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The therapeutic relationship between client and dietitian: An investigation of the core of clinical dietetic practice

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Certification

I, Annaliese Julia Nagy, declare that this thesis submitted in fulfilment of the requirements for the conferral of the degree Doctor of Philosophy, from the University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. This document has not been submitted for qualifications at any other academic institution.

Annaliese Julia Nagy
8th October 2021

Dedication

To my extraordinary grandparents:

Mimi and Pa, who have taught me the value of education, and
Nagymama and Nagypapa, who have taught me the value of perseverance.

Abstract

Over recent decades healthcare has shifted towards patient-centred care as a result of the numerous benefits this approach has shown. Within dietetics, part of practising in a patient-centred way requires the development of a 'positive' relationship between client and dietitian. Governing documents depict this relationship as a fundamental aspect of clinical dietetic practice, however little is known about how this 'positive' relationship is developed and maintained in clinical practice and what education and training dietitians receive in this aspect of practice. Consistent findings from psychotherapy research show that the quality of the relationship between a client and therapist (described as a 'therapeutic relationship') has a modest positive effect on the client's health outcomes. Hence understanding more about the therapeutic relationship between clients and dietitians may assist the profession to understand more about how the therapeutic relationship 'works' in clinical dietetic practice. Focusing on understanding this therapeutic relationship will contribute to strengthening dietetic practice in patient-centred delivery and potentially assist in supporting their clients to achieve improved positive health outcomes.

The overarching aim of this thesis was to investigate the phenomenon of the therapeutic relationship between client and dietitian. To address this aim, three qualitative studies were undertaken as part of a multimethod sequential research design. Each focused on a key area of knowledge and skill attainment for clinical dietitians. These areas included clinical practice, education and training and empirical literature. Through the theoretical lens of patient-centred care and role theory, four aims were identified for studies to address the overarching aim of this thesis:

1. To explore dietitians' perspectives of how they develop meaningful relationships with clients in the context of lifestyle-related chronic disease management (Study 1)
2. To describe how the therapeutic relationship between a client and dietitian is expressed and addressed in curriculum documents of Australian dietetics education programs (Study 2)
3. To explore Australian dietetics education program coordinators' perspectives of findings from the analysis of curriculum documents and how the client-dietitian relationship is taught within their respective programs (Study 2)
4. To provide a comprehensive overview of the topic of the therapeutic relationship between clients and dietitians in the individual counselling context by summarising empirical literature into

qualitative themes (Study 3)

The first study focused on how the client-dietitian relationship might exist in clinical practice by exploring dietitians' perspectives of how they develop meaningful relationships with clients in a lifestyle-related chronic disease context. Semi-structured interviews were conducted with 22 dietitians working in Australia and a conceptual model of relationship development was formed from the data. Data collection and analysis was guided by a constructivist grounded theory approach. Three main categories formed the conceptual model and showed that as part of developing a strong therapeutic relationship, dietitians indicated that they sense a professional chemistry with the client, balance both a professional and social relationship with the client and manage tension with competing influences. Based on these dietitians' perspectives, it was apparent that relationship development appears complex, and this is due to the dietitian having to manage both their direct interaction with the client as well as multiple other influences on their interaction (e.g. the physical environment).

The conceptual model was used to develop a coding framework which was applied in the second research study to describe how the client-dietitian relationship is expressed and addressed in curriculum documents of Australian dietetics education programs. Subject outlines from 122 subjects of 21 accredited dietetics education programs were analysed using a deductive thematic analysis approach. Findings showed that how the client-dietitian relationship is expressed and addressed in subject outlines is highly variable (e.g. the specific term used to describe the phenomenon, such as 'relationship' or 'partnership'). Semi-structured telephone interviews with 10 program coordinators were undertaken to explore their perspectives of the findings from the analysis of subject outlines and to clarify how they perceived relationship development to be taught within their respective programs. Inductive thematic analysis of interview data showed that program coordinators perceived that the high variability in programs made sense, but they noted limitations of analysing data from subject outlines which often did not provide details of how programs covered elements of therapeutic relationships. Programs coordinators' responses showed that the client-dietitian relationship appears to be ambiguously and inconsistently defined amongst dietetics education programs in Australia. Program coordinators also noted that teaching occurs mostly in communication, counselling and medical nutrition therapy subjects and through theoretical and practical means.

Given the complex yet ambiguous nature of the client-dietitian relationship identified in the first two research studies, an integrative literature review was conducted as the third study to explore the potential knowledge gap around research on therapeutic relationships in dietetics. An electronic literature search was conducted using the Cumulative Index of Nursing and Allied Health Literature, PsychInfo, Scopus and Web of Science databases. The methodological quality of the included studies was evaluated by two researchers using the Mixed Methods Appraisal Tool. Five themes were identified from 75 included studies which showed that the client-dietitian relationship is valued within clinical dietetic practice, involves complex and multifactorial interactions, is perceived as having a positive influence, requires skills training, and is embedded in practice models and tools. Clear areas for further research were identified which included conducting observational studies to describe how the client-dietitian relationship presents in clinical practice.

This research contributes novel and important findings that provide a richer understanding of how the therapeutic relationship between a client and dietitian might exist in clinical dietetic practice and within dietitians' education and training in Australia. In doing so, this thesis has contributed valuable knowledge to better support clinical dietitians to practise in a patient-centred way. This body of research has identified an apparent complex and ambiguous nature of the client-dietitian relationship and hence suggests that clearer articulation of what constitutes the client-dietitian relationship within clinical dietetic practice is needed, particularly of important relationship components that contribute to positive client outcomes. Research is needed to explore which relationship components should be prioritised in dietitians' education and training, and the use of a more standardised and nuanced relationship language. Use of the DIET-COMMS tool to guide training and professional development opportunities for dietitians is also recommended.

Acknowledgments

"It always seems impossible until it's done"

Nelson Mandala

Over the last five years, this quote has been a source of motivation for me on the road to completing my Doctor of Philosophy degree. I would like to acknowledge however that this road has been made a whole lot easier by the small army of people I've had supporting me along the way. A few key players need a special mention:

Firstly, to my primary supervisor Dr Anne-Therese McMahon. There is no denying that this PhD would not have been possible without you. It seems like yesterday that we were sitting in your office and I was telling you about my ideas for my Honours thesis. We didn't know it then but it was the start of a great journey together. Thank you for believing in me right from the start, and for seeing the value in this work well before I even could. Thank you for challenging me to do the best work I can, and for doing so with warmth. Thank you for not only caring about the 'work' but also the other little hurdles that life has thrown and knowing the right things to say. We've spent years talking about the relationship between clients and dietitians, but I'd like to acknowledge our own and the tremendously supportive and nurturing supervisory relationship that you have created with me. I will always value this and am forever grateful.

My supervisory team would not be complete without the incredible Professor Linda Tapsell and Professor Frank Deane. Along with Anne, our team has worked together since 2015 and I consider myself extremely lucky to have had the opportunity to learn enormous amounts from you both. Linda, your wisdom, and calm, methodical approach to challenging situations will always be a source of inspiration to me. Thank you for taking the time to listen to my ideas and read page after page of my work (even into retirement!), and for gently guiding me in the right direction. As a student, you have always made me feel like we are a team and this has truly meant the world. I promise to always think about context, my theoretical framework and cut down on my word count! And Frank, where do I begin? 'Thank you' doesn't quite seem enough. You have taught me so much from your own discipline and helped me make sense of how I might apply this in ours.

Thank you for your enthusiasm in working across disciplines and for your patience in teaching and explaining numerous concepts along the way (and the many meetings you sat through where we may have gone a little off topic!). The time you have given me since Day 1 of my Honours year has not gone unnoticed and I have the upmost respect and admiration for you and how you work. Thank you for always making me feel like my work is important.

A study does not go ahead without people willing to participate in them and so I owe a huge thank you to the incredibly articulate dietitians who gave up their time to talk to me. At times, this journey can feel long and lonely yet I was invigorated and inspired by the conversations we had and insights you shared. Thanks must also go my wonderful Honours student Angela Messina who helped me process the copious amounts of data that hours of interviews can generate, and to Eden Barrett for assisting with data checking.

To my wonderful managers and colleagues at St Vincent's Hospital and The Sutherland Hospital. Thank you for your tremendous support in getting this PhD finished, for your interest in this passion project of mine and for the time you indulged me in listening.

I was told at the start of this journey that having friends who are also doing a PhD might be a good idea, and I now realise the true value of this advice. Loz, thank you for being there every step of the way. Thank you for the laughs, and for being there when I needed to let out some steam (in person, or via FaceTime or text). You got it, and not needing to explain how I was feeling or why was just the best. Thank you for keeping this journey fun, I love that we shared it together. To my extraordinarily talented and intelligent peers that I was lucky enough to share office 41.228 with, thank you for the chats, thank you for the lunch time walks, and thank you for inspiring me.

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And to my biggest support, Teddy. Thank you for loving me and all of me (including the PhD Monster). You have the patience of a Saint. It’s time to enjoy our weekends together now.

Supporting Publications

The peer-reviewed publications listed below are specific to the Australian dietetics context and hence were published in the journal for dietetics in Australia, *Nutrition & Dietetics.* Doing so ensured research findings were communicated to the target audience where the greatest impact was likely to be achieved, that is to dietitians working in Australia. The below list also includes international presentations that were adapted to address the broader aspects of dietetics more generally.

Peer-Reviewed Publications

Nagy A, McMahon AT, Tapsell L, Deane F. The therapeutic relationship between a client and dietitian: A systematic integrative review of empirical literature. *Nutrition & Dietetics* 2022*;* 1-46*.* (Early View)

Nagy A, McMahon AT, Tapsell L, Deane F. How is the client-dietitian relationship embedded in the professional education of dietitians? An analysis of curriculum documentation and program coordinators' perspectives in Australia. *Nutrition & Dietetics* 2021; 78: 218-231.

Nagy A, McMahon AT, Tapsell L, Deane F. Developing meaningful client-dietitian relationships in the chronic disease context: An exploration of dietitians' perspectives. *Nutrition & Dietetics* 2019; 77: 529-541.

Nagy A, McMahon AT, Tapsell L, Deane F. Therapeutic alliance in dietetic practice for weight loss: Insights from health coaching. *Nutrition & Dietetics* 2018; 75: 250-255.

Conference Presentations and Workshops

Nagy A, McMahon AT, Tapsell L, Deane F. (2020) How is the client-dietitian relationship embedded in dietetic education? A review of Australian curriculum documentation. *37th Dietitians Association of Australia National Conference,* Melbourne, Australia. *Nutrition & Dietetics*; 77 (S1). (Submitted as oral presentation)

Nagy A, McMahon AT, Tapsell L, Deane F. (2019) What lies at the core of clinical dietetic practice? Exploring the client-dietitian relationship across three key settings. *12th European Federation of the Associations of Dietitians Conference,* Berlin, Germany. (Poster presentation by **A Nagy**)

Nagy A, McMahon AT, Tapsell L, Deane F. (2019) The client-dietitian relationship in lifestyle-related chronic disease management: A qualitative exploration. *36th Dietitians Association of Australia National Conference,* Gold Coast, Australia. *Nutrition & Dietetics*; 76 (S1). (Oral presentation by **A Nagy**)

Fitzpatrick S, McMahon AT, **Nagy A,** Tapsell L, Deane F. (2018) Does a relationship between therapeutic alliance and weight loss outcomes exist and can it be applied in dietetic practice? A pilot study within a multidisciplinary weight loss trial. *35th Dietitians Association of Australia National Conference,* Sydney, Australia. *Nutrition & Dietetics*; 75 (S1). (Oral presentation by **A Nagy**)

McMahon A, Swift J, **Nagy A**, Perkins L, Somehara F, Renn L. (2018) Developing Effective Professional Relationships with Clients Managing Chronic Disease. *35th Dietitians Association of Australia National Conference,* Sydney, Australia. (Conference workshop)

Nagy A, McMahon AT, Arenson D, Deane F, Ciarrochi J, Tapsell L. (2015) Developing a tool to identify therapeutic alliance in a health coaching weight-loss intervention program. *39th Annual Scientific Meeting of the Nutrition Society of Australia,* Wellington, New Zealand. (Oral presentation by A **Nagy**)

Invited Presentations

Nagy A, McMahon AT, Tapsell L, Deane F. (2021) Improving Long-Term Care: Developing meaningful therapeutic relationships with our patients. *Australia & New Zealand Metabolic and Obesity Surgery Society Integrated Health Conference*, Sydney, Australia. (Oral presentation by **A Nagy**)

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Scholarships

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Travel Grants

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List of Abbreviations

AM	Anne-Therese McMahon
AMe	Angela Messina
AN	Annaliese Nagy
EB	Eden Barrett
FD	Frank Deane
LT	Linda Tapsell
MIB	Motivational Interviewing Based
MMAT	Mixed Methods Appraisal Tool
USA	United States of America

Glossary of Terms

Axiology - The study of value; how the researcher's values and bias are acknowledged

Client - Person receiving therapeutic intervention from healthcare professional

Client-centred therapy - Type of therapy pioneered by psychologist Carl Rogers that is centred on the client's telling of their story

Client-dietitian relationship - The therapeutic relationship between a client and dietitian within a therapeutic context (used interchangeably with 'therapeutic relationship')

Competency standards - Document outlining domains of competency for entry-level dietitians

Constructivist grounded theory - A particular approach to grounded theory research developed by Kathy Charmaz that views the generated theory as an interpretive portrayal of the studied phenomenon

Deductive - An approach to qualitative data analysis that uses a 'top down' approach, where pre-existing concepts and ideas are used to code and make sense of data

Dietitian – A qualified healthcare professional that delivers a dietetic intervention to a client or patient

Dietitians Australia - Authoritive body for dietetic and nutrition professionals in Australia (formerly Dietitians Association of Australia)

Epistemology - The study of human knowledge; whether knowledge is considered subjective or objective

Grounded theory - A particular approach to qualitative inquiry that focuses on generating theory by explaining process and action

Inductive - An approach to qualitative data analysis that uses a 'bottom up approach', where meaning comes directly from the data itself and pre-existing concepts and ideas are not used

Methodology - The theoretical basis of a research approach

Methods - Practical techniques undertaken to conduct research

Mixed methods research - A type of multimethod research that utilises both qualitative and quantitative methods

Multimethod research - A form of research that combines different methods (can be exclusively qualitative or quantitative methods) to address an overarching research aim

Nutrition Care Process - A systematic and cyclic approach to the dietetic consultation that consists of four key steps: 'Assessment', 'Diagnosis', 'Intervention', 'Monitoring & Evaluation'

Nutrition Care Process Model - A graphic visualisation of the Nutrition Care Process that articulates the relationship between client and dietitian at the centre of the Nutrition Care Process and identifies internal and external factors that impact how the Nutrition Care Process can be applied

Ontological - The study of reality; whether reality is seen as one true reality or the existence of multiple realities

Patient-centred care - A type of healthcare that is client-driven and values the client as having an active role in their own healthcare

Qualitative research - A type of research that focuses on understanding process and meaning rather than measures of quantity

Relativist - A philosophical approach to qualitative inquiry that assumes multiple realities (a 'relativist approach')

Role theory - The study of 'roles or patterns of behaviour that are characteristics of person or context'

Therapeutic alliance (also 'working alliance') - A component of the therapeutic relationship acknowledged by Bordin as consisting of a 'bond' and the agreement on goals and tasks between the client and healthcare professional

Therapeutic relationship - The purposeful relationship between a client and health professional for the client's therapeutic benefit

CHAPTER ONE: Introduction

1.1 Prologue

This chapter introduces this thesis by first explaining the motivations of the author to investigate the therapeutic relationship in clinical dietetic practice. Following this, it explains relevant background information on the topic to position the research presented within this thesis within the broader healthcare context it is part of. This includes the specific context of dietetic practice in Australia as two of the three research studies that make up this thesis focus on dietetics in Australia. To finish, this chapter synthesises the background information presented to justify the overarching aim of this thesis and provides an overview of each chapter.

1.2 Personal Research Impetus: Observing and Reflecting on Healthcare Practice

The central focus of this thesis is the therapeutic relationship between a client and dietitian, which refers to the purposeful relationship between a client and dietitian for the client's therapeutic benefit. To begin, I will explain my motivation for investigating this phenomenon in light of my experiences as an early-career clinical dietitian and researcher in Australia. By sharing my motivations upfront, I aim to provide the reader with an understanding of how this PhD thesis came to be.

The inspiration for this research came from my observations and reflections of healthcare practice whilst training and working as a dietitian. As a dietetic student, one observation in particular was the catalyst for the questions that inspired my Honours thesis and eventual undertaking of a PhD. In January 2015 I began the final year of my Bachelor of Nutrition and Dietetics (Honours) degree at the University of Wollongong, during which I was required to undertake research to write an Honours thesis, and complete four practical placements. Like most of my peers, I felt overwhelmed by the thought of conducting research yet excited by the opportunity to explore an area I was interested in. However as an undergraduate student, I was uncertain of where my research interests lay.

My first practical placement was in Orange, a regional town in New South Wales, Australia and as part of this placement I conducted a nutrition needs assessment of patients accessing the Orange Heart Failure Service. Whilst working on this project, I attended patient home visits with a cardiac nurse. One patient-nurse interaction caught my attention as the patient and nurse seemed to get along well and their connection also appeared to underpin the therapeutic purpose of the visit. Both were female, of similar

ages and shared common interests. This particular patient-nurse interaction stood out from other home visits I had observed between the same nurse and older male patients. I was curious about this difference and wondered what contributed to the nurse and female patient's interaction appearing to be 'better' than other patient-clinician interactions. I began reflecting on whether it had something to do with them both being female, of similar age, and/or sharing similar interests? Furthermore, I began reflecting on how these commonalities might influence how they interacted together?

The opportunity to observe patient-nurse interactions highlighted for me that patients and health professionals can interact differently within a healthcare context and that the nature of these interactions seemed to depend on the two people involved. From this, I developed an interest in understanding how patients and health professionals interact with each other and began asking questions around patient-professional relationships in healthcare. In particular from this experience, I was eager to explore:

- What enables a patient and health practitioner to work well together and form a good relationship?
- How might commonalities between a patient and health professional influence their relationship?

My observations of patient-nurse interactions enabled me to identify a topic of interest for my Honours thesis, being the therapeutic relationship between patients and dietitians. I was co-supervised by a professor of psychology who introduced me to a wealth of literature on this exact phenomenon. I learnt that the psychology discipline has been studying what they refer to as the 'therapeutic relationship' for decades. With some understanding of the psychological literature, my Honours thesis explored a particular aspect of this relationship (the 'therapeutic alliance') between health coaches and study participants of a lifestyle intervention trial. From this research, we exposed interesting findings around how patients and health professionals might develop a therapeutic relationship in a chronic disease context and discussed these with regard to dietetic practice. I was eager to communicate our research findings to the broader dietetics and healthcare community and so our findings were published within the peer-reviewed journal *Nutrition & Dietetics*[1] and presented at the 39th Annual Scientific Meeting of the Nutrition Society of Australia and the Nutrition Society of New Zealand in Wellington, New Zealand.[2]

After finishing my degree, I began working as a clinical dietitian in an acute metropolitan hospital in

Sydney, New South Wales. Here I observed and reflected upon numerous interactions between patients and dietitians in a real-life practice context (including my own), which allowed me to think more critically around how therapeutic relationships exist in clinical dietetic practice. I was keen to explore the following questions:

- What do dietitians know about developing therapeutic relationships with their patients?
- How do dietitians build therapeutic relationships with their patients?

In particular, I noticed the nature of an acute healthcare context where patient-dietitian interactions seemed to be governed by time and other environmental pressures. High patient turnover and short lengths of stay were common. Dietitians were busy meeting the demands of patient referrals and completing other pressing tasks. Time available to develop meaningful interactions with each patient seemed limited and often interrupted. I wondered how the pressures of an acute hospital setting might influence how dietitians can meaningfully connect with patients, and what role did meaningful human connection between patients and healthcare professionals play in a demanding acute care setting. Upon further reflection, I considered how the therapeutic relationship in an acute healthcare context may differ from non-acute environments (for example, outpatient clinics and private practice) and questioned how therapeutic relationship development might occur in these settings.

Since developing an initial curiosity as a dietetic student six years ago, I have been extremely fortunate to be supported in my pursuit of knowledge around our therapeutic relationships with clients as dietitians. Inspired by the rich knowledge of the psychology discipline in this area, my motivation to investigate therapeutic relationships within my own discipline has grown. Further facilitating my drive to investigate this area of practice has been the research findings published from my Honours thesis, and my own experiences interacting with patients whilst working as a clinical dietitian. I have more recently returned to practising full time as a clinical dietitian, and through my experiences engaging with patients I continue to be totally inspired and energised to further pursue how dietitians might more meaningfully engage with their patients. My time spent reading, observing, reflecting and asking questions of the therapeutic relationship between a client and dietitian has led me to pursue this further as a PhD thesis.

This section has explained my personal research impetus, inspired by my own observations and reflections of healthcare practice as an early-career clinical dietitian. For the purpose of positioning this

thesis contextually, the following section will describe the profession of dietetics and the broader healthcare context it is part of.

1.3 Research Context

Understanding the context that this research is positioned within is essential for understanding key findings and recommendations. This section will describe how dietetics has evolved as a profession and changes within the wider healthcare context that are relevant to the topic explored by this thesis. As the research presented concerns the dietetics profession in Australia, this section will focus particularly on describing the Australian healthcare context. Following this, Section 1.6 will consolidate this information to explain the rationale for this thesis.

1.3.1 Dietetics as an evolving profession

The history of dietetics dates back to ancient times where links between diet and human health were first documented.[3] However as a distinct profession, dietetics was not formed until the early to mid 1900s.[4] This formation was catalysed by advances in science, including the discovery of vitamins, as well as the social and political context of the time. Wars were of particular influence, during which nurses recognised the importance of nutrition and cared for people to ensure optimal nutritional intake and survival.[3, 5] Hence dietetics is acknowledged as being aligned to the nursing discipline and embedded in the caring of others.[6] Since dietetics formed as a profession, the role of a dietitian has evolved immensely. From initially working in food provision in medical settings, today dietitians work across diverse roles including client or patient care, community and public health, research and the food industry.[7] For clarity, the research presented within this thesis concentrates on dietitians working in client or patient care, that is those dietitians who engage with individuals for dietetic management.

In addition to the increasing variety of roles that dietitians work in, the practice of dietetics has evolved to be acknowledged as both a science and an art. This is because dietetics is firmly underpinned by nutrition science, but demands the artful translation of this science into practice.[8] The ‘art’ of dietetic practice can be thought of in this definition as the process the dietitian engages in with their client to ensure key nutrition science information is translated and understood. This is reflected in the International Confederation of Dietetic Associations’ definition of a dietitian as ‘a professional who applies the science

of food and nutrition to promote health, prevent and treat disease to optimise the health of individuals, groups, communities and populations'.[9] Dietitians work with people and therefore how a dietitian applies and translates nutrition science for their audience is crucial. This translation of information concerns not just the relaying of nutrition science information, but demands high-level skills in understanding the client and creating a space where the client and dietitian can interact to ensure essential information is understood. With this in mind, the research presented in this thesis concentrates on a better understanding of the 'art' of dietetics with regard to client care. It does so by focusing on how dietitians and clients interact to develop a therapeutic relationship, facilitating the meaningful translation of nutrition science information.

A consultation between a client and dietitian is as unique as each of the individuals themselves. In contrast to other healthcare disciplines, food intake and its connected relationship with nutrition is at the core of a dietetic consultation. Other personal lifestyle factors may also be important, such as physical activity, particularly in the context of chronic disease management.[10] For most people, food choices are highly personal and can hold social, cultural, religious and economical meaning, and be ingrained with a strong sense of identity, tradition, memory and emotion.[11-13] Food is much more than a physiological response to hunger. Furthermore diet and eating behaviours can be influenced by other factors such as a person's socio-economic status and mental health.[11-13] A person's food behaviour is therefore multifaceted and as a result, discussions between a client and dietitian may uncover sensitive personal information. The dietetic consult frequently places dietitians in a position where they need to engage with clients regarding highly personal content, that is their food choice, to achieve better health outcomes. Consultations between clients and dietitians are thus laden with the intricate and interrelated emotional, psychological and physical drivers for food intake which impact diet behaviour. Thus conceptualising and understanding how the client-dietitian interaction enables a therapeutic relationship is a vitally important research area for best practice.

