients, but they did not want to create conflict with other team members by ‘stepping on toes.’ This was backed up by the discussion above, including a willingness to branch into someone else’s role and trusting the other professional you work with and feeling equal in some of their skills.

Gill I think the difference of why I am doing it now... is the opportunity, ummm I guess if I was to try and do that being at the DHB [District Health Board] it could be said that you are going past your scope of practice, ummmm and you know, tread on toes and what are you doing, that’s not your job, you need to be OT specific...

The most common experience of role mergence, described by participants, was between Physios and OTs.

Zoe: Dan, I see him also as an OT in some way, because he takes the client completely holistically in every possible way and he assesses in other aspects of their life, not just through physical [changes caused by injury or disease]

Traditionally, physiotherapists work in the biomedical model of practice rather than in the biopsychosocial (which OT’s work in). This means that there is an emphasis on the physical changes of the body rather than a whole person approach. Zoe felt confident that Dan was able

to assess in a holistic way, taking into account a client's personal, financial, and psychological needs alongside the anatomical changes. Zoe picked Dan, a specific physiotherapist that she works with, and argued that this was not generalised to her whole team of physiotherapists. Others in the same team also described how this specific physio merged into what was traditionally an OT role – suggesting this capability was related to the person in question rather than enabled by structure. However, many described that similar mergence happened over time as the OTs and physios were generally the ones that were most present in the clinic or working more regularly together. As evident in Table 4, the demographics also show that there were more OTs and physios within the vocational teams than other professionals. Being together increased professional and personal understanding. Chloe earlier described how she had built more rapport with the physios and would go in and talk to them and seek advice, unlike with the OP. Other team members described going for lunch or having social interactions with the OTs and physios who were predominantly in the clinic. As described above, these feelings of being equal (being human) assisted in overcoming the differences that each team member held. Dan was asked why he felt physios and OTs were more likely to have role mergence. He provided a different perspective on the scenario.

Dan: I suppose um both those backgrounds are kind of leaning towards, umm how would you say, there are clearer options about what else someone can do and I think that changes too within people's willingness to branch out. OT's, say Zoe for example, is really interested in functional assessments and using exercise. She is very willing to look at doing somethings that might be considered a Physio's role, whereas other OT's are like nah I want to leave that to the physio and vice versa

Dan identifies that OTs and physios have more role mergence as there are clearer aspects of the role that could be done by the other profession. However, some individuals seemed more able to make these shifts. Traditionally in practice, OTs and physios work very closely together. He also describes a willingness to move out of their traditional scope of practice and work in a new way. Whilst Dan described this as a 'willingness,' other team members described not wanting to step on other professionals' toes or overstepping their professional boundaries. Many described needing to implement role mergence due to isolation from other professionals [rural team], being the person with the client at the time, or to ensure the client is receiving timely support. It could be argued that physios and OTs were more likely to merge their roles as they felt that they were equal, that they knew and understood each other and their roles. The team members were not moving into another professional's role, who was higher up the medical hierarchy.

Many participants described how working in other environments had required them to work in their traditional role. Participants often described how the VR setting supported role mergence. The VR setting had special characteristics in that a key worker role could be filled by

a number of professionals, effectively forcing them to work outside of their scope of practice. An example of this would be completing a work site assessment where activity analysis is completed. Activity analysis would traditionally be an OT role but the key worker, whatever their profession, would complete this. When participants had come from other practicing backgrounds, they often struggled with the concept of role mergence as Gill describes above. Gill also described in her interview about coming from an unsupportive team. This was likely to increase the need for her to work in her own role. Being “allowed” to work in another role is also seen more when you feel supported or you know your colleagues.

Avoidance of conflict is another aspect of showing or being human, however, conflict was present in the teams. Conflict was most often discussed in focus groups about team members who were not seen as directly involved in the team i.e. contracting physio, GPs etc (see Figure 5.1). This often-caused laughter and discussions of shared experiences of working with that team member. These shared accounts brought the team closer together, with preferences to work with their own team members to avoid conflict and difficult working situations. When participants worked with their direct team there was trust they were doing their role and acceptance there was a shared understanding of roles.

Conflict with direct members was often a more sensitive issue. These conflicts were described in individual interviews only. Team members described personality clashes, not seeing the world in the same way and different social norms as causing conflict. Indeed, most conflict was at a personal level rather than a professional level.:

Ben: you've got ... very strong personalities, but strong in different ways, which doesn't necessarily make for easy working together

Personality differences had the potential to fragment the team and encourage a practice of working separately from one another. This often meant that the team do not develop professional and personal relationships. This in turn impacts on their ability to share roles and develop trust. In the rural team, management of personalities was more difficult.

Abi: ... because it's a small town, the relationships are quite intertwined in that office, which can make it difficult because there is a working professional relationship as well as a personal relationship that comes into it

There was a feeling within both teams that despite what you personally felt about another person you still needed to work with them on a professional level. This was more important in the rural area where it was felt people knew your name, and your reputation could easily be affected. Rural team members described how it was important to be seen positively by the community to ensure you built up a good reputation. As the community was in the workplace

and at home it was important that tensions and conflict were well managed. This ensured the reputation of the VR professional in all aspects of their life. Whilst team members did briefly describe situations of conflict within the team, it was mostly described by the colleagues who were not as directly involved with the conflict. This again could be seen as upholding your name in a rural community. When the team members discussed the conflict directly, they tended to shift blame onto themselves rather than onto the other person involved (for example, "it was my culture," "it was me being too assertive.")

For the rural team, there was also an understanding that there was a special type of person that worked in a rural area.

Abi ...I think you have to be a very special type of person to be working [in the rural] area ... There is a quality in people to live rurally, to work in... a small community and town...

This way of thinking brought comradeship to the team. It also gave them a mutual respect for one another. One team member [Ben] described that there was definite "kudos" for working in a rural area and the hardships that the team managed on a daily basis. This brought again the feeling of being equal, as despite your profession, role or seniority you were managing and dealing with the same issues.

"Having each other's backs" also provides a good understanding of why conflict was not discussed by team members. Both of the teams recognised and discussed that "having each other's backs" was an important shared value for team members. Having each other's backs was intertwined with feeling supported, having trust in your team members and caring about the people you work with. These conversations were had both at a FG and individual interview level. Even when there had been dysfunction within a team, team members still felt that they would stick up for their own. There was the discussion that whilst the team may have conflict internally, if someone outside the team said something bad about someone inside the team, they would always be supported by the team. These feelings often came with knowing team members personally and understanding them on a personal and professional level. Kate demonstrates below the strong feeling of being part of a team and the need to support one another.

Kate: we are just a really supportive team, who cares about each other, and will go into bat for each other. We will protect our own, you know [laughter]. It's like if something happens, we will definitely be going ahhh naahhaaaaAAAaaa you come over here, and you work with what we have to work with. So, we do stick up for each other, which is cool

Support and trust were commonly expressed as important team aspects throughout data collection. Most participants identified how these positively impacted on the team. Whilst these

two aspects were not talked about specifically as values it was clear throughout the interviews that all team members felt these were needed to have a successfully functioning team. There were incidences when having each other's backs was seen as important. This was particularly in challenging times or situations (i.e., if a client had laid a complaint or the organisation was pulling resources). Participants discussed that they would have a shared understanding of what the other person would be experiencing or going through. This was also particularly discussed in a rural team when they lacked access to resources, including professionals and medical services. Participants then responded by standing up for their team member and wrapping around them to provide support from inside the team. Support came from team members venting to one another about situations or speaking when the team member was unable to speak for themselves. Teams were almost seen as a family unit where they looked after each other despite any differences or animosity. One participant discussed how one team member breaking her trust often made it difficult to build trusting relationships in future work environments. This led to a dysfunctional team without the ability to vent or discuss concerns. This individual withdrew from the team and reported that she felt she was unable to fulfil the whole purpose of her role.

Despite all their differences, there was a common human denominator that brought all teams together – food. Food was talked about as a way to get everyone involved and it was something that everyone could share and participate in equally. It could be argued that food and gatherings around food are part of being human. All cultures have traditional foods, we are brought up eating the food of own cultures, and most events we attend have food options. One team member described how food, particularly baking, helped the team members get to know each other.

Paul: when another team member is baking you can see how the personality comes out. Oh, this [team] member is on a low carb high fat diet, so it is more of a keto type of [cake], and then when I'm on baking it's just whatever. So yeah, you get to know a little bit more deeper [about the teams] personality just by baking

When both teams were asked in the FG how they created a team environment the first comment that every staff member made was food related. One team described this as important as it helped meetings be a more relaxed environment whereas another team described it as a way to get everyone together in one room. One team member also described how food was used as a way of celebrating birthdays or special events in a team member's life. This was argued as a way to get the team together but also to show value to the team member. Participants described how eating food together encourages interpersonal relationships between team members which helps build a team. The emphasis was not only on food but on shared personal interests and

behaviours. Again, this brings us back to Chloe's opinion about knowing people outside of work and how you could see that all your team members were human.

5.4.1 Summary

'Being human' was a common theme throughout the data to enable the team to work positively together despite their differences. 'Being human' created a sense of equality, assisting with the VR demand of being a transdisciplinary team or creating role mergence. Role mergence was more clearly seen between physios and OTs as they had more personal interactions. OTs and physios felt that they were on an even playing field with each other making their role mergence easier. 'Being human' helped the team see their teammates as equal despite seniority, medical hierarchy, or profession. This belief created opportunities for the team to communicate with one another at the same level. Those teammates that struggled to see their colleagues as human often struggled to interact with specific members of the team. These specific team members were often doctors, psychologists, and managers that are traditionally seen as being higher up the medical hierarchy. Participants described conflict in providing another professions role, this was particularly apparent when providing psychological intervention. This highlights how there was a struggle in thinking about what a professional should be doing versus what they are doing. Feeling 'allowed' or given permission to step into someone else's role was also important. Teams identified that conflict with indirect team members gave them an opportunity to consolidate together and sometimes laugh about the challenges they faced. When the conflict was between team members it could be a lot more challenging. However, the challenges that the team all had to face, brought them together as one. This was particularly apparent in the rural area, where 'kudos' was given to the team for the challenges they manage in their normal working days. Ultimately, the teams all found ways of being different together. Coming from different professional backgrounds, training, and workplace experiences encouraged the team to find common denominators, in this case, 'being human.' The ultimate act the teams used to emphasise 'being human' was through food. Every staff member discussed food as a way of bringing the team together and getting to know the team members personally.

5.5 Having the power

Having the power explores the relationship VR professionals have within the A-NZ health systems and funding models. It also shows how interpretation of these systems at an organisational level impacts on how the team functions. This theme explores the power imbalances and changing power scenarios of professionals. Whilst 'being human' assisted team cohesion and bringing professionals to the same level, 'having the power' increased the feelings of segregation within the team. This often created a 'them and us' scenario. It also explains how

hierarchical imbalances are created in the medical/rehabilitative field as described throughout the findings chapter.

Having power was discussed frequently within both teams during FG and interviews. This discussion initially stemmed from VR providers being specialists in the VR field but not being able to have the final decision on a client's RTW. In A–NZ, VR companies are required by ACC to have a large percentage of VR professionals who hold a post-graduate qualification in VR. This provides them with the 'specialist' status to provide these unique services. It is unusual for rehabilitation professionals to receive any significant training for VR at undergraduate level. This means that most VR professionals learn on the job and through postgraduate qualifications. In addition to this, it is required that VR professionals have a minimum of two years practicing experience or participate in an approved VR internship programme to provide them with the specialist skills for the role. ACC and insurance providers also require a doctor or specialist to provide a medical certificate or sign off for RTW programmes produced by VR professionals. In traditional, medical hierarchical systems, doctors tend to occupy the top of the hierarchy. In other words, what the doctor says goes. However, times are starting to change, and other healthcare professionals are questioning whether physicians can really know everything. Researchers and professionals are now starting to challenge this traditional approach and look at ways doctors can become a part of the team through becoming more cooperative (Gauld, 2018; Russell & Kosny, 2019; Ståhl et al., 2009). The *traditionalist* and the *co-operative* doctors were explored in Ståhl et al.'s (2009) article, which identified that the modern doctors tended to be changing their stance to be a part of the team, leaving the traditionalist in their seat of power.

Chloe: I feel sometimes I get a bit disheartened, going and doing this big assessment, and coming up with this plan, to then just get the GP to just, you know, throw it in the bin. ... You start to think, why am I bothering doing all this? ... Sometimes I feel like [pause] yeah, we do all this work but ... I feel almost, not disrespected but, I feel like... kind of, we lack a lot of the power

Many of the professionals discussed submitting RTW plans to doctors which were based on objective assessments, only for them to be either ignored or not signed off. This often created additional work for the VR professionals. Many participants discussed feeling that their professional knowledge and expertise were being disrespected by their professional peers, the doctors. There were many discussions about how doctors made the final decision but often did not have a good knowledge or experience of the RTW system or the client's situation regarding RTW.

Gill: ...there is just a high turnover of locums or GPs, usually, they're doing ... overseas based work experience so they stay 6–12 months and then there's someone new that has to learn not just [about] the health system, but how to do an ACC med cert or return to work plan and understanding what that means

This highlighted again how the power for decision making is placed in the hands of a doctor with less experience and knowledge in the field of VR. The VR specialists were giving their specialist opinion, but these specialist skills are not accredited or respected by ACC, insurance providers or GPs.

Zoe: to be fair, they've got full power of making that final conclusion... Even though they see what we have assessed, and what we have done, but the power is in their hands

Other VR professionals argued how the power was more in the client's hands. They noted that clients were able to 'manipulate' the GP/Specialist through providing them with select information to either prevent RTW or encourage RTW.

Peter: ...that sort of power imbalance, the GP holds with medical certificates. ...They really only answer to the client who's in front of them, they don't answer to ACC, and they don't answer to us

Participants argued that clients were able to manipulate GP's/Specialists for two reasons. One was because they knew their GPs and had a relationship with them. The GPs were therefore not keen to lose their client as a customer to their business or to lose the rapport and trust that they had in each other. Others argued that as the client was always seeing a different GP, and therefore the GP did not know the client's medical background. This could be advantageous in that some GPs would welcome the RTW summary and assessment of the VR professionals. For others, it was a disadvantage as the GPs were still willing to take the client's own self-assessment above the VR professionals. This showed how the decision-making power could shift to the client. There was discussion amongst the VR team about having a doctor as part of the company would prevent issues with RTW sign off. However, the team argued that the client had a right to choice, and it was important that they could discuss their medical issues with a doctor with whom they trusted. The team felt that ethically this would take away too much power from the client.

VR professionals described how doctors would make a decision on a RTW plan without any consultation with them about their assessment or findings. In the words of one participant [Peter]: "I can count on my fingers how many GPs have ever rung me in five years." Consequently, the VR providers argued that doctors had no respect or did not care about their clinical judgement. It again placed all the power with the doctor or the client. However, even with discussing subjective information with the client the doctor still had the ability to make

the decision to choose which opinion s/he would work with. S/he could choose the VR professional with their specialist skills, or the client with their subjective information.

Zoe was the only participant who described a positive working relationship with GPs.

Zoe: ...I've noticed they [the GP's] like working together. Some call me after [a client appointment] and tell me this is what happened, I advise you trying this, I advise you doing that, or they ask me for advice. So I like [those] ones, that just want to build a team together and there are quite a few of those actually...

During her individual interview, Zoe described how she had spent time trying to build rapport with the local GPs and specialists. She had spent a lot of time attending appointments and holding case conferences with GPs and clients. This enabled her to showcase her skills to these treatment providers and make joint decisions with them. It also enabled her to challenge decisions on the spot or question information provided by the client. These face-to-face interactions enabled a mutual respect to be built between the professions. It could also reinforce that both the professionals were human. She also described how this assisted with any future interactions – for example, doctors would contact her for her VR specialist input. When questioned further about the response from GPs/specialist to attend appointments she did describe a mixed response. Some were very keen and happy to have her present others felt that they did not want her to be there. Ben gives some insights into why this may be an issue:

Ben: ... I know some [professionals] would hate having someone watch them examine a patient [laughs]. They would absolutely detest it, whereas it doesn't bother me. I see it as a learning opportunity. There is a professional pride thing where people are just worried that they might be criticised in some way

Ben reported this as professional pride, whilst other participants took different positions. There were similar reasons between why doctors chose not to have joint meetings and why they would not sign off RTW plans. Team members frequently discussed assumptions about why doctors made these decisions, during FGs. As noted above, the client could have a role to play in this decision. Some participants felt it was so that doctors could feel that they had the power and were able to uphold their hierarchical status in the medical field. Hierarchical status could also be seen as professional pride and being seen as the ultimate decision makers. Others felt that there were more business-related reasons why doctors were not willing to sign RTW plans or communicate with VR professionals.

Ben: money money [laughs], I think that they are too financially driven, and I think that's one of the difficulties with primary care here [in New Zealand]. Its very business minded ...I think they take the view that they should be paid for anything they do ...Although, actually they are paid for it. So, GPs through capitation fee, are paid to communicate about

any health care issues around their patient. Therefore, they are technically paid to communicate with us, but for whatever reason, the culture here is not great on that front...

Money or funding was a way in which power could be gained within the VR team. Case managers were described as having power in the team through their abilities to control funding. This took away power from the VR professionals. Case managers were seen as holding the 'purse strings' to funding for client needs. Case managers made the decision to refer for VR and what they wanted included in the service. This again took away the power and specialist clinical decision making from VR professionals. The VR professionals were not able to make a clinical judgement about what the client needed and instead had to provide what the 'purse holder' had requested. Some participants described how having a relationship with case manager could be beneficial. If case managers were seen to have trust and faith in the VR professionals when further funding or referrals were requested the case managers would approve it.

VR providers also described how they could (benevolently) manipulate funding and budgets to provide a service to clients. This could be seen as a way that VR professionals took back the power from funders/case managers to provide a service. VR professionals discussed how they would request referrals into other services that were provided by their company rather than providing a specialised service as part of the VR package. This often meant that clients would be provided with increased rehabilitation hours to reach their goals.

Peter: ... sometimes you might have one case, where its largely going to be a lot of strengthening physio. As the key worker, you kind of need to just compartmentalise that off, almost give it to the whoever is doing the strengthening, and step back, so you are not using hours...

Here, an OT describes how he let the physio continue to work with the client while he 'stepped back' to ensure he was not using the VR hours or budget for a client. This is often seen in VR when the budgets are tight. It often means that teams are encouraged to work less closely so that they are not going through the budget as quickly. This preservation of budget would prevent working together and therefore role mergence. VR under the ACC system in A-NZ is completed in staged budget packages. Each time a clinician moves through a stage they are required to ask the case manager for a further funding package. In order to do this, justification is required regarding what services have been provided to date and how future funding will be used. This again flips the power back to the case manager. Conserving budget was a strategy used to avoid asking for further funding, demonstrating the struggle between the VR professionals and the case managers/funding providers, and the innovative and flexible thinking that is often needed in response.

Currently, ACC is undergoing a ‘transformation,’ which was heavily discussed amongst the teams, particularly within the FGs. As understood by the study participants, within this ‘transformation’ clients are no longer allocated to one case manager. Clients are allocated effectively to an administrator in ACC. The teams described this as difficult, as they are required to speak to a different ACC staff member every time they call or email. Participants described having to retell and explain stories which created increased demand on their time. Participants reported that previously they felt ACC case managers were part of the team as they could build rapport with them through regular communication. With the changes described, they felt the case managers were becoming less and less part of the team.