To summarise, dietetic practice concerning client care has evolved to be more than the provision of nutrition science information. It is an interaction between two people, demanding skillful translation of nutrition science, as well as acknowledgement and engagement with the personal meaning and knowledge about food choice and eating behaviour that the client themselves hold. This thesis focuses on better

understanding this interaction between client and dietitian and by doing so, aims to contribute to the advancement and evolution of dietetic practice.

1.3.2 Dietitians play a crucial role in Australian healthcare

Dietetics has also evolved as a profession within Australia. Current data on dietitians working in Australia is limited, however general trends show the number of dietitians has increased over the last thirty years. The 1991 Census reported 1291 people having identified their occupation as a dietitian, with 1049 of those reported as being members of the authoritive body in Australia, Dietitians Australia (formerly Dietitians Association of Australia).[14] Current data on the number of dietitians in Australia is not available, however the 2018-2019 annual report from Dietitians Australia described having over 7000 members, suggesting an approximate seven-fold growth in nearly thirty years.[14-16] This growth in the Australian dietetic workforce is in part reflective of additional education programs being offered as well as the growing interest from both medical professionals and the general population about nutrition and its implications for health.[16] To become a qualified dietitian in Australia, students must complete an undergraduate or postgraduate degree that has been accredited by Dietitians Australia. Today, accredited education programs are offered by fifteen universities across a number of states and territories, with other universities developing additional programs for accreditation.[17]

The expansion of the dietetics profession in Australia is also reflective of the essential expertise dietitians contribute to Australia's healthcare system. This system consists of four components; primary health care, specialist services, hospitals and health promotion.[18] In Australia, dietitians form part of allied healthcare that works across these four components. The most recent report on Australia's health published by the Australian Institute of Health and Welfare identified managing population changes and service demand as a key challenge for Australia's healthcare system.[18] This challenge comes partly because of an aging population and an increased prevalence of chronic health conditions. Although the term 'chronic health conditions' encapsulates a range of health issues, importantly for dietitians diet-related chronic conditions are a leading cause of mortality and morbidity in Australia.[18] Examples of diet-related chronic conditions include cardiovascular disease, type 2 diabetes and some cancers. In support of this, data from the most recent National Health Survey (2017-2018) showed that dietary quality of many Australians is not in line with recommendations with approximately half of Australian adults consuming the recommended

servings of fruit, and only eight percent consuming the recommended servings of vegetables.[19] This data is consistent with results from the 2011-2012 National Health Survey that showed the majority of the Australian population did not meet the recommended number of servings for each essential food group described in the Australian Dietary Guidelines.[18] This data highlights the majority of Australians do not consume an optimal diet for general health, contributing to the high prevalence of diet-related chronic health conditions, and exemplifying the crucial role and need for dietitians' expertise in Australia's healthcare.

1.3.3 Shifting towards a patient-centred approach to healthcare

With the evolution of the dietetic profession in mind, this section will explain broader paradigm shifts in healthcare and how this shift has influenced dietetic practice. Over recent decades, healthcare in Australia has moved from a more traditional and paternalistic approach, to one that is patient-centred.[20, 21] This shift has followed similar changes globally, endorsed by the World Health Organisation as a 'fundamental paradigm shift in the way health services are funded, managed and delivered'.[22] A paternalistic style of healthcare is described as that of health professional 'knows best', where decisions about the patient's care are made by the health professional and based on their preferences as the 'expert'.[20] This traditional approach views the patient through the lens of their health condition and does not fully acknowledge the patient as a unique self-directed individual. In doing so, the patient is seen to play a passive role in their healthcare.[20] In stark contrast, a patient-centred approach values the patient (and their family or carer) as playing an active role in their own health care. It respects the patient as a unique individual and centres care around the patient's values, concerns and preferences.[20, 21] The Australian Institute of Health and Welfare contrasts the different approaches clearly in their description of patient-centred care as 'treating each person respectfully as an individual human being and not as a condition to be treated'.[20, 21] Thus patient-centred care focuses holistically on the patient as a unique person, and is therefore also referred to as 'person-centred', 'consumer-centred' or 'family-centred' care.[21] For clarity, 'patient-centred care' will be used throughout this thesis.

Although only becoming a major focus of healthcare in recent decades, a patient-centred approach is acknowledged as originating from psychologist Carl Roger's work on client-centred therapy from the 1940s.[23] Within a therapy context, this approach focused on clients telling their story at a pace

comfortable for them, whilst the therapist utilised reflective listening. Thus Rogers' advocated for the interaction between a client and therapist to be centred on the client's telling of their story, and recognised therapy as being underpinned by the therapist's perception of the client's worth as an individual.[23] More recently, the widespread adoption of a patient-centred approach to healthcare has been attributed to research conducted by the Picker Institute during the 1980s and 1990s.[20] Their research is acknowledged as having pioneered the use of national surveys to capture patients' perspectives, and as forming the foundation of the Picker Institute's patient-centred principles. An example of such a principle includes 'emotional support, empathy and respect'.[21, 24] Today, a patient-centred approach is advocated both nationally and internationally by the Australian Institute of Health and Welfare and the World Health Organisation.[21, 22] Key drivers for this advocation of a patient-centred approach were consistent findings showing numerous benefits to the patient (and their carer or family), health professionals, communities and the broader healthcare system.[22] Such benefits include improved clinical outcomes for patients, as well as economic benefits for organisations and healthcare systems. Consequently, patient-centred care is now recognised internationally as a dimension of high-quality healthcare.[21]

The patient-centred movement has also influenced changes in dietetic practice, and this approach to practice has now been incorporated within dietetic competency standards, both within Australia and globally.[25-27] Competency standards outline key knowledge and skills that dietitians need to demonstrate competence in to be able to practice proficiently. Current standards for dietitians working in Australia outline several patient-centred competencies, including developing nutrition plans in 'collaboration' with patients and displaying 'active listening, interviewing and interpersonal skills to better understand perspectives of clients'.[26] An international example from the United Kingdom shows dietitians needing to 'understand the need to respect and uphold the rights, dignity, values, and autonomy of service users and their central role in decisions about their health'.[28] Such examples of competency standards exemplify patient-centred care as an integral focus of dietetic practice and as a core skill for dietitians within Australia and internationally. Section 1.6 will explain why this is important in the context of the research presented in this thesis.

This section has explained the paradigm shift towards a patient-centred approach seen in healthcare, and subsequently in dietetics, because it is crucial for understanding the importance of the research presented

in this thesis. This thesis focuses on the therapeutic relationship between a client and dietitian, and therapeutic relationships in healthcare are identified as an essential component of delivering patient-centred care.[29, 30] With this in mind, the next sections describe and explain the notion of the 'therapeutic relationship' in healthcare and its origins within the psychology discipline. These sections also outline research on therapeutic relationships in other healthcare disciplines and dietetics for the purpose of articulating the knowledge gap this thesis addresses.

1.4 The Therapeutic Relationship: A Valued Component of Healthcare

Within this thesis, the term 'therapeutic relationship' refers to the purposeful relationship between a client and health professional for the client's therapeutic benefit. The term 'client-dietitian relationship' is also used to refer to the therapeutic relationship between a client and dietitian, and these terms are used interchangeably throughout.

1.4.1 Originating from the psychology discipline as a respected aspect of practice

The first ideas around therapeutic relationships came from the psychology discipline, and are noted as beginning with psychoanalyst Freud's work on transference and countertransference in the early 1900s.[31, 32] These terms refer to a client's unconscious transfer of feelings and attitudes from their past onto the present therapist and therapy situation (transference), and the therapist's counter response (countertransference).[33] Several decades later during the mid-century, psychologist Carl Rogers (of previously described 'client-centred therapy') also expressed interest in the relationship between client and therapist as a facilitator of change. However unlike Freud, Rogers' focus was on the conscious relationship and particularly on how clients experienced therapists' empathy.[31, 32] During this time, advances in technology allowed for therapy sessions to be recorded, and coupled with Rogers' interest in the client-therapist relationship, sparked a focus on therapeutic relationships for other researchers.[34]

Since then, much of the research on therapeutic relationships has been attributed to Bordin and Luborsky's work on a particular construct of the conscious, collaborative relationship (termed the 'therapeutic alliance' or 'working alliance') that began in the 1970s.[32, 34] Bordin describes the therapeutic alliance as having three components: Goal, Task and Bond. 'Goal' refers to the agreement between client and therapist on the client's goals, 'Task' refers to the agreement on tasks for the client to achieve their

goals, and 'Bond' refers to the connection between client and therapist.[35] Horvath describes Bordin and Luborsky's work as having 'rapidly gained a following' and as driving extensive research on the therapeutic alliance across a range of therapy types and client groups.[32]

Two major phases of research are described as a result of Bordin and Luborsky's work; the first focusing on how the therapeutic alliance impacts therapy outcomes, and the second focusing on how therapists manage the therapeutic alliance (such as overcoming alliance ruptures).[34] A crucial driver of the research presented in this thesis, is the moderate but consistent finding that alliance quality is positively related to diverse outcomes across therapies.[36] That is, the strength of the therapeutic alliance between a client and therapist somewhat positively impacts the client's health outcomes. This finding has provided some explanation for therapists as to what works in the process of psychotherapy and has important implications for considering what works in dietetic practice. These implications will be discussed in Section 1.6. In addition, over thirty tools have been developed to quantitatively measure the quality of the 'therapeutic alliance' from different perspectives, that is client, therapist and observer. For example, the Working Alliance Inventory[31] is a tool based on Bordin's construct of the therapeutic alliance (Goal, Task and Bond) and is most commonly used in psychotherapy research.[31, 35]

Despite the extent of research investigating the therapeutic alliance, debate remains over the overall construct of the broader therapeutic relationship (of which the 'therapeutic alliance' is argued to be a part of).[37] In recent decades, discussion has ensued over what constitutes the therapeutic relationship, how different components might overlap and the consequent impact on therapy outcomes. For example, Gelso[38] describes a model consisting of three interlocking components:

1. *A real relationship*: 'a personal, non-work connection' acknowledged as the foundation of the overall therapeutic relationship
2. *A therapeutic alliance*: based on therapeutic 'work' and collaboration
3. *Transference and countertransference*: the unconscious transfer of feelings and attitudes from the client's past onto their current therapist and therapy situation, and the therapist's response

Other constructions of the overall therapeutic relationship have been suggested, such as the model described by Wampold & Budge.[39] Their model describes an initial bond occurring between client and

therapist, followed by three 'relationship pathways': the real relationship, the creating of expectations, and participating in healthy actions.[39] Notwithstanding this debate, researchers seem to agree that the construct of the overall therapeutic relationship is more than the conscious, collaborative quality of the therapeutic alliance, and that to suggest they are synonymous would be over-simplifying the therapeutic relationship.[38]

From these discussions around the therapeutic relationship construct, what is clear is how the therapeutic relationship is valued as a vital component of therapy within psychology. Driven by the motivation to understand more clearly what makes therapy work, this value is evident in the great extent to which the client-therapist relationship has been researched, and the pivotal findings produced. Describing the full extent of this research is beyond the scope of this thesis, however this section has provided an overview that demonstrates the depth and breadth of research focusing on therapeutic relationships within the field of psychology. From this, the multifaceted and intricate nature of therapeutic relationships that still generates debate amongst researchers today is clear. Most important for understanding the imperative for this thesis is the value of the therapeutic relationship as part of the therapy process and its proven positive impact on clinical outcomes.[36]

1.4.2 Being valued within other healthcare disciplines

The knowledge of therapeutic relationships from psychology has also influenced practice and research in medicine, nursing and allied health fields. As a result, these healthcare fields also appear to value the therapeutic relationship within their respective disciplines. Focusing firstly on the medical field, the Journal of the American Medical Association published a paper in 1927 that recognised medical practice as including 'the whole relationship of the physician and his patient', and that medicine 'is an art, based on medical sciences, but comprising much that still remains outside the realm of any science'.[40] This quote suggests that despite medicine being governed by paternalistic practices during this time, there was some early recognition of the relationship between a doctor and patient. Recognition of the patient-doctor relationship can be further seen in models developed by Szasz and Hollander in the 1950s, who conceptualised three different relationships that depended on the type of medical care provided (e.g. comas versus acute infections, versus long-term care for chronic illnesses).[41]

More recently, research has demonstrated the extent to which the patient-doctor relationship has been a focus of medical research. A 2012 review of instruments used to assess the patient-doctor relationship concluded that the increased interest in this aspect of practice had resulted in a 'large number' of instruments available.[42] Their findings showed 19 instruments used to assess the patient-doctor relationship, four of which were from psychotherapy. The authors explained this was a result of recognising likely differences in therapeutic relationships between medical and psychological contexts, and identified the subsequent need to validate medically-relevant instruments.[43] The overview provided in this chapter has highlighted that therapeutic relationships seem to be valued within medicine, a concept that is further supported by the development of relationship frameworks. Two examples include the REDE Model of Healthcare Communication[43] and the Hui Process.[44] The REDE Model outlines three primary phases of the relationship ('establishing', 'developing' and 'engaging') to guide education in this skill for medical practitioners.[43] In contrast, the Hui Process focuses particularly on cultural competency in relationship development, and outlines a framework for relationships with Māori patients.[44] Clearly, how doctors interact with patients and the nature of their relationship has been an enduring topic of discussion and investigation within the medical field, and appears to be a valued component of medical practice.

Similarly, this value of the therapeutic relationship is also apparent within nursing. Texts dating back to the 1860s are described as emphasising the importance of nurses being skilled in interacting with patients.[45] More recently, Feo et al acknowledged the importance of safe and trusting patient-nurse relationships as being 'well-established', particularly with regard to patient experiences, their health outcomes and nurse satisfaction.[46] Hartley et al has also articulated the importance of this in mental health nursing, describing nurses being 'at the core of the caring profession' and that their relationship with patients is therefore 'central' to their work.[47] In addition, the importance of the nurse-patient relationship has been further exemplified through being embedded in frameworks for patient-centred care.[48]

Recent research has attempted to understand the extent of the evidence around therapeutic relationships in nursing. Published in 2020, a systematic review of interventions to improve therapeutic relationships reviewed eight studies and concluded that limited studies are available that provide evidence for how

nurses can develop and maintain a therapeutic relationship.[47] Furthermore, a scoping review was published in 2019 that reviewed tools used to measure behavioural aspects of the patient-nurse relationship. This study identified 35 tools from 127 studies and described high duplication amongst tools, suggesting a disparity between the recognised importance of nurse-patient relationships and the diligence with which the relationship has been conceptualised and measured.[46] These reviews further highlight the value of the therapeutic relationship within the nursing discipline as they indicate recent interest and action taken to better understand this phenomenon, and a desire to identify how the profession might better address the importance of the relationship in practice.

This consistent value of therapeutic relationships apparent across healthcare is also supported by allied health disciplines, such as speech pathology, occupational therapy, physiotherapy and pharmacy, where the importance of the therapeutic relationship is acknowledged.[49-51] For example, Palmadottir describes this importance being recognised from the 'early days' of occupational therapy,[52] whilst qualitative findings from speech pathology identify the relationship as the 'key' and 'central' component of aphasia therapy.[53] A range of study methods have been employed to investigate therapeutic relationships in adult and paediatric contexts, including both qualitative[50, 52-56] and quantitative[57-59], mixed methods[60] and literature reviews.[61-63] Models of the therapeutic relationship[64, 65] and discipline-specific tools[58, 66] for assessing relationship quality have also been developed, inspired by the work undertaken within psychology. An example includes the A-STAM tool (Aphasia and Stroke Therapeutic Alliance Measure) developed by researchers from speech pathology.[58] This tool includes 42 items (for example, 'my therapist is interested in me as a person', with the prompt 'my therapist takes times to get to know me and who I am'), and both client and clinician versions have been developed. These examples of how other allied health disciplines have acknowledged the client-practitioner relationship and seek to better understand how this phenomenon exists in their own discipline confirms the therapeutic relationship as a crucial and respected aspect of healthcare practice.

1.5 The Therapeutic Relationship in Dietetics

1.5.1 Forming the theoretical foundation of clinical dietetic practice

In dietetics, key literature that establishes the theoretical foundations and principles of dietetic practice, including competency standards and models of practice, appear to value the therapeutic relationship between a client and dietitian. This can perhaps be most clearly seen in the Nutrition Care Process, a systematic approach to nutrition and dietetic care that encompasses four main phases: Assessment & Re-Assessment, Diagnosis, Intervention and Monitoring & Evaluation.[67] The Nutrition Care Process was adopted in 2003 by the Academy of Nutrition and Dietetics (formerly the American Dietetic Association) from earlier models, and today is utilised by dietetic associations around the world, including Australia and the United Kingdom.[67-69] The Nutrition Care Process guides dietetic education and training, as well as clinical practice. Accompanying this process is the Nutrition Care Process Model, a visual representation of the process in a cyclic diagram.[67] The core of the diagram reads the 'Individual/Population interacts with Nutrition Professional' (Figure 1.1), and is described as representing the 'dynamic relationship' between the professional and client.[67] Previous iterations of the model used the term 'relationship', however Swan et al explain the most recent revision as using the term 'interacts' to encapsulate not only relationships with individuals, but also populations and groups.[67] Regardless of the specific term used, the central core of this widely-used and recognised model for dietetic practice includes the client-dietitian relationship, thus cementing the significance of this relationship for the dietetic discipline. Permission to reproduce the graphic presented in Figure 1.1 was granted by The Academy of Nutrition and Dietetics (Appendix 1) (Credit line: Nutrition Care Process Model taken from the publication: *electronic Nutrition Care Process Terminology*, published by the Academy of Nutrition and Dietetics [access date June 2020]).

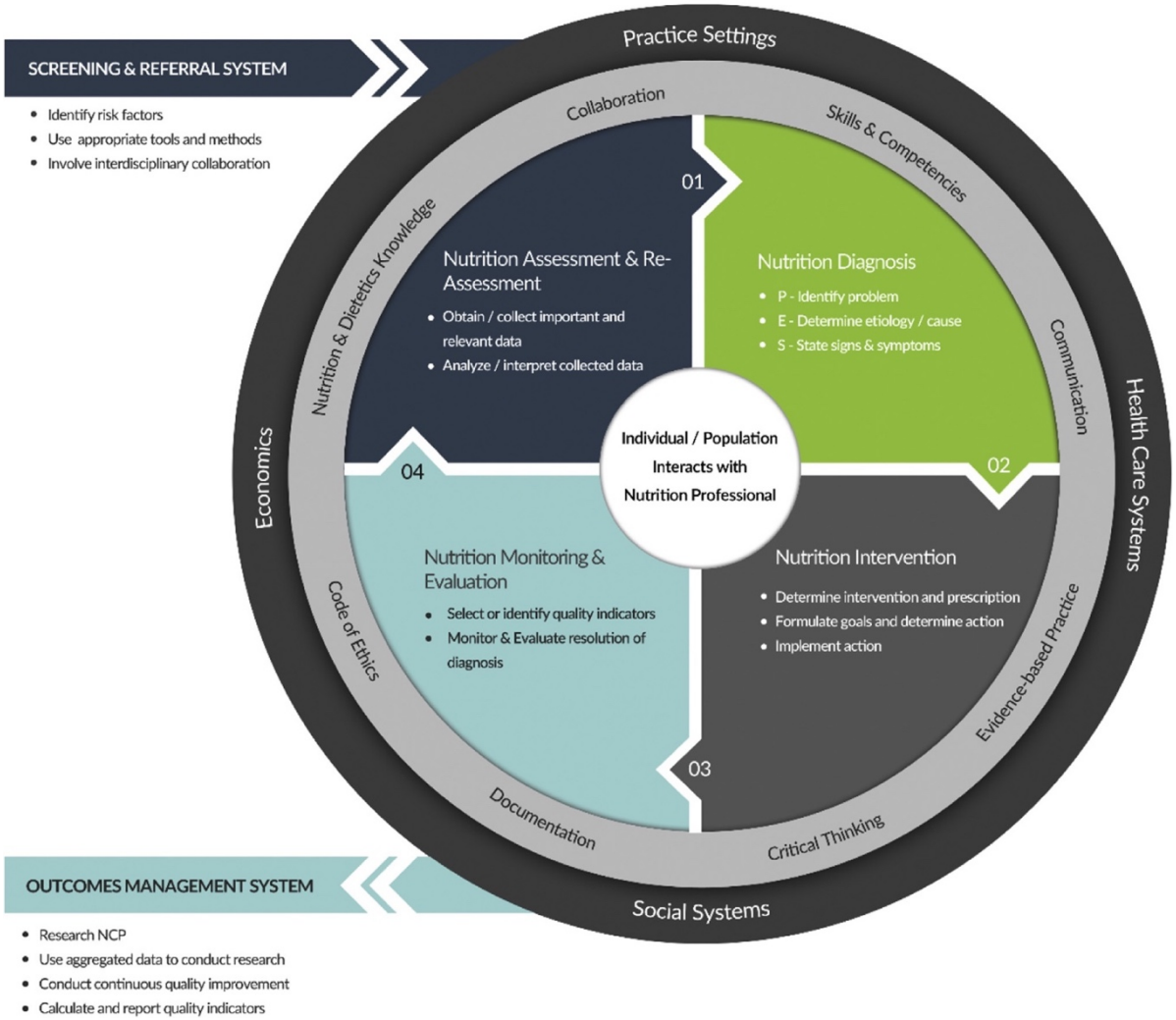

Figure 1.1 Nutrition Care Process Model as published by the Academy of Nutrition and Dietetics[67]

Not only does the current Nutrition Care Process Model exemplify the importance of the client-dietitian relationship, but it is further reflected in the development of the model.[69] The client-dietitian relationship as the theoretical 'core' of clinical dietetic practice has been acknowledged for decades.[69] A paper published by the Journal of the Academy of Nutrition and Dietetics traced the development of the Nutrition Care Process Model, and described it as originating from a series of models termed the 'Hammond Models', as developed by dietitian Marian Hammond.[69] The earliest sketch of this model from 1970 shows a similar cyclic pattern to the current model, with the 'patient-dietitian relationship' appearing at the centre.[69] Since then, other iterations of the model have maintained the cyclic shape with the client-dietitian relationship represented at the core. Although the wording used within the tool has changed (for example 'Helping Relationship' and 'Connection'), the premise of the model's central core as the client-dietitian relationship has remained the same, and can be seen today in the current Nutrition Care Process Model.[69] With this in mind, there appears to be long-standing recognition of the client-dietitian relationship underpinning clinical dietetic practice.

There is further recognition of the client-dietitian relationship within dietetic competency standards, which summarise the minimum skills required of an entry-level dietitian.[26] The National Competency Standards for Dietitians in Australia state that dietitians must 'demonstrate empathy and establish trust and rapport to build an effective relationship with clients, carers (and) families'.[26] Thus for dietitians to be deemed competent to practice in Australia, they must be able to form 'effective relationships' with their clients. This competency for dietitians in Australia is reflected globally as dietetic associations in New Zealand[70] and the United Kingdom[28] also focus on competent relationship development. Therefore the skill of developing a therapeutic relationship for dietitians is not only recognised in a global practice model for dietetics, but is also articulated as an essential skill dietitians must demonstrate. This confirms the respected role that the client-dietitian relationship theoretically plays within dietetics.

1.5.2 Empirical literature

Empirical findings from dietetics also support the value of the therapeutic relationship and therefore show consistency with literature from other healthcare disciplines. Several qualitative studies have explored clients' and dietitians' perspectives and have shown that they value their relationship with each other as part of the dietetic consultation.[71-76] For example, Jones et al interviewed 24 clients attending dietetic

consultations for weight management, and reported that they valued an 'ongoing, supportive and positive relationship' with their dietitian.[74] Similarly, Cant explored trust within dietetic consultations by interviewing 46 dietitians working in hospitals, community services and private practice and reported that they 'desired to build relationships with their patients'.[72] In addition to demonstrating the value of therapeutic relationships in dietetics, empirical literature has also exposed other findings that provide some further understanding of this relationship in dietetics. The following paragraphs will provide an overview of relevant empirical findings concerning the client-dietitian relationship.

Research has identified to an extent what factors might be important in the client-dietitian relationship, and findings show factors related to both the client and dietitian. A 2017 integrative review of patient-centred care in dietetic practice reviewed 27 studies and concluded that dietitians can build trusting relationships with clients by demonstrating effective communication skills, and 'being empathetic, honest, integral and supportive' to clients.[30] An earlier mixed-method study published by Cant & Aroni that utilised interviews and surveys identified that clients and dietitians perceive the dietitian's ability to develop rapport as important in relationship development, amongst other similar skills also outlined in the integrative review by Sladdin.[30, 77] Cant has also described some evidence suggesting that clients and dietitians perceive the dietitian's dress to impact non-verbal communication, and thus potentially influence their relationship.[78] In addition, findings from qualitative studies exploring clients' perspectives through interviews and observations of counselling sessions have also revealed that how the dietitian makes the client feel is important. This includes feeling prioritised, heard and seen as an individual.[71, 79] Other qualitative studies have focused on dietitians' perspectives and shown that dietitians perceive clients' unrealistic expectations as hindering their relationship, and the client feeling comfortable and engaged as supporting their relationship.[73, 80] Few studies have also focused on training dietitians and dietetic students in relationship-building skills.[81-85] Of particular note is the DIET-COMMS tool, which is an assessment tool designed to measure dietitians' communication skills during patient consultations.[86] Described as 'responding' to the client-dietitian relationship being at the core of the 'Nutrition and Dietetic Process', the DIET-COMMS tool has since been applied in an acute hospital context.[85, 86]

The extent of these findings allows us to understand what single factors may be important for relationship

development between clients and dietitians, however they provide little meaningful explanation of therapeutic relationship development as an entire process. Other healthcare disciplines, particularly psychology, have developed detailed constructs of what the therapeutic relationship might look like in practice, as explained earlier in Section 1.4.1.[32, 34, 38] These constructs allow us to understand what the therapeutic relationship could likely consist of as a complete phenomenon, that is as a complex, multi-layered interaction between two people (for example consisting of a 'real relationship', the 'therapeutic alliance' and 'transference and countertransference' as articulated by Gelso).[38] Hence although qualitative findings have revealed important factors for relationship development in dietetics, further qualitative research is needed to more critically unpack what occurs between a client and dietitian in the process of therapeutic relationship development and be able to articulate this process in a more meaningful way for the profession. This extends to how dietitians are trained in therapeutic relationship development.

Furthermore in comparison to other healthcare disciplines like medicine,[31] application of psychology-based frameworks of therapeutic relationships to quantitatively assess the client-dietitian relationship (such as the 'therapeutic alliance') appear limited. One study published in 2018 conducted a secondary analysis of data from a randomised controlled trial, and aimed to explore whether therapeutic alliance with head and neck cancer patients improved after dietitians were trained in motivational interviewing.[87] Dietetic sessions were audio-recorded and the quality of the therapeutic alliance formed between the patient and dietitian was directly assessed using a psychotherapy-based tool, the Agnew Relationship Measure.[88] This study demonstrates one instance of a psychotherapy-based measure being applied in dietetics, and was conducted by researchers from psychology rather than dietetics.[87] Although the direct application of these measures in dietetics seems limited, research shows that similar constructs as those captured in psychotherapy-based measures have been assessed in dietetic contexts. For example, a study by Parkin et al focused on agreement on decisions made in consultations between clients and dietitians, which reflect Bordin's therapeutic alliance elements (agreement on goals and tasks).[35, 89] Quantitative findings revealed that greater dietitian empathy was associated with greater agreement between dietitians and patients on decisions made in consultations. Although this study did not use a specific psychotherapy-based measure, it shows that similar constructs found to be important for therapeutic alliance have been measured in a dietetic context.[35, 89]

This section has provided an overview of research supporting the value of therapeutic relationships in healthcare, and specifically in dietetics. It has also briefly summarised findings from empirical literature within dietetics and highlighted where gaps exist in the research on this topic. In light of this, the following section outlines the nature of the problem that this thesis addresses, identifies the significance of this research and provides an overview of the thesis structure.

1.6 Thesis Overview

So far this chapter has described important background information to provide a context for understanding why the research presented in this thesis is needed. The current section will integrate this information to identify the research gap that this thesis addresses.

1.6.1 The nature of the problem

From a psychotherapy perspective, Horvath explains that the 'larger context of the research on the therapeutic relationship is the overarching goal of understanding how therapy works'.[34] With this in mind, the nature of the problem this thesis addresses is better understanding how clinical dietetic practice works, and in particular exploring this through the therapeutic relationship between a client and dietitian. Findings from psychotherapy research cement the need to explore this via the therapeutic relationship, as meta-analyses have shown that the quality of the therapeutic alliance (a component of the therapeutic relationship) positively influences clients' health outcomes.[36] Hence there is consistent evidence to suggest that the quality of the relationship between a client and therapist contributes somewhat to the client's ability to achieve favourable outcomes. These findings have provided some explanation as to 'what works' in psychotherapy and hence support the need to further investigate the nature of this relationship in clinical dietetic practice and how it might contribute to our understanding of how clinical dietetics 'works'.

Furthermore dietitians are experts in food and nutrition and play a crucial role in healthcare. Part of their role includes interacting with individual clients for the prevention and treatment of diet-related health conditions.[7] Over recent decades, the profession of dietetics has grown and evolved.[14] Today dietetics is recognised for not only the nutrition science that underpins it, but also for the dietitian's skills in meaningfully engaging with their client to ensure the 'science' is effectively translated.[8] Part of this

focus comes from the unique nature of a dietetic consultation, where the complexities around food and eating behaviour are central. Simply relaying nutrition science information is not sufficient to enact positive change in clients, and dietitians require skills in interacting, understanding client's perspectives and then empowering their clients to make meaningful change.[90] Thus the problem this thesis addresses does not focus on the nutrition science that underpins dietetics, but instead focuses on understanding more about the 'art' of dietetics. That is, how dietitians and clients can interact as part of the consultation process to ensure nutrition science information is meaningfully translated for positive change.

1.6.2 Research significance

The broader significance of this thesis as a complete body of work is that it contributes to the growing knowledge base around how dietitians can deliver patient-centred care. It does so by focusing on a particular component of patient-centred care, being the therapeutic relationship between clients and dietitians. This is important because the benefits of patient-centred healthcare have been described at both individual and organisational levels. Patient-centred care is now a recognised priority for healthcare both within Australia and across the globe, and this thesis therefore aligns with global healthcare priorities.[20, 21]

Prior to this research being conducted, there was limited work that looked at the concept of the therapeutic relationship in dietetics comprehensively. This thesis was designed to contribute new knowledge in this area, and more specifically to look at the therapeutic relationship across three areas of dietetics: clinical practice (Study 1), education and training (Study 2), and empirical literature (Study 3). The significance of the findings from each study are discussed in more detail within the relevant chapter. However as a complete body of work, the significance of this thesis is also that its design provides a strong foundation for further research in this area. The conceptual model of therapeutic relationship development formed in Study 1 is the first known model to detail meaningful processes underpinning the therapeutic relationship in dietetics and to articulate what this actually looks like in practice. It is anticipated that this will allow for further refinement and testing of this model within other types of care settings (e.g. acute care), and ultimately contribute to a richer understanding of the therapeutic relationship across clinical dietetic practice. The design of this thesis enabled the conceptual model to then be applied in Study 2 to explore how therapeutic relationship development is expressed within the

Australian dietetics curriculum. Using the conceptual model in this way allowed for a richer analysis of the curriculum, as it provided a way to understand what components of the curriculum corresponded with therapeutic relationship development.

1.6.3 Arrangement of chapters

The overarching aim of this thesis was to investigate the phenomenon of the therapeutic relationship between a client and dietitian. The specific aims and research questions for each of the three studies are identified and explained in Chapter 2. An overview of each chapter is provided below.

Chapter 1:

The opening chapter provides an introduction to the problem being investigated within this thesis. It begins with an explanation of the researcher's personal impetus to investigate the problem, followed by a description of key background information relevant to the thesis topic. This includes the profession of dietetics and how it has evolved in Australia, the shift towards patient-centred care in global healthcare, and the value of the therapeutic relationship across healthcare disciplines. It concludes with an explanation of the nature of the problem addressed and the significance of the thesis.

Chapter 2:

Following on from the introductory chapter, the second chapter explains how qualitative inquiry was utilised as the methodological approach underpinning this thesis. This chapter then describes and explains client-centred therapy and role theory as theoretical frameworks guiding the thesis design, and data collection and analysis. This chapter concludes by rationalising why and how an exploratory multimethod design was used to address the overarching aim of this thesis, and the specific methods used to address each study aim.

Chapter 3:

The third chapter describes findings from the first research study that explored Australian dietitians' perspectives of how they develop therapeutic relationships with clients in a free-living context (i.e., not in hospital) (Study 1). This study focused particularly on therapeutic relationship development within chronic disease management and was guided by a constructivist grounded theory approach. The key

finding from this study was the development of a conceptual model of relationship development that identified meaningful processes underlying therapeutic relationship development in clinical dietetic practice. This conceptual model was used to guide the analysis of related curriculum documentation described in Chapter 4.

The findings reported in Chapter 3 have been published in the journal of the authoritive dietetics body in Australia, *Dietitians Australia*:

Nagy A, McMahon AT, Tapsell L, Deane F. Developing meaningful client-dietitian relationships in the chronic disease context: An exploration of dietitians' perspectives. *Nutrition & Dietetics* 2019; 77: 529-541.

Chapter 4:

The fourth chapter describes findings from the second research study that explored the therapeutic relationship within the context of the education and training undertaken by informants from Study 1 and Australian dietitians more broadly (Study 2). This study investigated how the therapeutic relationship between a client and dietitian is expressed and addressed in curriculum documentation of Australian dietetics education programs, and explored program coordinators' perspectives of this description as well as their perceptions of how relationship development is being taught. Data analysis was guided by the conceptual model of relationship development formed in Study 1. The key finding from this study was the variability in how the therapeutic relationship appears to be expressed in subject outlines.

The findings reported in Chapter 4 have been published in the journal of the authoritive dietetics body in Australia, *Dietitians Australia*:

Nagy A, McMahon AT, Tapsell L, Deane F. How is the client-dietitian relationship embedded in the professional education of dietitians? An analysis of curriculum documentation and program coordinators' perspectives in Australia. *Nutrition & Dietetics* 2021; 78: 218-231.

Chapter 5:

The fifth chapter describes findings from the third research study that provided a comprehensive overview of the topic of the therapeutic relationship between clients and dietitians in the individual

counselling context by summarising empirical literature into qualitative themes (Study 3). Given the findings from the first and second research studies, an integrative literature review was conducted to provide clarity around where further research on the therapeutic relationship in dietetics is needed. This study was also undertaken to broaden the scope of understanding more generally given the first and second research studies were centred on the Australian context. Observational studies that assess the extent to which the therapeutic relationship might account for client's health outcomes specific to dietetic interventions were identified as a clear area for further research.

The findings reported in Chapter 5 have been published in the journal of the authoritive dietetics body in Australia, *Dietitians Australia*:

Nagy A, McMahon AT, Tapsell L, Deane F. The therapeutic relationship between a client and dietitian: A systematic integrative review of empirical literature. *Nutrition & Dietetics* 2022; 1-46. (Early View)

Chapter 6:

The final chapter of this thesis draws upon the findings and conclusions made from each of the three research studies (Studies 1-3) to make recommendations for clinical dietetic practice, education and training, and further research. It begins by summarising key findings before identifying key recommendations for the dietetic profession.

CHAPTER TWO: Methodology, Methods & Thesis Design

2.1 Prologue

Following on from the introductory chapter, this chapter explains and justifies the design of this thesis to address the research aim of investigating the phenomenon of the therapeutic relationship between a client and dietitian. In doing so, it firstly examines the methodological approaches that have underpinned this thesis. This is followed by an explanation of theoretical frameworks that have guided the three research studies in different ways and an explanation of the overall thesis design. The chapter is completed with a description of the methods used and discussion of their suitability for addressing each study aim.

2.2 Methodological Approach

2.2.1 What is a methodology?

The term 'methodology' can be understood as the theoretical basis of a research approach. A methodology offers a way of thinking that shapes the research design and justifies the use of particular methods, explaining why the research was conducted in a certain way.[91] Birks & Mills describe a 'fluid interplay' between the methodology and method, whereby the methodological framework and its philosophical assumptions shape how the researcher collects and analyses data (Figure 2.1).[92] Having an understanding of the methodology is important in being able to understand the research process, rather than simply the research outcomes.[93] Therefore understanding the methodology underpinning this thesis is important in understanding key findings. The following sections will explain the methodological and philosophical approaches of the research reported within this thesis for the purpose of providing clarity around the research process. The methods applied will be explained later in this chapter (see Section 2.5).

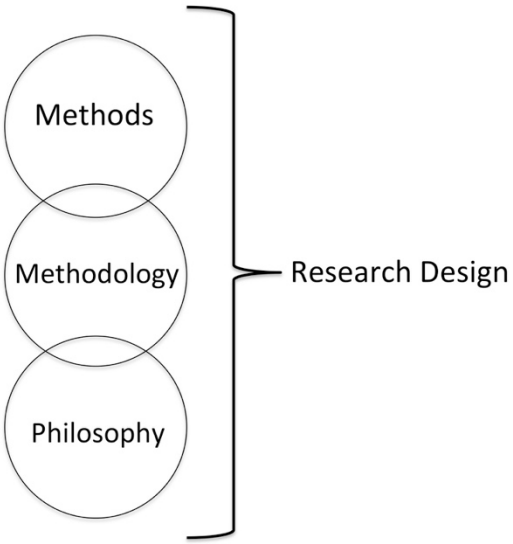

Figure 2.1 Schematic demonstrating the interplay between the philosophy, methodology and methods that contribute to the overall research design, as published by Birks & Mills[92]

2.2.2 Qualitative Inquiry

Qualitative inquiry was chosen as the overarching methodology to investigate the phenomenon of the therapeutic relationship between a client and dietitian. Denzin & Lincoln acknowledge the difficulty in clearly defining qualitative research as they recognise it as a style of inquiry not bound by a particular theory, paradigm or set of methods.[94] Swift & Tischler build on this by suggesting that qualitative research can be considered as an 'umbrella term' because it embodies diverse practices that have been established across a range of disciplines, such as anthropology and sociology.[95] However the essence of this type of research is captured in Denzin & Lincoln's description of the term 'qualitative', that it infers 'an emphasis on the qualities of processes and meanings that are not experimentally measured in terms of quantity, amount, intensity, or frequency'.[94] Thus qualitative inquiry can be understood as focused on process and meaning, rather than quantitative measures.

Four types of philosophical assumptions are described as underpinning qualitative inquiry:[96]

1) *Ontological* – 'the nature of reality'; that is whether reality is seen as one true reality or the existence of multiple realities;
2) *Epistemological* – 'what counts as knowledge and how knowledge claims are justified'; that is whether knowledge is considered subjective or objective;
3) *Axiological* – 'the role of values in research'; that is how the researcher's

values and bias brought to the research process are acknowledged and;

4) *Methodological* – 'the process of research'; that is how research procedures occur, including how context is considered and whether it applies an inductive or deductive approach.

Comprehension of these philosophical assumptions and how they underpin qualitative inquiry is important in understanding the methods and key findings reported in this thesis. Creswell's description of qualitative research from a constructivist lens applies to this thesis.[96] He has described this style of inquiry as assuming multiple realities (a relativist ontological position) and that through doing so, researchers can embrace and champion diverse realities in their work. Within people-based research, this constructivist approach recognises knowledge as subjective (that is based on personal beliefs and emotions) and as co-created between the researcher and participant (a subjectivist epistemology).[96] In addition, the values and bias of the researcher are honoured and embedded within the research process (axiological), and an inductive logic is applied (that is 'from the ground up'). This means that emergent ideas are valued, instead of being pre-determined by an existing theory.[94, 96]

The research presented in this thesis is highly exploratory. Exploratory research is recognised as an appropriate starting point to explore a valuable phenomenon where limited research on the topic exists and consequently little is understood.[97] As explained in Chapter 1, there is limited understanding of the therapeutic relationship between a client and dietitian in the literature and specifically of meaningful processes that underpin this relationship. The exploratory nature of this research was conducive to a qualitative approach being applied, as a qualitative approach is able to explain processes and actions (that is, 'how'), as opposed to quantity or frequency. A quantitative approach would be insufficient in providing the same degree of rich meaning needed to better understand the underlying actions and processes of the client-dietitian relationship and advance existing knowledge. By focusing on the process of therapeutic relationship development, this thesis provides a richer explanation as to how the therapeutic relationship might exist in a dietetic context. The use of a qualitative, exploratory approach within this thesis is explained in more detail in Section 2.4. Furthermore, looking at this relationship is a way of focusing on human behaviour in a particular therapeutic context, and the value of qualitative inquiry to dietetics for explaining how and why people might behave in particular ways is recognised.[95]

Swift & Tischler articulate this further by directly acknowledging the suitability of qualitative inquiry for investigating human relationships.[95] Hence the use of qualitative inquiry to unveil valuable explanations of processes supporting therapeutic relationships between clients and dietitians is well supported.

2.2.3 Constructivist Grounded Theory

Grounded theory is a particular approach to qualitative inquiry that is recognised as both a methodology and method.[92] For this reason its methodological influence in the first line of inquiry (Study 1) will be explained here, and the rationale for applying its methods will be explained within Section 2.5 of this chapter. Grounded theory differs from more simply applied qualitative approaches as it moves beyond description to instead produce levels of abstract meaning that 'explain processes associated with a phenomenon'.[92, 98] This explanation, or 'theory', is ultimately grounded in the data, as particular inductive methods are applied to focus on generating new understandings from collected data rather than testing pre-existing theory. Such methods include collecting additional data to refine questions arising from the emerging analysis which provides a point of difference from other qualitative methods.[98]

Grounded theory was chosen for this research because of its ability to explain, and provide meaningful insight into 'what is going on' within a particular phenomenon.[98] The value of grounded theory for the research problem addressed in this thesis is that it allows for findings to move beyond simple description. Instead this methodology generates levels of abstract meaning which is what is required to begin to advance knowledge of therapeutic relationships in dietetics.[92] For example, within this thesis this has meant going beyond simply identifying 'empathy' as important for relationship development and looking at more abstract processes of which empathy might form a part of. Little is known about these underlying processes and actions of the client-dietitian relationship and hence this methodology was required. Thus grounded theory was used in the first line of inquiry (Study 1) to address knowledge around meaningful articulation of the process of therapeutic relationship development between a client and dietitian.

A full explanation of the history of grounded theory is not within the scope of this thesis, however as background, notably the first writings on this approach date back to 1967 when Anselm Strauss and Barney Glaser published their work 'The discovery of grounded theory'.[92] Since then grounded theory has evolved to take on many different philosophical and methodological positions and several grounded

theorists have published their own interpretations.[92] In 2006 Charmaz published flexible guidelines to her constructivist interpretation of grounded theory. These were used in Study 1 of this thesis as they were congruent with the ontological and epistemological positions of the researcher [AN], namely that multiple realities exist and knowledge is subjective.[98] Charmaz's interpretation differs from the more positivist approach of Glaser & Strauss by acknowledging the influence of the researcher and their interaction with study participants on the research process and theory generation.[92, 98] Charmaz writes that we 'construct our grounded theories through our past and present involvements and interactions with people, perspectives and research practices'.[98] Therefore in contrast to Glaser & Strauss, Charmaz suggests that grounded theories offer 'an interpretive portrayal of the studied world, not an exact picture of it'. This means that the generated theory is recognised as being context specific, that is dependent on the researcher's and study participants' perspectives, and their interaction with each other.[98] Hence Charmaz's constructivist approach to grounded theory reflects the position taken in this thesis as findings are acknowledged as an interpretation of the client-dietitian relationship that is specific to the researchers and participants involved. More detailed explanation of the application of constructivist grounded theory is provided within Chapter 3.

An investigation of process and the need to focus on action within a particular phenomenon is also emphasised by Charmaz's interpretation of grounded theory.[98] Process is described as the linkage of single events that leads to change, and the process of how a dietitian forms and maintains a therapeutic relationship was the focus of Study 1.[98] Current literature identifies attributes and techniques important for therapeutic relationship development, such as the dietitian's empathy, however it does not recognise other meaningful processes that might underpin relationship development.[30] Thus the emphasis that Charmaz's interpretation of grounded theory places on action in order to explain process appeared particularly suited to the first line of inquiry because this study focused on meaningful actions and processes underpinning therapeutic relationship development from the dietitian's perspective (Study 1, Chapter 3).[98] The next section explains how theoretical frameworks from psychology, sociology and anthropology guided the design of research studies conducted within this thesis and assisted in illuminating findings (Section 2.3).

2.3 Theoretical Approach

2.3.1 What is 'theory'?

In contrast to 'methodology' which specifically refers to the theoretical basis of research, 'theory' more broadly concerns ideas with explanatory power.[99] It is recognised as being integral to healthcare research, as exemplified by Collins & Stockton who state that 'theory-free research does not exist'.[99, 100] In particular, the important role of theory in qualitative inquiry is acknowledged.[99, 101] How theory can be applied in qualitative research varies, from providing structure to guide a study, to providing different lenses through which data can be focused on.[99, 101] A theoretical framework is defined as the use of theory to provide 'an explanation of the way things work', in an attempt to understand particular phenomena.[99] A theoretical framework channels underlying values held by the researcher whilst also providing a clear lens for how new knowledge can be understood.[99] An explanation of how theory and corresponding theoretical frameworks have been applied to shape the design of this thesis and assist in illuminating research findings will be explained in the following sections.

2.3.2 Client-Centred Therapy

The notion of a therapeutic relationship existing between client and health practitioner is acknowledged as originating from the psychology discipline.[102] The Australian Psychological Society describes psychology as a science that is committed to understanding 'how people think, feel, behave and learn' through studying 'the human mind and its wide-ranging functions and influences'.[103] Part of this includes studying the relationships between people, and in particular the relationship between a client and their therapist. Many theorists from different theoretical positions have proposed mechanisms to explain this phenomenon.[102] An in-depth review of theories pertaining to the therapeutic relationship is not within the scope of this thesis, however some of the first writings on this topic are described from the psychoanalytic approaches of Sigmund Freud around the early 1900s. Freud explained 'transference' in the therapeutic relationship, which is defined as the redirection of the client's feelings for a significant other toward their therapist (often from childhood).[102] By the 1950s and 1960s theorists had begun exploring other aspects of the client-therapist relationship, demonstrating a clear interest in understanding the therapeutic relationship within the field of psychology during the 20th century.

An important and novel area of work was conducted by psychologist Carl Rogers around this time, who articulated a different theoretical approach to therapy known as 'client-centred therapy'.[23] Later referred to as 'person-centred therapy', Rogers described his approach as being centred on perceptions of the worth and significance of others.[23] This is reflected in the key tenet that the client's expertise in their own life is valued and respected. How this theoretical approach to therapy is operationalised in practice has evolved, however ultimately it encompasses the creation of a client-driven environment that enables the client to communicate their thoughts and feelings free of judgement.[23] Three key facilitators of client-centred therapy have been identified for therapists (incorporating clients' perceptions of these):[23, 102]

1) *Empathic understanding:* Therapists demonstrate sensitive awareness of the nuanced thoughts and feelings of the client, and thoughtfully convey their own understanding back to the client;
2) *Transparency:* Therapists are transparent and genuine about what they think and feel of the client and therapeutic process and;
3) *Unconditional positive regard:* Therapists convey to the client that they are valued as a person.

For the purpose of providing theoretical guidance to this research, Rogers' client-centred therapy has been most influential. It is recognised as being responsible for the majority of the attention on the therapeutic relationship throughout healthcare research, as Rogers himself described it as an 'approach to human relationships'.[23, 102] Thus client-centered therapy can be recognised as a theoretical position towards healthcare that prioritises and values the therapeutic relationship, and has therefore been critical in informing the focus and design of this thesis (Figure 2.2). In addition, Rogers' theoretical position has gathered momentum over recent decades as a valuable approach to healthcare practice.[23] Accordingly, a change in attitude towards healthcare delivery has seen a shift from a practitioner-driven biomedical model of care, to one that is client-driven (and commonly referred to as 'patient-centred'). In Australia, the need to deliver care that is client-centred has been increasingly acknowledged and is now integrated within national health policy documents and best-practice guidelines, including those within dietetics.[20, 26] A client-centred approach therefore seems fundamental to healthcare delivery in Australia, exemplifying that the theoretical underpinning of this thesis is cemented in a highly-valued healthcare

paradigm.