Zoe: they are just relying on us a lot more now

Peter: absolutely, and there is a lot more trust in us as well, I guess

Zoe: so yeah, I guess a lot of case managers don’t know what’s happening. We’re the ones constantly seeing the clients, so they take into consideration what we’re saying. So, if I say, this client needs to be closed now, they take that into consideration. They just close them off, as long as I have a report explaining why, and that’s it.

The new system identified a change in power, with some of the power going back to the VR professionals, enabling the VR professional to make more decisions than previously. Case managers were also relying on their specialist skills and knowledge in this new regime. The VR professional had the power to make decisions about what a client needs and how to proceed with a client using the current systems. Zoe and other participants described this as a positive change. However, not all VR professionals agreed with her. Some participants viewed the changes as negative predominantly due to the funding power still being in ACC or the case manager’s hands. That they continued to have no control over what funding was approved or what budget was allocated. Whilst the case managers were looking to them to make a clinical decision, they were still the ones who decided if they would provide funding. The new case managers often had lack of knowledge of their own roles, the clients’ needs, and VR professionals’ roles. It was also identified that with the new system, decision making was slower, making the VR professionals’ jobs more difficult. This often required VR professionals to stretch the budget further or close programmes feeling that they have not provided the best service to their client.

During the power struggles outlined, the participants discussed and described being the “middleman” (sic). They noted that they were not the only professionals in the middle, trying to make the client, case manager and each other happy. They could see other professionals in the team also taking this role.

Zoe: ...they [GP's] get caught in between everyone, and they just don't know what to do. So, when I get calls from the GPs, most of them are like, I'm sorry I can't do anything more. The client is saying this you are saying that.

Whilst Zoe described the GP as being caught between competing demands, this statement also highlighted that much of the power still lay with the GP. The GP has chosen not to take the assessment of the VR professional and instead has relied on the information supplied by the client. The doctor already holds the power in the medical system and can use their decision-making powers to reassert their powerful status. When decisions are put back to the VR professionals, as they do not have the power to make the final decision, the doctors can try to defer responsibility back to them. The VR practitioner becomes a go between rather than an advocate or support to the client. Being the intermediary was also associated with having too many people or professionals involved in a client's RTW. Peter described this as having "too many cooks." This further supports the notion that often the VR professionals, although the specialists in this area of practice, often did not have the power to make key decisions. The case managers, clients, and the doctors do not hold specialist skills or training in VR yet they feel they need to become involved in this, often-challenging VR professionals' clinical decisions. VR professionals also described being challenged by other allied health professionals such as physios who sat outside their team. Again, these challenges were made by practitioners who often did not have specialist skills in VR. Feeling like the professional in the middle highlighted how power seemed to be with all the other professionals surrounding VR, other than the VR practitioner themselves.

5.5.1 Summary

This theme has explored how **having the power** is a challenge for VR professionals despite their specialist skills and training. It explored how the decision-making power going to GPs and specialists was shaped by the A–NZ system and traditional medical hierarchies. Clients could also have the power through provision of selected information to doctors. Ultimately, however, it was still the doctor who made a choice to base their RTW decision on client subjective information over the VR professional clinical assessment and judgement. Case managers were also seen as having the power to make judgements, particularly about funding for a client. It was noted that case managers could decline funding for clients. This resulted in VR professionals asserting the only power that they have – to self-limit services to their own clients to stretch budgets out as much as possible. This was often at the detriment to positive team working and good client service provision. The theme also explored the transformation of ACC and how this new way of working had the potential to provide more power back to the VR professionals or take more power away. Ultimately, despite VR professionals' experience and

expertise, they were often the intermediary. Being an intermediary reflected how all the power was often held by the case manager, client, and doctors rather than those VR professionals who are specialists in their field.

5.6 Vocational rehabilitation is not for everyone

This theme explores what elements of VR create pressure, stress, or role and ethical conflict for participants. Participants described the results of this pressure and stress as a factor in the high turnover in vocational staff. Whilst these elements were seen to be impacting on their role, participants also reflected on how this could bring the team together through having a shared understanding of the pressures and being able to support each other to work through these. There was a lot of comparison between traditional roles in a DHB (district health board/hospital) environment versus in the private sector, and how this created role and ethical conflict for team members who just wanted to be healthcare professionals. To draw on this further there was also recurring reference to there being a certain type of person/professional who is able to do and sustain VR roles.

As touched on in the previous theme, ‘having the power,’ VR is provided through a semi-privatised system meaning that it is important that VR professionals stick within a budget. Alongside the financial pressures, there is also a requirement for VR professionals to meet KPI’s (key performance indicators) set by both the referrer (ACC/insurance system) and the organisations that VR professionals work for. These business and financial incentives were described as conflicting with a rehabilitation professionals’ role. Ben described this conflict below:

Ben: I think one of the challenges for us, is what's the word, it's that relationship between our sort of ethical moral background in healthcare and deconflicting the whole business side. How do we make those sort of work together? ... Health care providers generally aren't [driven by] money, they are looking for clinical outcomes. If you can get the two to marry up, then it ticks both boxes. ... If we don't make enough money, we can't invest in the business. I am not sure there is that level of understanding amongst a lot of the staff”

Despite the acknowledgement that KPIs and finances do not drive staff, most companies and ACC/insurance providers still use these as markers of success. The companies involved in the study had not come up with a strategy to “marry up” the clinical drivers with the financial. This often led to feelings of negativity among the VR professionals. Professionals were striving to “be human” and good healthcare practitioners. Finances and KPIs took this human aspect away from the professional themselves and the client. Professionals and their clients could become a number with no human aspects. Rehabilitation professionals are trained to work with clients

to achieve the best outcomes that they can, not restrict services to fit within a budget (as discussed in **Having the power**).

Emma: ...I think the sixty days is externally implanted for them, whereas I think their drive and their training is about how could I work with this client, to get them back to where they want to be

One team described how they felt that interdisciplinary meetings became a breeding ground for negativity in VR professionals. It was discussed that there had been a top down approach to the structure of the meetings, and this had resulted in a focus on KPI's. This KPI orientation meant that often the worst performing clients and professionals were discussed in meetings. Teams described how they would like to create their own format so that some of the focus could be on positive outcomes. Positive outcomes included feedback about staff or complex clients returning to employment. This fulfilled those personal drivers described by Emma. It also returned the focus back onto the human aspects of the role rather than the numbers.

Dan: ... with the meetings, all the focus is on the difficult people. Just sending out an email to everyone and saying [for example], hey Zoe did a really good job on this client, or this has been a real success story.

I: and so how do you think those positive things impact on the team?

Dan: I think it makes a real difference, yeah um yeah, you can tell from the response rates, and the way that people respond to emails, and things like that [laughs]. I think it's seen as a good thing. It kind of helps to remind you, that's it's not just a drag, of trying to get people back to work [laughs].

Practitioners described feeling resentful due to the focus and push always being on the numbers and the stripping away of the human element of the role. Praising and rewarding people fed their desire to be seen as human. It also assisted with the building up of trust and respect for professional opinions and clinical expertise. VR professionals were more likely to respond to what they saw was positive rather than a negative ideal. KPIs and finances were seen as a negative aspect to the role as not only did they dehumanise, they caused negativity, pressure, and stress.

Emma: we've got to balance the stats, we are being judged, we've got to meet the KPI's, we've got to do right by the client, we've got to look after our case managers, we've got to keep our employers happy and we have got to not end up burnt out

Emma described the constant juggle that VR professionals have in their daily practice. Part of this juggle was described in **Having the power**. Emma adds additional aspects to the life of a VR practitioner. VR was often described as "burn out material" by VR practitioners. Many participants struggled with providing a high quality of service while looking after their own wellbeing and the day to day juggling of the role. They noted that they were not good at taking

breaks or eating lunch away from the desk. They reported that this was due to the level of pressure that they were under to perform at a high level. Other VR practitioners identified that they tried to create a wellness culture in their workplace, holding meetings in cafes to change the environment and get some fresh air. Others discussed using exercise after work as release to the stresses of the day. Paul discussed how he would move away from the team to get his work done:

Paul: because I am getting behind, I just isolate and then I am not part of the team. I don't have the support, or I don't mingle, and I just completely isolate, to get stuff done

After some time in the role, VR practitioners came up with strategies to assist them to manage the pressures and requirements of the role. However, many of these strategies were highly individualised in nature. For many, this included working in isolation as well as lack of breaks. Their personal wellness started to take a backseat in relation to meeting KPIs and being productive (i.e. bringing money into the company). None of the participants discussed how this was discouraged by their company. It was noted that often there were wellness programmes promoted but it was up to the individual to implement these. Many argued they did not have time to look at the wellness programme let alone implement it. It could be argued that this strategy also reduces the clinician to a number, rather than be seen as a human. If they are meeting targets and making profit, they are meeting the needs of the organisation. VR practitioners are either then required to put up with the pressure or leave. In **Being human**, the importance of being part of a team was discussed. You need to be able to converse and spend time with each other to know each other on a personal level. Without this time the team were not as cohesive. Role mergence was also less likely to occur as relationships and trust was unable to be developed. In both companies, participants described a high turnover of staff.

Emma: clinicians who just want to do good work, it'll drive them nuts and they will leave, and go to the DHB. So, they will just go, I am not up for this, they just want to go [laughs] I'm a great OT, I'm not up for all this administration and following up. That's the complaint about Voc [vocational rehabilitation]

Many professionals made the decision not to put up with the status quo and sought alternative opportunities. There was a lot of discussion about practitioners seeking roles in the DHB. It was perceived that these roles had less stress and pressure on KPIs and finances and more emphasis on client outcomes. Many practitioners discussed that the administration levels were very heavy for practitioners, with a high requirement of report writing, note writing, and referrals. DHB roles had less administration and more time with clients. Professionals described that their training and backgrounds motivated them to want to spend as much time as possible with their clients. There was a personal conflict about not providing the service that they wanted. Many

professionals identified that they restricted services to ensure budgets stretched or so they could meet the company's productivity standard. Restricting services meant they were not providing the best quality of service they could i.e. they had a large number of clients but a low quality of service. Participants described that their internal drive to work was different to their company's or ACC's. Participants who could manipulate the system and organisational structures to their advantage were the ones who could manage the VR stressors effectively. Manipulation allowed them to marry their needs with the systems.

Gill: ...keeping up with reports for everyone on your case load, it can be pretty tough. Yeah, so more stress, [laughter] less time to talk with [your] team. I wouldn't say less friendliness, but it's just you know, stress [pause] doesn't make you a happy person, doesn't make you as energetic or lively

All the pressure and stress felt by the VR professionals had a cyclic effect. Not achieving KPIs causes stress to the VR professional as it then results in repercussions for them. Repercussions included feeling like they are chased by ACC for the report, everyone being angry with them, having your case load reviewed in an IDT meeting, or ultimately performance management. Participants reported feeling they were letting the company they were working for down, if they did not meet the KPIs it reflected badly on the company, causing a reduction in referrals. Participants and managers who worked with other contracts discussed how they felt KPIs were tougher in VR than in other services. They noted that there was an emphasis to move the client off the contract quicker and there was a tighter turn around for reports. Participants discussed struggling to meet KPIs when the number of clients that they had on their case load was high and how this impacted their team working. The pressures and stresses of the job stopped the team coming together. This also prevented role emergence and working in their best way – transdisciplinary (as described by Dan in **being human**). To be an effective team, the team need to build personal relationships, and this can only be done if the team are together.

All the teams described supporting each other to meet KPIs. In fact, these often brought the team together. All practitioners related to how tough the job was and this brought solidarity amongst the team. It was also something all the team could relate to on a professional level despite age, profession, or experience. It gave the team members another equalizer, something to discuss they could all relate to. Practitioners discussed supporting teammates with their caseloads if they were under pressure – they had 'each other's backs'.

Chloe: Well that's the thing, it kind of swings up and down. I think we get, I don't know, just wound up with it all, and we will kind of explode and then you know, we'll have each [other], we will help each other out

Team members also discussed taking different roles in the team to ensure that everyone got the support that they needed, at the time they needed it. Others discussed just making sure that they were present and available to talk to others. Some discussed that the casual conversations in the hot spot rooms or open plan office helped to relieve pressure and stress. Knowing your colleague on a human level legitimated discussing concerns and difficulties. It also reinforced the feeling of ‘having each other’s backs’ or being together in one family unit was protective, reducing stress levels.

The rural team described needing to be a certain type of person to live and work in a rural area.

Mary: I think, you need to want to be in the area and most people do. You know they're committed, and professional about what they do, and they really want to be here. They like the people that they are working with, because the area's peoples are very honest, and black and white people, pretty straight about things, and don't suffer fools gladly either so they want you to be honest with them and help them get through

Mary suggests that the rural team members need to reflect the personal traits of the local community to be able to work well and achieve outcomes with clients. This was a feeling resonating with all of the rural team who identified that it takes a special type of person to live and work rurally. The rural team members identified that living rurally created its own type of pressures due lack of access to things such as shops, nightlife, activities, and services. The need to be resilient, just to live and work rurally, was recognised as another trait which was required for the rural VR practitioner. As suggested in **Being human** this gave the team “kudos” and something to come together over.

High turnover is a characteristic of VR. Both companies described difficulties in keeping staff for a number of reasons. When questioned about this, participants described that there was a certain type of professional that worked in VR. Emma described the personal characteristics she feels are needed to work in VR.

Emma: ...what I personally think is that voc [vocational rehabilitation] is burn out material. It takes a certain kind of character; you have got to be fairly robust and very organised ... If you haven't got that resilience and the ability to say it how it is, and call it, and be in charge of good meetings and you're the one in charge, then potentially I feel like you could struggle”

Many described working with difficult clients, and in difficult situations, and needing to be able to pick yourself up and move forward to continue to achieve the best for the client. Practitioners described not taking things personally i.e. when a GP/specialist did not clear a RTW plan. Practitioners discussed how they often had to challenge decisions being made and this required them to be resilient in the face of adversity. This is when the need to be human

and seek support from their work colleagues became important. Many found venting and discussing difficult situations with their trusted colleagues assisted with alleviating pressure. For others, it was about getting out of the building with a friend (work colleague) and not talking about work. In the **Being human** section, there were clearly some participants who were struggling with VR. This included the participant (pseudonym undisclosed for confidentiality) who discussed how their cultural background made it difficult to be assertive, especially with professionals perceived to be further up the medical hierarchy. Challenging the decisions of those higher up would almost become impossible.

Anna described why she felt some practitioners did not stay in the VR field.

Anna: I think there is a stereotype of, this is what we are, this is what we do, and this is how we do it. So people who aren't exactly like that, don't necessarily fit into [the] norms and I think we are quite a norms culture...I think yeah, it's quite a one box fits all and if you don't fit the box, you mould to the mould, or you find a mould that fits you."

Anna portrayed that there is only one way of working. If practitioners are unable to conform to the expectations of the role then they were unlikely to stay – locating the ‘blame’ for this in the individual’s personality or capacities. Practitioners also discussed that physios fit the mould better than OTs, with varying opinion on why this might be. One theory was that some physios are on incentive-based pay scales so have more reason to ensure their stats and KPIs are being met. Often meeting KPIs increased their pay. OTs were described as holistic practitioners and client centred. Focusing on statistics and KPIs made them feel like they were moving away from their internal drivers and professional values. They became less themselves (less human) and more of a businessperson. Their professional goals become repellent from the goals of their organisation. As discussed, the ones who survive are often those that can shape their practice to meet their own needs as well as the needs of their organisation.

5.6.1 Summary

This theme, **VR is not for everyone**, explored the unique pressures and stressors VR practitioners in A–NZ experience. Many practitioners described a personal and role conflict. This was particularly apparent with practitioners trying to meet and understand the financial expectations of their role. Many VR practitioners saw themselves as clinicians and not as businesspeople who are in the VR business to make profit. The constraints of the VR service and the need to meet business expectations meant that they often felt they were not providing the service to their clients that they wanted. Professionals described the dehumanisation of the role and the focus on numbers. Both the professionals and clients became numbers, leaving professionals feeling despondent to their roles. Ultimately these challenges caused turnover of staff with some people being unhappy in the VR role. Those practitioners that remain in the role

were described as fitting a certain stereotype or mould. There was much discussion about what a VR professional should look like. Those that survived in the role were usually the ones who could make their professional and organisational ideals fit into their work. This often required some manipulation of the rules.

6 Discussion

This research aimed to review how teams who deliver VR are conceptualised in the international peer-reviewed literature and how VR teams based in A-NZ compare. I specifically looked at if the needs of A-NZ VR teams were the same or different needs to international VR teams. In summary, the findings suggest: A-NZ VR teams do have some unique needs from other teams described in the international literature. This is largely due to the A-NZ VR systems and how the teams are set up by organisations. Unique needs include funding, finances, meeting KPIs, and the stress this caused practitioners. The needs that were the same as international teams included, the power play between all stakeholders in RTW planning and the impact of medical hierarchy. The research also proposed that being human was an important aspect to achieve a collaborative team. This was unique to this research project, specifically looking at VR teams.

To expand on this summary four key points were found in the findings. **Being human** assisted all team members to work together despite their differences. It enabled team members to be seen as equal despite profession, age or experience. Being human explores the uniqueness of human behaviour and how this impacted on team cohesion. Within the theme **having the power** the question was raised, are vocational rehabilitation practitioners' specialists? Despite VR professional's specialist status, the research found that decision making power was still in the hands of the doctor. It also identified how power could move between case managers, doctors, clients and VR professionals. However, the VR professionals usually had the least power. Finally, the research identified that there are stressors for A-NZ VR professionals. These three aspects (being human, having the power and VR stressors) of the research combined, resulted in vocational rehabilitation being 'burn out material'.

In the following sections, these four main points: being human, are vocational rehabilitation practitioners' specialists?, stressors for A-NZ VR professionals and VR is burn out material; will be discussed further and their impact on VR practice reviewed. How the research is unique to A-NZ will be explored throughout the discussion. Finally, the strengths and limitations of the study will be reviewed and the recommendations for further research will be identified.

6.1 Being human

As detailed in the findings, being human was the common denominator that linked all VR professionals. Being human included a few aspects of human nature including having trust in your work colleagues, trying to avoid conflict and upsetting others. It was important to know about personal motivators and how someone worked, to build a team. Some team members felt that this relationship building gave them unique relationships with certain team members. Having trust to build a team is reflected in other literature focussed on team building or

specifically within healthcare teams. Other researchers have noted how knowledge about who you are working with; from insights into their personal lives to having confidence in their professional practice, all assist with building a team (Terry & Kayes, 2018). Jones and Jones (2011, p. 177) specifically identified how “friendships” increased team cohesions and trust between team members. They noted how building team relationships happened over time and was something that happened naturally rather than forced by management. Whilst one participant in my study identified that they struggled to mix a professional and personal relationship, other research literature supported the notion that this was a less common experience, as most research suggests that the ability to cross these two relationship boundaries strengthens the team (Breuer, Hueffmeier, Hibben, & Hertel, 2020; Jones & Jones, 2011; Terry & Kayes, 2018). The researchers identified that giving a little bit of your personal self to your team increased the levels of trust.

Terry and Kayes (2018) research went further to suggest that those professionals who relied on their professional expertise and status, rather than relationship building, created distrust with the client. Whilst this article specifically looked at trust between client and professional the principle could also be transferred to trust between professionals within a team. This will be explored further under 6.2. This portrayal of trust is interesting, as in my findings, the physios and OTs felt that they interacted more with each other and often described working across roles. Some participants (allied health professionals) described discomfort in crossing the boundaries of the psychologist or the OP. One of the reasons behind this was that they did not work together regularly so trust could not be built, or that professional hierarchies existed. In addition to this, unwritten rules were often put into place to ensure that VR professionals did not create conflict. One example of this was ‘not standing on another person’s toes’ by stepping over a role boundary. Cartmill, Soklaridis, and Cassidy (2011) argue that in order for role merging to occur it was important that there was not a hierarchical culture present within the team. There was also research that investigated the unwritten rules around where a professionals scope of practice ended and when you needed role specific advice (Cartmill, Soklaridis, & Cassidy, 2011; Shaw et al., 2008).

There was discussion in both my findings and in other research that role mergence was also related to the individual and specific team member relationships. This was seen in the findings when it was noted that a physio [Dan] was often discussed as holding OT values or was sometimes seen as an OT. Cartmill, Soklaridis, and Cassidy (2011) discussed different clinicians having varying degrees of how comfortable they were crossing boundaries. The need for trust in role mergence was also identified. It was noted that professionals needed trust in their work colleagues to let go of their traditional roles. In my research findings, clinicians need to feel they

were allowed to move into someone else's role. Terry and Kayes (2018) argued that those clinicians that worked outside of their usual role acquired trust for themselves from other team members. It could be argued that teams that have more role mergence have more trust.

Avoidance of conflict was identified as a need to keep trust and increase role mergence. The teams identified how most conflicts derived from personal challenges such as adapting to cultural needs in the workplace or personality clashes. Participants often identified themselves as the person to blame. Jones and Jones (2011) agreed with this idea, identifying most conflict within a team came from personal rather than professional clashes. It was these personal conflicts which were often more challenging to manage within the team environment. Teams often applied humour and shared story telling of clashes with professionals outside of the immediate team. The one thing all team members agreed on was that despite personal conflict the team would always support their own. Ståhl, Svensson, Petersson, and Ekberg (2010) support this notion by identifying that shared conflicts can assist with bringing the team together and focussing on a shared perspective. Venting about these situations of conflict were also argued to support team cohesion and trust (Cartmill, Soklaridis, & Cassidy, 2011). The teams almost acted as a traditional family unit ensuring that everyone was looked after despite any animosity that may exist between teammates.

Māori (A-NZ indigenous population) have a strong emphasis on whānau (family) within their culture. Brougham, Haar, and Roche (2015) argued that culture can impact on and shape workplace relationships. Māori populations would be seen as a collective society focusing on 'us' (family) rather than 'me' (Brougham et al., 2015; Moeke-Pickering, 1996). Whilst traditionally whānau focussed on extended family and common ancestors there has been an extension of this in contemporary A-NZ society. Whānau is now also a concept that is utilised as a framework for managing relationships in community groups and workplaces (Moeke-Pickering, 1996). It could be argued that to be seen as family within the A-NZ workplace ties back to the strong whānau culture. Many people often refer to their 'work families.' The research identified the feeling of family within the teams' through their need to have each other's backs, avoid conflict, and see each other as human or equal. Moeke-Pickering (1996) argued that the concept of whānau in the A-NZ workplace established "meaning and belongingness" (p. 11). This tied strongly to the need for participants to be seen as human. Conforming to society and embracing cultural norms is part of being human.

A strong factor in all the teams was food. Food brought the team together and emphasised the feeling of being equal amongst team members. Food is a fundamental part of the human world; survival is based on humans receiving adequate nutrition. Food is used in celebrations, in remembrance, in rituals, and is usually at all social gatherings (Murcott, 1982; Plester, 2015).

Participation in eating food at these events shows the person is participating in the group or community. By eating the food the diner “transfer[s] those values to the self” (Plester, 2015, p. 254). Participating in food based activities can improve relationships within organisations (Plester, 2015). This is seen in the findings where the team can start to understand each other better through the food that they bring with them. As everyone needs to eat, it also brings an equalling factor to the team which was seen to open up dialogue and understanding between team members. Often food also encouraged social interactions through discussing, likes and dislikes, or previous experiences of eating certain types of food.

6.2 Are vocational rehabilitation practitioners' specialists?

‘Being human’ focused on how the immediate team members could be seen as equal, having the power brought disparity with wider team members. Having the power left the question about who really has the power in RTW planning for clients. My research showed that despite VR practitioners requiring specialist training to complete RTW plans and VR, they rarely held the power in clinical settings. Power moved between case managers, clients, doctors, and VR practitioners but often VR practitioners had the power less frequently.

One explanation for this was medical hierarchy which is seen throughout health systems internationally (Clark, 2010; Gabel, 2012; Gauld, 2018; Green, Oeppen, Smith, & Brennan, 2017; Ståhl et al., 2009). Doctors are always at the top of the medical hierarchy, above nurses and allied health professionals. There are many high-profile cases (Elaine Bromiley case and The Kennedy inquiry as cited in Green et al., 2017) where doctors have used their power at the detriment of their clients. Some cases include doctors being provided information from either junior colleagues or nurses and not following through with this advice due to feeling that they knew best. In other cases, it has been documented that nurses have not felt that they are able to identify a wrong doing or feel they were unable to speak up (Clark, 2010; Gauld, 2018; Green et al., 2017). Green et al. (2017) argued that a flatter hierarchy promoted better communication and team working. In the data presented in my findings, there is evidence that these hierarchical privileges still persist in A-NZ. However, it is not the doctors alone who continue to uphold this position. The A-NZ system continues to promote this way of thinking by requesting medical sign off for RTW. Despite the VR professionals being ‘specialists’ in their fields, doctors with no specialist skills in this area still have the ultimate decision-making power. This is an area that may benefit from further review and research.

To say all doctors’, continue to base their power on their hierarchical standing would be incorrect. Hierarchical powers are still held and manipulated by an individual. In this research, it was noted that doctors very rarely contacted VR professionals to discuss RTW options or opinions, but it did happen on occasion. This shows that despite hierarchical power, the

individual still holds a choice about how they act on this power. Ståhl et al. (2009) explored this further in their study and identified the *traditional* and *cooperative* doctor. The *traditional* doctor wanted to hold onto his or her hierarchical powers and not be questioned by the rest of the team. The *cooperative* doctor was open to involving the wider team and would seek advice and further information as needed. Interestingly, in this study based on Swedish RTW functions, the policy makers were changing the structure of their systems, to flatten hierarchical gradients, and to support the specialism of RTW professionals. There were similarities between the findings of the two studies in that the traditional approach had fostered doctors having the power. They were able to sign RTW clearances with little input from other professionals and base their information either on the subjective information of the client or come to their own conclusions about what was best. There was also information about doctors not wanting to open their caseloads up for scrutiny which was also identified in this study.

Within section 5.5 Having the power, there were also conversations about client centred care and client choice. Client centred care has made a change in where the power sits for healthcare professionals. Client centred care has promoted the expert client and the client being their own expert in their care (O'Shea, Boaz, & Chambers, 2019). This has moved power from healthcare professionals to the client. In this research, participants described how the client was able to use their relationship with their own doctor to their advantage (in some cases). If a client was unmotivated to RTW because of barriers, other than their injury or medical condition, they are able to be selective of the information that they provide to their doctor. This subjective information could influence how the doctor would provide clearance for work. However, the doctor always has the opportunity to seek further validity of information with VR providers. This rarely happened. This was another notion supported by Ståhl et al. (2009) who noted that doctors were more likely to make a decision based on subjective, client information, rather than clinical information from VR professionals.

In my research, the participants talked about power dynamics from VR professional to doctor, there were also alternative discussions about why communication did not take place. Some examples included doctors lack of knowledge of the VR system and being too busy to communicate. One participant, in particular, found that by attending appointments with doctors she was able to build a more trusting relationship, assisting with future involvement with that specific doctor. In research and opinion pieces reviewing traditional medical hierarchies, it was recommended and argued that allied health professionals or those lower in the medical hierarchy should stand up and be heard more (Green et al., 2017; Russell & Kosny, 2019; Ståhl et al., 2009). This was particularly important when the professional challenging the doctor holds specialist knowledge and experience (Green et al., 2017; Russell & Kosny, 2019; Ståhl et al.,

2009). It was debated that this did not happen as much as it should as there was fear about challenging someone who was superior (Green et al., 2017; Russell & Kosny, 2019). It was noted that challenging the doctor can help to reduce hierarchical perceptions, build respect for the professional, and create an understanding of VR systems. This highlights that there could be an opportunity in the current system for VR professionals to promote their specialist status. The participant in this study had already found that through self-promotion of her skills she gained respect of the doctors she was working this, this improved collaborative working.

Kilgour, Kosny, McKenzie, and Collie (2015) argued that doctors may be more likely to become involved in RTW discussions if they were funded appropriately for services, including communication around RTW. Ben argued that doctors were paid in the current A-NZ system through capitation fees, but this still did not encourage contact with VR professionals. He noted that he was unable to explain why they were resistant to being involved in their patient's rehabilitation. Ståhl et al. (2010) argued that doctors did not communicate as they did not see the importance of returning clients back to work. They noted that it was not their first goal and did not understand the impact on society or other stakeholders. Russell and Kosny (2019) reported that lack of communication was due to time pressures. Therefore, would doctors be more likely to participate in RTW discussions if they felt they were funded for their services? Or is the ongoing resistance due to maintaining their hierarchical power? Or a mixture of both?

Funding for services also magnified issues with power difference or collaborative working. In A-NZ the majority of funding comes from the case manager within ACC or private insurance companies. The case manager identifies the need for a referral and selects the person to make the referral to. In A-NZ, the referrals for RTW programmes come in package prices with different levels of service for easy to complex clients. The VR practitioner is required to liaise with the case manager about any additional funding that is required. This creates two power issues; the first being the case manager can decline or approve funding (the power with the case manager), the second, the VR professional is selective of how they use the budget (the power is with the VR professional). In the first instance, we will discuss the case manager's power.

Case managers (or funders) having financial control appears to be a worldwide issue. It is particularly apparent in countries where there is privatisation or semi-privatisation of services and often the best outcome is wanted to be achieved for the least funding. Management of budgets can be prioritised over client need (Dew et al., 2016; Hart et al., 2006). This will be explored further under section 6.3. The relationship between the case manager and the VR professional is an interesting one. It has been explored by other researchers identifying that differing needs and goals can impact on funding provision from a case manager (Dew et al., 2016; Hart et al., 2006). There is little research that explores the power relationship between

case manager and VR professional. In my findings, the participants were clear about the case manager's role and identified them as the holders of the purse strings. They also discussed how sometimes funding can be requested and declined, or they need significant clinical reasoning for further funding or services. This could be seen as the case managers requiring the VR practitioners' expertise and specialism to guide rehabilitation. However, when funding is declined or made difficult to access it could be suggested that case managers are displaying and asserting their power within the rehabilitation process.

The other changing dynamic, in the current A-NZ climate, was the change in case management structure. It was noted that whilst traditionally clients were allocated one case manager, they are now being placed into a pool of case managers. These pools of case managers were described as administrators with less knowledge than the existing case management team. Some participants believed that this increased the VR practitioners' power in decision making, as the case manager would not know the client as well as them. This could mean that the case manager would be reliant on their knowledge and expertise. Other participants felt that this was creating more difficulties in terms of administration and lack of knowledge of the system. They noted that sometimes they needed to provide more justification to get funding. Kilgour et al. (2015) identified that case managers often challenged or ignored VR providers assessments and rehabilitation guidance, creating tensions in any ongoing working relationships. VR practitioners discussed that in the traditional system they were able to get to know case managers personally, which meant that they could build up a trusting relationship with them. This could help with joint power, in that the case manager became part of the team and a joint decision could be made. Marnetoft and Selander (2000) argued that having access to one case manager was more beneficial to the team and the client through increasing RTW outcomes. They also identified that "co-ordination and co-operation" were the most important roles for the case manager (Marnetoft & Selander, 2000, p. 277). Having two different systems creates different dynamics of power. On one hand, the VR professionals' skills are needed, but on the other, the case manager continues to make the decision that they like. Several studies argue that case managers continue to decline funding as their goal is often monetarily focussed – this will be explored in section 6.3 (Kilgour et al., 2015; Russell & Kosny, 2019; Ståhl et al., 2010).

Despite VR professional's specialist status, they ultimately had only one way to assert their power. This was through benevolent manipulation of budgets. Dew et al. (2016, p. 2496) also supported this identifying that "flexibility" was often required to ensure budgets were kept, whilst providing a good service. Other research identified that as they were not privately funded there was no power play between practitioners as there was not different agendas for funding. Cartmill, Soklaridis, and Cassidy (2011) argued that not having funding issues also improved

team interactions and role mergence. There is also limited research into the power of VR professionals. However, this could be linked to the systems and traditional hierarchical medical values. Perhaps it has been accepted that this is the way that it is, and the way things should be done i.e. the doctor has the power and this is yet to be challenged in the VR system, or the case manager is the holder of the purse strings. It can be difficult for VR practitioners (and other medical professionals) to fight against the status quo. This is seen in discussions earlier in the chapter where professionals have tried to challenge the doctor's power and failed. The case managers are likely also aware of another factor, which is that private practices want to continue to receive referrals so to challenge the case manager could result in less referrals. Another reason why VR professionals will not challenge the current power status quo. Stahl et. al.'s (2009) study explored what happened when the social security system in Sweden changed the process for workability assessments. The system was changed to create equal power between all stakeholders. This research demonstrated again that VR professionals do not have the power to fight against the current A-NZ systems alone and changes in processes need to come from a higher level.

6.3 Stressors for Aotearoa/New Zealand vocational rehabilitation professionals.

Throughout the findings and discussion chapter, the challenges of VR in A-NZ have been discussed. Some of these stressors are unique to A-NZ VR practitioners and others are discussed in the international literature. These stressors included challenging the traditional hierarchy, business versus clinical conflicts, meeting KPIs, and the pressure to perform. For the rural team, there was also the additional stressor of living rurally.

Research into medical hierarchies recommends that healthcare professionals, lower down the hierarchical chain should challenge doctors' opinions (Clark, 2010; Gabel, 2012). VR professionals discussed that the need to challenge the doctors often caused additional stressors and made them feel their clinical opinion was discredited. They also needed to balance not only the doctor's expectations but also those of the case managers, clients, and their own organisations. This was not unique to A-NZ with many RTW practitioners throughout the international research identifying the need to juggle competing demands of stakeholders (Kilgour et al., 2015; Loisel, Durand, et al., 2005; Russell & Kosny, 2019; Ståhl et al., 2010). In the findings, it was noted that often VR professionals felt that everyone was angry with them. This is likely to be related to not being able to meet everyone's expectations. VR practitioners were in the middle, trying to balance all of the stakeholders' different goals and expected outcomes. Competing demands included case managers wanting a quick return to work for clients at the cheapest rate, while healthcare professionals wanted to ensure quality of life factors were

considered alongside RTW. Employers could have differing requirements dependent on the relationship with the employee prior to injury and the workplaces abilities to provide light or graduated duties (Kilgour et al., 2015; Loisel, Durand, et al., 2005; Russell & Kosny, 2019; Ståhl et al., 2010).

Competing demands were also seen within the VR practitioner's organisations and within the A-NZ VR systems. The first was the competing demand between being a health professional and working in a private practice setting. This required the practitioner to not only consider the best outcomes for the client but also that they were making their organisation money. Alongside making money they were also required to achieve KPI targets. Cozijnsen, Levi, and Verkerk (2020) argued that business procedures are ineffective in healthcare environments. They argued that the intrinsic nature of healthcare workers is at odds with business drivers. When the organisation became more focussed on these business drivers it resulted in "dehumanisation of the patient and demoralisation of staff" (Cozijnsen et al., 2020, p. 252). These factors are discussed throughout my findings with participants noting the conflict in what they want to do versus what is expected of them. VR professionals became a number, or cog in the wheel, where they felt that the focus was now on outcomes rather than their own personal wellbeing and that of their clients. Ethical conflicts were often discussed in research which outlined the roles of private practitioners (Dew et al., 2016; Flatley, Kenny, & Lincoln, 2014). Both articles identified that there could be difficulties making a private practice profitable whilst also providing high quality care. They also noted that services that promote staff wellness i.e. supervision and joint staff meetings had competing demands with company finances. For example, when a clinician was in supervision they were not earning the company money however this was needed to ensure safe practice (Flatley et al., 2014). Ben argued that businesses needed to find a way to fit both business and practitioner drivers. None of the research identified that any businesses had successfully achieved this pairing of two divergent needs.

A common factor that put additional stress and pressure on participants, was the amount of administration that was required to perform their jobs. The administration tasks often attributed to their billable hours and management of competing needs. In A-NZ, case managers require a report detailing the client's current abilities and RTW targets with justifications of rehabilitation requirements. Doctors also require different reports and forms to sign a client as fit for work. These put increased administrative pressure on VR providers. Administration pressures were discussed throughout the research literature (Dew et al., 2016; Flatley et al., 2014; Kilgour et al., 2015; Russell & Kosny, 2019). The other research identified that high levels of administration could prevent healthcare workers wanting to work with compensation agencies (Kilgour et al., 2015). In my study, it was found that high levels of administration could

be a factor in staff turnover. It supported the notion that VR practitioners were not doing what they wanted to do (i.e., they were sat at their desks for long periods rather than spending time with their clients). Russell and Kosny (2019) argued that follow up with different professionals also created increased administration time. They identified that often doctors liked written communication rather than phone contact which also increased VR practitioner administrative pressures. It also took away joint and collaborative decision making (another pressure discussed in section 6.2).

A unique factor in my research was that certain personalities were considered better suited to VR. The participants described a certain stereotype of professional that was able to cope with all the VR stressors. This was not a phenomenon described in other research. The findings also identified that those VR participants living and working rurally also had special traits which could link them to the community. Whilst other research identified unique rural factors for private practice professionals, they did not specifically talk about personality traits. Dew et al. (2016) identified that there were “shared values and experiences” (p. 2496) amongst people living within the same community. This could assist the healthcare professional when they were working with clients in the same area. However, Dew et al.’s (2016) study also identified that policy makers did not understand the unique needs of those living and working rurally. Rural professionals were found to have additional stressors on their workloads which could impact on their financial performance. The two main factors were lack of access to services and team members, but also large amounts of travel. Dew et al. (2016) described how in Australia, rural professionals (and clients) needed to travel long distances but were often poorly compensated by the insurance systems. This often left the rural professionals at a disadvantage to their urban counterparts. Travel, and not being able to see the team regularly were issues also brought up in my study. Travel, particularly in rural areas, often meant that the team were required to work more independently or autonomously.

6.4 Vocational rehabilitation is burn out material

Burnout occurs when the demands placed on an individual exceed what they are able to cope with (Bruschini, Carli, & Burla, 2018; Tabaj, Pastirk, Bitenc, & Masten, 2015). Bruschini et al. (2018) identified that there were several factors which caused burnout; not being able to manage your workload, inability to have power over your own clinical decisions, feeling undervalued, and conflicting standards between the healthcare professional, their organisation, and the system. In effect, the VR role becomes dehumanised and lack of importance is placed on the professional. The participants in this research described the importance of being human and how the dehumanisation of the role through lack of power and need to meet outcomes, created a situation in which burnout could occur. Burnout then created a situation of high

turnover of staff. The participants in this study found ways of putting the soul back into their work through providing positive feedback to the team. This notion was also supported by Bruschini et al. (2018) who reported that positive feedback could reduce professional stress levels, improving overall work performance.

My findings, and comparison with the international literature, have found that there are numerous stressors placed on VR practitioners. Ultimately VR professionals have competing demands within the workplace between system and client management. They often feel that they are juggling and balancing a lot of stakeholders needs or requirements. There is a constant demand on their time and energy to perform at high level in all aspects of their role. In addition to this, they have specialist skills and knowledge which are often not appreciated in the current A-NZ VR system. The positive aspects of their work include building trust and acknowledging their colleagues as human. Often identifying that their colleagues are managing the same personal and professional stressors. However, this positive aspect of their role competes with the financial aspects of their workload. VR practitioners are left feeling that their wellness is not as high a priority to their companies and their stakeholders and achieving outcomes and financial targets. The combination of all these factors creates high turnover of staff or in Emma's words "voc [vocational rehabilitation] is burn out material".