Client-centred therapy provides a way of looking at and understanding the relationship between a client and dietitian, and it is in this way that client-centred therapy has informed this thesis. Applying a lens that is shaped by Rogers' theoretical position to counseling has meant that this research values the client as an active and key player in their own healthcare, and seeks to explore the relationship between a client and dietitian in a way that honours this.[23] As a result the client-dietitian relationship is viewed as a 'two-way interchange' with an equal power-balance, and the result of combined thoughts, feelings and actions from both parties.[102] This is in contrast to a relationship that may be dominated by the dietitian, and consequently only addresses the dietitian's needs. Language has been carefully considered throughout this thesis to honour the perspective that the client should have an active role in their healthcare. For this reason, particular words and phrases were purposefully used over others. Rogers used 'client' in place of 'patient' to depict a more equal relationship between client and therapist, compared to a relationship where a therapist is seen to treat a 'patient' and therefore the patient has a more passive role.[23] It is for this reason that 'client' has been used throughout this thesis. In the same way, 'client-dietitian relationship' has been used to refer to the therapeutic relationship between a client and dietitian, where 'client' purposefully precedes 'dietitian'. This intentional ordering of words is to emphasise that the interaction between client and dietitian is centred on the client.

2.3.3 Role Theory

Human interaction is at the core of the problem being investigated within this thesis, specifically the interaction between a client and dietitian for a therapeutic purpose. Hence theoretical approaches that attempt to explain human interaction have been particularly influential in guiding this research and provide a lens to which findings can be understood more clearly. Such approaches have been articulated within the social sciences, a particular area of science that explores human society including interpersonal relationships. Most influential to this thesis has been role theory, described as having 'evolved gradually' across the sociology, social psychology and anthropology disciplines during the 1920s and 1930s.[104] Within sociology in particular, this approach is recognised as having come from a shift in focus from studying the macrostructures and processes of society to the interactions between individuals.[105]

Described as the study of 'roles or patterns of behaviour that are characteristic of persons or context', role theory addresses 'sociological problems of human interaction' and has provided a lens for which the client-dietitian relationship has been viewed through within this thesis.[104] Biddle identified three basic constructs of role theory: 1) roles, described as patterned and characteristic behaviours, 2) social positions, described as identities assumed by social participants and 3) expectations for behaviour which are understood by all.[104] Thus role theory views human interaction as individuals acting out particular roles related to their social position or 'status', and acknowledges that these roles encompass expected behaviours. Biddle also clarifies the importance of context, recognising role behaviours as 'contextually bound'.[104]

Role theory has provided a framework for which the client-dietitian relationship can be understood in a unique, yet critical and theoretically-bound way.[106] This framework has enabled the client-dietitian relationship to be viewed as the intersection of two roles (that is 'client' and 'dietitian') within a specific context. Framing the client-dietitian relationship in this way has acknowledged that when the client and dietitian interact, they may be acting within particular roles and that their behaviour reflects these roles. This theoretical approach has assisted in clarifying and explaining possible processes underpinning the client-dietitian relationship, that is moving beyond descriptions of behaviour to a more critical analysis of how and why clients and dietitians might behave in particular ways when they interact. Additionally, viewing the client-dietitian relationship through a role framework has emphasised the specific context that this relationship exists in, that is a professional healthcare context driven by therapeutic purpose. This means that the client and dietitian are interacting for the specific purpose of facilitating a beneficial influence on the client's health. Acknowledging this context has exposed the client-dietitian relationship as a dynamic interaction between two complementary roles that are both required for a therapeutic purpose to be fulfilled.

Role theory is well-placed to be applied within a dietetic context due to its noted influence in other helping professions, particularly those within healthcare.[104] Research from psychology, psychiatry and pharmacy has recognised the value of applying role theory to investigate the therapeutic relationship from a richer, and more critical lens.[106-108] Ivey & Robin[107] identify role theory as providing an 'important theoretical base' to study psychological counseling, whilst Guirguis & Chewning[106] highlight the

applicability of role theory in studying client-pharmacist interactions. Role theory is described as making 'intuitive sense' by Guirguis & Chewning[106] who identified a pharmacist's role being highly ritualistic with clear role behaviours defined. These include informing the client about their medication and answering the client's questions. Similarly as part of providing a service, dietitians are required to enact key professional tasks such as conducting a nutrition assessment and providing education, suggesting that dietitians engaging in patient care might also enact ritualistic role behaviours. These commonalities in the nature of healthcare delivery across disciplines highlight the applicability and value of applying role theory in a dietetic context to guide the investigation of therapeutic relationships. In addition, Guirguis & Chewning[106] identify a strength of role theory as assuming the interaction is shaped by the active participation of both parties, and thus reflects similar values to Roger's client-centred therapy[23] described previously. With these theoretical positions in mind, the next section explains the multimethod design of this thesis and identifies the specific aims of each research study.

2.4 Thesis Design

2.4.1 An exploratory multimethod design

The comparative wealth of research conducted in other healthcare disciplines that has focused on understanding the therapeutic relationship has highlighted the limited knowledge of therapeutic relationships within dietetics. This has exposed a vast area of possible research avenues and highlighted a need for appropriate exploratory research that can begin to facilitate a more critical understanding of the client-dietitian relationship. The research conducted as part of this thesis has therefore been purposefully considered in terms of knowledge that would be useful in contributing to a richer understanding of the client-dietitian relationship.

The social nature of the research problem investigated within this thesis, being one that focuses on more clearly articulating a particular type of human interaction, and not underpinned by significant literary understanding, has meant that this research is highly exploratory. Where little is understood, exploratory research is seen to be an appropriate starting point to explore a valuable phenomenon.[97] In contrast to confirmatory research, this type of research does not aim to establish conclusive evidence, instead

exploratory research aims to 'explore' an under-researched area and provide insights into the phenomenon of interest.[109-111] In doing so, Babbie[112] and Mason et al[109] describe exploratory research as generating new understanding, assisting with developing more clearly defined concepts, and establishing a footing for which further research can be conducted from. Thus utilising an exploratory approach was most appropriate in gaining a better understanding of the therapeutic relationship between a client and dietitian.

To apply an exploratory approach, a qualitatively driven multimethod sequential design was utilised as outlined by Hesse-Biber, Rodriguez & Frost.[113] This means that qualitative studies were sequentially conducted to address a 'common overall research goal' that was to investigate the phenomenon of the therapeutic relationship between a client and dietitian.[113] A multimethod research design is recognised as being particularly suited to investigating under-researched areas and therefore is appropriate for conducting exploratory research.[113] To clarify the distinction between 'multimethod research' and 'mixed methods research', Fetters & Molina-Azorin explain that multimethod research refers to 'all the various combinations of methods that include in a substantive way more than one data collection procedure'.[114] They specify that this can include a combination of either exclusive qualitative or quantitative methods, or that it can also include a combination of both qualitative and quantitative methods.[114] For the purpose of clarity within this thesis, utilising both qualitative and quantitative methods is referred to as 'mixed methods research', where mixed methods research is identified as a type of multimethod research. As the research reported in this thesis utilised qualitative methods only, this thesis has employed a qualitatively driven multimethod design.

Hesse-Biber, Rodriguez & Frost acknowledge the potential for this type of research design to develop our understanding of human behaviour and relationships.[113] They describe this potential resting in the ability of the design to recognise and articulate intricate detail, allowing for a more comprehensive understanding of the 'multiple layers' of a phenomenon. In doing so, this research design is recognised as an appropriate means to answer complex social research questions, such as those pertaining to relationships between people. A qualitatively driven multimethod design is therefore well suited to the problem addressed in this thesis concerning therapeutic relationships because it is able to articulate detail amongst the complexity of particular social phenomenon, thus providing a clearer and richer

understanding.

How this multimethod design functions is explained by Hesse-Biber, Rodriguez & Frost in their textbook chapter on multimethod research.[113] It consists of several individual qualitative studies, that are considered as either the primary or secondary component. The primary qualitative component is conducted first as the driver of the secondary qualitative component and is therefore recognised as 'playing a greater role' in addressing the overall research aim. Each qualitative component usually includes different samples and data collection and analysis methods.[113] Figure 2.2 outlines how this design was applied within this thesis and depicts client-centered therapy and role theory as the theoretical frameworks underpinning the overarching thesis aim.

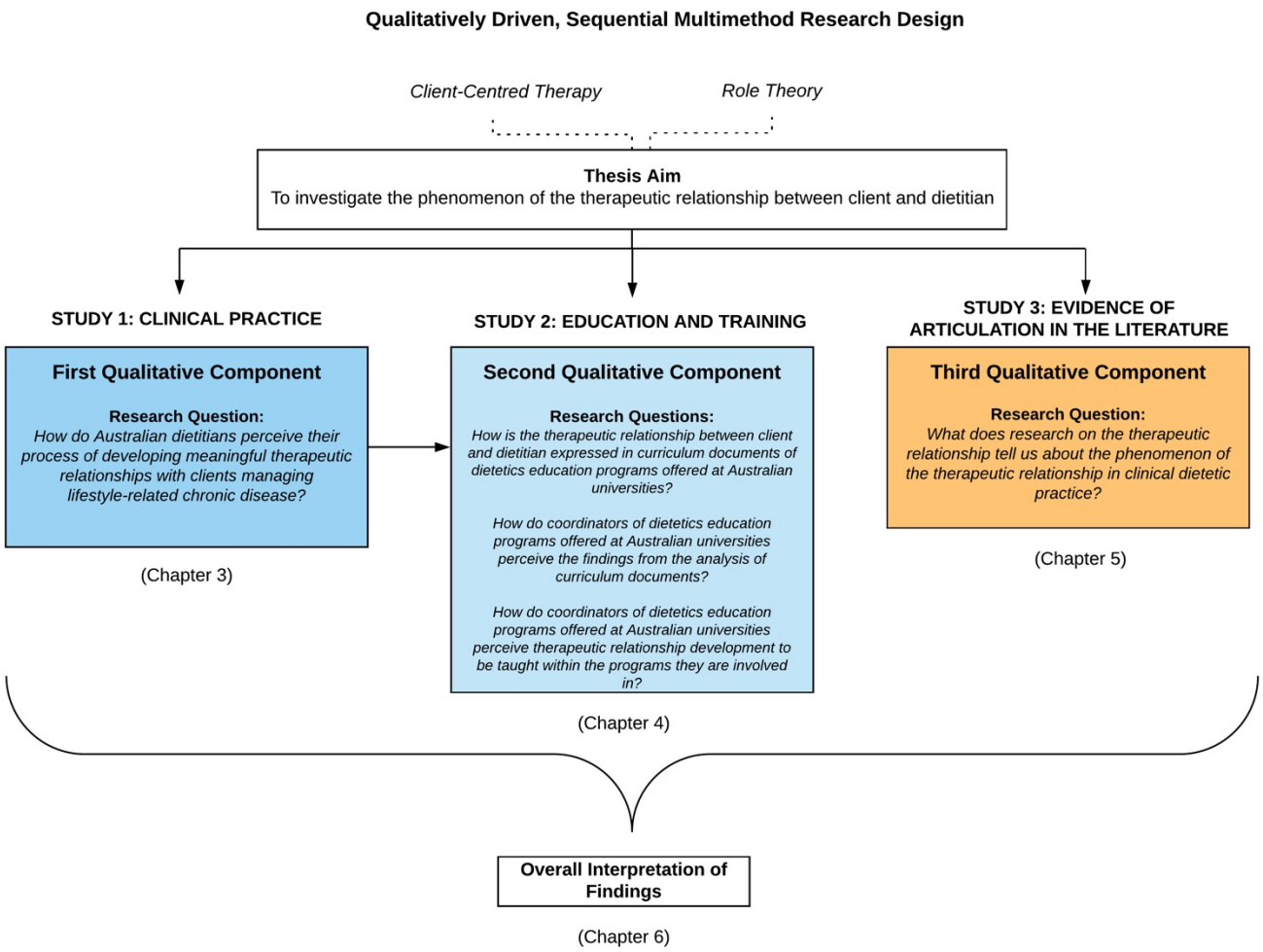

Figure 2.2 Schematic outlining the qualitatively driven sequential multimethod thesis design

The explorative nature of this research has meant that several different approaches have been drawn upon to address the overarching aim (Figure 2.2). Three discrete studies were conducted (Chapters 3-5), each addressing important questions pertaining to the therapeutic relationship between a client and dietitian. These research questions reflect key areas of knowledge and skill attainment for clinical dietitians, including clinical practice (Chapter 3), education and training (Chapter 4) and empirical literature (that is published studies) (Chapter 5). Given the limited research on therapeutic relationships within dietetics, these three areas were selected for the purpose of conducting problem-oriented exploratory research that would be useful for the profession in better understanding this relationship. That is, not just how the relationship might exist in clinical practice, but also how it might be part of dietitians' training and a focus of dietetics research. Findings from the three studies provide a strong foundation for the profession to gain a deeper understanding of the therapeutic relationship across several key areas of clinical dietetics, and a clear direction for future research.

Figure 2.2 depicts the purposeful sequencing of the three studies that make up this thesis. The first study on Australian dietitians' perspectives (Study 1) was guided by grounded theory methodology and focused on the process of relationship development. This study formed the primary qualitative component of the thesis because it produced a conceptual model of therapeutic relationship development that guided the subsequent analysis of related curriculum documents (Study 2, secondary qualitative component). The development of the conceptual model in Study 1 was crucial to Study 2 because limited evidence exists that explains in detail the process of relationship development. Thus no clear framework for what should be examined within curriculum documents existed. Therefore utilising the conceptual model from dietitians' perspectives ensured that an informed and thorough analysis of how the relationship was expressed and addressed in curriculum documents could be achieved.

The multimethod sequential design outlined by Hesse-Biber, Rodriguez & Frost[113] was adapted to include a third qualitative component that explored how the client-dietitian relationship is reported within empirical literature more globally (Study 3) (Figure 2.2). This integrative literature review was undertaken to confirm a potential knowledge gap around research on therapeutic relationships in dietetics, given the observations in the previous two studies. Addressing this knowledge gap is a crucial component of this thesis for assisting with beginning to understand the client-dietitian relationship and providing

clarity around where further research is needed. As the final research component of this thesis and as it focused on studies published globally, the integrative literature review also enabled the results of the first two studies to be considered in more general terms given their focus on dietetics in Australia.

As a methodological consideration of grounded theory, the integrative literature review (Study 3) was undertaken after the development of the conceptual model (Study 1) to minimise the influence of existing literature on the emerging model.[98] Classic grounded theorists have advocated for delaying the literature review until after a grounded theory analysis is completed. This is to ensure generation of an original theory and not one from preconceived ideas.[98] Charmaz acknowledges that this view is not shared by all grounded theorists and identifies some pitfalls in the practicalities of this classic grounded theory perspective.[98] For example and as in the case of this thesis, Charmaz recognises that student research projects require some understanding of the literature surrounding their topic, particularly when developing a research proposal.[98] The dispute around the role of literature reviews within grounded theory research has been carefully considered in the sequential design of this thesis. Thus it was recognised that some understanding of the literature would be necessary in planning this thesis, however a full integrative review may also impede the originality and innovation of the developed conceptual model (Study 1).

Finally, due to differences in individual study designs, integration of findings between studies is not required within a multimethod design.[115] Therefore data from each study was not integrated, but instead findings were described and discussed separately within each chapter. As outlined by Hesse-Biber, Rodriguez & Frost[113], Chapter 6 instead provides an overall interpretation of the findings that are presented separately within Chapters 3-5.

2.4.2 Research Aims

The overarching aim of this thesis was to investigate the phenomenon of the therapeutic relationship between a client and dietitian. The aims, methods and findings of each study are explained in more detail in Chapters 3-5, however for clarity an outline of the study aims and how each aim was addressed is provided in Table 2.1.

Table 2.1 Outline of aims, sampling and data collection and analysis methods for Studies 1, 2 and 3

Study	Aims	Sampling	Data Collection	Data Analysis
Study 1 (Chapter 3)	To explore dietitians' perspectives of how they develop meaningful therapeutic relationships with clients in the context of lifestyle-related chronic disease management	Three stages: 1. *Purposive approach to initial sampling* (qualified dietitians working in Australia managing adult clients regarding lifestyle-related chronic diseases within the free-living environment) 2. *Snowball sampling* (recruiting contacts of existing study participants) 3. *Theoretical sampling* (a grounded theory technique used to clarify arising questions from concurrent data analysis)[98]	Concurrent data collection and analysis as part of a constructivist grounded theory approach, applying key methods: initial, focused and theoretical coding, memo writing, constant comparative analysis, theoretical saturation and theoretical integration (see Table 2.2).[98] Data collected from individual semi-structured interviews (telephone or videoconference). Interview guide developed incorporating open-ended questions that focused on key elements that supported positive and negative interactions with clients and particular skills or techniques used by the dietitian to support relationship development.	
Study 2 (Chapter 4)	1) To describe how the therapeutic relationship between a client and dietitian is expressed and addressed in curriculum documents of dietetics education programs offered at Australian universities 2) To explore program coordinators' perspectives of findings from the analysis of curriculum documents and how client-dietitian relationship development is taught with their respective dietetics education programs	Purposive sampling (coordinators of accredited dietetics education programs in Australia)	Two sources of data used: Aim 1 - *Curriculum documents* (subject outlines) Aim 2 - *Telephone semi-structured interviews* with coordinators of dietetics education programs Interview questions focused on programs coordinators' perspectives of findings from the analysis of curriculum documents (e.g. initial thoughts, findings that stood out to them and if they had concerns) and where they perceived teaching to occur within their program (Aim 2)	Two styles of thematic analysis applied (guided by approach described by Braun and Clarke):[116] Aim 1 – Deductive approach utilising a pre-existing coding framework (see Table 4.1) Aim 2 – Inductive approach

Study 3 (Chapter 5)	To provide a comprehensive overview of the topic of the therapeutic relationship between clients and dietitians in the individual counselling context by summarising empirical literature into qualitative themes	Not applicable	Guided by Whittemore & Knafl:[117] Systematic electronic literature search conducted Data systematically extracted (study authors, year, country, study design and aim, inclusion criteria, sample, data collection and analysis methods, findings concerning therapeutic relationship or associated terms) Methodological quality of studies appraised using the Mixed Methods Appraisal Tool[118]	Descriptive qualitative approach as guided by Whittemore & Knafl[117] involving an iterative process of qualitatively coding, categorising and comparing data

Note: Research methods are explained in detail in the corresponding chapter for each research study (Chapters 3-5)

2.5 Methods for Collecting and Analysing Data

2.5.1 What are methods?

In contrast to a methodology which provides the theoretical basis of a study design, 'methods' are the practical techniques undertaken to conduct the research.[91] This section explains the rationale for utilising particular methods to collect and analyse data within each study conducted as part of this thesis. Different methods were applied within each study to collect and analyse data and a full description of these is provided in each relevant chapter (Chapters 3-5).

2.5.2 Methods applied within Study 1

As mentioned previously, grounded theory is identified as both a methodology and method (Section 2.2)[98]. This section explains grounded theory as a method used to collect and analyse data on dietitians' perspectives of how they develop therapeutic relationships with clients (Study 1). Grounded theory consists of several key techniques and how they are applied can vary depending on the particular grounded theory approach and its philosophical and methodological position.[92, 98] Grounded theory methods are described as non-linear, that is they do not progress linearly from sampling and data collection through to data analysis. Instead, these methods are part of an iterative process where data is concurrently collected, analysed and compared to inductively generate an explanation of the studied phenomenon.[92, 98] Figure 2.3 has been adapted from Birks & Mills[92] and depicts how these methods work together, driven by the use of memo writing, to generate data and refine the emerging analysis. For clarity, the methods that have guided Study 1 as part of a constructivist interpretation of grounded theory have been outlined in Table 2.2.[92, 98] As explained in Section 2.2, these methods have enabled a focus on action that has been particularly useful in articulating detailed and abstract processes that underpin the therapeutic relationship between client and dietitian.

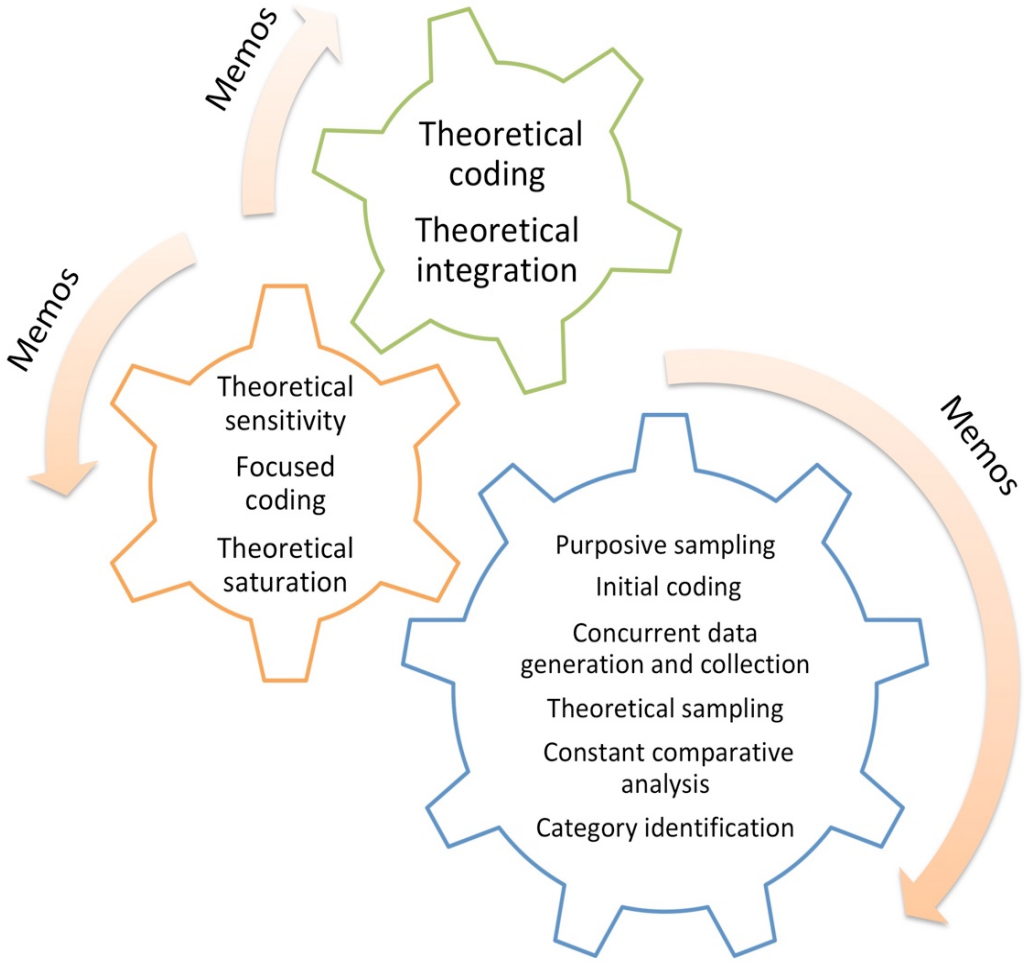

Figure 2.3 Schematic outlining the interaction between key grounded theory methods adapted from Birks & Mills[92]

Table 2.2 Explanations of key constructivist grounded theory methods as adapted from Birks and Mills[92]

Method	Explanation
Coding:	Defining what is seen in the data and labelling the data with descriptions that reflect the research question
1. Initial coding	First phase of coding where each word, line or segment of data is described
2. Focused coding	Second phase of coding that uses the most significant or frequent initial codes to sort, synthesise, integrate and organise larger amounts of data
3. Theoretical coding	Final phase of coding that articulates abstract relationships between categories developed throughout focused coding in order to explain process or action
Concurrent data collection and analysis	Data collection and analysis occur simultaneously, where the emerging analysis drives the direction of further data collection
Memo writing	A technique used throughout the research process to explore and document emerging thoughts and ideas about the data using informal writing
Theoretical sampling	A type of sampling that targets a particular sample to further develop, illuminate and define theoretical categories as part of the emerging analysis (as a result of concurrent data collection and analysis)
Constant comparative analysis	The inductive process of comparing levels of data throughout data collection and analysis to drive the emerging analysis (for example comparing codes to codes, codes to categories, categories to categories).
Theoretical saturation	The point at which it is identified that no further analytical insights would be gained from gathering more data
Theoretical integration	Developing the final grounded theory from the abstractions developed through theoretical coding

Charmaz acknowledges that a variety of data collection strategies can be used within a grounded theory approach.[98] Study 1 utilised one-on-one semi-structured interviews that were conducted by either telephone or videoconference. Robson's guide for selecting data collection techniques states that 'to find out what they think, feel or believe, use interviews', therefore interviews were identified as the most appropriate method to explore dietitians' perspectives of therapeutic relationship development.[119] Furthermore interviews are recognised as a useful method for collecting data within qualitative research, and acknowledged as being particularly suited to grounded theory research.[98, 120] This is because as a

directed conversation between two people, interviews enable deep exploration where interviewers can 'go beneath the surface' of a particular topic or experience.[98] In addition and through a constructivist lens, interviews are also seen as a construction of a reality between people.[98] As a result, Charmaz acknowledges that in comparison to other data collection strategies, interviews allow for researchers to have greater control over the construction of data as they guide the conversation. This provides researchers with more analytic control over the collected data and interviews are therefore recognised as being particularly suited to a grounded theory approach.[98]

Interviews vary in their structure, ranging from being highly structured to unstructured.[98, 120] This refers to the degree of flexibility within an interview, including how the questions are phrased, the order they are asked in, and how flexible the interviewer can be in exploring leads. Semi-structured interviews exist at the middle of this structure continuum and were utilised within Study 1.[120] This was because key questions could be asked, whilst also allowing for flexibility in the order and phrasing of questions, and the exploration of important leads.[120] Being able to explore interesting leads whilst also ensuring rich data is collected from key questions is important for grounded theory research and thus semi-structured interviews were particularly suitable.[98] Furthermore, limitations of using telephone and online videoconferencing mediums over face-to-face interviews have been acknowledged, such as missing important non-verbal cues.[92] However utilising these mediums was crucial for collecting important data from dietitians across Australia, including regional and remote areas, within the timeline and budget allocated. Thus interviews via telephone and online videoconferencing was selected as a method to gather data most effectively.