Whilst burnout is often spoken about frequently for health professionals there was limited information about burnout in VR professionals. One article was found that identified work related stress and burnout for VR professionals (Tabaj et al., 2015). The article looked specifically at VR in Slovenia. The article identified similarities with the stressors of A-NZ VR professionals. Work stressors causing burnout included too much administration, high caseloads, and lack of work variety. It also noted that VR professionals felt that the degree of specialism of their work, and the responsibilities they held, were not reflected in their renumerations. This left them feeling undervalued. This could be a reflection on the fact they are specialists but not seen in this way. The demands of both the organisation and the Slovenian system were also seen to be stressors. Tabaj et. al.'s (2015) article delved into why professionals felt like this and it supported the notion that the focus of work had been on quantitative measures (KPIs and finances). The effect being that VR professionals who are feeling burnout take increased time off on sick leave, becoming more of a financial burden to the employer (Tabaj et al., 2015). The focus on KPIs and financial requirements for VR professionals can actually have a detrimental effect both for the practitioner and the employer.

6.5 Implications for practice

Due to the lack of VR research in A-NZ, this thesis has given a unique insight into the A-NZ VR system and the impact that this has on the teams of professionals who work in it. It has identified

areas that impact on current practice and also identified areas that would benefit from further exploration. Recommendations from this research have an impact on professionals working in VR, VR policy makers, and organisations.

Organisations need to ensure that trust is able to be built within team

The research identified that a successful team is a team that has trust in each other. Having trust is built through understanding others (personally and professionally), understanding skill, and having each other's backs. Trust within a team meant that role emergence (transdisciplinary and interdisciplinary) was more likely to occur. Participants described that they were working at their best when they were practicing as a transdisciplinary team. Having the time to socialise and work together was an important element of building trust

Organisations, the system, and professionals to understand the need to be human

Being human put all professionals on the same level and created an equalizing factor. This assisted to break down team barriers and was a component of building trust. The professional allowing themselves to disclose personal aspects about themselves was important. Professionals included those directly (i.e. physio's, OTs) and indirectly within a team (i.e. case managers and doctors). Participants described how getting to know someone on a human level improved team cohesion. Organisations were able to control this through providing time such as meetings for teams to get together, share stories, and food. It was easy for the VR role to become dehumanised through the impact of business practices on clinical practices. Efforts need to be made by both the organisation and the system to ensure that conflicts between these two diverse areas are kept to a minimum.

Business versus clinical needs should be more balanced

Participants identified that business practices had left them feeling like a number. They were required to be highly functioning in both clinical outcomes and financial output. What this resulted in was less focus on the VR practitioner's wellness and made the conditions for burnout possible. This created high turnover amongst staff. Whilst most could understand that they worked in private practice and there did need to be an emphasis on financial gain, this ethically did not sit well with their client care drivers. It was noted that these two aspects of practice need to find a better way to sit together. Organisations and VR professionals may benefit from reviewing their current systems and identify how these two practices can be brought more closely together, so that business needs are seen as a positive rather than a negative. ACC has also moved away from a one client, one case manager approach. It could be argued that this will

prevent team members getting to know each other on a human level which has the potential to cause a negative impact on future practice.

Vocational rehabilitation professionals as specialists

VR practitioners usually have to go through post graduate training to provide work in this specialist area. They have skills and knowledge which is not found in other professionals. Currently, they have limited power over RTW planning. VR professionals should promote their skills and expertise further. The findings showed that those professionals that developed relationships with doctors and case managers found that their knowledge and expertise started to be utilised more frequently. Despite this relationship building, there will be some people/professionals that hold the power who do not want to be an active part of the team. How to use power is chosen by the person holding it. Policy makers should review the current RTW clearance system and where the power lies. A study discussed changes in the Swedish system to ensure those with specialist skills were heard (Ståhl et al., 2009). A review of current practices around RTW clearance and provision of services would be valuable to ensure more joint decision making, rather than the current power play that occurs between the stakeholders.

Funding for collaboration

Both in the findings of this research and in the international research literature it was noted that time and funding for collaboration were an issue. Policy makers may need to review how collaborative working could be improved. Whether this is through clearly outlining what current funding is for or through policy makers making available additional funding for collaboration. This may assist to promote the VR specialism and ensure that all stakeholders are on the same page.

Organisations can create hierarchical issues

OTs and physios were the professionals seen as most likely to work together and have role emergence. Psychologists and occupational physicians were often seen as higher up the hierarchy. This prevents role emergence and collaborative working. This hierarchical perception could be supported by the organisation through specialist treatment. For example, both psychologists and occupational physicians required referral forms to access them rather than open door/more casual conversations within the clinic. Other factors that promoted this hierarchy was specialist treatment such as professionals having their own office rather than sitting in an open plan office (or vice versa). It may be valuable to review current practices to see if organisations are supporting hierarchical perceptions and if there are better ways of managing this to prevent hierarchies within immediate teams. Hierarchies prevented

collaborative team working with some professionals not feeling comfortable to freely discuss clients with team members they felt were superior. Hierarchies prevented the team feeling equal to each other which also impacted on ability to merge roles.

6.6 Strengths and limitations of study

As the research was completed for a master's thesis there were time constraints around when the research needed to be submitted. This impacted on a variety of factors throughout the research. My role as a VR clinician was both a strength and limitation for the study. With my current knowledge of VR, I had assumptions about what the research might show. To mitigate this, I completed an assumptions interview prior to the data collection to ensure that my assumptions did not impact on the research. The knowledge that I have in the A-NZ VR field helped with interpretation of the data and I was able to bring some of my own knowledge to support understanding for the reader. This was particularly useful around the A-NZ VR system.

A large percentage of the participants were OT's and physio's which does reflect the types of professional more apparent in VR. However, the research also managed to capture an occupational physician, vocational consultant, and exercise physiologist. There was discussion about working with psychologists and it would have been valuable to have a psychologist to participate to add further to the findings. There were more participants in the urban team than the rural team, but this was to be expected as it is common in VR to have smaller teams in rural areas. There was a diverse mix of cultural backgrounds with some participants noting their European-Māori decent. It may have been valuable to have a Māori VR practitioner to add further depth to the specific A-NZ practicing climate.

Another limitation was that I am a novice researcher. I completed practice interviews prior to completing FGs and interviews to provide myself with some basic training. As I was new to research interviewing, I was developing my skills throughout the data collection stages. This could impact on the quality of data received from participants.

It could be argued that as I used a QD approach, the conclusions I was able to draw were specific to the experiences of the participants. However, I was able to compare my study's conclusions to the findings from the conceptual review. Finally, the research was conducted in the A-NZ practicing climate. A-NZ has a unique semi-privatised VR system which may cause unique stressors to A-NZ VR practitioners. Some of these unique practicing experiences may not be transferable to VR practitioners in other countries. However, some countries do practice under similar systems and some of the data in this research may be transferable to these practicing climates.

6.7 Recommendations for future research

There is very limited research on VR in the A-NZ context. Even in international literature, there is not the scope and breadth of research as in other practicing areas. This may be due to its specialism and limited number of professionals who work in this area. Further research, particularly into VR teams would be beneficial to understand what works and what improvements need to be made. This could assist with keeping VR practitioners in the VR practicing area. As noted in this research project, there are a high turnover of VR professionals and a deeper understanding of why this happens may be valuable.

This research has told the story of VR professionals and their experience of working in the VR system. There has been much discussion around hierarchical perceptions from the VR professionals and within the general healthcare environment. It may be valuable to get the other side of the story through interviewing of doctors, psychologists, and case managers (or the indirect team) on their perceptions of VR. This would give a full picture and understanding into why the systems are working as they are and if improvements could be made to help all parties. Further exploration would also be valuable to understand the unwritten rules and hierarchical boundaries within practice and if other professionals perceive them in the same way. This may further support potential changes in policy to support RTW for all professionals.

6.8 Conclusions

I began this research by wanting to find out more about A-NZ teams and how they compared to VR teams in other geographical settings. Despite my own preconceptions of what I might find, the research has provided a much more in-depth insight into A-NZ VR practice than I expected. In particular, it has identified the unique stressors and frustrations that A-NZ VR professionals manage on a daily basis. This was supported through practitioners identifying that they felt they had vented during data collection interviews. The research has provided a unique insight into the field of VR in A-NZ.

The first unique concept identified was ‘being human’. Whilst parts of this concept have been explored in other research the full idea of being human is relatively unique to this research. Within being human the need for trust and the idea of role mergence was explored. These were notions that have been explored by other researchers. Effectively, if you have more trust you have more role mergence (and vice versa). This was seen in OT and physio relationships at work. Being human was about striving to be equal and being part of a work family. Family or whānau units are also supported by Māori culture where the importance is on ‘us’ rather than ‘me’. This often strengthened the bond between practitioners.

Difficulties negotiating power often divided the direct and indirect team creating conflict and pressures. It also raised the question if VR practitioners were specialists. They are established as specialists in the system through requirement of post graduate training and working in a unique role. However, this specialism was not acknowledged by the people working around them such as doctors, case managers, and clients. How power is used was a decision made by the professional who is holding it. Those who want to share power will often collaborate and those who want to assert their power will often work alone. This perception is also encouraged through the A-NZ VR and healthcare systems where medical hierarchy is embedded. It created the question if it was time for a change in the system, a question not unique to this research.

Finally, the concept that VR was not for everyone was explored. This highlighted two distinct areas; the first being that VR practitioners are required to manage a large amount of stress and frustrations in their role. The second being that there is a certain type of person that is able to manage these stressors. Predominant stress and frustration factors included business values versus client care values, the need to meet KPIs, administration loads, and being stuck in the middle of all stakeholders (without having the power). When all these stressors were at play VR practitioners felt the role became dehumanised and they became a number. Some practitioners were able to successfully manipulate the system to manage competing stressors to feel they were fulfilling their own drivers alongside the systems and their organisations. For others, they were never able to achieve this balance. Ultimately for those who could not achieve a balance burnout was a risk, making high turnover of staff a concern for effective team working.

References

- Accident Compensation Corporation. (2017a). *Service Schedule for Vocational Rehabilitation Service*. Retrieved from <https://www.acc.co.nz/assets/contracts/f0b55e03fc/vrs-schedule.pdf>
- Accident Compensation Corporation. (2017b). *What your levies pay for*. Retrieved 1.10.17, from <https://www.acc.co.nz/about-us/how-levies-work/what-your-levies-pay>
- Accident Compensation Corporation. (2019a). *Getting Paid If You Can't Work*. Retrieved 17.7.19, from <https://www.acc.co.nz/im-injured/financial-support/weekly-compensation/>
- Accident Compensation Corporation. (2019b). *What we cover* Retrieved 17.7.19, from <https://www.acc.co.nz/im-injured/injuries-we-cover/what-we-cover/>
- Andersén, Å., Larsson, K., Lytsy, P., Berglund, E., Kristiansson, P., & Anderzén, I. (2018). Strengthened General Self-Efficacy with Multidisciplinary Vocational Rehabilitation in Women on Long-Term Sick Leave: A Randomised Controlled Trial. *Journal of Occupational Rehabilitation*(28), 691-700. <https://doi.org/10.1007/s10926-017-9752-8>
- Andersen, M., Nielsen, K., & Brinkmann, S. (2014). How do Workers with Common Mental Disorders Experience a Multidisciplinary Return-to-Work Intervention? A Qualitative Study. *Journal of Occupational Rehabilitation*, 24(4), 709-724. <https://doi.org/10.1007/s10926-014-9498-5>
- Aust, B., Helverskov, T., Nielsen, M. B. D., Bjørner, J. B., Rugulies, R., Nielsen, K., . . . Ørbaek, P. (2012). The Danish national return-to-work program - aims, content, and design of the process and effect evaluation. *Scandinavian Journal of Work, Environment and Health*, 38(2), 120-133. <https://doi.org/10.5271/sjweh.3272>
- Aust, B., Nielsen, M. B. D., Grundtvig, G., Buchardt, H. L., Ferm, L., Andersen, I., . . . Poulsen, O. M. (2015). Implementation of the Danish return-to-work program: process evaluation of a trial in 21 Danish municipalities. 41, 529-541. <https://doi.org/10.5271/sjweh.3528>
- Bowyer, P., Kielhofner, G., & Braveman, B. (2006). Interdisciplinary staff perceptions of an occupational therapy return to work program for people living with AIDS. *Work*, 27(3), 287-294. Workdoi: <https://www.iospress.nl/journal/work/>
- Braathen, T. N., Veiersted, K. B., & Heggernes, J. (2007). Improved work ability and return to work following vocational multidisciplinary rehabilitation of subjects on long-term sick leave. *Journal of Rehabilitation Medicine (Stiftelsen Rehabiliteringsinformation)*, 39(6), 493-499. <https://doi.org/10.2340/16501977-0081>
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a Qualitative Description Approach in Health Care Research. *Global qualitative nursing research*, 4, 1-8. <https://doi.org/10.1177/2333393617742282>
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology *Qualitative Research in Psychology*, 3(2), 77-101. <http://dx.doi.org/10.1191/1478088706qp063oa>
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2018). Thematic Analysis In *Handbook of Research Methods in Health Sciences* (pp. 1 - 16). Singapore Springer Nature Singapore <https://doi.org/10.1007/978-981-10-2779-6>
- Brendbekken, R., Eriksen, H., Grasdal, A., Harris, A., Hagen, E., & Tangen, T. (2017). Return to Work in Patients with Chronic Musculoskeletal Pain: Multidisciplinary Intervention Versus Brief Intervention: A Randomized Clinical Trial. *Journal of Occupational Rehabilitation*, 27(1), 82-91. <https://doi.org/10.1007/s10926-016-9634-5>
- Breuer, C., Hueffmeier, J., Hibben, F., & Hertel, G. (2020). Trust in teams: A taxonomy of perceived trustworthiness factors and risk-taking behaviors in face-to-face and virtual teams. 73, 3-34. <https://doi.org/10.1177/0018726718818721>
- Brewer, C. C., & Storms, B. S. (1993). The final phase of rehabilitation: work hardening. *Orthopaedic Nursing*, 12(6), 9-16. <https://doi.org/10.1097/00006416-199311000-00003>
- Brougham, D., Haar, J., & Roche, M. (2015). Work-family enrichment, collectivism, and workplace cultural outcomes: a study of New Zealand Māori [Article]. *New Zealand*

- Journal of Employment Relations*, 40(3), 19-34. New Zealand Journal of Employment Relationsdoi: <https://www.nzjournal.org/>
- Brunarski, D., Shaw, L., & Doupe, L. (2008). Moving toward virtual interdisciplinary teams and a multi-stakeholder approach in community-based return-to-work care. *Work*, 30(3), 329-336. Workdoi: <https://www.iospress.nl/journal/work/>
- Bruschini, M., Carli, A., & Burla, F. (2018). Burnout and work-related stress in Italian rehabilitation professionals: A comparison of physiotherapists, speech therapists and occupational therapists. *Work*, 59(1), 121-129. <https://doi.org/10.3233/WOR-172657>
- Bültmann, U., Sherson, D., Olsen, J., Hansen, C. L., Lund, T., & Kilsgaard, J. (2009). Coordinated and tailored work rehabilitation: a randomized controlled trial with economic evaluation undertaken with workers on sick leave due to musculoskeletal disorders. *Journal of Occupational Rehabilitation*, 19(1), 81-93. <https://doi.org/10.1007/s10926-009-9162-7>
- Cartmill, C., Soklaridis, S., & Cassidy, D. (2011). Transdisciplinary Teamwork: The Experience of Clinicians at a Functional Restoration Program. *Journal of Occupational Rehabilitation*, 21(1), 1-8. Journal of Occupational Rehabilitationdoi: <http://search.ebscohost.com/login.aspx?direct=true&db=s3h&AN=58503063&site=ehost-live>
- Cartmill, C., Soklaridis, S., & David Cassidy, J. (2011). Transdisciplinary teamwork: The experience of clinicians at a functional restoration program [Article]. *Journal of Occupational Rehabilitation*, 21(1), 1-8. 10.1007/s10926-010-9247-3
- Catlett, J. (2014). Combined effort to cut sick leave. *Occupational Health*, 66(5), 22-23. Occupational Healthdoi: <https://www.personneltoday.com/occupational-health-and-wellbeing/>
- Cheng, A. S., & Hung, L. (2007). Randomized controlled trial of workplace-based rehabilitation for work-related rotator cuff disorder. *Journal of Occupational Rehabilitation*, 17(3), 487-503. <https://doi.org/10.1007/s10926-007-9085-0>
- Clark, F. A. (2010). Power and confidence in professions: Lessons for occupational therapy. *Canadian Journal of Occupational Therapy*, 77(5), 264. <https://doi.org/10.2182/cjot.2010.77.5.2>
- Cozijnsen, L., Levi, M., & Verkerk, M. J. (2020). Why industrial methods do not work in healthcare: an analytical approach [Article]. *Internal Medicine Journal*, 50(2), 250-253. <https://doi.org/10.1111/imj.14730>
- Creswell, J. W., Hanson, W. E., Plano Clark, V. L., & Morales, A. (2007). Qualitative Research Designs: Selection and Implementation. *Counseling Psychologist*, 35(2), 236-264. <http://doi.org/10.1177/0011000006287390>
- Critical Appraisal Skills Programme. (2018). *Qualitative Research Checklist* Retrieved 26.06.2019, 2019, from <https://casp-uk.net/wp-content/uploads/2018/01/CASP-Qualitative-Checklist-2018.pdf>
- Crotty, M. (1998). *The foundations of social research : meaning and perspective in the research process* [Electronic document]: Allen & Unwin. Retrieved from <http://ebookcentral.proquest.comhttp://ebookcentral.proquest.com>
- de Buck, P. D. M., Breedveld, J., van der Giesen, F. J., & Vliet Vlieland, T. P. M. (2004). A multidisciplinary job retention vocational rehabilitation programme for patients with chronic rheumatic diseases: patients' and occupational physicians' satisfaction. *Annals of the Rheumatic Diseases*, 63(5), 562-568. <https://doi.org/10.1136/ard.2003.007260>
- Désirón, H. A. M., Donceel, P., Godderis, L., Van Hoof, E., & Rijk, A. (2015). What is the value of occupational therapy in return to work for breast cancer patients? A qualitative inquiry among experts. *European Journal of Cancer Care*, 24(2), 267-280. <https://doi.org/10.1111/ecc.12209>
- Dew, A., Barton, R., Ragen, J., Bulkeley, K., Iljadica, A., Chedid, R., . . . Gallego, G. (2016). The development of a framework for high-quality, sustainable and accessible rural private therapy under the Australian National Disability Insurance Scheme [Article]. *Disability*

- and Rehabilitation*, 38(25), 2491-2503.
<https://doi.org/10.3109/09638288.2015.1129452>
- Ejelöv, M., Bergström, M., Stålnacke, B.-M., & Mattsson, M. (2016). "Many obstacles along the way": follow-up of rehabilitation plans after multimodal pain rehabilitation. *European Journal of Physiotherapy*, 18(1), 18-26.
<https://doi.org/10.3109/21679169.2015.1115553>
- Fadyl, J., McPherson, K., & Nicholls, D. (2015). Re/creating entrepreneurs of the self: discourses of worker and employee 'value' and current vocational rehabilitation practices. *Sociology of Health and Illness*, 37(4), 506-521. <https://doi.org/10.1111/1467-9566.12212>
- Fadyl, J., McPherson, K., Schlueter, P., & Turner-Stokes, L. (2010). Factors contributing to workability for injured workers: Literature review and comparison with available measures. *Disability and Rehabilitation*, 32(14), 1173-1183.
<http://doi.org/10.3109/09638281003653302>
- Faucett, J., & McCarthy, D. (2003). Chronic pain in the workplace. *Nursing Clinics of North America*, 38(3), 509-523. [https://doi.org/10.1016/S0029-6465\(02\)00099-3](https://doi.org/10.1016/S0029-6465(02)00099-3)
- Feuerstein, M., Callan-Harris, S., Hickey, P., Dyer, D., Armbruster, W., & Carosella, A. M. (1993). Multidisciplinary rehabilitation of chronic work-related upper extremity disorders. Long-term effects. *Journal of Occupational Medicine*, 35(4), 396-403. <https://doi.org/10.1177/030802260606900704>
- Fineout-Overholt, E., & Melnyk, B. (2005). Building a culture of best practice [Article]. *Nurse Leader*, 3(6), 26-30. <https://doi.org/10.1016/j.mnl.2005.09.007>
- Finlay, L. (2006). 'Rigour', 'ethical integrity' or 'artistry'? Reflexively reviewing criteria for evaluating qualitative research. *British Journal of Occupational Therapy*, 69(7), 319. <https://doi.org/10.1177/030802260606900704>
- Fisker, A., Langberg, H., Petersen, T., & Mortensen, O. S. (2013). Early coordinated multidisciplinary intervention to prevent sickness absence and labour market exclusion in patients with low back pain: study protocol of a randomized controlled trial. *BMC Musculoskeletal Disorders*, 14, 93-93. <https://doi.org/10.1186/1471-2474-14-93>
- Flatley, D. R., Kenny, B. J., & Lincoln, M. A. (2014). Ethical dilemmas experienced by speech-language pathologists working in private practice. *International Journal of Speech-Language Pathology*, 16(3), 290-303. <https://doi.org/10.3109/17549507.2014.898094>
- Fox, N. (2008). Post-Positivism. In *The SAGE Encyclopaedia of Qualitative Research Methods* (pp. 660-664). London: Sage. Retrieved from <https://sk.sagepub.com>.
<http://dx.doi.org/10.4135/9781412963909>
- Gabel, S. (2012). Power, leadership and transformation: the doctor's potential for influence. *Medical Education*, 46(12), 1152-1160. <https://doi.org/10.1111/medu.12036>
- Gauld, R. (2018). Disrupting the present to build a stronger health workforce for the future: a three-point agenda. *Journal of Primary Health Care*, 10(1), 6-10.
<https://doi.org/10.1071/HC17083>
- Grant, B. M., & Giddings, L. S. (2002). Making sense of methodologies: a paradigm framework for the novice researcher. *Contemporary Nurse*, 13(1), 10-28.
<https://doi.org/10.5172/conu.13.1.10>
- Green, B., Oeppen, R. S., Smith, D. W., & Brennan, P. A. (2017). Challenging hierarchy in healthcare teams – ways to flatten gradients to improve teamwork and patient care. *British Journal of Oral and Maxillofacial Surgery*, 55(5), 449.
<https://doi.org/10.1016/j.bjoms.2017.02.010>
- Hancock, D. R., & Algozzine, R. (2017). *Doing Case Study Research : A Practical Guide for Beginning Researchers* (Vol. Third edition) [Book]. New York, NY: Teachers College Press. Retrieved from <https://eds-a-ebscohost-comhttps://eds-a-ebscohost-com>
- Harrison, K., & Allen, S. (2003). Features of occupational rehabilitation systems in Australia: A map through the maze. *Work*, 21(2), 141-152. [Workdoi:
https://www.iospress.nl/journal/work/](https://www.iospress.nl/journal/work/)

- Hart, T., Dijkers, M., Fraser, R., Cicerone, K., Bogner, J. A., Whyte, J., . . . Waldron, B. (2006). Vocational services for traumatic brain injury: treatment definition and diversity within model systems of care. *Journal of Head Trauma Rehabilitation*, 21(6), 467-482. <https://doi.org/10.1097/00001199-200611000-00002>
- Jakobsson, B., Ekholm, J., Bergroth, A., & Ekholm, K. S. (2010). Improved employment rates after multiprofessional cross-sector cooperation in vocational rehabilitation: a 6-year follow-up with comparison groups. *International Journal of Rehabilitation Research*, 33(1), 72-80. <https://doi.org/10.1097/MRR.0b013.e32832fea0a>
- Jensen, C., Jensen, O. K., & Nielsen, C. V. (2012). Sustainability of return to work in sick-listed employees with low-back pain. Two-year follow-up in a randomized clinical trial comparing multidisciplinary and brief intervention. *BMC Musculoskeletal Disorders*, 13, 156-156. <https://doi.org/10.1186/1471-2474-13-156>
- Jensen, C., Nielsen, C. V., Jensen, O. K., & Petersen, K. D. (2013). Cost-effectiveness and cost-benefit analyses of a multidisciplinary intervention compared with a brief intervention to facilitate return to work in sick-listed patients with low back pain. *Spine (03622436)*, 38(13), 1059-1067. <https://doi.org/10.1097/BRS.0b013e31828ca0af>
- Jones, A., & Jones, D. (2011). Improving teamwork, trust and safety: An ethnographic study of an interprofessional initiative. *Journal of Interprofessional Care*, 25(3), 175-181. <https://doi.org/10.3109/13561820.2010.520248>
- Jousset, N., Fanello, S., Bontoux, L., Dubus, V., Billabert, C., Vielle, B., . . . Richard, I. (2004). Effects of functional restoration versus 3 hours per week physical therapy: a randomized controlled study. *Spine*, 29(5), 487-494. <https://doi.org/10.1097/01.brs.0000102320.35490.43>
- Karjalainen, K., Malmivaara, A., van Tulder, M., Roine, R., Jauhainen, M., Hurri, H., & Koes, B. (2001). Multidisciplinary biopsychosocial rehabilitation for subacute low back pain in working-age adults: a systematic review within the framework of the Cochrane Collaboration Back Review Group. *Spine*, 26(3), 262-269. <https://doi.org/10.1097/00007632-200102010-00011>
- Kärrholm, J., Ekholm, K., Jakobsson, B., Ekholm, J., Bergroth, A., & Schüldt, K. (2006). Effects on work resumption of a co-operation project in vocational rehabilitation. Systematic, multi-professional, client-centred and solution-oriented co-operation. *Disability and Rehabilitation*, 28(7), 457-467. <https://doi.org/10.1080/09638280500198063>
- Kilgour, E., Kosny, A., McKenzie, D., & Collie, A. (2015). Healing or Harming? Healthcare Provider Interactions with Injured Workers and Insurers in Workers' Compensation Systems. *Journal of Occupational Rehabilitation*, 25(1), 220-239. <https://doi.org/10.1007/s10926-014-9521-x>
- Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of Qualitative Descriptive Studies: A Systematic Review. *Research in Nursing and Health*, 40(1), 23-42. <https://doi.org/10.1002/nur.21768>
- Koopman, F. S., Edelaar, M., Slikker, R., Reynders, K., van der Woude, L. H. V., & Hoozemans, M. J. M. (2004). Effectiveness of a multidisciplinary occupational training program for chronic low back pain: a prospective cohort study. *American Journal of Physical Medicine and Rehabilitation*, 83(2), 94-103. <https://doi.org/10.1097/01.phm.0000107482.35803.11>
- Lacroix, C. (1995). Work hardening for sub-acute back injured workers: A new approach [Article]. *Work*, 5(2), 143-146. <https://doi.org/10.3233/WOR-1995-5205>
- Lambeek, L. C., van Mechelen, W., Buijs, P. C., Loisel, P., & Anema, J. R. (2009). An integrated care program to prevent work disability due to chronic low back pain: a process evaluation within a randomized controlled trial. *BMC Musculoskeletal Disorders*, 10, 147-147. <https://doi.org/10.1186/1471-2474-10-147>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. doi:<http://dx.doi.org/10.4135/9781412961288.n262>

- Loisel, P., Durand, M., Baril, R., Gervais, J., & Falardeau, M. (2005). Interorganizational collaboration in occupational rehabilitation: perceptions of an interdisciplinary rehabilitation team. *Journal of Occupational Rehabilitation*, 15(4), 581-590. <https://doi.org/10.1007/s10926-005-8036-x>
- Loisel, P., Durand, P., Abenaim, L., Gosselin, L., Simard, R., Turcotte, J., & Esdaile, J. M. (1994). Management of occupational back pain: the Sherbrooke model. Results of a pilot and feasibility study. *Occupational and Environmental Medicine*, 51(9), 597-602. <https://doi.org/10.1136/oem.51.9.597>
- Loisel, P., Falardeau, M., Baril, R., José-Durand, M., Langley, A., Sauvé, S., & Gervais, J. (2005). The values underlying team decision-making in work rehabilitation for musculoskeletal disorders. *Disability and Rehabilitation*, 27(10), 561-569. <https://doi.org/10.1080/09638280400018502>
- Lytsy, P., Carlsson, L., & Anderzén, I. (2017). Effectiveness of two vocational rehabilitation programmes in women with long-term sick leave due to pain syndrome or mental illness: 1-year follow-up of a randomized controlled trial. *Journal of Rehabilitation Medicine*, 49(2), 170-177. <https://doi.org/10.2340/16501977-2188>
- Marnetoff, S., & Selander, J. (2000). Multidisciplinary vocational rehabilitation focusing on work training and case management for unemployed sick-listed people. *International Journal of Rehabilitation Research*, 23(4), 271-279. <https://doi.org/10.1097/00004356-200023040-00003>
- McKinlay, E., Mackie, S., Arcus, K., & Nelson, K. (2012). Work and Wellness Hand-in-Hand: The Role of the New Zealand PATHS Program Nurse in Improving Health and Employment Outcomes. *Rehabilitation Nursing Journal*(4), 185. <https://doi.org/10.1002/rnj.31>
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research : A Guide to Design and Implementation* (Vol. Fourth edition). San Francisco, CA: Jossey-Bass. Retrieved from <https://eds-a-ebscohost-comhttps://eds-a-ebscohost-com>
- Mills, J., & Birks, M. (2014). *Qualitative methodology : a practical guide*: Sage. <https://doi.org/10.4135/9781473920163.n1> Retrieved from cat05020a database.
- Ministry of Social Development. (2019). *Benefit Rates at the start of April 2019*.
- Ministry of Social Development. (n.d.-a). *Stopping Work Because of Health Condition or Disability* Retrieved 17.7.19, from <https://www.workandincome.govt.nz/eligibility/lost-job/health-condition.html#null>
- Ministry of Social Development. (n.d.-b). *Work*. Retrieved 30.06.2019, 2019, from <https://www.workandincome.govt.nz/work/index.html>
- Moeke-Pickering, T. M. (1996). *Māori identity within whanau: A review of literature*. Retrieved from <https://hdl.handle.net/10289/464https://hdl.handle.net/10289/464>
- Moliner, C. E., Durand, M., Desrosiers, J., & Coutu, M. (2007). Subjective quality of life according to work status following interdisciplinary work rehabilitation consequent to musculoskeletal disability. *Journal of Occupational Rehabilitation*, 17(4), 667-682. <https://doi.org/10.1007/s10926-007-9100-5>
- Murcott, A. (1982). The cultural significance of food and eating. *Proceedings of the Nutrition Society*, 41(2), 203. <https://doi.org/10.1079/pns19820031>
- Nordmark, B., Blomqvist, P., Andersson, B., Hägerström, M., Nordh-Grate, K., Rönnqvist, R., . . . Klareskog, L. (2006). A two-year follow-up of work capacity in early rheumatoid arthritis: a study of multidisciplinary team care with emphasis on vocational support. *Scandinavian Journal of Rheumatology*, 35(1), 7-14. <https://doi.org/10.1080/03009740510026580>
- O'Halloran, D. (2002). An historical overview of Australia's largest and oldest provider of vocational rehabilitation -- CRS Australia. *Work*, 19(3), 211-218. Workdoi: <https://www.iospress.nl/journal/work/>
- O'Shea, A., Boaz, A., L., & Chambers, M. (2019). A Hierarchy of Power: The Place of Patient and Public Involvement in Healthcare Service Development [article]. *Frontiers in Sociology*, 4, 1-12. <https://doi.org/10.3389/fsoc.2019.00038>

- Øyeflaten, I., Lie, S., Ihlebæk, C., & Eriksen, H. (2014). Prognostic Factors for Return to Work, Sickness Benefits, and Transitions Between These States: A 4-year Follow-up After Work-Related Rehabilitation. *Journal of Occupational Rehabilitation*, 24(2), 199-212. <https://doi.org/10.1007/s10926-013-9466-5>
- Plester, B. (2015). Ingesting the organization: The embodiment of organizational food rituals [Article]. *Culture & Organization*, 21(3), 251-268. <https://doi.org/10.1080/14759551.2013.873798>
- Proctor, T. J., Mayer, T. G., Theodore, B., & Gatchel, R. J. (2005). Failure to complete a functional restoration program for chronic musculoskeletal disorders: a prospective 1-year outcome study. *Archives of Physical Medicine and Rehabilitation*, 86(8), 1509-1710. <https://doi.org/10.1016/j.apmr.2005.02.010>
- Russell, E., & Kosny, A. (2019). Communication and collaboration among return-to-work stakeholders. *Disability and Rehabilitation*, 41(22), 2630-2639. <https://doi.org/10.1080/09638288.2018.1472815>
- Sandelowski, M. (2000). Focus on research methods. Whatever happened to qualitative description? *Research in Nursing and Health*, 23(4), 334-340. [https://doi.org/10.1002/1098-240x\(200008\)23:4<334::aid-nur9>3.0.co;2-g](https://doi.org/10.1002/1098-240x(200008)23:4<334::aid-nur9>3.0.co;2-g)
- Sandelowski, M. (2010). What's in a Name? Qualitative Description Revisited. *Research in Nursing and Health*, 33(1), 77-84. <https://doi.org/10.1002/nur.20362>
- Sandström, U., Lundborg, C. S., Axelsson, R., & Holmström, I. (2007). Variation in views on clients in interprofessional work for vocational rehabilitation in Sweden. *Journal of Interprofessional Care*, 21(5), 479-489. <https://doi.org/10.1080/13561820701478120>
- Savin-Baden, M., & Fisher, A. (2002). Negotiating 'Honesties' in the Research Process. *British Journal of Occupational Therapy*, 65(4), 191. <https://doi.org/10.1177/030802260206500407>
- Schult, M., & Ekholm, J. (2006). Agreement of a work-capacity assessment with the World Health Organisation International Classification of Functioning, Disability and Health pain sets and back-to-work predictors. *International Journal of Rehabilitation Research*, 29(3), 183-193. <https://doi.org/10.1097/01.mrr.0000210057.06989.12>
- Scotland, J. (2012). Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms. *English Language Teaching*, 5(9), 9-16. <https://doi.org/10.5539/elt.v5n9p9>
- Shaw, L., Walker, R., & Hogue, A. (2008). The art and science of teamwork: enacting a transdisciplinary approach in work rehabilitation. *Work*, 30(3), 297-306. Workdoi: <https://www.iospress.nl/journal/work/>
- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63 - 57. <https://doi.org/10.3233/EFI-2004-22201>
- Skouen, J. S., Grasdal, A. L., Haldorsen, E. M. H., & Ursin, H. (2002). Relative cost-effectiveness of extensive and light multidisciplinary treatment programs versus treatment as usual for patients with chronic low back pain on long-term sick leave: randomized controlled study. *Spine*, 27(9), 901-910. <https://doi.org/10.1097/00007632-200205010-00002>
- Søndergaard, J., Andersen, R., Olesen, F., & Neergaard, M. (2009). Qualitative description – the poor cousin of health research? [article]. *BMC Medical Research Methodology*(1), 52. <https://doi.org/10.1186/1471-2288-9-52>
- Ståhl, C., Svensson, T., Petersson, G., & Ekberg, K. (2009). The work ability divide: holistic and reductionistic approaches in Swedish interdisciplinary rehabilitation teams. *Journal of Occupational Rehabilitation*, 19(3), 264-273. <https://doi.org/10.1007/s10926-009-9183-2>
- Ståhl, C., Svensson, T., Petersson, G., & Ekberg, K. (2010). A matter of trust? A study of coordination of Swedish stakeholders in return-to-work. *Journal of Occupational Rehabilitation*, 20(3), 299-310. <https://doi.org/10.1007/s10926-009-9205-0>

- Streibelt, M., & Bethge, M. (2014). Effects of intensified work-related multidisciplinary rehabilitation on occupational participation: a randomized-controlled trial in patients with chronic musculoskeletal disorders. *International Journal of Rehabilitation Research*, 37(1), 61-66. <https://doi.org/10.1097/MRR.0000000000000031>
- Stubbs, J., & Deaner, G. (2005). When considering vocational rehabilitation: describing and comparing the Swedish and American systems and professions. *Work*, 24(3), 239-249. Workdoi: <https://www.iopspres.nl/journal/work/>
- Sweet, C. (1995). The vocational rehabilitation counsellor: bridging the gap between multidisciplinary rehabilitation and the work place. *Physiotherapy*, 81(10), 588-590. [https://doi.org/10.1016/s0031-9406\(05\)66639-4](https://doi.org/10.1016/s0031-9406(05)66639-4)
- Tabaj, A., Pastirk, S., Bitenc, Č., & Masten, R. (2015). Work-Related Stress, Burnout, Compassion, and Work Satisfaction of Professional Workers in Vocational Rehabilitation. *Rehabilitation Counseling Bulletin*, 58(2), 113. <https://doi.org/10.1177/0034355214537383>
- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). *Thematic analysis*. doi:<https://dx.doi.org/10.4135/9781526405555>
- Terry, G., & Kayes, N. (2018). Person centered care in neurorehabilitation: a secondary analysis. *Disability and Rehabilitation*, 1-10. <https://doi.org/10.1080/09638288.2018.1561952>
- Tracy, S. J. (2010). Qualitative Quality: Eight “Big-Tent” Criteria for Excellent Qualitative Research. *Qualitative Inquiry*, 16(10), 837. <https://doi.org/10.1177/1077800410383121>
- Tracy, S. J. (2020). *Qualitative research methods : collecting evidence, crafting analysis, communicating impact* (Second edition. ed.): Wiley-Blackwell. <https://doi.org/10.1080/22041451.2019.1688620>
- Turner, D. P. (2020). Sampling Methods in Research Design. *Headache*, 60(1), 8-12. <https://doi.org/10.1111/head.13707>
- van den Hout, W. B., de Buck, P. D. M., & Vliet Vlieland, T. P. M. (2007). Cost-utility analysis of a multidisciplinary job retention vocational rehabilitation program in patients with chronic arthritis at risk of job loss. *Arthritis and Rheumatism*, 57(5), 778-786. <https://doi.org/10.1002/art.22786>
- van Staden, H., Kemp, R., & Beukes, S. (2011). Return-to-Work (RTW) of Patients after Lumbar Surgery. *South African Journal of Occupational Therapy*, 41(3), 70-78. South African Journal of Occupational Therapydoi: <http://www.sajot.co.za/index.php/sajot>
- Volker, D., Zijlstra-Vlasveld, M., Brouwers, E., Lomwel, A., & Feltz-Cornelis, C. (2015). Return-to-Work Self-Efficacy and Actual Return to Work Among Long-Term Sick-Listed Employees. *Journal of Occupational Rehabilitation*, 25(2), 423-431. <https://doi.org/10.1007/s10926-014-9552-3>
- Waddell, G., Burton, K., & Kendall, N. (2008). *Vocational rehabilitation—what works, for whom, and when?* Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/209474/hwwb-vocational-rehabilitation.pdf https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/209474/hwwb-vocational-rehabilitation.pdf
- White, M. J., Gutierrez, A., Thayer, B., Davis, K., McLaughlin, C., Williams, M., . . . Asselin, G. (2013). A Pilot for Understanding Interdisciplinary Teams in Rehabilitation Practice. *Rehabilitation Nursing*, 38(3), 142-152. <https://doi.org/10.1002/rnj.75>
- Willis, D. G., Sullivan-Bolyai, S., Knafl, K., & Cohen, M. Z. (2016). Distinguishing Features and Similarities Between Descriptive Phenomenological and Qualitative Description Research. 38, 1185-1204. <https://doi.org/10.1177/0193945916645499>
- Won, D., & Stergiou-Kita, M. (2012). The PEO and Ready, Set, Go: Preparing clients to return to work following a burn injury. *Occupational Therapy Now*, 14(6), 23-25. Occupational Therapy Nowdoi: <https://www.caot.ca/site/pd/OTNow>

Zeller, J., Sturm, G., & Cruse, C. W. (1993). Patients with burns are successful in work hardening programs. *Journal of Burn Care and Rehabilitation*, 14(2 part 1), 189-196.
<https://doi.org/10.1097/00004630-199303000-00011>

Appendix 1 Ethics approval



Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

TE WĀHANGA ARONUI

D TAMAKI MAKAU RAU

1 July 2019

Joanna Fadyl
Faculty of Health and Environmental Sciences

Dear Joanna

Re Ethics Application: 19/108 The vocational rehabilitation team: Using the international research literature to inform a qualitative investigation of local needs

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 1 July 2022.