Participants were recruited using three different sampling strategies that aligned with Charmaz's constructivist grounded theory approach.[98] A variety of sampling strategies were applied to assist with data generation and ensure completeness of findings. The first strategy took a purposive approach where initial sampling was used to identify participants who could provide insight into the topic being studied (that is, dietitians' perspectives of relationship development with adult clients managing lifestyle-related chronic diseases in the free-living environment).[92] This inclusion criteria was purposely kept broad given the highly exploratory nature of the research, and so as not to limit potential findings. For example, the dietitian's years of experience was not specified within the inclusion and exclusion criteria. This was

because there is limited empirical evidence to support that a dietitian's skill in relationship development is influenced by the amount of experience they have. Additional participants were recruited via a snowball sampling technique, where study participants identified colleagues who met the inclusion criteria and were interested in participating.[120] This sampling technique was used to allow for additional participants to be recruited and to generate more data. To further clarify and expand on emerging findings arising from the concurrent analysis, theoretical sampling was then used as the third sampling strategy.[92, 98] This is a sampling approach that is specific to grounded theory (see Table 2.2). Birks and Mills describe theoretical sampling as being used to answer broader questions arising from the data or alternatively 'to seek out a specific issue'.[92] Theoretical sampling was used in Study 2 to answer questions emerging from the data analysis around how relationship development may differ from the perspective of dietitians practising in a weight-neutral context. For example, what is the role of honesty and trust in a weight-neutral dietetic consultation, and how does it compare to a weight-centric consultation? Although the inclusion criteria for participants was kept broad initially, this was later refined to ensure theoretical sampling could be achieved. To answer such questions emerging from the data analysis, dietitians who specifically practised using a weight-neutral approach (and who met the original inclusion criteria) were recruited.

2.5.3 Methods applied within Study 2

Study 2 utilised two methods of data collection to explore how dietitians in Australia are trained in relationship-development skills. Data sources included curriculum documents (specifically subject outlines) and telephone interviews with coordinators of dietetics education programs. Rowher et al recognise that tertiary education programs have multiple components, that is what is 'taught', what is 'learnt' and the written components that support teaching and learning.[121] They articulate the value of combining multiple sources of data when analysing a curriculum as doing so reflects different perspectives (that is the 'written' curriculum versus the 'taught' curriculum). Hence to capture these perspectives, a three-pronged approach is suggested by Rowher et al when analysing a curriculum, namely a document review supported by interviews with teachers and students.[121]

In light of this recommendation, two data sources were used in Study 2 to provide a more comprehensive analysis of how teaching of client-dietitian relationship development might occur in dietetics education

programs. Utilising only one method may not capture the full extent to which particular content may be embedded within an education program. Program coordinators were defined as those who were currently employed in a role that oversaw the coordination of one or more dietetics subjects as part of an accredited dietetics education program in Australia.[121] Program coordinators were involved in the development and refinement of taught content, as well as teaching students theoretical content and practical skills. For this reason, program coordinators were deemed to have crucial insight into how relationship development is actually taught within Australian dietetics education programs (that is both formally and informally) and were identified as important key informants. Within the context of this qualitative research a key informant is a person with first-hand experience of the phenomenon of interest who, as a result, can provide useful insight. Limited research exists that describes how dietitians are trained in relationship development in Australia, and hence a focus on the 'taught' curriculum (that is from the perspective of educators) and the supporting written component (subject outlines) was selected as an appropriate starting point to explore this topic. Interviewing students on their perspective of the 'learnt' curriculum was not within the scope of Study 2 however is identified as an area for further research in Chapters 4 and 6.

No published method for analysing curriculum documents in dietetics was evident, therefore a rigorous and systematic method for analysing medical and allied health curriculum documents guided Study 2.[121] This method was developed by Rowher et al and describes how to collect, analyse and synthesise data from curriculum documents.[121] This published method was appropriate for addressing the study aim as dietetics is an allied health discipline. Data was collected in the form of subject outlines because they are an accessible document that outlines important information related to key teaching and learning practices of the subject and the expectations around learning for both the student and the teacher. This includes a description of the subject, key learning outcomes for students, and details of assessment tasks. As suggested by Rohwer et al,[121] subject outlines were therefore considered to be a formal representation of the teaching that occurs as part of subjects delivered within dietetics education programs and thus an important source of data.

Telephone semi-structured interviews were utilised to explore program coordinators' perspectives of the curriculum document findings and how they perceived the client-dietitian relationship to actually be taught within their respective programs. For the same reasons as Study 1, semi-structured interviews were

used because they allowed some flexibility in the direction of the interview whilst also ensuring that key questions could be asked.[120] Conducting the interviews via telephone also accounted for differences in geographical locations between the interviewer and participants, and allowed the study to be completed on time and within budget.[120] Program coordinators were asked their perspectives of the curriculum document findings to verify that the findings appropriately reflected their experiences. As a written document, subject outlines are limited in the extent to which they can reflect the entirety of a curriculum.[121] Hence interviewing program coordinators' about their perspectives of the curriculum document findings was a way to ensure that the findings made sense in the context of dietetics education in Australia and enrich the analysis process.

Both deductive and inductive approaches to thematic analysis were applied in Study 2 as methods of analysing data. Table 2.3 outlines key phases of thematic analysis described by Braun & Clarke and provides an overview of how each type of thematic analysis was applied to address each study aim.[116] Described as a method for 'identifying, analysing and reporting patterns within data', thematic analysis in general is an approach to qualitative research that enables the exploration of themes within data and was therefore well placed to address the research problem.[116] As explained in an earlier section, Study 2 forms the secondary qualitative component of this thesis and therefore a deductive, or 'top down' form of thematic analysis was applied to curriculum documents. This means that pre-existing concepts and ideas were used to code and make sense of the data.[116] In doing so, a coding framework was developed from the conceptual model of relationship development formed in Study 1 and was used to drive the analysis of how the client-dietitian relationship is expressed and addressed in subject outlines. As explained earlier, this was done because limited research exists that comprehensively explains relationship development in dietetics. Using the conceptual model ensured a clear picture of the client-dietitian relationship which, through the developed coding framework, allowed for clear distinctions of what was to be coded as part of this relationship within subject outlines. Hence utilising the conceptual model as part of a deductive approach ensured a thorough examination of how the therapeutic relationship is expressed in subject outlines that is based on current evidence.

In contrast to the way data from curriculum documents was analysed, an inductive or 'bottom up' approach to thematic analysis was used to analyse data from interviews with program coordinators.

Inductive thematic analysis is described as a method where themes are developed from the data itself, and not determined by pre-existing concepts or ideas.[116] This version of thematic analysis was applied as this part of Study 2 asked broad, open-ended research questions (that is '*How do coordinators of dietetics education programs perceive the findings from the analysis of curriculum documents?'* and *'How do coordinators of dietetics education programs perceive therapeutic relationship development to be taught within the programs they are involved in?*') of which the research team wanted to provide answers originating from the data itself, rather than looking at the data through the lens of a pre-existing concept.[122] Little is known about program coordinators' perspectives of dietitians' training in relationship-development skills and hence applying an inductive approach helped to generate original explanations and contribute to the limited evidence-base around this topic.[122] More detail on how data was analysed within Study 2 is described in Chapter 4.

Table 2.3 Application of the key stages of thematic analysis outlined by Braun & Clarke within Study 2 (116)

Stage of Thematic Analysis	Aim 1 - Curriculum Documents (Deductive Thematic Analysis)	Aim 2 - Interviews with Program Coordinators (Inductive Thematic Analysis)
Stage 1: Familiarisation with Data	Extracted data read multiple times and preliminary analytical notes documented by primary researcher	Interview transcripts read multiple times and preliminary analytical notes documented by primary researcher
Stage 2: Generating Initial Codes	Relevant text highlighted on data extraction form Initial codes developed for highlighted data using coding framework developed from the conceptual model of relationship development (Study 1)	Relevant data highlighted on transcript and copied into Microsoft Excel document for initial coding Initial codes developed for relevant data
Stage 3: Searching for Themes	All initial codes collated and coded for broader themes as guided by the coding framework developed from the conceptual model of relationship development (Study 1)	All initial codes collated according to whether they reflected program coordinators' perspectives of curriculum document findings or how they perceived relationship development to be taught within their respective programs Comparisons made between initial codes to identify recurring patterns and develop preliminary themes
Stage 4: Reviewing Themes	All data collated by theme Themes reviewed by all authors and discussed against the coding framework developed from the conceptual model of relationship development (Study 1) Notes made to document the meaning of each theme and process of theme development (including any subthemes)	Preliminary themes reviewed through multiple readings of data extracts and developed codes Relationships between codes defined more clearly through discussion with research team Notes made to document process of theme development
Stage 5: Defining and Naming Themes	Iterative process of comparing data extracts, codes and themes Discussions had with all authors to challenge the emerging analysis and articulate themes more clearly against the coding framework (Study 1) Notes made to document process of refining themes	Iterative process of comparing data extracts, codes and themes and notes made to document process Discussions had with research team to challenge emerging analysis and articulate themes more clearly
Stage 6: Producing the Report	Key themes and subthemes described Exemplary quotes identified Figures and tables developed	Key themes and subthemes described Exemplary quotes identified

For clarity, the data analysis methods used in Study 1 (constructivist grounded theory)[98] and Study 2 (both deductive and inductive thematic analysis)[116] differ in their approaches. Key methods of constructivist grounded theory have been outlined in Section 2.5.2 however important differences between both methods will be further explained here to assist in understanding the results presented in Chapters 3 and 4. Firstly data analysis occurs concurrently to data collection within a constructivist grounded theory approach, whereas in Braun & Clarke's thematic analysis the process of data analysis only commences once data collection is finalised.[98, 116] Concurrent data collection and analysis allows for theoretical sampling to occur in a grounded theory approach, as analytical questions can be generated from the data and consequently explored through, for example, additional participant interviews.[98] This means that within a grounded theory approach the emerging analysis can be further refined through the collection of more data. In contrast, the extent to which data can be analysed and explored within a thematic analysis approach is limited to the initial data collected.[116] Secondly, the approach to coding in constructivist grounded theory focuses on 'action', that is using gerunds (or verbs that function as nouns) to ensure the emerging analysis captures action or process.[98] This same level of specificity towards how data is coded is not articulated in Braun & Clarke's thematic analysis.[116] Finally, the two approaches to data analysis differ in whether they are inductive (that is from the 'bottom up'), or whether they are deductive (that is from the 'top down').[116] The very nature of constructivist grounded theory is inductive, in that it is generating new information or 'theory', and by the same token cannot be deductive.[98] In contrast, Braun & Clarke describe thematic analysis as being able to take on either an inductive or deductive approach depending on the research question.[116] Both deductive and inductive approaches to thematic analysis were used in Study 2 to address each aim (Table 2.3).

Although the specific methods of analysing data differ between the constructivist grounded theory approach (Study 1) and Braun & Clark's thematic analysis (Study 2), both methods are philosophically aligned. As explained earlier in this chapter, a constructivist lens was applied to this thesis. A constructivist approach assumes multiple realities and that knowledge is subjective and co-created between researcher and participant.[96] A constructivist lens also honours the researcher's values and bias (of which are embedded in the research process).[96] As the name suggests, constructivist grounded theory is an approach to grounded theory synonymous with constructivist ways of thinking.[98] In contrast, Braun & Clarke describe thematic analysis as not bound to one particular philosophical approach, however

acknowledge its compatibility with a constructivist paradigm.[116] Both studies applied particular methods aligned with a constructivist approach, such as reflecting on researcher bias and incorporating these reflections into written memos as part of data analysis. Hence although both constructivist grounded theory and Braun and Clarke's thematic analysis are identified as their own 'method', they are aligned philosophically as each method can be applied through a constructivist lens.[98, 116] Further detail on the methods undertaken within each study is provided in Chapters 3 and 4.

2.5.4 Methods applied within Study 3

To explore what has been reported regarding therapeutic relationships between clients and dietitians in empirical literature, an integrative literature review was conducted. This particular type of literature review was undertaken because it can provide a rich understanding of a certain healthcare phenomenon, such as the therapeutic relationship, by summarising past literature.[117] In contrast to other types of literature reviews such as meta-analyses or systematic literature reviews, integrative reviews are described as the 'broadest' review method because they allow for a variety of methodologies to be included.[117] The usefulness of this type of review is acknowledged when beginning to understand a concept, and in providing evidence for which future studies can be built on to inform practice and policy.[117, 123] Whittemore & Knafl articulate this further as they recognise that when conducted systematically and rigorously, an integrative literature review can provide data that enables a comprehensive understanding of particular healthcare problems.[117] An integrative literature review was therefore undertaken to better understand the concept of the therapeutic relationship in dietetics in terms of what has been reported in empirical literature, and in doing so to provide clearer direction for future research.

It is in this way that the integrative literature review (Study 3) builds on findings from Studies 1 and 2. In contrast to Studies 1 and 2, which were set in a specific Australian context, the integrative literature review includes studies published globally. Hence findings from the integrative literature review highlight similarities and differences between the research presented in this thesis that was conducted in an Australian context, and findings from international empirical literature. The 'broad' nature of the integrative literature review (that is including a variety of methodologies) allows the study to provide valuable context as to where the findings from Study 1 and 2 are positioned within international literature

on therapeutic relationships in dietetics.[117] The integrative literature review is therefore an important contribution to the findings presented in this thesis as a complete body of work. This is discussed further in the final chapter of this thesis (Chapter 6).

The method for conducting an integrative literature review published by Whittemore & Knafl was applied, as it details a thorough and systematic approach relevant to healthcare literature.[117] It has also been applied previously in a dietetic context for the related topic of patient-centred care.[30] Whittemore & Knafl provide clear direction for how to conduct an integrative literature review, in an attempt to address the issue of poorly articulated review methods in previous literature.[117] Particular focus is placed on clarifying data analysis, synthesis and conclusion drawing methods where qualitative techniques are recognised as being especially suitable. Thus Whittemore & Knafl's method for conducting an integrative literature review outlines a descriptive qualitative approach to data analysis that emphasises the examination of patterns and themes.[117] The qualitative nature of this particular integrative literature review method means it is particularly suited to understanding what has been reported about the therapeutic relationship in dietetics within empirical literature. It is also congruent with the broader qualitative approach of this thesis, as it focuses on meaning (through summarising empirical literature into qualitative themes) rather than focusing on quantitative aspects of the data such as frequency or measurements.[117] Furthermore, particular methods of data analysis are consistent with the constructivist approach of this thesis. For example, an inductive approach was applied to data analysis (that is not determined by pre-existing theory) to generate meaningful themes that describe key findings from empirical literature.[98, 117] How this method was applied is described in more detail in Chapter 5.

CHAPTER THREE: Developing meaningful client-dietitian relationships in the chronic disease context: An exploration of dietitians' perspectives

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Statement of Authorship

AN, AM and LT contributed to the study conceptualisation and design. AN conducted all interviews and transcribed each audio-recorded interview. AN, AM, LT and FD contributed to data analysis. AN developed the formal write-up of the study, which was critically reviewed by AM, LT and FD.

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3.1 Prologue

The previous chapters have described relevant background information and explained the overall research design of this thesis. Following on from this, Chapter 3 describes in detail the qualitative methods and results of the first research study presented within this thesis (Study 1). This study focuses on the process of therapeutic relationship development from the dietitian's perspective. To begin to understand the complexities of the therapeutic relationship, this study specifically examines the therapeutic relationship within a chronic disease management context. This chapter concludes with a discussion of the key findings and identifies opportunities for further research.

3.2 Abstract

Aim: Meaningful client-dietitian relationships are central to effective dietetic practice. The chronic disease management setting provides an opportunity to examine what is meaningful and how these relationships are constructed, since the dietitian and client generally have multiple interactions over an extended period of time. This study aimed to explore dietitians' perspectives of how they develop meaningful relationships with clients managing lifestyle-related chronic diseases.

Methods: Study design and analysis was guided by Charmaz's constructivist grounded theory. Dietitians working in Australia with clients managing chronic diseases were recruited through initial, snowball and theoretical sampling. Online videoconference and telephone semi-structured interviews were conducted. Recorded interview transcripts were analysed using repeated reviews comprising initial, focused and theoretical coding and memoing.

Results: Twenty-two dietitians were recruited. A conceptual model developed from the data showed the dietitian's role in developing the client-dietitian relationship is complex. Key elements were identified and described as 'Sensing a Professional Chemistry', and the dietitian's skills in 'Balancing Professional and Social Relationships' and 'Managing Tension with Competing Influences'. Influences were categorised as relating to the client and dietitian as individuals (e.g. their values), their support network and external contextual factors (e.g. working with interpreters).

Conclusion: Developing relationships with clients in the chronic disease context appears complex due to the dietitian's role of managing multiple interrelated elements and influential factors simultaneously. To deepen understanding, research should explore clients' perspectives of relationship development and how knowledge of practitioner-client relationships in other disciplines may be utilised to enhance dietetic

service delivery.

3.3 Introduction

Shifts in paradigms on healthcare delivery have recognised the importance of client-practitioner relationships, specifically within patient-centred and relationship-centred care paradigms.[20, 124] This has been acknowledged in dietetic practice. A recent integrative review identified a 'positive dietitian-patient relationship' as a component of patient-centred dietetic care.[30] Client-practitioner relationships appear well-researched in other disciplines, particularly within medicine and psychology.[31, 36, 42] Furthermore research shows the strength of client-practitioner relationships positively influences outcomes, including those related to clients' health.[36]

The importance of client-dietitian relationships has been reiterated throughout research to date.[30, 125] This importance is reflected in the Nutrition Care Process, a key model underpinning an approach to current dietetic practice, which articulates the relationship as the 'central component' of this approach.[67] Despite this importance, meaningful explanations of this relationship and how it is developed in dietetics are limited. Qualities of the client-dietitian relationship have been identified in qualitative and quantitative research,[71, 72, 126] however what these qualities mean in the dietetic context and how they interact with each other as a process to facilitate relationship development is not clear. Examples of qualities include the dietitian's communication skills and integrity.[71, 72, 126] A model of how dietitians can build 'positive relationships' with clients was suggested in a recent integrative review, however this research only briefly described qualities of relationships without in-depth explanation of the interplay between them or meaningful processes underlying them.[30] As a result our understanding of how dietitians might develop relationships with clients appears superficial. The importance of this relationship drives the need to think more critically about this crucial aspect of practice to gain a deeper, more meaningful and comprehensive understanding of client-dietitian relationship development as an entire process, rather than as individual qualities. Further in-depth qualitative research is needed in order to address this.

An important setting to explore client-dietitian relationship development appears to be within lifestyle-related chronic disease management. These diseases, such as type 2 diabetes, are a global issue and dietitians play a key role in managing these diseases.[127] Additionally, care in chronic disease settings

generally occurs over an extended period of time. This sustained care and the global prevalence of chronic disease drives the imperative to further explore how dietitians deliver patient-centred care, specifically through their relationship with clients.

The aim of this study was to explore dietitians' perspectives of how they develop meaningful relationships with clients in the context of lifestyle-related chronic disease management. Whilst appreciating the contribution of the client to the relationship,[128] this research focused on dietitians' perspectives exclusively. The purpose of this was to address the knowledge gap around meaningful processes of relationship development in dietetic chronic disease management from the professional perspective. The research was guided by the question 'How do dietitians perceive their process of developing meaningful relationships with clients managing lifestyle-related chronic diseases?'

3.4 Methods

Qualitative research is conducted when a complex and detailed understanding is needed.[96] As this research sought to gain a deeper and more comprehensive understanding of client-dietitian relationship development than what is currently understood, a qualitative approach was utilised. Charmaz's interpretation of grounded theory guided the study design, including sampling and data collection and analysis.[98] Grounded theory is recognised as both a methodology and method, for the purpose of 'generating a theory for a process or an action'.[92] Charmaz assumes a constructivist view, where findings are recognised as a subjective interpretation of the researcher.[98] This approach utilises key interrelated elements, including sampling, coding and memoing, that are conducted simultaneously to generate findings. Methods were reported in accordance with the COREQ checklist for reporting qualitative research.[129]

3.4.1 Participants and Sampling

Sampling occurred in three stages between January and July 2018. Firstly, a purposive approach was taken where initial sampling was used to identify individuals who could provide an understanding of the problem.[98, 120] This stage recruited qualified dietitians working in Australia, who were currently managing, or had recent experience managing, adult clients regarding lifestyle-related chronic diseases (overweight and obesity, type 2 diabetes, cardiovascular disease). Dietitians were required to see clients

individually within the free-living environment (i.e., not in hospital). Given the highly exploratory nature of this research, the inclusion criteria for the initial sample was kept broad so as to not limit any potential findings. Participants were recruited through approved advertisements in e-newsletters from Dietitians Australia to its members. Expressions of interest were also collected during a workshop led by authors at the 2018 Dietitians Australia national conference. Workshop attendees were informed of the study and invited to provide their contact details if interested. Dietitians known by the primary researcher [AN] through professional networks were also contacted by email, hence a relationship with some participants existed prior to the study commencing.

The second stage used a snowball sampling technique where participants identified colleagues who might be interested in participating and they were contacted via email.[120] Snowball sampling was undertaken to allow for more participants to be recruited and to generate more data. The third stage used theoretical sampling (as a component of grounded theory), to clarify questions generated from data in early interviews.[98] For example questions arose regarding how perspectives of relationship development may differ in dietitians practising within weight-neutral approaches.[130] Although the initial inclusion criteria was kept broad, the inclusion criteria was then refined to ensure theoretical sampling could be achieved (that is dietitians who specifically practised using a weight-neutral approach and who met the original inclusion criteria). Dietitians identified by theoretical sampling were recruited through face-to-face contact during a workshop at the Dietitians Australia national conference. Other dietitians were identified by applying relevant search terms to the Google™ search engine and were contacted through the email address provided. Dietitians who confirmed they met the inclusion criteria were sent an information sheet and consent form to sign and return.

3.4.2 Data Collection and Analysis

Charmaz's grounded theory methodology recognises the researcher as being actively involved in the research process, therefore AN reflected on her biases as a novice researcher and qualified female dietitian prior to and during the study.[98] Reflections were documented within written memos regarding emerging codes which were embedded within the analysis. This process enabled AN to be aware of preconceptions held and thus facilitated a more critical approach to data analysis, where the emerging analysis was challenged in light of these reflections both throughout coding and in discussions with the

research team.

A core component of grounded theory methods is simultaneous data collection and analysis and this was utilised throughout.[98] Participant demographic information was collected through an online survey.[131] Online videoconference or telephone semi-structured interviews were undertaken by AN to account for distances between geographic locations. Telephone interviews were conducted as per participants' preferences, or when technical problems occurred with the videoconferencing software.[132] The interviewer undertook each interview in a private room at the University of Wollongong with no other persons present. A semi-structured interview guide ensured key questions were addressed whilst allowing flexibility in following participants' leads (Appendix 2). The interview guide was developed in consultation with authors and probes were identified from empirical literature.[71, 72, 77, 86] Prior to use, the interview guide was piloted with dietitians at the University of Wollongong and recommendations were incorporated. Interview questions were open-ended and included asking participants to identify key elements of successful interactions with clients. To support the collection of rich data, participants were provided with the interview questions via email before their interview to ensure ample time to reflect on their responses.

Each participant was interviewed once and to ensure thorough data collection, interviews were recorded using a digital audio recorder with consent from participants. Field notes were documented by AN during and after each interview, which included details such as how the interview was conducted (including any technical problems). Recordings were transcribed verbatim by AN, during which participants were assigned numerical codes and each transcript was de-identified. Transcripts were checked twice against the recording, once by AN and again by a second researcher AMe to ensure accuracy. Participants were invited to check their transcript, however only one participant elected to do so.

Analysis was conducted manually and was derived from the data as per grounded theory methods.[98] AN undertook initial coding where each line or segment of data was coded using gerunds (verbs that functions as nouns, such as 'demonstrating empathy').[98] Focused coding was then used to categorise significant and similar initial codes at a more abstract level. Finally, theoretical coding was conducted where comparisons were analysed between focused codes to produce more abstract and advanced

theoretical codes. Detailed memos were written throughout this process to document relationships between codes. These memos were used in conjunction with discussions with the research team to construct the final conceptual model.

The constant comparison technique was applied to the interviews as a whole to distinguish similarities and differences between codes, for example how self-disclosure is used, and memos regarding this were documented. This technique was also used once the conceptual model was finalised to ensure the analysis reflected transcripts and memos, and to enhance study rigour.[98] Other memos were kept to document code definitions, possible analytical avenues and further questions of the data. The final conceptual model was not presented to participants for feedback, however findings were presented during regular meetings with authors where raw data was discussed, the emerging analysis was critiqued and potential analytical avenues raised. Data collection and analysis ceased when data saturation was reached, that is when no new codes emerged as per grounded theory methods.[92, 98] The use of cross comparison techniques, recording detailed analytical memos and discussing the analysis with the research team throughout the study allowed for continuous interrogation of the data and recognition of data saturation.

This study was approved by the University of Wollongong Health and Medical Human Research Ethics Committee (2017/575) (Appendix 3). All participants gave informed consent prior to participating.

3.5 Results

Interviews were conducted with 22 dietitians (online n=14; telephone n=8) with interviews lasting between 27 and 82 minutes. A total of 47 dietitians were contacted or expressed interest in participating. Dietitians declined participation due to time constraints (n=4), health reasons (n=1), or because they did not meet the inclusion criteria (n=2). Some dietitians did not respond to email communication (n=18).

3.5.1 Participant Demographic Data

The majority of participants identified themselves as female (n=19, 86%), aged between 20 and 39 years (n=16, 72%) and working in New South Wales or Queensland (n=14, 64%) (Table 3.1).

Table 3.1 Participant demographic data (n=22)

	n (%)
Gender	
Female	19 (86)
Male	3 (14)
Age	
20-29	8 (36)
30-39	8 (36)
40-49	2 (9)
50-59	4 (19)
State or Territory	
New South Wales	7 (32)
Queensland	7 (32)
Victoria	3 (14)
Australian Capital Territory	2 (9)
South Australia	2 (9)
Western Australia	1 (4)
Geographic Area	
Metropolitan	13 (59)
Regional	5 (23)
Rural or Remote	4 (18)
APD[#] Status	
Provisional APD	5 (23)
APD	17 (77)
Years of Experience	
Private Practice	
0-2	7 (32)
3-5	5 (23)
6-10	4 (18)
11-20	4 (18)
Not applicable	2 (9)
Other Areas	
0-2	10 (46)
3-5	2 (9)
6-10	3 (14)
11-20	2 (9)
20 or more	3 (14)
Not applicable	1 (4)
Unanswered	1 (4)

[#]Accredited Practising Dietitian

3.5.2 Qualitative Analysis

A conceptual model of relationship development was developed from the data, consisting of three main categories (Figure 3.1). Two categories related to the direct interaction between a client and dietitian: 'Sensing a Professional Chemistry' and 'Balancing Professional and Social Relationships'. These categories are shown in blue at the centre of the model, representing this direct interaction. A third category 'Managing Tension with Competing Influences' emerged relating to influences on the direct interaction. This category is shown in orange, with inward-facing arrows representing this influence. The model shows that from the dietitian's perspective, developing relationships with clients managing lifestyle-related chronic diseases appears complex. This complexity relates to the dietitian's role in managing both the direct interaction and influences on it simultaneously.

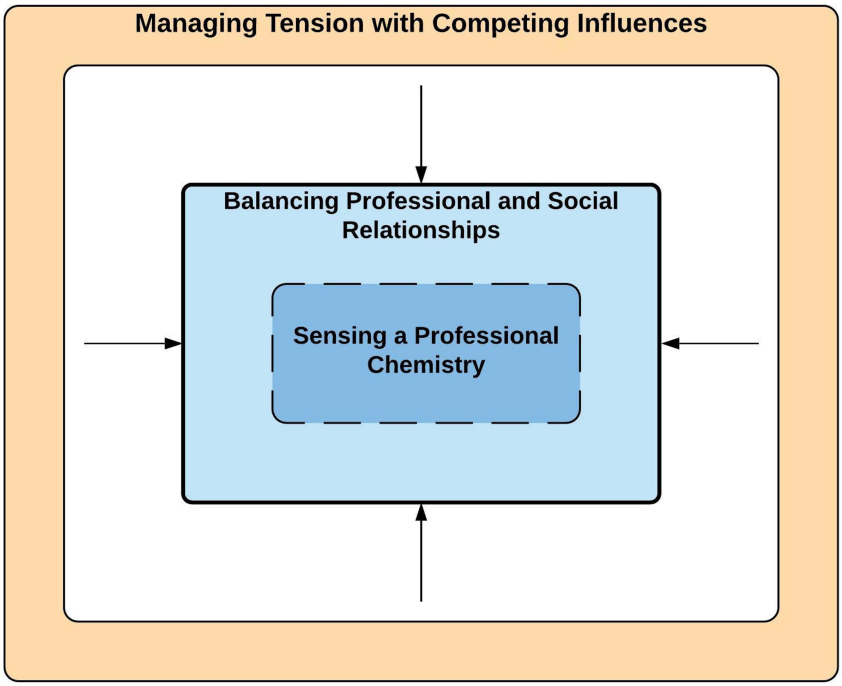

Figure 3.1 A conceptual model of client-dietitian relationship development in lifestyle-related chronic disease management from the dietitian's perspective

The first category 'Sensing a Professional Chemistry' reflected an undefinable quality of relationships apparent in dietitians' responses that was suggestive of a connection between people. Having this sense of a professional chemistry seemed to be important in whether dietitians were able to develop a functional relationship with their client in the context of undertaking their professional activities. The importance of this sense of chemistry to the potential for a functional relationship is represented visually in

Figure 3.1, where ‘Sensing a Professional Chemistry’ is embedded within ‘Balancing Professional and Social Relationships’ (where ‘Balancing Professional and Social Relationships’ reflects the functional relationship).

The category ‘Sensing a Professional Chemistry’ arose from dietitians’ descriptions of good relationships, where ‘gelling’, ‘clicking’, ‘connection’, ‘subconscious aspect’ and ‘vibe’ were used. Dietitians further explained these terms to some extent, describing them as finding a commonality, openness, trust and rapport. Dietitians also noted this chemistry may reflect their personalities and the client’s motivation. It also appeared that dietitians had some difficulty articulating these terms:

“*it’s one of those things (gelling) that I don’t know that I could put words to*” (Participant 20)

“it’s hard to explain, ‘cause you feel it, you get this feeling they’re being open towards you, and that you can be open towards them, and you have that trust” (Participant 15)

Dietitians’ responses also reflected that this sense of chemistry was unmodifiable, that is dietitians expressed they would not be able to ‘gel’ with a client in the future if they were not able to initially. This quality further contributed to the sense of a professional chemistry in that dietitians perceived it as natural and unable to be forced:

“there’s some element of subconscious aspect with that, there’s lots of people no matter what I do we still just don’t connect” (Participant 3)

“there’s gonna be people that you just don’t gel with, and you’re never gonna gel with” (Participant 20)

The second category ‘Balancing Professional and Social Relationships’ described the dietitian’s skill in balancing two functional relationships within the client-dietitian relationship. ‘Professional relationship’ referred to a relationship where roles as either professional or client are fulfilled and focused on skills needed in upholding the professional nature of the interaction. ‘Social relationship’ differed in that it referred to humans interacting without labels of ‘dietitian’ or ‘client’ and reflected the importance of

ensuring humanity exists within the client-dietitian relationship. Figure 3.2 and Table 3.2 provide further explanation of subcategories within this category.

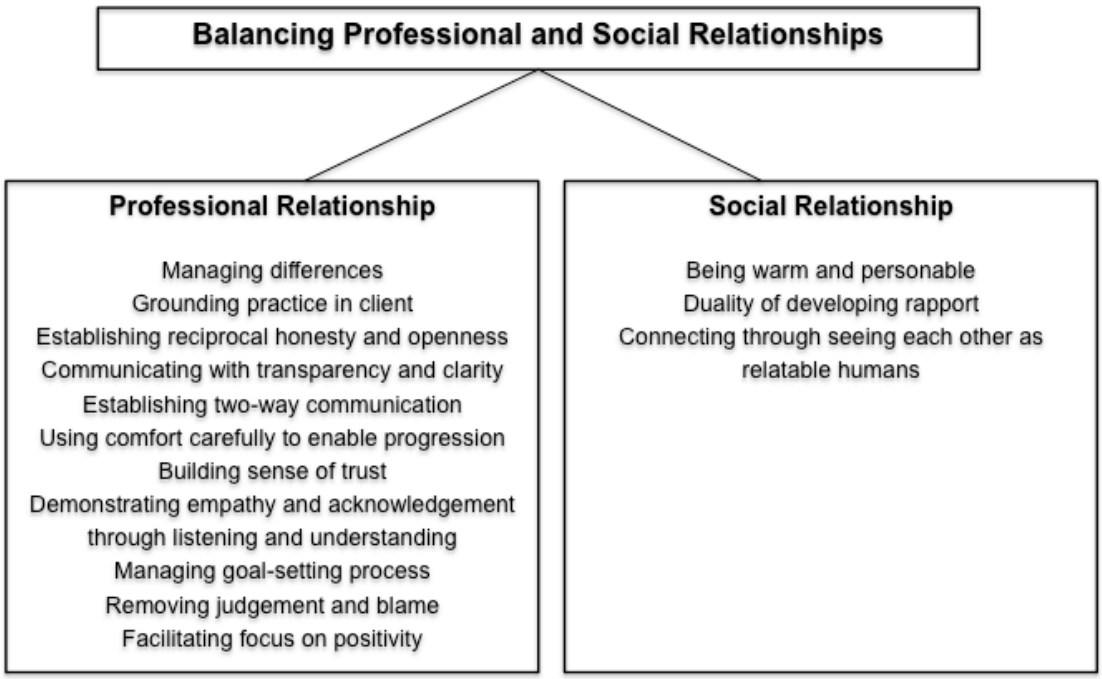

Figure 3.2 Subcategories of main category 'Balancing Professional and Social Relationships'

The perceived need to maintain an appropriate balance of professional and social relationships was evident. However dietitians recognised the difficulty of achieving this in practice, and suggested the appropriate balance depended on each client and dietitian. The need for established indicators and strategies to ensure dietitians address their professional obligations was recognised. Indicators of balance appeared education-based, such as providing new individualised education, or outcome-based, such as tracking clients' progress. The importance of utilising clinical expertise was also a concern:

"*I don't think there's much point being all 'nicey nicey', saying 'don't worry you can eat whatever', but also being able to (answer) should I eat butter or margarine, being able to give them a decent answer*"

(Participant 6)

An example of a strategy to ensure professional obligations were addressed was to focus on developing the social relationship in the initial stages of engaging with a client. Establishing a social relationship first

appeared to ensure the professional relationship had more value and meaning for the client. This appeared particularly important for 'resistive' clients.

"*it is a priority, I think you have to get that before talking nutrition, cause if (you) go straight into the nutrition and say someone comes to see you and it's automatically into 'this is how much you need of carbs, fat, protein', there's not gonna be a connection and they're gonna say 'well who are you to say that*?' " (Participant 15)

Although the need to balance professional and social relationships was recognised, the professional relationship appeared to be the foundation of the client-dietitian relationship as the dietetic consultation is a professional service. This is exemplified in a statement by a dietitian who noted that the relationship weakened if the professional attributes of the interaction, such as goal setting, were missing:

"It weakened at the end, because we were done with what we set out to do and they were smashing their goals so to speak" (Participant 10)

Table 3.2 Description and illustrative quotes of subcategories relating to either professional or social relationships, as part of main category 'Balancing Professional and Social Relationships'

Professional Relationship		
Subcategory	**Description**	**Quotes**
Managing differences	Refers to dietitians managing points of difference between clients and themselves as points of difference were recognised as potential barriers to relationship development. Differences were categorised as misaligned preconceptions and expectations, values and opinions, and gender and cultural differences.	*"it was difficult for me to help her achieve her own goals when I disagreed with them"* (Participant 15) *"and his idea of, I wasn't a good dietitian because I hadn't helped him lose as many kilos as this other dietitian, it was quite a like, not a fraught relationship but we were both coming from very different angles, he was so, so, so weight focused and I was very slowly trying to guide him away from it"* (Participant 16) *"I try to take the gender aspect out of it I guess and just talk about that I've got the knowledge regarding what you're here for and it doesn't matter that I'm a male telling you this, a female (dietitian) would be telling you the same sort of information"* (Participant 22)
Grounding practice in client	Refers to dietitians modifying their practice to ensure that every aspect of their practice is driven by the client's needs, which includes: • Respecting the client's expertise in their own lives (asking the client for their perspective; giving the client time to	*"I sort of start the interview, so my standard is 'now I've received this lovely referral from your doctor and I'm very interested to see what your doctor has to say, but tell me how can I help you today?' So it's this idea that you acknowledge the human being in front of you, that the doctor's sent something and that's important but what are you hoping to get out of it?"* (Participant 13)

	express themselves; ensuring the client's perspective is addressed) • Reading the client and recalibrating practice according to the client's needs (acknowledging and responding appropriately to client's emotion; recognising and responding to client's need to have interest shown in them; recognising where continuing to focus on data collection would be detrimental) • Being attune to and interpreting verbal and non-verbal cues from clients • Applying motivational interviewing techniques	*"I guess I showed interest in him you know he has tattoos everywhere so I was like oh wow what's that tattoo on his leg, that I probably did do different behaviour on that front, to build that relationship"* (Participant 9) *"ah body language, you know if they're crossed up or hunched up and hiding behind their handbag or not making eye contact then there's that barrier that they're not feeling open, so you can pick up on those signals."* (Participant 15)
Establishing reciprocal honesty and openness	Refers to needing honesty and openness within the relationship, and that one person's honesty and openness seems to enable the other to feel they can also be open and honest within the context of the dietetic consultation	*"you just get this feeling like they're being open towards you, and that you can also be open towards them a little bit more as well"* (Participant 15) *"they can tell us what they're eating but if they're not telling us the truth it's really hard for us to help where we can"* (Participant 19) *"if I'm not comfortable with the content, being able to tell the person that I'm not comfortable with the content like, when I try and fluff my way through it, people can generally tell"* (Participant 3)

Communicating with transparency and clarity	Refers to the dietitian being clear in their communication with the client to minimise the potential for misunderstandings that may impede relationship development. This primarily involved providing explanations to clients about the dietitian's role and scope of practice, what they can expect from the consult and the consult process, the dietitian's approach to practice, the rationale for the client receiving dietetic input and stopping consultations once therapeutic benefits cease.	*"if people don't understand why I'm asking questions that are involving them talking more than I need to talk, I explain to them that I really need to know what's happening for you otherwise you're just going to walk out with a plan that could be given to anyone, and that won't be the best thing for you. And they really come around to that"* (Participant 17) *"So in the initial (consultation) we talk about before we go into anything deeper, we talk about how I work and that it's not the only way to work, this is one of the options that they have and the reasons why I work from that (Health at Every Size approach)"* (Participant 18)
Establishing two-way communication	Refers to establishing communication pathways where dietitians and clients are able to communicate with each other equally and feel comfortable in doing so. Importance was placed on enabling clients to feel comfortable instigating communication with the dietitian, as it allows the client to perceive their dietitian as approachable and supportive. The medium of communication (e.g. email, telephone, face-to-face) and how dietitians manage that medium also appeared important.	*"I always end my consult with giving my business card and saying if you've got any questions my email's there, send me an email or admin are always happy to take calls and get them to give them a call back so that approachability really comes through"* (Participant 22) *"Yeah that was definitely the issue, it was the promising something I couldn't deliver and then avoiding the communication of that, because of this desire to be able to do it for them, but not prioritising or having the time to be able to do it so yeah definitely communication was an issue there."* (Participant 8)

Using comfort carefully to enable progression	Refers to the dietitian's skill in utilising comfort appropriately within the consultation to ensure it facilitates relationship development, rather than impedes relationship development. The need for dietitians to create a calm, relaxing and comfortable interaction for both themselves and clients was evident. Managing this balance of comfort was suggested as a skill for dietitians in ensuring clients feel comfortable but also recognising when the client's comfort may be detrimental to their progress. Comfort and discomfort appeared to be drivers of relationship development when utilised appropriately by the dietitian.	*"I think that that's one of the thing(s) that they feel quite comfortable, I mean that's possibly not a great thing, because I think sometimes it's a way to just listen to all their stuff that's going on, they can manipulate, maybe so we don't give it to them for instance?"* (Participant 7) *"people do need to feel like they don't need to change everything and that there are things that they're actually doing quite well, so being comfortable and remembering to give that positive feedback to people I think is quite important"* (Participant 17) *"embracing discomfort is something that we can all do better because by doing so we really can connect with that human in front of us, and it's both embracing our own discomfort as well as the client's discomfort"* (Participant 13)
Building sense of trust	Refers to dietitians building clients' trust in their role delivering a professional service. Building a sense of trust appeared to be determined by multiple factors, such as the ability of the dietitian to fulfill promises made to the client, and as needing to be developed over time.	*"trust is probably 99% of what we do because if they don't trust you, they're not gonna tell you the truth, they'll tell you what they think you want to hear"* (Participant 4) *"because if people don't trust you, they won't listen to you and they won't open up to you, so you'll never know, you'll never be able to address the right barriers with them and help them find solutions to those barriers"* (Participant 17) *"I've got a good location, but I guess it (trust) just takes time doesn't it? To build trust, and I don't rush people in their appointments so they're half an hour or an*

		hour so they have time for questions if they've got any" (Participant 7)
Demonstrating empathy and acknowledgement through listening and understanding	Refers to a process of interaction between the client and dietitian which includes: • Listening to the client using interpreting, clarifying and probing skills, being present and focused and giving the client uninterrupted time to talk • Developing a holistic understanding of the client and their story, perspectives, culture and experiences • Acknowledging client's progress, feelings and experiences throughout the consultation • Demonstrating empathy (creating a comfortable and supportive environment; being non-judgemental; conveying a sense of working together, showing understanding of the client's history and integrating understanding verbally throughout consult; using body language)	*"the empathy is a big part to be able to have that relationship because if you just disregard everything then there's that lack of respect isn't there?"* (Participant 10) "*anyone with a chronic disease has been in the health system for a long time and often they've dealt with a lot of challenging situations and without identifying that and acknowledging it, you'll get nowhere"* (Participant 14) *"just asking them you know how does it feel to be in that situation, and just trying to tease out their story more, and also recognising that story throughout the consultation, so even when setting the goals, reiterating look I know that you're going to find this part challenging because in the past this has happened to you here"* (Participant 10) *"I will actually paraphrase back to them emotions and feelings so that they know I've heard what they've said, in you know I'm busy I don't have time to cook dinner, but then I'll also say something like gosh that sounds really challenging, we're all expected to be on 24/7, we're only human, that sort of thing so that then they feel like I'm hearing them but I'm also actually understanding where they're coming from, from an emotional point of view."* (Participant 20)

Managing goal-setting process	Refers to the dietitian's skills in managing the goal-setting process to facilitate relationship development, particularly regarding how it impacts the client's perception of the dietitian's value of their opinion. This skill overlaps with the need to respect the client's expertise in their own lives (as part of the skill 'grounding practice in client'). Dietitians appeared to involve clients in the goal-setting process to varying degrees, ranging from dietitian-led approaches to client-led approaches. Goals were identified as needing to be specific, long-term and understood by the client.	*"I think it has a big impact (setting goals with clients) because it actually shows that you're listening to them, and you're valuing their opinion and what they think that they can actually achieve."* (Participant 10) *"I always try to encourage them to have participation in setting their goals so that it's something they they're interested in."* (Participant 19) *"Sometimes it's as simple as getting through their diet history and then just saying what do you think about your diet? What do you think you do well? What do you think you'd like to change and what do you think you can change?" (Participant 14)*
Removing judgement and blame	Refers to dietitians removing any judgement or blame they may contribute to the consultation. Dietitians perceived clients to appreciate a non-judgemental approach, and that it enabled clients to be more comfortable within the consultation and open to change. Verbal and non-verbal techniques were identified.	*"I guess the way I respond to, you know if we're going through a food diary, how much soft drink do you drink or something and they go oh two litres, I wouldn't respond in a way that's ah, wow that's a lot but sort of pointing out that, that is something that we need to change, so not being judgemental in a way I respond I guess to some element of the food diet history that is out of the ordinary or needs to be changed"* (Participant 22) *"Once a client realises that they're not being judged and their situation's unique, you can take the pressure off that it's not their fault, then they're more open to change"* (Participant 5)
Facilitating focus on positivity	Refers to dietitians facilitating positivity within the consultation to promote relationship development. Strategies included focusing on	*"Well, you want it to be positive for everybody I mean, who wants to sit there and just hand out meal plans and tell people what not to eat all day, like that's pretty*

	food in a positive light, such as focusing on foods that the client can eat.	*awful"* (Participant 6) *"I think what made it successful is that I tend to work more from a, working with where they're at, making it positive about foods that they can have, and why certain foods are better choices, or why certain foods aren't great say in terms of cholesterol, and then turning that into well here's a meal you could make or here's something you could take for lunch that would be a better option, and might help your cholesterol"* (Participant 6) *"so what I'm trying to do especially for the overweight or obese patients, I won't restrict their diet but instead I will encourage them to make some healthy changes for example maybe just to get them to eat more vegetables and drink more water to keep them full, so they don't have to starve themselves and they can build a happy and positive relationship with food"* (Participant 21)
Social Relationship		
Subcategory	**Description**	**Quotes**
Being warm and personable	Refers to dietitians being warm and personable when interacting with clients managing chronic diseases due to clients likely experiencing feelings of confusion and anxiety. Dietitians reflected a need to behave in a way that was more 'human' than 'clinical' and included: • Engaging in casual and non-dietetic related conversation • Remembering and following up on personal details of client's life	*"the second time they come in, you know really trying to remember small things about what they said first consult, so they might have been a bit stand-offish) because they were having a bad day, the car broke down, and if you sort of make little notes about that next time you come in you ask them 'so how did it go with the car?', like little personal details, I think they appreciate that a bit more, then they start to open up a little bit to you, so that persistence as well, will help, just that personal touch I think makes a bit of a difference"* (Participant 12)

	• Being reassuring • Providing positive feedback • Responding with emotion, such as smiling and laughing when appropriate • Displaying a genuine interest in the client	*"I think in terms of warmth it's showing that you're genuinely interested in the person, explaining to them what you know changing could mean for them so really linking it, not just to like biochemical parameters but really like explaining to them what it could mean for their life and their lifestyle and their future"* (Participant 17)
Duality of developing rapport	Refers to dietitians developing rapport with clients, and that rapport development appears to have a sense of duality. This refers to dietitians' perspectives of rapport development suggesting contrasting qualities, in that it appeared to be both a natural and unnatural skill for dietitians, both easy and difficult with particular clients, and that it should be a focus both during initial stages of interacting and throughout all interactions. This apparent duality suggests that rapport development may depend on the individuals within the interaction.	*"there are people who have a natural tendency towards looking for that rapport building and I know for myself that is very much what I do with everybody, in every social interaction"* (Participant 3) *"Building rapport is also really important and I spend any opportunity I can in the consult to have those human interactions and emotional connections."* (Participant 8) *"with those ones I find the thing that really helps with the interaction is needing to establish rapport early on"* (Participant 12) *"I think rapport building is something that you do every single session even though after a few months you know there's that strong relationship you still want to make sure that you're welcoming her in and really listening to what they want"* (Participant 18)

Connecting through seeing each other as relatable humans	Refers to clients and dietitians seeing each other as relatable humans through identifying similarities in each other. Generally, dietitians recognised the importance of relating to each other however some questioned its importance. How dietitians develop a sense of relatability appeared multifactorial and dependent on each client. Factors include: • Seeing each other as human • Showing understanding and acknowledgement • Establishing a shared experience • Ensuring clients feel normal • Using self-disclosure • Verbal and non-verbal language	*"I find especially, you know, budget related to food, if you can relate to them that 'oh yeah I know, you gotta buy sausages, isn't steak expensive', it is where I mention I do things myself you know 'oh yeah for my family too I'm buying up on mince'"* (Participant 9) *"I'm hoping that I've tried to actually have an angle of what I would call common humanity, where people say things like 'oh you know and then I did this and then I ate another chocolate' and I'd say 'well yes because that's what human beings do, that makes you a normal human'"* (Participant 20) *"I think being authentic is really important, and say knowing that you're not perfect either and you don't have to resemble the Australian Dietary Guideline(s) every single day is really important"* (Participant 18) *"So if I was seeing a young woman who was dealing with similar issues, cause that's one of the things that I think actually does help me, cause I'm dealing with my own chronic disease, and so I think I can relate a lot to that myself, but if someone was very different and was sort of, again like the classic example, a middle aged white man, I wouldn't be as nearly as open with them as I would be if I had somebody who was really struggling with a lot of issues who was a lot more similar to me"* (Participant 20)

The third category ‘Managing Tension with Competing Influences’ reflected dietitians’ perspectives that developing both professional and social relationships with clients, and achieving an optimal balance between them, can be influenced by factors unrelated to their direct interaction. Dietitians’ responses suggested that tension exists between the need to develop and achieve optimal balance between professional and social relationships, and influential factors of that interaction (Figure 3.1). This category suggests a need for dietitians to be skilled in managing this tension in order to maintain an optimal balance of professional and social relationships with their client and thus uphold an interaction that supports overall relationship development.