Non-Standard Conditions of Approval

1. Please make it clear in the Information Sheets that Team Leaders may be included in the Focus Groups.

Non-standard conditions must be completed before commencing your study. Non-standard conditions do not need to be submitted to or reviewed by AUTEC before commencing your study.

Standard Conditions of Approval

1. The research is to be undertaken in accordance with the [Auckland University of Technology Code of Conduct for Research](#) and as approved by AUTEC in this application.
2. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through <http://www.aut.ac.nz/research/researchethics>.
3. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through <http://www.aut.ac.nz/research/researchethics>.
4. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: <http://www.aut.ac.nz/research/researchethics>.
5. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
6. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact ethics@aut.ac.nz

Yours sincerely,

Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: lisa.mcaulay@fitforwork.co.nz; Gareth Terry

Appendix 2 Information sheets



Participant Information Sheet

Date Information Sheet Produced:

27.3.19

Project Title

The vocational rehabilitation team: Using the international research literature to inform a qualitative investigation of local needs.

An Invitation

My name is Lisa McAulay and I am undertaking this research as part of a Master's thesis at AUT University. I am undertaking this research part time whilst working as a Regional Manager and Occupational Therapist for Fit For Work. You are being invited to participate in a focus group and/or individual interview about your experience of working in a Vocational Rehabilitation team within New Zealand. Your consent to participate in both focus group and individual interview is voluntary and confidential. If you are an employee of Fit For Work your participation will neither advantage or disadvantage you in anyway and all information you choose to share will be confidential.

You will have 2 weeks to respond to this invitation and you are welcome to contact me, the researcher of this study to ask any questions or address any queries which may arise. If you agree to take part, you are free to withdraw at any time prior to data collection without having to provide a reason for this.

What is the purpose of this research?

Currently, there is limited research in Aotearoa/New Zealand specific to Vocational Rehabilitation teams. This study aims to investigate how specific health professional teams that deliver Vocational Rehabilitation in New Zealand compare to the conceptualization of Vocational Rehabilitation teams in the international peer-reviewed literature. In particular, how their needs compare.

An in-depth conceptual review of the peer-reviewed literature has been conducted to establish how vocational rehabilitation teams are conceptualized. Qualitative descriptive focus groups and interviews with two heterogeneous A/NZ-based teams will be used to explore similarities and differences between these teams and teams described in the literature, and unique needs associated with VR team working in local environments.

The outcomes of this research include a Master's thesis, an academic journal article and presentation at academic conferences.

How was I identified and why am I being invited to participate in this research?

You have been invited to participate with this research as you are a rehabilitation professional working as part of a Vocational Rehabilitation team. You will have been part of your current team for 6 months or more and will not be currently managed or previously managed by me/the researcher. Your team leader or manager has agreed for your company and team to participate in this research. You may also have received this information and invite to participate from one of your colleagues.

Regional Managers and direct managers of teams are invited to participate in individual interviews only.

How do I agree to participate in this research?

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

You may choose to participate in only the focus group or individual interview or you may choose to participate in both. You will be required to fill out a consent form for both the focus group and individual interview. The consent form has been made available to you with this information sheet and it will also be made available at the time of participation.

What will happen in this research?

There will be two parts to this research. In the first part you will be invited to participate in a focus group. In the second part you will be invited to attend individual interviews. Taking part in the individual interviews is not dependent on taking part in the focus group, this means that we welcome participants who only wish to take part in the individual interviews or focus group.

Focus groups:

In the focus groups you will be asked questions to explore the type of team you work in, who is involved in the team and how the team works together. Applications to participate in the focus group will be received and you may be selected based on your profession and length of time working in vocational rehabilitation. Team managers will not be invited to participate in the focus groups. The focus group will comprise of 3 – 6 participants. Using this selection process will ensure that we have a wide range of views and experiences. Only participants able to be on site for the focus groups will be able to attend. Focus groups will be held at your place of work.

Focus groups will last no longer than 1 – 1.5 hours and there will be suitable breaks and refreshments. The focus groups will be pre-arranged, and you will have advanced warning of the time and date of these groups (over 4 weeks). I will ask your permission to audio record the focus group and make notes on what is discussed. These recordings will then be transcribed and analysed by the researcher.

Individual interviews:

In individual interviews we will explore further the topics discussed in the focus group (what type of team you work in, who is involved and how the team work together). Team managers and those not available on site for focus groups will also be invited to attend an individual interview.

Individual interviews will last no longer than 1 hour and will be in the same week as the focus group. You will have advanced warning about the dates and times of the individual interviews (over 4 weeks). I will ask your permission to audio record the interview and make notes. The recordings will also be transcribed. Should further clarity be sought about your transcripts I may contact you at a later date.

What are the discomforts and risks?

The research is not expected to cause discomfort or embarrassment to you or other participants. You have the opportunity to voluntarily be part of the focus group and/or an individual interview. You can choose not to disclose information if you feel it will cause discomfort or embarrassment to yourself, others or the team.

Some participants may be concerned about disclosing information which they see as sensitive about the team and the impact this could have on their employment. All information received during research will be anonymised and is treated confidentially.

How will these discomforts and risks be alleviated?

Absolute confidentiality cannot be guaranteed with focus groups. You and other participants will be reminded at the start of the focus group that information shared in the group stays in the group, that who participated in the group should be kept confidential, and that all contributions should be respected.

You have the right to decline to participate in both the focus group and individual interviews and can choose to participate in only one of these methods of data collection. The researcher has chosen to exclude direct managers from focus groups to enable participants to freely share information which may not be disclosed with a manager present.

All participants details will be kept confidential and pseudonyms will be used to protect the confidentiality of participants at all times. Information gathered on consent forms will also be stored securely. All information collected will be password protected and/or locked in a secure filing cabinet. All information will be kept for 6 years as per the requirements of the Ethics board, and then securely destroyed.

What are the benefits:

On completion of research I have agreed to share my findings with you and your team. You and your team may be able to use the research to influence organisational policy to support and create a more effective team. The focus group and individual interview also give you the opportunity to talk about work and your work environment. This may assist you to define your own team and identify improvements that may be beneficial to enable the team to work more effectively..

The primary researcher benefits from the research as this will form part of her Masters Thesis which will be submitted towards gaining a Masters in Health Sciences Qualification. The researcher will also gain knowledge in what makes an effective VR team and in her role as a regional manager could use this research to influence organisational policy to support and create a more effective team in her current practice.

How will my privacy be protected?

No identifiable information on participants will be shared other than with the researcher and her 2 direct supervisors. Contact details will be securely and electronically stored using password protected files on AUT secure servers. Furthermore, no identifying information will be used in any reports, I will give you a pseudonym in all records including publications. Should your profession or sex make you identifiable this information will also not be included. Recordings and transcriptions will remain with the researcher and her supervisors and will be transcribed by the researcher. Should a transcriber be used they will be required to sign a confidentiality agreement.

Upon completion of the study your records will be stored for at least 6 years in a secure, locked cabinet at the Akoranga campus of Auckland University of Technology and on a secure password protected server..

All future use of the information will be with permission from you and in accordance with the Privacy Act.

What are the costs of participating in this research?

There will be no cost to you other than your time. 60 – 90 minutes for the focus group and up to 60 minutes for an individual interview.

What opportunity do I have to consider this invitation?

I would appreciate if you could let me know your interest to participate within one week of receiving the invite. If I do not hear back from you, I will re-send a reminder invite after which you have another week to reply. Late replies will still be considered.

Will I receive feedback on the results of this research?

Once the research is in its final form you and your team will be offered a copy of the research.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Joanna Fadyl, joanna.fadyl@aut.ac.nz, 09 921 9999 ext 7675

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, ethics@aut.ac.nz, 09 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Lisa McAulay

gbv3307@aut.ac.nz

Project Supervisor Contact Details:

Dr Joanna Fadyl

joanna.fadyl@aut.ac.nz

09 921 9999 ext 7675

Approved by the Auckland University of Technology Ethics Committee on 1.7.2019, AUTEC Reference number 19/108.

Appendix 3 Focus group consent



Consent Form Focus Groups

Project title: The vocational rehabilitation team: Using the international research literature to inform a qualitative investigation of local needs.

Project Supervisors: Joanna Fadyl, Gareth Terry

Researcher: Lisa McAulay lisa.mcaulay@fitforwork.co.nz; 021595807

- I have read and understood the information provided about this research project in the Information Sheet dated dd mmmm yyyy.
- I have had an opportunity to ask questions and to have them answered.
- I understand that identity of my fellow participants and our discussions in the focus group is confidential to the group and I agree to keep this information confidential.
- I understand that notes will be taken during the focus group and that it will also be audio-taped and transcribed.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if I withdraw from the study then, while it may not be possible to destroy all records of the focus group discussion of which I was part, I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research.
- I wish to receive a summary of the research findings (please tick one): Yes No

Participant's signature:

Participant's name:

Cultural Identity of participant

Participant's Contact Details (if appropriate):

.....
.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on; AUTEC Reference number 19/108

Note: The Participant should retain a copy of this form.

Appendix 4 Consent form individual interview



Consent Form Individual Interviews

Project title: The vocational rehabilitation team: Using the international research literature to inform a qualitative investigation of local needs.

Project Supervisors: Joanna Fadyl, Gareth Terry

Researcher: Lisa McAulay lisa.mcaulay@fitforwork.co.nz; 021595807

- I have read and understood the information provided about this research project in the Information Sheet dated 27.3.19.
- I have had an opportunity to ask questions and to have them answered.
- I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.
- I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.
- I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.
- I agree to take part in this research.
- I wish to receive a summary of the research findings (please tick one): Yes No

Participant's signature:

Participant's name:

Cultural Identity of participant.....

Participant's Contact Details (if appropriate):

.....
.....
.....
.....

Date:

Approved by the Auckland University of Technology Ethics Committee on AUTEC Reference number
19/108

Note: The Participant should retain a copy of this form.

Appendix 5 Interview guide

The vocational rehabilitation team: Using the international research literature to inform a qualitative investigation of local needs.

Individual Interview

Prior to starting interview (10 minutes)

Review of information sheets and consent forms. Ensure consent forms obtained for all participants.

Participants able to ask researcher any questions needed at this time.

Time (mins)	Topics for discussion
5	<ul style="list-style-type: none">● Welcome and brief introduction<ul style="list-style-type: none">a) Introduce plan for individual interview (including expected end time (between 45 -60 minutes))b) Remind participants that we will be audio-recording the individual interviews and check they are happy with this.c) Remind participants about how data will be used and that all identifying information will be removed
5	<ul style="list-style-type: none">● Start up – this information may be given in more depth if a participant has not attended the focus group<ul style="list-style-type: none">a) Explain to participants why I am doing this studyb) Introduce participants to the topic of discussion New Zealand Vocational Rehabilitation teams compared to international teams
45	<ul style="list-style-type: none">● Consultation questions (guide only)<ul style="list-style-type: none">• How would you describe your team?• Who is involved in your team directly?• Who is involved in your team indirectly?• Present definitions of teams and ask team how they would describe their team now?• How do you communicate with each other?• How do you work together?• How do you create a team environment?• How would you describe your team culture?• What works well in your team?• What do you think you could do better to improve team working?• What would you like to improve?• How does your organisation support you to work as a team?• Are there other things you feel would support your team working?

	<ul style="list-style-type: none"> • What would you like to see to improve your team working
5	<ul style="list-style-type: none"> • Exit question <ul style="list-style-type: none"> • Do you have any further thoughts for discussion that we haven't covered yet?
5	<ul style="list-style-type: none"> • Close of the focus group <p>Thank participants, inform them summary of findings will be available and will be emailed. Inform participants that a morning tea voucher will be provided to their team manager/team leader as a thank you to the team for their participation.</p>
	<ul style="list-style-type: none"> • Additional information <p>Participants may be provided with additional information to guide their thinking. This will include:</p> <ol style="list-style-type: none"> 1. Definition of teams – unidisciplinary, multidisciplinary, interdisciplinary, transdisciplinary 2. Information on immediate and wider teams (team diagrams)

Appendix 6 Focus group guide

The vocational rehabilitation team: Using the international research literature to inform a qualitative investigation of local needs.

Focus Group Guide

Prior to focus group (10-15 minutes)

Review of information sheets and consent forms. Ensure consent forms obtained for all participants.

Participants able to ask researcher any questions needed at this time.

Time (mins)	Topics for discussion
5	<ul style="list-style-type: none">● Welcome and brief introduction<ul style="list-style-type: none">d) Introduce plan for focus group (including expected end time (between 60 -90 minutes including suitable breaks, refreshments, etc.)e) Remind participants of confidentiality and respect for each other's views.f) Remind participants that we will be audio-recording the focus group and check they are happy with this.g) Remind participants about how data will be used and that all identifying information will be removed
5	<ul style="list-style-type: none">● Start up<ul style="list-style-type: none">c) Explain to participants why I am doing this study.d) Introduce participants to the topic of discussion New Zealand Vocational Rehabilitation teams compared to international teams
90	<ul style="list-style-type: none">● Consultation questions (guide only)<ul style="list-style-type: none">• How would you describe your team?• Who is involved in your team directly?• Who is involved in your team indirectly?• Present definitions of teams and ask team how they would describe their team now?• How do you communicate with each other?• How do you work together?• How do you create a team environment?• How would you describe your team culture?• What works well in your team?• What do you think you could do better to improve team working?• What would you like to improve?• How does your organisation support you to work as a team?

	<ul style="list-style-type: none"> • Are there other things you feel would support your team working?
5	<ul style="list-style-type: none"> • Exit question • Do you have any further thoughts for discussion that we haven't covered yet?
5	<ul style="list-style-type: none"> • Close of the focus group <p>Thank participants, inform them summary of findings will be available and will be emailed. Inform participants that a morning tea voucher will be provided to their team manager/team leader as a thank you to the team for their participation.</p>

Appendix 7 Critical appraisal

Authors	Type of Research/Design	Purpose of Study/Article	Participant Information	Results	Strengths and weaknesses
Andersen, A; Larsson, K; Lytsy, P; Berglund, E; Kristiansson, P; Anderzen, I (2018)	Randomised control trial	To investigate the effect of 2 voc rehab interventions on self-efficacy for women on long term sick leave	401 Swedish women on long term sick leave On sick leave due to mental health issues or pain syndrome	MDT assessment and multimodal rehabilitation increased self-efficacy for a long period of time (mean 7.8 years) for women who had low self-efficacy prior to intervention.	<p>Randomised control trial design</p> <p>Observation of longitudinal change/impact of intervention</p> <p>Professionals who assessed in each stage of the research changed.</p> <p>Difficulty determining what components of the team intervention had the most impact on self-efficacy.</p>
Andersen, Malene; Nielsen, Karina; Brinkmann, Svend (2014)	Interpretative Phenomenological analysis Assumptions from post positivism and constructionist	To investigate how sick listed people with common mental disorders experience participating in RTW and how workability assessments and RTW activities influenced their return to work process	17 participants randomly selected from RTW group On sick leave due to stress or depression Had been on sick leave for 8 weeks or longer	The workability assessment and intervention received could result in both motivation and frustration dependent on how client centred the health professionals approach was. RTW professionals are both facilitators and controllers to the RTW process impeding on the establishment of	<p>Participants were recruited prior to completing the RTW intervention</p> <p>Participants were followed while receiving RTW intervention and not post</p> <p>Legal aspects of the study may not be able to be transferred to other countries and systems</p>

				relationship between client and professional	
Aust, B; Nielsen, MBD, Grundtvig, G; Burchardt, HL; Ferm, L; Andersen, I; Lund, TL; Jelle, MOC; Andersen, MF; Hansen, JV; Tverborgvik, T; Helverskov, T; Bjorner, JB; Rugulies, R; Orbaek, P; Winzor, G; Bultmann, U; Poulsen, OM. (2018)	Mixed method, structured process evaluation conducted alongside stratified cluster-controlled trial	To evaluate the implementation of the Danish national return to work program in 21 Danish municipalities.	21 municipalities Only open to participants who were unlikely to return to work in 3 months but are able to participate in Voc rehab. Interdisciplinary teams were recruited Training provided to IDT prior to start of project	It was possible to implement the desired RTW program into the municipalities however there were large variations with how the program was delivered. Establishing well-functioning IDTs required increased time and resources More early assessment was required and more cooperation with employers	Both qualitative and quantitative data was analysed Qualitative data was turned into quantitative data which would be seen as weakness More measures of exposure to rehab may have shown a wider range of results. This was attempted but struggled to gain a consensus for recording clients views of programs. Assessment of socioeconomic and demographic characteristics, local unemployment rate and municipal budget may be valuable.
Barthel, Richard; Miller, Lawrence; Deardorff, William; Portenier (1998)	Retrospective case study	Response to MDT rehab program for clients presenting with upper extremity repetitive use syndrome	24 participants with upper extremity symptoms related to repetitive use.	83% had symptoms due to computer use Bilateral hand and forearm pain were main symptoms 25% gained resolution of symptoms through modified or reduced activity levels,	Patients were pre-selected and there was no control group for comparison Small sample size Data gathered retrospectively.

			All had previous failed interventions 50% were receiving medical disability 62% had made a worker's compensation claim	54% had moderate improvement and 13% minimal improvement. 58% returned to their previous jobs	Did not include psychological aspects of injury
Braathen, Tore; Veiersted, Kaj; Heggenes, Jan (2007)	Controlled trial	To evaluate impact of a voc rehab MDT programme for patients with long term sick leave, on their workability and RTW	183 patients Control group recruited from national sickness insurance record	The MDT rehab improved perceived workability compared with the normal treatment. 80% of the intervention group had RTW post MDT rehab compared to 66% in the control group.	High number of people who dropped out – this could have led to favourable results in both groups Unable to be completely randomised due to referral criteria for voc rehab centre No differences between control group and intervention group in terms of background characteristics Intervention group had higher educational levels than the control group

Brendnekken, Randi; Eriksen, Hege; Grasdal, Astrid; Harris, Anette; Hagen, Eli; Tangen, Tone (2016)	Randomised control trial	To compare the effect of a new MDT intervention to a brief intervention for RTW at 12 and 24 months	Sick listed due to musculoskeletal pain 284 participants in total Mean age 41.3 53.9% women Multidisciplinary intervention = 141 Brief intervention = 143	Number of clients with full time RTW were similar between the 2 groups Patients receiving MDT input were more likely to partly return to work in the first 7 months post treatment MDT treatment is likely to hasten the return to work process in the long term sick	Large sample sizes, randomisation with similar sample sizes per group Ability to use data from register giving more accurate information on outcomes at follow up Both treatments based on written manuals so easily replicated Different teams provided MDT and brief intervention Many similarities in the treatment methods which is likely to influence the outcome More experienced therapists in the brief intervention group
Bultmann, Ute; Sherson, David; Olsen, Jens; Hansen, Carl; Lund, Thomas, Kilsgaard, Jargen	Randomised control trial with economic evaluation	To compare the effects of coordinated and tailored work rehabilitation (CTWR) with conventional case management on return to work for clients with	Workers on sick leave for 4 – 12 weeks Total 113 workers	Those participants who underwent CTWR had fewer sickness absence hours than controls CTWR was cost saving for society	CTWR group had higher number of participants Respondents at the 3 month follow up were more likely to be less educated participants

		musculoskeletal disorders	66 CTWR 47 in normal case management		Standardised assessment for back pain was used with participants also not reporting back pain but with other musculoskeletal issues.
Cartmill, Carrie; Soklaridis, Sophie; Cassidy, David. (2011)	Qualitative research using grounded theory approach	Exploration of the experience of clinicians transitioning from a IDT to a transdisciplinary team in a functional restoration program	Purposeful sampling to interview a wide range of professional groups Representation from all different functional restoration teams, clinical professions and broad range of experience Individual interviews	Three theme were identified to building successful transdisciplinary teams 1) The client population 2) Opportunities for communication with colleagues 3) Organisational structure which supports transdisciplinary team work	Single functional rehab clinic was utilised meaning the information may not be transferable to other teams or settings (no other limitations detailed by researchers)
De Buck, P; Breedveld, J; van der Giesen, F; Vieland, T (2004)	Randomised control trial	On investigate patient and Occ Physicians satisfaction with Voc Rehab program for retaining work ability in those with chronic rheumatic disease	Chronic rheumatic disease with arthritis involvement of 1 or more joints	Satisfaction was good Improvements identified included speed of delivery and communication between team members and the Occ Physician	Lack of measurement of patient expectation prior to study Selection bias would impact on results as participants were highly motivated to return to employment

			<p>Patients had challenges for retaining their jobs but were highly motivated to continue in employment</p> <p>Patients were currently working or had used less than 1 year if sick leave</p> <p>65 participants in total</p>		<p>Only 53% of physicians involved were interviewed</p>
Desiron, H (2014)	<p>Qualitative inquiry to understand phenomena that help answer specific questions</p> <p>Use of semi-structured interviews/focus groups</p> <p>Thematic analysis</p>	<p>What are the experiences of OT intervention for RTW?</p> <p>What is good practice for OT interventions in RTW for patients with Breast cancer?</p>	<p>Interviews completed with 5 OT department heads</p> <p>4 focus groups were held they included a total of 41 professionals from 8 different disciplines</p>	<p>RTW should be an essential part of rehab for breast cancer clients</p> <p>OT can assist patients to transition from patients to survivors</p> <p>OT should be part of an integrated, holistic and client centred approach</p> <p>OT services should be embedded into MDT setting</p>	<p>Number of interviews was limited</p> <p>Recruitment for focus groups was part of a seminar on RTW for breast cancer patients which assisted organisation but could have caused bias towards more positive perceptions of RTW</p>

				<p>OT services should be available in the very early stages of rehab</p> <p>Goal setting for RTW should focus on abilities of patient and linked to quality of life goals</p> <p>RTW process should include workplace visits and observations of patient situation and include contact with all stakeholders.</p>	
Ejelov, Marina; Bergstron, Margareta; Mattsson, Monica; Stalnacke, Britt-Marie (2016)	Mixed method Quantitative – examines number of recommendations in a plan and type of measure suggested Qualitative – content analysis of interviews	Explore the content of rehabilitation plans after multimodal rehabilitation for chronic pain How rehabilitation plans were implemented after 1 year	18 – 65 years 39 participants (31 women, 8 men) Diagnosed with chronic pain and no further medical examination needed Able to participate in multimodal rehab	Lack of follow up from professionals and negative body signals prevented completion of rehab Professional flexibility, external actors regarding patient rehab plans and own positive experiences of striving for change facilitated rehab	Researchers were not practicing clinicians in the rehab programs Each group attended rehab at the same time so would have received the same input No information available about how long the participants had been on sick leave Interviews were time limited impacting on strength of information

<p>Feuerstein, Michael; Callan-Harris, Susanne; Hickey, Paul; Dyer, Diana; Armbruster, William; Carosella, Ann (1993)</p>	<p>Qualitative, particular design and methods not clearly documented</p>	<p>To determine the long term outcomes for clients with chronic work-related upper extremity disorders following MDT work intervention program</p>	<p>34 participants work disabled for 3 months and receiving workers compensation Control group had 15 participants</p>	<p>MDT work rehabilitation creates better RTW rates than the usual care. This is also reflected in long term follow up.</p>	<p>Upper limb disorders are representative of a small percentage of why people are receiving workers compensation Long follow up period (17 – 8 months) Small sample size in one MDT treatment centre only. Selection bias for control group as they were client who were unable to receive compensation or unmotivated to participate in rehab</p>
<p>Hart, Tessa; Dijkers Marcel; Fraser, Robert; Cicerone, Keith; Bogner, Jennifer; Whyte, John; Malec, James; Waldron, Brigid (2000)</p>	<p>Qualitative, semi-structured phone interviews</p>	<p>To examine characteristics and diversity among vocational treatment services in programs for traumatic brain injury (TBI) rehab</p>	<p>16 Project directors of TBI rehab centres</p>	<p>Voc rehab services are variable dependent on funding differences, how the service has evolved. Predominant services could be classified as medical rehab, supported employment or a combination of the two services. Job coaching identified as a key intervention but time available was variable for</p>	<p>Convenience sampling used Small sample of rehab centres Based only within the American system and is this relatable to other countries? Barriers to effective intervention identified</p>

				each participant and rehab centre.	
Jakobsson, Bjorn; Ekholm, Jan; Bergroth, Alf; Schuldert Ekholm, Kristina (2010)	Quantitative, Natural experiment study design (quasi-experimental format)	To understand the long-term effects of an improved model for cooperation on employment	Focused on records obtained from the Swedish Public Employment service 51 had rehabilitation	Systematic multi professional cross sector group meetings resulted in a higher percentage of people returning to employment compared to the usual approach of cooperation. This was more significant within a 3 years post intervention.	Reliant on information held at the Public employment office noted that not all information may be available due to participants losing contact with the office. Also noted that some clients were listed as unemployed but actually held employment. Original control groups were excluded as they started to adopt the model in the research. New control groups located but socioeconomic comparisons not made Limited information provided about strengths and weaknesses of the study
Jensen, Chris; Jensen, Ole; Nielsen, Claus (2012)	Two year follow up of a randomised control trial	Study the sustainability of RTW in a trial comparing a brief and MDT intervention in patients with sick leave due to low back pain.	351 employees Sick leave 3 – 16 weeks due to low back pain 16 – 60 years	There was no difference in results between brief and MDT interventions at a 2 year follow up	Unclear if participants return to sick leave due to the same disorder i.e. low back pain Register linked to the social security office was used which ensured all participants were available for follow up

			Ability to read and speak Danish		Large sample size
Jensen, Chris; Nielsen, Claus; Jensen, Ole; Petersen, Karin (2013)	Randomised clinical trial of 2 interventions	To identify cost effectiveness and cost benefit of MDT vs brief intervention by calculating health care sector costs and sick leave benefits	Aged 16 – 60 Partly or fully sick listed for 4 – 12 weeks due to low back pain 351 employees in total	Brief intervention was more effective than MDT in cost and results THE MDT intervention was only more effective for those who were at risk of losing their employment	Results came from a national database meaning more accuracy for those who had returned to work/were no longer in receipt of sickness benefit. Noted that variations in delivery of rehab and changes in the local job market can impact on results. Good sample size
Jousset, Nathalie; Fanello, Serge; Bontoux, Luc; Dubus, Valerie; Bilbabert, C; Vielle, Bruno; Roquelaure, Yves; Penneau-Fontbonne, Dominique; Richard, Isabelle (2004)	Quantitative, randomized parallel-group comparative trial with a 6 month follow up period	To compare the effectiveness of functional restoration programs on chronic low back pain patients	18 – 50 years, job uncertain due to ongoing back pain, conventional input trialled with no improvement 84 participants in total (44 received functional restoration, 42 received usual intervention)	Functional restoration had a positive impact on outcome measures such as number of days sick leave.	Small sample sizes for both groups studied. Some patients' workplaces had participative ergonomic programs and it was unclear if the intervention or this program assisted some client to have better outcomes post 6 month follow up Some participants lost to the 6 month follow up

Karrholm,J; Ekholm, K; Jakobsson, B; Ekholm, J; Bergroth, A; Schuldt, K (2006)	Matched-pairs design	Evaluate the effect of systematic multi-professional co-ordinated rehabilitation on the number of days sick leave during the first and second half years after the rehab period, compared to the year before. To evaluate the economic effects at the national level.	77 employees of Stockholm Municipality 14 no history of sick leave but were classed as at risk	Those participating in the multi-professional rehab have more working days post intervention than those with conventional rehab Cooperation between stakeholders is important for those participants with previous long-term sick leave but not those with less sick leave. The rehab generates economic gains	One study group contained more fatigue (burn out cases) than another group One group contained more single people Educational level was higher in the study group rather than the comparison group Pairs were matched by hand rather than computer Registers can contain incorrect information
Koopman, Fieke; Edelaar, Michel; Slikker, Rene; Reynders, Koop; van der Woude, Lucas; Hoozemans, Marco. (2004)	Prospective Cohort study	Evaluate the effectiveness of an MDT occupational training program for patients with low back pain and identify prognostic factors for treatment success	Low back pain patients admitted to training program between over selected period Low back pain for more than 6 months 20 – 60 years Had other treatment which was unsuccessful	Short term results indicate that the treatment was successful, but more emphasis needs to be placed on long term maintenance. Though work resumption rates had a significant improvement 1-year post completion of the program	As the study did not have controlled design some results could be attributed to time and other variables. Functional capacity not functional work demands are assessed which would give further indication as to why participants did not return to work Sickness absence and RTW rates were self-reported A lot of participants were lost to follow up

			Motivated with positive expectation for RTW post program		The number of participants was unclear
Lambeek, Ludeke; Mechelen, Willem; Buijs, Peter; Loisel, Patrick; Anema, Johannes (2009)	Process evaluation as part of a randomised control trial	To describe feasibility of an integrated care program and to assess the satisfaction and expectations of the involved stakeholders and identify needs for improvement	<p>Patients 18 – 65 years suffering from low back pain for 12+ weeks</p> <p>In paid employment for minimum of 8 hrs per week and those who were sick listed</p> <p>Health professions were 2 x occ physicians, 2 x OTs and 20 physio therapists.</p> <p>Required to complete a 2 day training program</p>	<p>Program demonstrated it was feasible in its application and patients/supervisors and health professionals identified they were satisfied with the program. Patients were also compliant with the rehab.</p> <p>Communication and information technology required improvement</p>	<p>Different stakeholders' perspectives were assessed</p> <p>Triangulation of research methodology</p> <p>Selection bias as only patients who were motivated to participate were included</p> <p>Dropout rate low</p> <p>Some of the health care professionals were self-selected and may have been more motivated to participate than others</p>
Loisel, Patrick; Durand, Marie-Jose; Baril, Raymond; Gervaid, Julie;	Observational study, Qualitative	To characterise the obstacles and facilitators between IDT and stakeholders	Review of 338 team meetings with discussions about 22 workers	<p>Range of factors identified as obstacles and facilitators.</p> <p>Some identified included:</p> <p>1) Stakeholder endorsement of</p>	<p>Collaboration observed only from the team's perspective</p> <p>Due to the length of time the team were studied many</p>

Falardeau, Marlene (2005)			Team included 5 different professions	team's therapeutic principles and confidence in their approach 2) Education and awareness raising were used to facilitate collaboration	examples of feedback and responses from stakeholders were included
Loisel, Patrick; Falardeau, Marlene; Baril, Raymond; Jose-Durand, Marie; Langley, Ann; Sauve, Sandrine; Gervais, Julie (2005)	Single case observational study	What are the values of the decision-making process for an IDT working in a rehab facility	Clinicians from a hospital-based work rehab centre working with clients with musculoskeletal disorders 7 regular members of the team, range of disciplines and experience ranged from 1 – 27 years	10 common decision values identified: 1) Team unity and credibility 2) Collaboration with stakeholders 3) Workers motivation 4) Adherence to the program 5) Workers reactivation 6) Single message 7) Reassurance 8) Graded intervention 9) Pain management 10) RTW as therapy	Results based on one team and may not be the same for other teams Research team may have interpreted the values differently to the IDT members Data collection was over an 18 month period – results were stable over time and did not change with introduction of new team members
Lytsy, Per; Carlsson, Lars; Anderzen, Ingrid (2017)	Randomised control study	The effects on return to work of 2 vocational programmes for women on long term sick leave	308 women Aged between 20 and 64 2 interventions groups and one control group	MDT assessment and individual rehabilitation interventions may improve the chance of return to work in women with long term sick leave due to pain conditions or mental health.	Large sample size Randomised Difficulty measuring RTW in a reliable way

			On sick leave due to mental health issues or pain syndrome		
Marnetoft, Sven-Uno; Selander, John (2000)	Quasi-experimental study, non-random comparison groups	Compare the outcome of an extended MDT VR programme with the outcome of conventional MDT VR for sick listed unemployed people.	Study group 24 participants Control group 23 participants Sick listed for 90 days or more Diagnosed with head, shoulder or back Completion of acute and subacute treatments	The extensive MDT VR Programme lowered the level of benefits for more participants in the group but had no impact on quality of life	Small sample sizes VR outcomes can be dependent on current job market, but it was noted there were no differences in the periods the control and study group completed their input. Control and study group completed their input at different times which could mean changes are made to treatment being provided.
McKinlay, E; Mackie, S; Arcus, K; Nelson, Katherine (2012)	Qualitative, case study approach using interviews with clients, stakeholders and a documentation review	Examination of the contribution of the nurse working in the PATHS team	Interview with 1 x PATHs program nurse, focus group with 6 members of the governance group, 3 PATHS services clients	PATH nurses have assisted clients to successful enter or re-enter employment with other PATHs members.	Unclear how the sample group was chosen and not clearly detailed Only 1 x nurse was interviewed Researcher did not detail strengths and weaknesses pf research

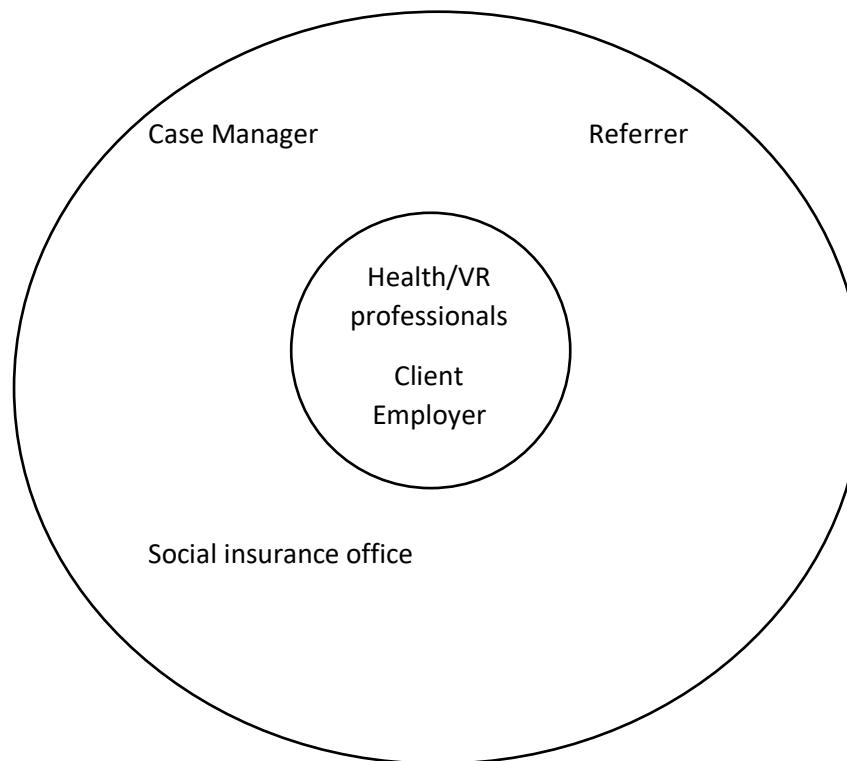
Nordmark, B; Blomqvist, P; Andersson, B; Hagerstrom, M. Nordh-Grate, K; Ronnqvist, R; Svensson, H; Klareskog, L. (2006)	Observational study, Quantitative	To explore changes in sick leave patterns and work ability in patients with early rheumatoid arthritis after receiving VR alongside a disease modifying anti-rheumatic drug.	18 – 60 years who are not eligible for early retirement pension and could not be permanently disabled by another disease were included.	Number of clients working full time increased from 65 – 74, those working part time increased from 8 – 23, those with full time work disability decreased from 37 – 13.	Not clearly defined by researchers 110 clients included in total Majority of clients worked in light roles and did not complete heavy physical roles Clients self-rated their ability to work and work status.
Proctor, Timothy; Mayer, Tom; Theodore, Brian; Gatchel, Robert (2005)	A prospective cohort study	To identify why clients do not complete a functional restoration programme. To identify socioeconomic outcomes for completers and non-completers of a functional restoration program	1440 participants with “chronic disabling occupational musculoskeletal disorders” (CDOMD) Started functional restoration program between 1996 – 2000 Work related injury acquired more than 4 months prior	The non-completion group was 7 x more likely to have surgery and to have more than 30 visits to a new healthcare provider. The non-completion group had less than half the RTW rates. Risk factors for non-completers included existence of a pre-morbid health condition, negative relationship with employers, negative outlook on their ability to return to work, higher levels of psychological distress.	Large sample size Limited information given about the strengths and weaknesses of the study Information was based on self-rated scales Not all participants were available at the year follow up Even percentage of men and women