Influences were further categorised as being related to clients and dietitians as individuals, their support network and external contextual factors. Factors related to the dietitian and client as individuals were their values, beliefs and opinions, and their health. Dietitians’ responses suggested that the client’s opinion of the dietitian’s expertise, the client’s value of the dietetic input generally and the client’s motivation and belief in their ability to change were influential. The dietitian’s value of relationships, their negative opinions of clients and their belief in their professional ability appeared influential. For example, responses suggested that when dietitians have negative opinions of clients, they perceive practising in a way that facilitates relationship development to be more difficult:

> “*I find it really hard to not have my back up with those people cause they’ve been quite demanding*” (Participant 9)

Another dietitian recognised qualities of clients that could bring on negative thoughts, such as when the client makes sexist statements. Hence it appears that dietitians may develop negative opinions towards clients when there is conflict between how the client behaves and the dietitian’s values.

Tension between clients’ and dietitians’ physical and mental health and their ability to form relationships was identified, where poorer health appeared to make relationship development more difficult. It was suggested that for clients, this may be due to having lower motivation and attending fewer consultations. Dietitians described ‘running with their own agenda’ when they felt stressed, tired or sick. The negative impact poor health had on the dietitian’s ability to be empathetic, patient and motivating was also

identified:

"*if you're feeling sick or tired, you're like I don't even want to do this job, I hate this job, it's gonna be so hard to overcome that and put a smile on and be really perky and get people motivated*" (Participant 11)

The need for clients to have a supportive network, including their broader socioeconomic context and their home environment was expressed. Clients of lower socioeconomic status were described as being likely to attend consultations less frequently, impacting contact time and therefore relationship development. Dietitians described situations where the client's support network caused tension between their relationship. For example, the impact of the involvement of a client's family was described:

"*the conflict between this young man and his family became so significant because he felt they were over-involved in his care, he slipped away in the end*" (Participant 13)

Dietitians' responses also reflected a need to form a relationship with the client's support network, such as their family or friends:

"no one is a silo, everyone is part of a network, unless you can engage effectively with the entire network you will never be an effective clinician" (Participant 14)

Additionally, dietitians recognised the influence of their own support network, including working within a supportive multidisciplinary team and having a network to engage in reflective practice with. Dietitians described reflecting formally through regular clinical supervision, whilst others described reflecting informally with fellow colleagues.

"that formal supervision process, particularly for a private practice practitioner, who's isolated is absolutely essential for me, and has made such a difference to my mental health, and my capacity to work more meaningfully with my clients" (Participant 13)

External contextual influences were unrelated to the client and dietitian, but seemingly needed managing

by dietitians to ensure meaningful relationships with clients. These included influences on their contact time, such as their workplace, the physical environment of the consultation, having an interpreter present, the need to complete documentation and sources of conflicting information. For example, dietitians perceived having insufficient time with clients as negatively impacting their relationship, which exposed the issue of who determines how much time dietitians spend with clients. Some dietitians described their time with clients being governed by workplace constraints enforced by the Medicare Chronic Disease Management Plan and expressed their frustration at this. For example, one dietitian questioned their ability to develop a relationship under the time constraints of Medicare-funded consults:

"you're so time limited that I mean what chances are there of developing trust and rapport?" (Participant 9)

Hence consultation time appeared to influence how dietitians address key elements of both professional (trust) and social relationships (rapport) (Figure 3.2).

3.6 Discussion

This study has produced a novel model of relationship development in chronic disease management from the dietitian's perspective, which offers a more in-depth and comprehensive representation than what is currently understood in dietetics. It has done this by building on the knowledge of individual qualities important for client-dietitian relationships within literature,[30, 71, 72] and by identifying meaningful processes underlying those qualities and how they might interact with each other. Furthermore this model offers a more comprehensive picture of relationship development by recognising not only the direct interaction between clients and dietitians as important, but also influences on this interaction. As a result, this model demands an additional skillset of dietitians in being able to manage the tension between this direct interaction and factors that may influence it. Thus, this study offers a unique insight into the complexity of our role as dietitians in establishing meaningful relationships with clients in a chronic disease context. By exposing this, our findings have also contributed to the evidence describing how dietitians can be patient-centred in their practice and key tenets to be addressed. The need for more in-depth understanding of relationship development in dietetics, and for further professional support in this crucial aspect of practice has been identified.

Research in psychology and medical disciplines has established therapeutic relationships as multidimensional.[42, 128] An example from psychology-based research describes therapeutic relationships consisting of personal role investment (degree of involvement in the therapeutic process), interactive coordination (how the client and therapist interact, such as whether it is client or therapist-directed), expressive attunement (how well the client and therapist communicate, including their level of expressiveness, empathic understanding and communicative rapport), affective attitude (the feelings the client and therapist have towards the other) and experiential congruence (the extent to which the client and therapist agree on their experience of the consultation).[128] These dimensions highlight the degree to which therapeutic relationships are understood within psychology. The difficulty dietitians had in explaining ambiguous terms they had used, such as 'gelling', were represented within the category 'Sensing a Professional Chemistry'. This may suggest a limited understanding of, or limited language to describe aspects of therapeutic relationships within dietetics in comparison to other disciplines. For example, what does it mean to 'gel' with a client? Thus, it appears there is a need to further explore what this sense of 'professional chemistry' is in dietetics, and how it might compare to dimensions of therapeutic relationships explicitly identified in other disciplines. Interdisciplinary collaboration between dietetics and psychology, for example through education and training, and overt recognition of the psychology existing in this aspect of dietetic practice may benefit dietitians in better understanding therapeutic relationships.

Psychology-based literature also recognises that different types of relationships exist within the therapist-client relationship: the working alliance, transference and countertransference, and the real relationship.[133] This supports our finding that the client-dietitian relationship consists of both professional and social relationships, as the working alliance is based on therapeutic 'work' (professional relationship), whereas the real relationship is recognised as the 'person-to-person, non-work connection' (social relationship).[133] Thus the support of this finding within established psychology-based literature highlights the need to explore if, and how, dietitians are aware of these dimensions of relationships and to further understand how they might co-exist in client-dietitian interactions, particularly in the chronic disease context. A deeper understanding of how to appropriately balance professional and social relationships when interacting with clients may further support dietitians to deliver optimal dietetic care and assist in alleviating consequences of weaker relationships, such as poor client attendance and

engagement in consultations.[30, 134, 135]

The need to balance professional and social relationships within the client-dietitian relationship exposes a potential grey area in the blurring of professional conduct. Dietitians in Australia receive payment from clients and hence there is an obligation to deliver a professional service. Therefore ethical questions can be raised about the responsibility of the dietitian in fulfilling the professional relationship. Key dietetics bodies recognise the ethical obligation of dietitians to deliver a professional service and this was reflected in dietitians' responses where the importance of the professional relationship was expressed.[136, 137] This is further supported and discussed in other healthcare disciplines, where for example Zur[138] identified a direct impact of maintaining therapeutic boundaries on the effectiveness of psychotherapy. Therefore further research is needed in understanding how this is expressed and managed in dietetic practice, particularly within education and training, and how it can be integrated into meaningful relationship development.

The finding that dietitians' values, beliefs and opinions, and their health, can influence relationship development reflects the need to consider our own lens as dietitians: who we are, what we bring to the relationship and what impact it may have. Research suggests dietitians can show weight stigma towards clients,[139, 140] whilst a cross-sectional study[141] surveyed dietitians about their management of obesity and found they experienced frustrations with clients' lack of motivation, commitment and compliance. Furthermore, Diversi et al[139] acknowledge the negative impact these emotions may have on client-dietitian relationships. Quantitative research in psychotherapy suggests that therapists are less able to develop strong relationships with clients when they feel burdened in their personal lives.[142] In addition, Vandenberghe and Martins de Silveria[143] describe a type of psychotherapy where therapists engage in mindfulness exercises in preparation for interacting with clients by reflecting on themselves and their past experiences. This literature supports our findings and suggests a need for dietitians to reflect on who they are as a person and how this may impact relationship development, particularly how this might contribute to their sense of a 'professional chemistry' with their client. Furthermore, our findings showed that workplace stressors for dietitians in Australia (e.g. restrictions on consultation duration) can make relationship development more difficult. Further research is needed to explore the impact of the work environment for dietitians globally, particularly in light of the recent Covid-19 pandemic. If dietitians are

feeling pressured in their work environment on a global scale, then the implications may be significant for clients and their health outcomes. It therefore seems important for dietitians to be aware of workplace pressures and how they might limit the potential for relationship development. Thus the need for dietitians to be self-aware and be able to self-manage their own 'lens' for optimal relationship development with clients managing chronic diseases seems important, and further accentuates the importance of dietitians engaging in regular and critical reflective practice. It seems that further emphasis on dietitians' self-awareness and self-management skills is needed within professional development opportunities, and increased professional support in this area of service delivery, to continue advancing dietitians' relationship development skills.

There are strengths and limitations of this study. From the limited data available the sample appears to reflect the mostly female-dominated dietetic profession in Australia that primarily works in New South Wales, Queensland or Victoria.[14, 15] Also it is likely that dietitians who participated were motivated to share their perspectives due to their own interest in the topic. Hence this research may offer a 'one-sided' perspective from dietitians who sought to express their views, and that perspectives of dietitians not interviewed may have differed. The reflexive processes employed by the first author meant that their preconceptions of relationship development seen through a dietetic lens, could be challenged by psychology-based perspectives offered by the interdisciplinary research team. Finally, the constructivist approach to this research acknowledges findings as embedded within a specific context, where the researcher's involvement is recognised as part of this context.[98]

3.7 Conclusion

In conclusion, developing meaningful client-dietitian relationships in the chronic disease context appears complex for dietitians due to needing to manage multiple interrelated elements and influential factors simultaneously. The appropriate management depends on the dietitian as both a person and professional, and the individual client. Further research is needed to advance the profession's understanding of meaningful relationships, particularly from the client's perspective, and how knowledge of practitioner-client relationships in other health disciplines may be utilised to enhance dietetic service delivery.

CHAPTER FOUR: How is the client-dietitian relationship embedded in the professional education of dietitians? An analysis of curriculum documentation and program coordinators' perspectives in Australia

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Statement of Authorship

AN, AM and LT contributed to the study conceptualisation and design. AN analysed curriculum documents and conducted and transcribed each audio-recorded interview. AN, AM, LT and FD contributed to data analysis. AN developed the formal write-up of the study, which was critically reviewed by AM, LT and FD.

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4.1 Prologue

Continuing on from the first research study presented in the previous chapter, Chapter 4 describes the qualitative methods and results of the second research study presented within this thesis (Study 2). This study has applied the conceptual model described in the previous chapter (Study 1) to focus on the client-dietitian relationship within an education and training context. This chapter does so by analysing related curriculum documents from dietetics education programs and conducting interviews with program coordinators. This chapter concludes with a discussion of the main findings in light of literature from other healthcare disciplines and exposes important areas for further research with regard to how dietitians are trained in therapeutic relationship development.

4.2 Abstract

Aim: How dietitians are trained to develop relationships with clients is not clearly articulated despite its importance being well-documented. This study aimed to describe how this relationship is expressed and addressed in curriculum documents of Australian dietetics education programs, and to explore program coordinators' perspectives of this description and their perspectives on how relationship development is actually taught.

Methods: Data extracted from subject outlines included subject descriptions, learning outcomes, assessments, readings and the mode of delivery (e.g. lectures). Guided by a pre-existing coding framework, deductive thematic analysis was utilised to explore qualitative themes from subject outline data. Semi-structured telephone interviews were conducted with 10 program coordinators and analysed using inductive thematic analysis.

Results: Subject outlines for 122 subjects across all 21 accredited Australian programs were analysed. The overarching theme was the wide 'variability' in the ways that the client-dietitian relationship was expressed across subject outlines. Program coordinators perceived that findings from the analysis of subject outlines made sense, however acknowledged limitations of analysing data from curriculum documents. The relationship appeared ambiguously defined amongst programs and was described as occurring mostly in communication, counselling and medical nutrition therapy subjects and through theoretical and practical learning.

Conclusion: The client-dietitian relationship appears inconsistently embedded in the curriculum of Australian dietetics education programs despite widespread acceptance of its importance to practice.

Further research is needed to investigate if training programs should embed more consistent language around therapeutic relationships, and how this might be achieved to reflect current competency standards.

4.3 Introduction

The importance of dietitians being trained in the development of therapeutic relationships was recognised in the dietetic literature during the 1970s and 1980s.[83, 144, 145] Several papers described a need for this skills development in university training, however since these articles were published, further research in this area and the impact on practice has not been forthcoming.[83, 144, 145] More recent research from the United Kingdom has focused on training and assessing dietitians' communication skills, yet does not include other important skills shown to influence relationship development such as managing contextual influences (e.g. physical environment).[86, 146] A recent study from Malaysia focused on the use of empathy amongst dietetic students, a component known to be important for relationship development, however again the study did not focus on other important skills.[147] There is limited understanding of current training practices for dietitians in therapeutic relationship development.

Across 15 universities in Australia, 21 accredited dietetics education programs are currently offered.[148] The Australian accreditation standards for dietetics education programs require university programs to design a curriculum that enables students to meet the national competency standards.[26, 149] As part of the most recent review of the competency standards, a qualitative survey of Dietitians Australia members identified a need to 'enhance the focus on client-centred care'.[150] A recent qualitative study exploring how a competency-based education framework has influenced competency standards and their application in dietetic practice in Australia showed that from 1993 to 2015, competency standards have focused more on client-centred communication skills, for example 'collaboration' and 'negotiation' with clients.[151] This change in the Australian competency standards is consistent with a report from the Australian Commission on Safety and Quality in Healthcare which recommended healthcare professionals be supported in undergoing training to deliver patient-centred care.[21] This style of healthcare respects the patient's preferences and values, and has been proven to benefit clinical outcomes and the broader healthcare system and economy.[21] An integrative review of dietetic literature found that establishing a positive client-dietitian relationship forms part of patient-centred care for dietitians.[30] Hence aspects of patient-centred care are embedded in the current competency standards for dietitians in Australia, part of

which includes developing an ‘effective relationship’ with clients, carers and their families.[26] The findings from Ash et al indicate a shift towards dietitians training in a more patient-centred style of healthcare.[151] They also underline a need to explore how dietitians are trained in all aspects of patient-centred care, particularly therapeutic relationship development, which encompasses notions of trust, communication and empathy for beneficial change in health-related outcomes.[30, 146]

Findings from psychology show that therapist-related factors can impact the quality of the client-therapist relationship and this may also have implications for how dietitians are trained. More specifically, reviews have argued that particular therapist attributes can affect the relationship.[152, 153] Examples of those having a positive influence include honesty and warmth,[153] whilst negative attributes include being tense and distracted.[152] In dietetics, qualitative research has identified client-favoured dietitian qualities as being supportive, positive, genuine, empathetic and respectful.[71, 74, 76, 154] Both disciplines emphasise the significance of the practitioner’s role in the therapeutic relationship, and the need to be adequately trained in this practice area.

Methods to begin exploring how dietitians are trained in therapeutic relationship development include reviewing curriculum documentation of accredited dietetics programs and interviewing program coordinators. An analysis of curriculum documentation provides an opportunity to describe how knowledge and skills are expressed within the university curriculum and is recognised as an ‘important baseline study’ for exposing curriculum content.[121] Interviewing program coordinators provides an opportunity to more deeply explore the ‘taught curriculum’ and support findings from the analysis of curriculum documents.[121] The broader focus of the current study is dietitians’ training in patient-centred care, and concentrates on a particular component of this style of healthcare that is the therapeutic relationship.[30] Concerning accredited dietetics education programs in Australia, this study aimed to:

1) Describe how the therapeutic relationship between a client and dietitian is expressed and addressed in curriculum documents

2) Explore program coordinators’ perspectives of findings from the analysis of curriculum documents and how client-dietitian relationship development is taught within their respective programs.

4.4 Methods

The research reported here describes qualitative research. The methods used to describe how the relationship is expressed and addressed in curriculum documents are described first (Aim 1), followed by the methods used to explore program coordinators' perspectives (Aim 2).

4.4.1 Data Collection and Analysis of Curriculum Documents

To address Aim 1, a deductive thematic analysis utilising a pre-existing coding framework (Table 4.1) was conducted first, with broader themes then being developed from the allocated codes. The method for collecting and extracting data from medical and allied health curriculum documents by Rowher et al guided this part of the study as it describes a clear, step-wise method, and to the author's knowledge no specific method for dietetics has been published.[121] Clear articulation of a competency framework was required to guide data extraction and analysis of curriculum documents.[121] To focus this specifically on the client-dietitian relationship, a conceptual model previously published by our team was utilised (Chapter 3).[146] This model provided a guide to more comprehensively identify activities related to the therapeutic relationship between a client and dietitian. Elements of the model (as qualitative codes) were documented to form a coding framework for clear reference during data analysis (Table 4.1).[146]

A list of accredited dietetics education programs offered at Australian universities was accessed on the Dietitians Australia website in August 2019.[148] To establish the structure of each program, publicly-available information was gathered from university websites. Information on the subjects offered within each program was extracted at the time of analysis, including the subject name and code. Screening was applied to determine subjects included for analysis and was conducted by AN who read subject descriptors and learning outcomes published on the university website. Screening criteria were developed by consensus with a research team member [AM]. Subjects were included if they contained content regarding the application of dietetic theory for individual client management, or interpersonal counselling and communication in a professional setting. Subjects were excluded if they contained content regarding foundation sciences (for example chemistry), public health and community nutrition, food service, epidemiology or research methods. Subject outlines were used as a proxy for curriculum content. The most recently available subject outlines from each university were analysed.

Following screening, data was extracted from subject outlines comprising of the subject description, learning outcomes, assessment information, readings and mode of delivery (for example lectures). Where it was unclear whether the full subject outline was published online (n=10 universities), program coordinators were contacted by email and invited to provide the full version. Program coordinators were provided with study information and a consent form seeking the consent of the program coordinator and their university. When full versions of requested subject outlines could not be provided, subject information published on university websites was used. To ensure a systematic approach, data from subject outlines was copied directly onto a data extraction form which included sections for raw data, coding and analytical notes.

Data analysis was guided by Braun and Clarke's guidelines for deductive thematic analysis.[116] Braun and Clarke describe thematic analysis as a systematic approach to 'identifying, organising and offering insight into patterns of meaning across a dataset'.[155] A deductive approach is further described as a 'top-down approach, where the researcher brings concepts, ideas, or topics that they use to code and interpret the data'.[155] In this study, data coding was led by pre-existing codes established within the conceptual model of client-dietitian relationship development we had published earlier (Table 4.1) (Chapter 3).[146] Data analysis was conducted manually and managed using Microsoft Word and Excel.[156, 157] To become familiar with the data, AN re-read the extracted data and documented preliminary analytical notes during these initial readings. Initial codes were generated by AN where the relevant text was highlighted on the data extraction form and codes written in the adjacent column. Initial codes were collated and coded for broader themes, as guided by the conceptual model (Chapter 3).[146] For example, an initial code that articulated 'client-centred practice' was coded with the theme 'grounding practice in client' from the conceptual model (Table 4.1).

All data was collated by theme for further analysis and reviewed by all authors to confirm the corresponding theme was represented.[155] Braun and Clarke describe writing (including informal notes) as needing to be interwoven throughout the data analysis to facilitate the analytical process.[155] Hence notes were made to document the meaning of themes and how they had developed, including apparent subthemes. An iterative process of comparing data extracts, codes and themes was applied to ensure the emerging analysis reflected the data, as recommended by Braun and Clarke.[116] This process was further

facilitated by discussions with all authors, where the emerging analysis was challenged and attention was given to articulating themes and their definitions to ensure data was reflected appropriately.[116]

Table 4.1 Coding framework for the analysis of subject outline data based on the conceptual model of relationship development published previously by study authors[146]

Category 1: Sensing a Professional Chemistry[a]	
Category 2: Balancing Professional and Social Relationships	
Managing differences	• Managing gender and cultural differences • Managing misaligned preconceptions and expectations • Managing differences in values and opinions
Grounding practice in client	• Being attune to and interpreting verbal and non-verbal cues from clients • Applying motivational interviewing techniques • Respecting the client's expertise in their own lives • Reading the client and recalibrating practice according to the client's needs
Communicating with transparency and clarity	• Providing a rationale for the client receiving dietetic input and stopping consultations when therapeutic benefits cease • Providing explanations about the dietitian's role and approach to practice, scope of practice and consult process
Demonstrating empathy and acknowledgement through listening and understanding	• Developing a holistic understanding of the client and their story, perspectives, culture and experiences • Acknowledging the client's progress, feelings and experiences throughout the consult • Demonstrating empathy • Listening to the client using interpreting, clarifying and probing skills • Listening to the client by being present and focused • Listening to the client by giving client uninterrupted time to talk
Being warm and personable	• Providing positive feedback • Responding with emotion as appropriate • Displaying genuine interest in the client • Engaging in casual and non-dietetic related conversation • Remembering and following up on personal details of the client's life

	• Being reassuring
Connecting through seeing each other as relatable humans	• Seeing each other as human • Showing understanding and acknowledgement • Establishing a shared experience • Ensuring clients feel normal • Using self-disclosure • Verbal and non-verbal language
Establishing reciprocal honesty and openness[(a)]	
Establishing two-way communication[(a)]	
Using comfort carefully to enable progression[(a)]	
Building sense of trust[(a)]	
Managing goal-setting process[(a)]	
Removing judgement and blame[(a)]	
Facilitating focus on positivity[(a)]	
Duality of developing rapport[(a)]	
Category 3: Managing Tension with Competing Influences	
Client and dietitian	• Values, beliefs and opinions • Health • Support

External influences	• Contact time • Physical environment • Working with an interpreter • Keeping required documentation • Conflicting information

[(a)] Subthemes are deliberately not listed as subthemes were not identified for the specified theme

4.4.2 Data Collection and Analysis of Interviews with Program Coordinators

To address Aim 2, semi-structured interviews were undertaken by AN with key informants representing coordinators of dietetics programs between December 2019 and October 2020. Within the context of this qualitative research a key informant is a person with first-hand experience of the phenomenon of interest who, as a result, can provide useful insight. The purpose of these interviews was to verify that findings from the analysis of subject outlines appropriately reflected experiences of these coordinators, and to further explore their perspectives of how client-dietitian relationship development is taught. The semi-structured format allowed for leads to be explored, such as asking for further details, whilst ensuring key questions were addressed. Program coordinators from universities offering accredited dietetics programs were invited by email to participate in a telephone interview. The interview questions, study background and a summary of the methods and findings were provided to program coordinators via email at least one week before their interview. This was to ensure familiarity with findings from the analysis of subject outlines and sufficient time to consider their responses. Program coordinators were also provided with an information sheet that explained the study purpose and what their participation would involve. Program coordinators provided written consent to participate in the research prior to being interviewed.