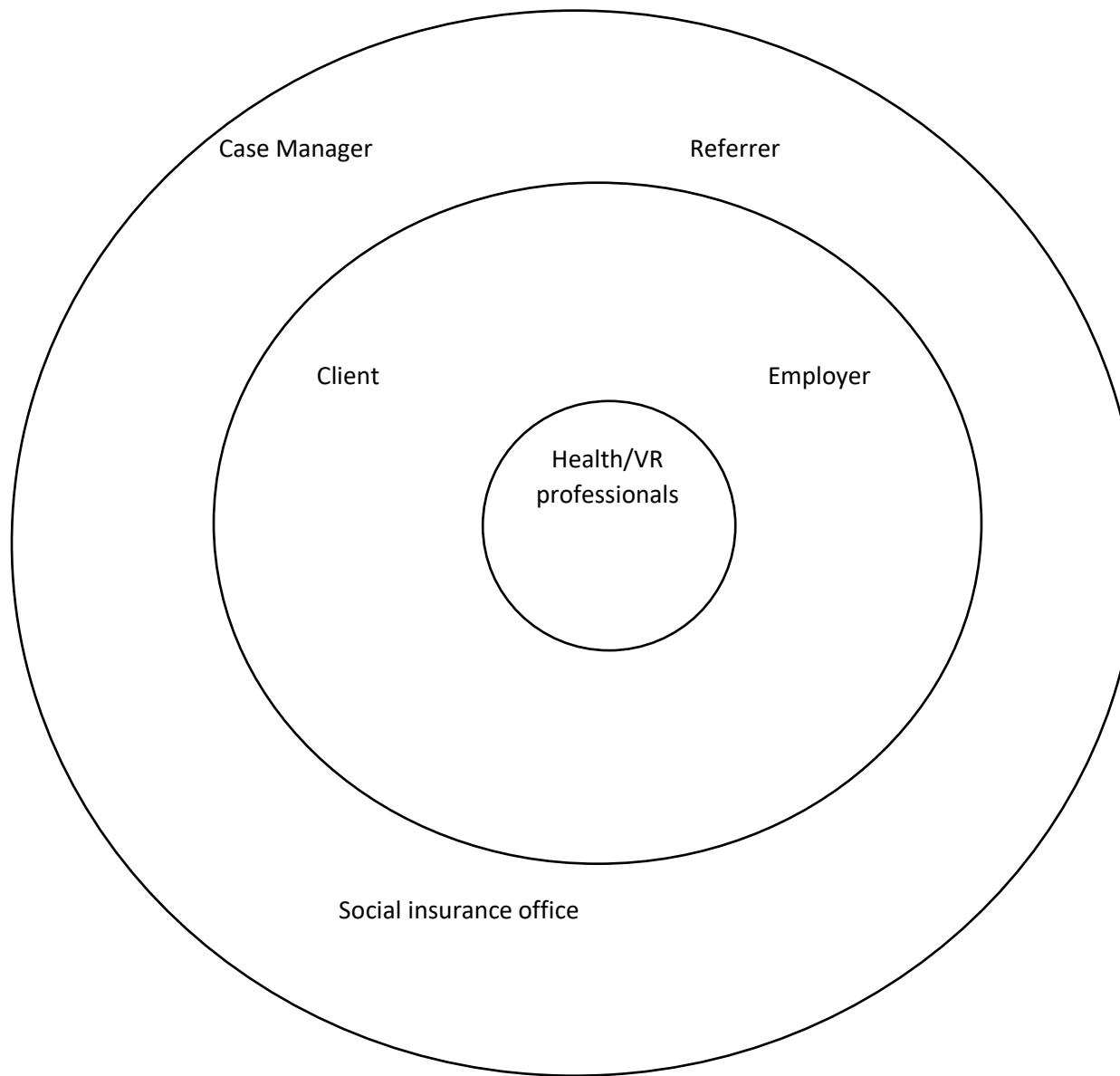
			Previous medical intervention had failed Surgery had not provided relief from problem Functionally limited Could speak English or Spanish		
Shaw, L; Walker, R; Hogue, A (2008)	Grounded theory approach	To understand the social processes among team members in enacting a transdisciplinary approach in a work rehabilitation clinic	4 professionals five team planning meetings two days of observation	Team members consciously attend to a team approach through a nurturing consensus, nurturing professional synergy and a learning culture. This enabled the team to work together in achieving solution focussed goals for RTW and improving functioning.	Limited information provided on study strengths and weaknesses Only one team was reviewed in a specific setting? how this will transfer to other teams and settings Observation was over a short period]
Skouen, Jan; Grasdal, Astrid; Haldorsen, Ellen; Ursin, Holger (2002)	Quantitative, cost benefit analysis	To evaluate the outcomes of light vs extensive MDT treatment	196 patients with low back pain Patients sick listed for minimum of 8 weeks or had	Light MDT was noted to be most cost effective for men with low back pain.	Large sample size Methods for research not clearly defined Strengths and weaknesses of the study not clearly defined by the researchers

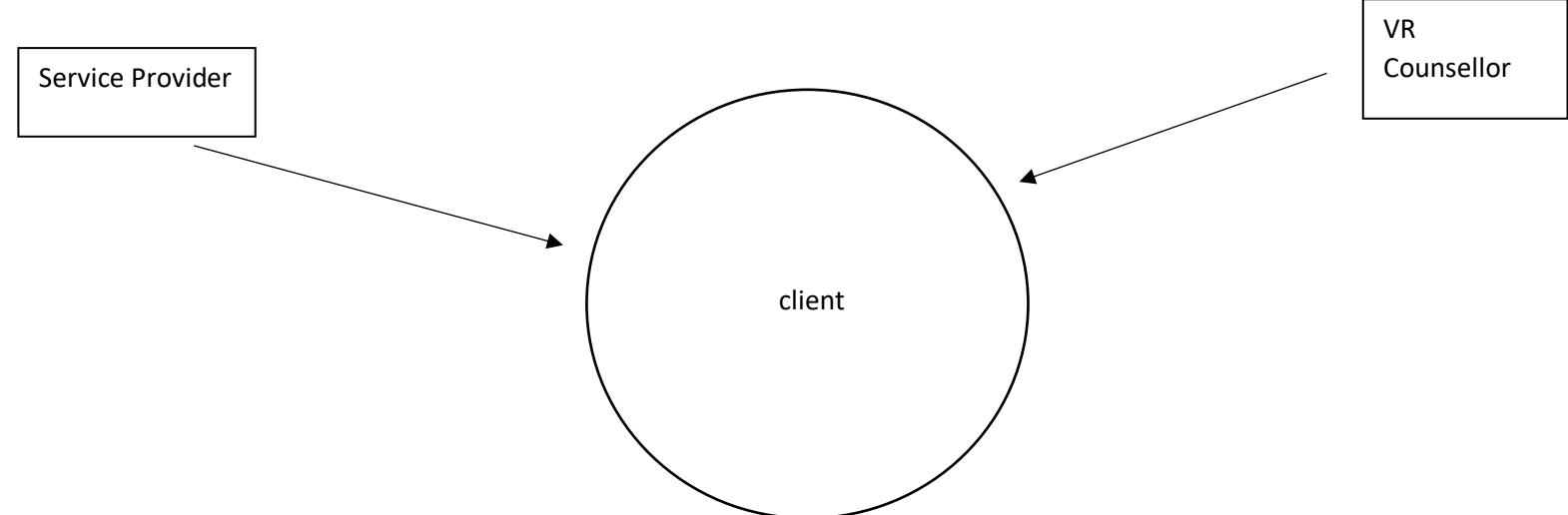
			been on 8 weeks + sick leave over the last year due to musculoskeletal pain		
Stahl, Christian; Svensson, Tommy; Petersson, Gunilla; Ekburg, Kerstin. (2009)	Qualitative, Interpretative approach	To determine how the relationship between healthcare professionals and social insurance officers is expressed, specifically focussing on the definition and uses of work ability	12 teams, strategic selection, focus groups Individual interviews with managers of primary health centres	Divergent perspectives of workability between healthcare professionals and insurance offices Traditional physicians' dissatisfaction with changes in sickness regulations negatively impacts on cooperation	Strategic selection used to have a variety of teams from established to newly formed teams. Good cohort of participants Strengths and weaknesses detailed Based on Swedish system
Van Den Hout, Wilbert; De Buck, Petronella; Vlieland, Theodora (2007)	Randomised control trial	To estimate from a social perspective the cost-utility of a MDT job retention Voc Rehab program completed with usual treatment in patients with chronic RA at risk of losing their employment	Chronic rheumatic disease with arthritis involvement of 1 or more joints Patients had challenges for retaining their jobs but were highly motivated to continue in employment Patients were currently	Unclear if the program reduces or increases total costs, further Voc Rehab research would be recommended with emphasis on early identification of work issues and collaboration with voc rehab providers	Based on the Dutch system where working part time is very normal and Dutch labour laws makes it difficult to dismiss an employee which improves job retention. Small sample size

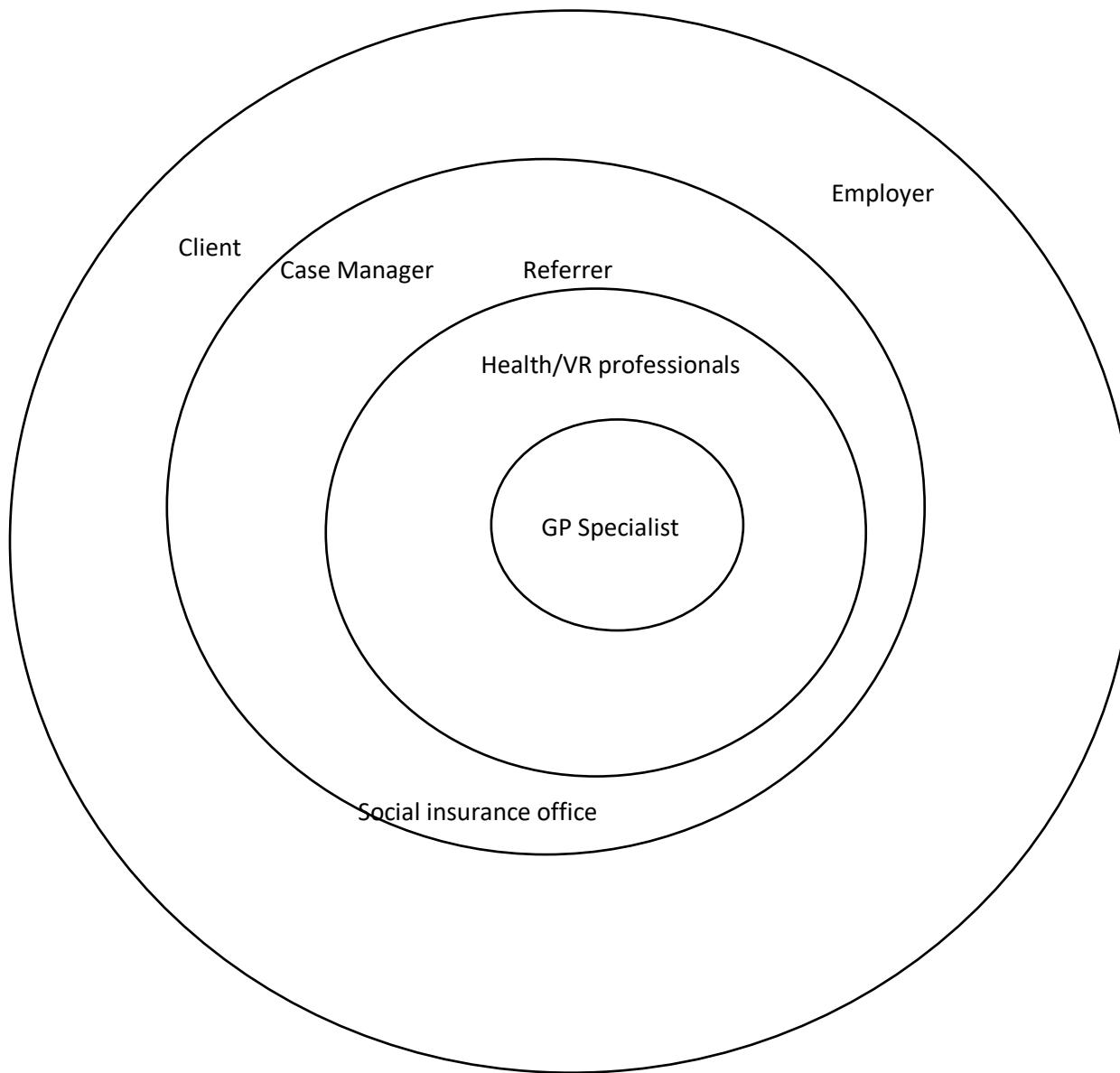
			working or had used less than 1 year if sick leave 121 participants in total		
Van Staden, Herdculene; Kemp, Rene, Beukes, Susan (2011)	Quantitative, experimental group design	To establish if work hardening was more effective than current treatment post acute care for lumbar surgery	Recently under gone lumbar surgery, labourers and those who retained work after back injury at work	Work hardening was found to be beneficial in returning patients back to work after lumbar surgery in comparison to usual care.	Small sample of participants Only looked at workers in heavy roles Standardised assessments were not the same across the 3 groups studied.

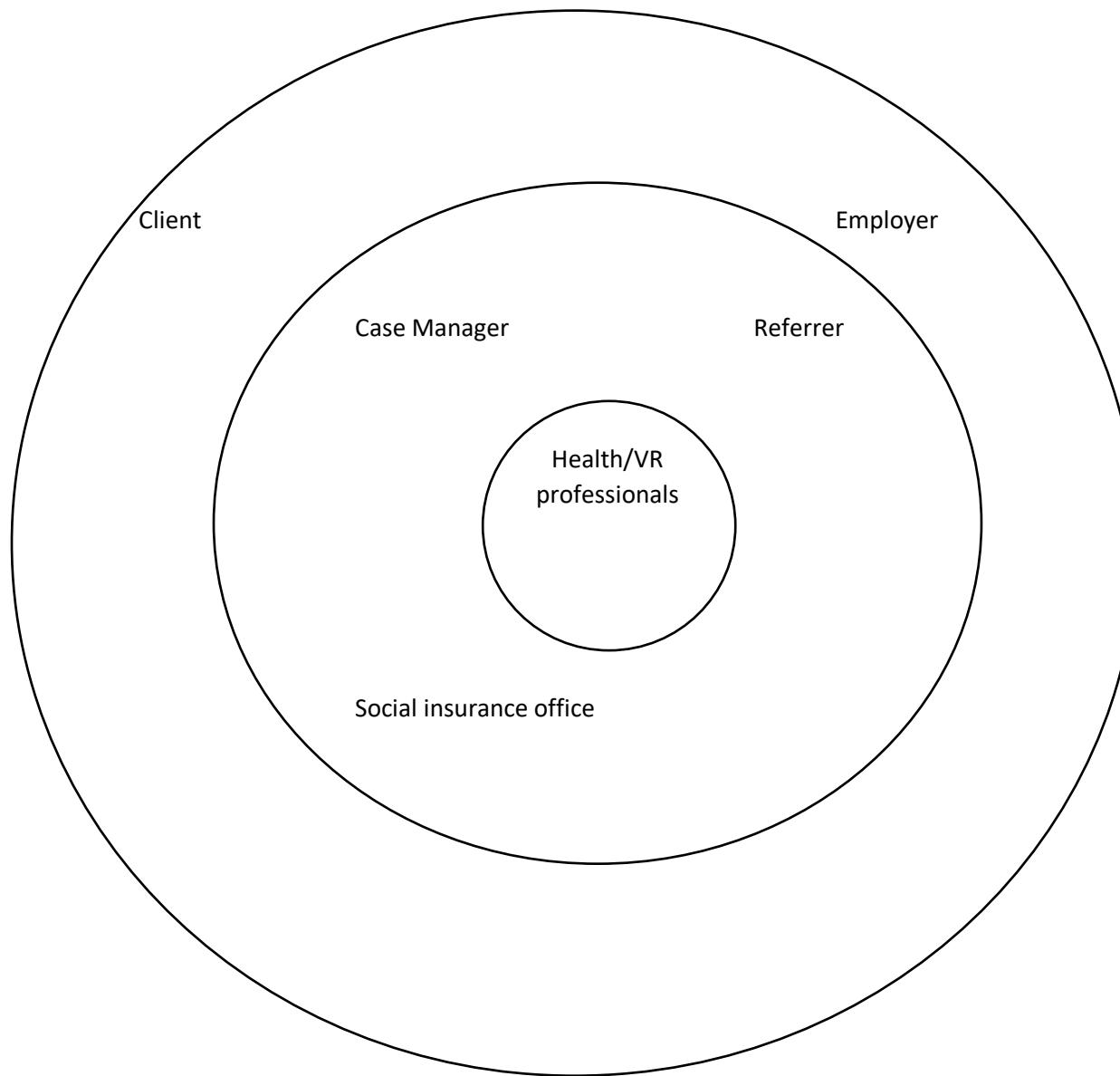
Appendix 8 Team diagrams

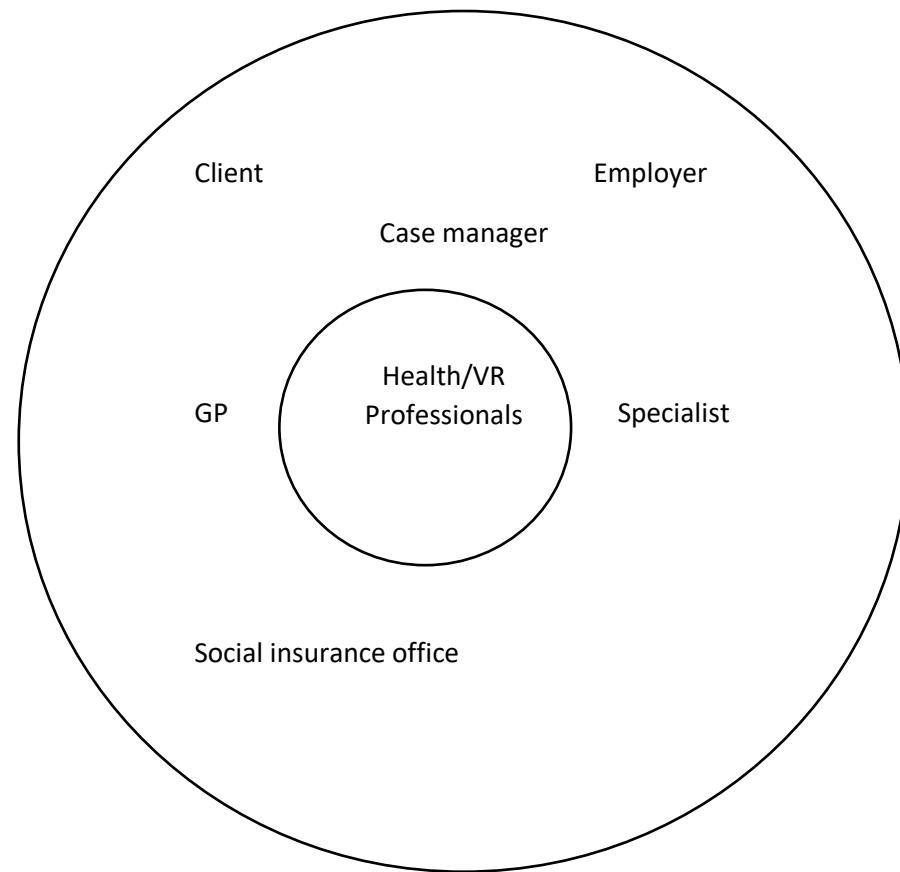












Appendix 9 Team Descriptions

Team Descriptions

For use with focus groups/individual interview for research topic:

The vocational rehabilitation team: Using the international research literature to inform a qualitative investigation of local needs.

- Uni-disciplinary – a single professional or group of professionals of the same discipline working towards a healthcare goal.
- Multidisciplinary – work to address the same barriers/problems but maintain their own profession specific roles and independent decision making for intervention
- Interdisciplinary – profession specific roles remain but intervention goals are shared and created by the team. Team roles are often delegated and there can be role mergence across disciplines
- Transdisciplinary – a group of professionals working towards a client centred goal, with evolving and changing roles and responsibilities dependent on client need. Sharing of skills and knowledge is common place to reduce role boundaries.

(Cartmill, Soklaridis, & Cassidy, 2011; Brunarski, Shaw, & Doupe, 2008; Molineux, 2017)