The interview guide was formed through a critical development and revision process involving a four-member multidisciplinary research team. It incorporated open-ended questions that focused on program coordinators' perspectives of the findings and how they perceived relationship development to be taught (Appendix 4). Program coordinators were interviewed once each. Interviews were recorded using a digital audio recorder and transcribed verbatim, then checked again by AN. Each program coordinator was invited to review their transcript for accuracy but declined.

Braun and Clarke's inductive thematic analysis guided the analysis of interview data where patterns within program coordinators' responses were examined without being guided by a pre-existing coding framework.[116] Microsoft Word and Excel were used to support data management.[156, 157] AN reread the interview transcripts and documented preliminary notes before undertaking descriptive coding, noting program coordinators' perspectives and comparing them to identify reoccurring patterns.[155] These were reviewed and refined through an iterative process of rereading data extracts and codes, recognising relationships between codes and crystallising what they may represent.[116] As an analytical tool

recommended by Braun and Clarke, informal notes were kept to document analytical directions.[155] All authors reviewed the final analysis and provided feedback. Findings from the analysis of subject outlines are presented first, followed by those from the interviews with program coordinators.

This study received ethical review and approval from the University of Wollongong Human Research Ethics Committee (HREC 2019/222) (Appendix 5).

4.5 Results

4.5.1 Analysis of Curriculum Documentation

Subject outlines were analysed for 122 subjects across 21 accredited dietetics education programs offered at 15 Australian universities between July 2019 and October 2020. Full versions of subject outlines from 12 universities were either publicly available online or provided by universities. One program coordinator was unable to provide full versions of subject outlines due to university policy, another program coordinator did not respond to follow-up email communication and the remaining program coordinator was unable to provide subject outlines within the study timeframe.

The overarching theme of 'variability' was identified from subject outline data, reflecting that how the client-dietitian relationship was expressed seemed to vary widely. Two subthemes were identified that supported this main finding: 'varied expression of the phenomenon' and 'varied expression of relationship elements and influential factors' (Figure 4.1).

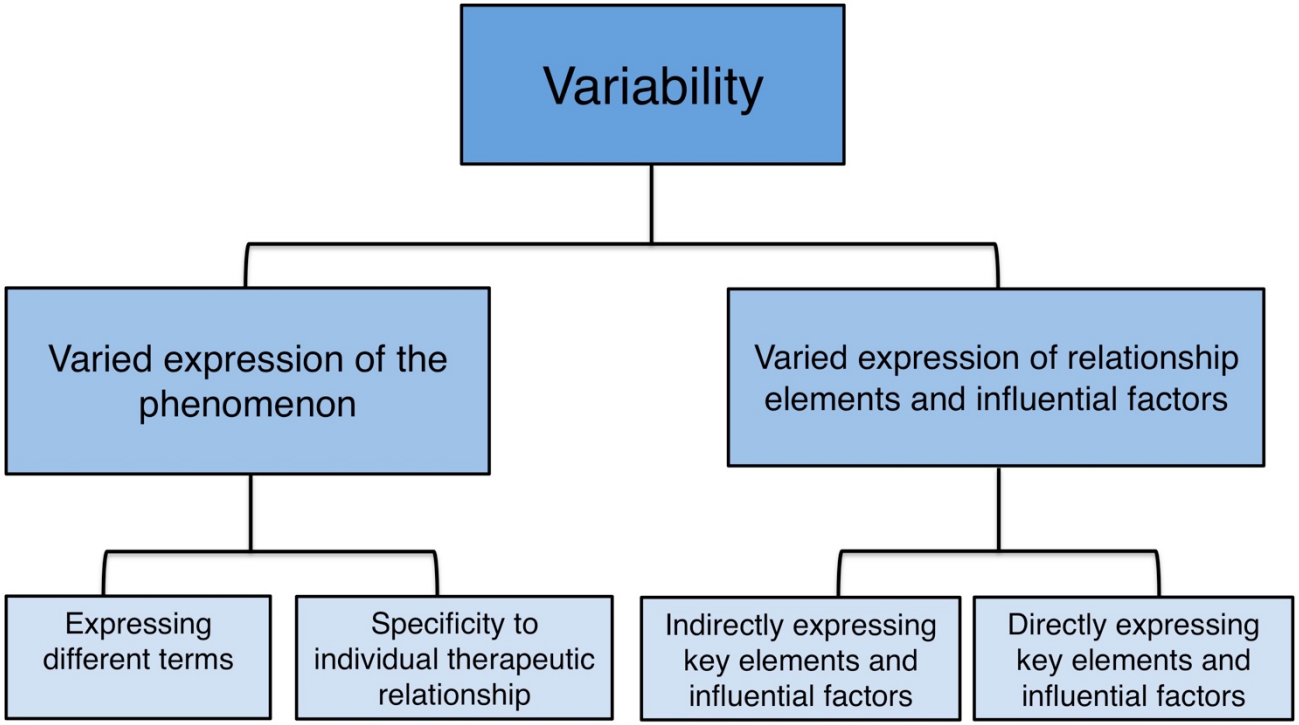

Figure 4.1 Overarching theme and subthemes identified from the analysis of subject outline data that describe how the client-dietitian relationship is expressed and addressed in curriculum documents of Australian dietetics education programs.

The subtheme ‘varied expression of the phenomenon’ depicted the phenomenon of the client-dietitian relationship being explicitly expressed but in different ways. This was apparent in the specific terms used, where different terms were identified across six subject outlines from three universities (Table 4.2). Subject outlines from most universities did not include a term that reflected the phenomenon of the client-dietitian relationship. From those universities that did include a term that reflected the phenomenon, ‘relationship’, ‘alliance’ and ‘partnership’ were evident within subject descriptions, learning outcomes and readings. Terms also varied with regard to their specificity to the individual client-dietitian relationship in a therapeutic context, versus more general relationships (for example to a community). Some terms and their descriptors appeared to more overtly refer to a relationship within a therapeutic context, for example ‘client-practitioner relationship’ or ‘working alliance’.

‘This course is a foundation course for development of an understanding of core concepts and basic competencies necessary for effective counselling practice, especially those essential to establish and maintain the client-practitioner relationship’

(University 11, Subject 9)

In contrast, other uses of ‘relationship’ and ‘partnership’ seemed more ambiguous as to whether they referred specifically to the client-dietitian relationship in a therapeutic context. Examples included ‘trustful relationships’ and ‘working in partnerships’. The intended meaning of these terms may have included the client-dietitian relationship in a therapeutic context however this meaning was not explicit.

‘To critically analyse the impact of history and colonisation on contemporary First Peoples' health outcomes and how this may influence trustful and respectful relationships with Australia's First Peoples.’

(University 11, Subject 8)

Table 4.2 Terms identified within subject outlines from each university that appeared to reflect the phenomenon of the client-dietitian relationship (Subtheme 1: Varied expression of the phenomenon)

	University														
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Client-practitioner relationship											**X**				
Helping relationship	**X**														
Therapeutic relationship											**X**				
Counselling relationship											**X**	**X**			
Appropriate relationship											**X**				
Respectful relationship											**X**				
Trustful relationship											**X**				
Relationship											**X**				
Working alliance												**X**			
Alliance											**X**				
Effective partnership											**X**				
Partnership												**X**			

Note: An 'X' indicates that the corresponding term was identified in a subject outline from the specified university. Subject outlines from most universities did not include a term that reflected the phenomenon of the client-dietitian relationship.

The second subtheme ‘varied expression of relationship elements and influential factors’ concerned elements important for, and factors shown to influence, relationship development (as identified within the conceptual model described in Chapter 3 and Table 4.1). This subtheme showed variability in the degree to which their role in the relationship itself was overtly articulated. The majority of data showed that relationship elements were expressed within subject outlines however without clear articulation of their role in relationship development. That is, a direct connection was not expressed between some relationship elements and their role in the relationship itself. These key elements (as identified from the conceptual model described in Chapter 3 and Table 4.1) included developing rapport, grounding their practice in the client, communicating and building a sense of trust (Table 4.3). Other elements also included the dietitian’s skills in demonstrating empathy and acknowledgement through listening and understanding, managing the goal-setting process and removing judgement and blame. Influential factors of relationship development appeared to be expressed to an extent and included the dietitian and client’s values, beliefs and opinions, their health and support network, and having an interpreter present (as identified from the conceptual model described in Chapter 3 and Table 4.1). A summary of the thematic patterns of how relationship elements and influential factors were expressed in subject outlines is provided in Table 4.4, including exemplary data extracts.

In contrast, one subject outline from one university explicitly articulated relationship elements with regard to their role in the therapeutic relationship. That is, a direct connection was expressed between some relationship elements and their contribution to the relationship itself. A learning outcome within this subject outline described students being able to ‘explain characteristics associated with a helping relationship’, where ‘warmth’ and ‘a want to understand’ were directly expressed as characteristics of the relationship. The inclusion of ‘etc’ at the end of the learning outcome also suggested other relationship elements were taught.

Table 4.3 Summary of key elements and influential factors of the client-dietitian relationship from each university expressed within subject outlines (Subtheme 2: Varied expression of relationship elements and influential factors)

	University														
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Being warm and personable	X[c]														
Developing rapport	X				X	X									
Grounding practice in client	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Communication	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Building a sense of trust											X				
Empathy[a]	X[c]	X				X		X		X	X	X			
Managing the goal-setting process	X	X		X			X			X	X	X			
Removing judgement and blame	X														
Values, beliefs and opinions[b]					X						X	X	X		
Dietitian's health					X	X						X			
Dietitian's support network	X	X		X	X	X	X	X	X	X	X	X	X		X
Working with an interpreter												X			

[a] Demonstrating empathy and acknowledgement through listening and understanding
[b] Values, beliefs and opinions of clients and dietitians
[c] Relationship element is explicitly articulated in subject outlines with regard to its role in relationship development

Table 4.4 Summary of how relationship elements and influential factors of the client-dietitian relationship were indirectly expressed within subject outlines (Subtheme 2: Varied expression of relationship elements and influential factors)

Relationship Element or Influential Factor[(a)]	Patterns within Data	Data Example
Developing rapport	Describing teaching skills that facilitate the development of students' abilities to build rapport	*'Counselling and negotiation skills will enable you to develop rapport with clients... and negotiate client centred care underpinned by the latest evidence.'* (University 5, Subject 10)
	Focusing on students demonstrating rapport building skills for the purpose of improving clients' health outcomes	*'Demonstrates empathy... and rapport building skills to empower individuals and groups to improve nutrition and health outcomes...'* (University 6, Subjects 2 and 6)
	Describing practically assessing students' abilities to build rapport with clients through simulation activities	*'You will be assessed on your ability to: Conduct the interview professionally, in a manner that establishes and maintains rapport'* (University 1, Subject 3)
Grounding practice in client	Articulating dietetic care that is centred around client ('patient-centred', 'client-centred', 'person-centred', 'family-centred' and 'client-focused')	*'Use client-centred counselling skills to facilitate nutrition and lifestyle change and support clients to self-manage'* (University 4, Subject 6)
	Describing clients as unique individuals and the need for students to individualise their practice according to the client	*'... and adapt dietetic practice to individual cases in an ethical, organised and professional manner'* (University 13, Subject 3)
	Describing how students should engage with clients through needing to collaborate with clients, their families and carers	*'Implement nutrition care plans in collaboration with clients or carers and other members of the health care team.'* (University 4, Subject 4)

Communication	Identifying communication as a skill needed in a general professional context and more specifically within individual client dietetic management	*'The unit will lay foundational skills in professionalism... communication and cultural competence to support your success in the demonstration of learning outcomes'* (University 5, Subject 1) *'Apply the principles of communication to the diet history method'* (University 5, Subject 3)
	Describing teaching and assessing theoretical knowledge and practical skills in communication	'*The counselling session will require you to conduct a counselling session with a mock patient. This task provides you with the opportunity to demonstrate the communication and counselling skills that you have learnt throughout the course'* (University 1, Subject 7)
	Describing teaching different types of communication skills (interpersonal, intrapersonal, cross-cultural) across different mediums (verbal, non-verbal, written)	*'The pathways to effective verbal and written communication with clients and colleagues are practised and current professional protocols for documenting dietetic records are explored'* (University 10, Subject 3)
Building a sense of trust	Articulating students needing to build trust in the context of engaging with Indigenous peoples (not specific to therapeutic relationship between client and dietitian)	*'Discuss the principles of culturally appropriate, safe and sensitive communication that facilitates trust and the building of respectful relationships and effective partnerships with Aboriginal and Torres Strait Islander peoples.'* (University 11, Subject 8)

Demonstrating empathy and acknowledgement through listening and understanding	Describing students 'learning' and needing to 'explain', 'demonstrate', 'display' and 'develop' listening skills (described as 'active', 'effective', 'appropriate' and 'inter and intra-cultural' listening skills)	*'Display effective active listening, interviewing and interpersonal skills... when communicating with individuals and groups'* (University 2, Subject 1)
	Describing practically assessing students' listening skills	*'Criteria: 1. Ability to demonstrate listening skills' (University 11, Subject 1)*
	Listing readings focused on listening skills	*'Cormier, L. S., Hackney, H... 'Chapter 5 Listening skills', in Counseling strategies and interventions for professional helpers. 9th edition'* (University 11, Subject 1)
	Describing students needing to 'demonstrate' or 'display' empathy	*'Demonstrates empathy... to empower individuals and groups to improve nutrition and health outcomes through engagement, collaboration, facilitation and education'* (University 6, Subject 6)
	Listing readings focused on empathy from counselling, psychology and psychotherapy disciplines	*'Rogers, C.R. (1975). Empathic: An Unappreciated Way of Being' (1975) The Counseling Psychologist, 5(2)*' (University 11, Subject 9)
	Explicitly describing students needing to develop an understanding of the client	*'You will also be introduced to the foundations of developing an understanding of the client as a unique person, also termed 'case conceptualisation' and the concept of diversity.' (University 11, Subject 9)*

	Implicitly expressing students needing to develop an understanding of the client through considering determinants of nutrition status	*'Use critical thinking and clinical reasoning to construct a nutrition care plan that integrates an individual's social, cultural, economic and environmental influences.'* (University 1, Subject 4)
Managing the goal-setting process	Describing students needing to 'establish' and formulate' goals with clients	*'You will need to identify relevant and important information... establish goals, and consider the most relevant nutrition intervention plan'* (University 1, Subject 5)
	Describing students needing to 'prioritise', 'monitor' and 'review' client's goals	*'Integrate knowledge and assessment data to identify the nutritional problem and then formulate and prioritise realistic nutrition management goals and intervention strategies'* (University 2, Subject 2)
	Describing students needing to 'negotiate' and 'collaborate' with clients to set goals	*'Students will conduct a client assessment and consultation focusing on nutrition education... and counselling for behaviour change (including negotiating client goals and strategies)'* (University 11, Subject 6)
Removing judgement and blame	Describing practically assessing students' abilities to demonstrate a non-judgemental attitude	*'You will be assessed on your ability to: Demonstrate a non-judgmental attitude towards the client'* (University 1, Subject 3)
Dietitian's and client's values, beliefs and opinions	Describing students needing to 'analyse', 'reflect', 'explain', 'explore', 'discuss the relevance of' and 'demonstrate awareness of' personal values, beliefs, attributes, assumptions, bias, experiences and cultural identity	*'Analyse, reflect on and explain your personal attributes, including cultural identity, values and experiences...'* (University 5, Subject 1)

	Describing students needing to evaluate the influence of personal values, beliefs, attributes, assumptions, bias, experiences and cultural identity on aspects on practice	*'Evaluate the influence of personal ethics, values and cultural issues in communication with others'* (University 12, Subject 1)
Dietitian's health	Articulating 'self-care' within a learning outcome and as seminar and workshop topics	*'Analyse, reflect on and explain your personal attributes, including cultural identity, values and experiences and how these influence.... personalised strategies to support self-care.'* (University 5, Subject 1) *'Seminar – Self-care and personal MH care on placement.'* (University 12, Subject 6)
	Listing 'mindfulness' as a lecture topic	*'Orientation Week Lecture – Career Planning Introduction, Unit Overview, Assignments, intro Mindfulness'* (University 12, Subject 6)
Dietitian's support network	Describing students learning to 'communicate', 'work effectively', 'collaborate', 'contribute', and 'liaise' with other health professionals for client management	*'Communicate with clients/patients, peers and members of the health care team for the purpose of individual dietetic case management'* (University 7, Subject 5)
	Describing assessing students' knowledge and skills in multidisciplinary collaboration	*'The aim of this assessment task is to assess students understanding of the role of dietitians and other health professionals, and the significance of collaboration and communication within the multidisciplinary team.'* (University 13, Subject 3)

	Focusing on students' abilities to be reflexive	*'The topic will encourage students to reflect on their present level of skills and to set goals for continuous improvement as a model for lifelong learning'* (University 8, Subject 4)
	Describing assessing students' skills in reflective practice	*'Your journal is a personal record of all that occurs during the counselling session with evidence of reflection and critical thinking with comments that show impact on behaviour.*' (University 12, Subject 1)
Working with an interpreter	Listing 'working with an interpreter' as a syllabus topic	*'...cross cultural communication skills, working with an interpreter, communication in the media communicating with low literacy audiences...'* (University 12, Subject 2)

[(a)] As identified from the published conceptual model of client-dietitian relationship development from study authors[(146)]

4.5.2 Analysis of Interviews with Program Coordinators

Program coordinators from 10 universities participated in an interview which lasted between 21 and 56 minutes. Program coordinators were from New South Wales (n=2), Queensland (n=3), Victoria (n=3), South Australia (n=1), and Western Australia (n=1), and held either professor, senior lecturer or lecturer positions. Program coordinators perceived that findings from the subject outline analysis made sense in the context of their involvement with dietetics training. Program coordinators considered the findings from the perspective of their experiences and expectations of how therapeutic relationships might be expressed.

Responses showed that program coordinators expected variability across subject outlines. They explained that they expected this variability due to universities each having different requirements for subject outline content and formatting, and also because they perceived that the relationship could be described in many ways. Subject outlines were seen as broad, theoretical representations of subjects that may not include necessary detail articulated in other documents (for example marking rubrics). Hence program coordinators indicated limitations in the capacity of subject outlines to reflect the extent to which dietitians might be trained in developing and maintaining therapeutic relationships with clients. From this, program coordinators recognised a disparity between the extent to which the client-dietitian relationship is taught in practice to how it seemed to be articulated in subject outlines, and therefore perceived a need for careful consideration of how subject outline findings are reported.

> *"what I would hate to see is you then to say, 'oh, it's not being taught' because I don't think a subject outline is a full indication. I think what you can say is 'it's not articulated in the subject outlines' "* (Program Coordinator 1)

Program coordinators also expressed their perspectives on findings within each subtheme. They described their surprise at the limited number of universities whose subject outlines overtly articulated either 'relationship', 'partnership' or 'alliance' (Subtheme 1, Table 4.2). Findings from Subtheme 2 (Varied expression of relationship elements and influential factors, Table 4.3), were perceived differently and program coordinators' responses seemed to depend on their experiences and expectations of the findings. For example, Program Coordinator 3 expected that all programs would include communication and

therefore was ‘not surprised’ that communication was articulated in subject outlines from other universities.

“I think the communication skills, every uni would’ve had something ticked didn’t it? I don’t think you can write a dietetics course without ‘communication’ as one of your key elements, so I guess I’m not surprised” (Program Coordinator 3)

All program coordinators were able to describe how they perceived the client-dietitian relationship to be taught within their respective programs. Some respondents appeared more confident in definitively stating that the relationship is taught, whilst others acknowledged shortfalls of their program in teaching relationship development and identified a need for improvement.

“so while I think we teach students the client-dietitian relationship and how to do it, I think that it would be good to do more and we could do it better”
(Program Coordinator 6)

“they do go into a lot of detail about the medical side of things, but what is missing is really getting down to their relationship with the patient” (Program Coordinator 9)

The client-dietitian relationship appeared to be an ambiguous concept in terms of how it was defined amongst accredited programs and therefore how it was taught. Program coordinators described the relationship as ‘difficult to articulate’ and that they used ‘non-prescriptive’ approaches that they perceived as largely dependent on their own experiences. One program coordinator also described students feeling uncomfortable when learning relationship development skills due to the non-prescriptive quality of teaching relationship development as a ‘craft’, as opposed to more ‘black and white’ content.

“I find that a lot of my teaching of this is not so much written down or necessarily planned, like I talk off the top of my head a lot” (Program Coordinator 4)

Subjects dedicated to communication, counselling and medical nutrition therapy were identified by most

program coordinators as subjects where the client-dietitian relationship is taught. Some program coordinators also identified 'broad principles' important for relationship development being integrated into other subjects. An example given was a food service subject where students learnt about cultural awareness. Program coordinators perceived the client-dietitian relationship to be taught through a number of key skills, most of which reflected those identified in the conceptual model. Most program coordinators described teaching communication, empathy and rapport, whilst others described different skills such as being non-judgemental, working with interpreters and considering the physical environment of the consultation.

"the checklists in the communication class, we're looking at the very basic sort of things, verbal and non-verbal cues, attempts to build rapport, arranges seating"

(Program Coordinator 7)

A combination of both theoretical and practical learning was described. Multiple theories were perceived by program coordinators as contributing to the teaching of the client-dietitian relationship, such as the transtheoretical model.[158] Program coordinators emphasised the importance of practical learning in developing skills necessary for relationship development, and particularly valued students' experience engaging with patients on placement. Practical learning was otherwise described as occurring through simulated role-plays with peers, teachers, family members and mock clients. Program coordinators described assessing students' knowledge and skills in relationship development through both written and practical means. Examples include multiple choice questions focused on patient-centred care and Objective Structured Clinical Examinations (OSCEs). Some program coordinators described developing their own 'checklists' to assess students' practical skills, whilst one program coordinator described basing their assessment criteria on the Dietitians' Skills Recognition checklist from Dietitians Australia.

Several tools were identified that facilitated students' learning. Specific textbooks and videos were described, such as YouTube videos on empathy, whilst the DIET-COMMS tool was identified as a valuable framework for guiding students' learning.[86] Most program coordinators also identified using case studies to simulate real-life client scenarios. Interdisciplinary collaboration with psychology was highly valued as contributing to students' knowledge and skills, however responses from program

coordinators suggested a careful balance of psychology and dietetic content was needed. This value was particularly acknowledged in teaching compassion and behaviour change theory. Specific frameworks for the client-therapist relationship developed from psychology were not mentioned.

"I can call up the psychologist and ask anything, anytime, they're just so helpful and they've made some suggestions to me about how to teach some of these things, or how they teach similar things in their program" (Program Coordinator 4)

4.6 Discussion

Findings from this study clearly reveal a high degree of variability in the terminology used to characterise the client-dietitian relationship within Australian dietetics curriculum documents. This is likely to have significant implications for 'how' as well as 'what' types of skills are taught, assessed and understood by students. This study shows how the topic of the client-dietitian relationship is expressed in subject outlines and which key elements and influential factors regarding the relationship have been articulated.[146] Responses from program coordinators provide more detail as to how the client-dietitian relationship is taught, and support the finding that all programs appear to have some component of the client-dietitian relationship as part of their curriculum. However, responses from program coordinators also depict the client-dietitian relationship as an ambiguous concept across accredited programs and hence 'how' and 'what' is taught appears inconsistent. These findings from both curriculum documents and perspectives of program coordinators provide a more comprehensive understanding of how the relationship is embedded and assessed in dietetic curricula in Australia.

The key finding from this study was the variability in how the client-dietitian relationship is articulated in subject outlines. Similar to other healthcare contexts, a range of terms have been used to describe therapeutic relationships including 'helping relationship' and 'therapeutic alliance'.[159] Thus the variation in how the relationship is expressed within dietetic subject outlines may be reflective of how the phenomenon is referred across the broader healthcare literature. We also found some ambiguity around whether these terms referred to the client-dietitian relationship in a therapeutic or other work-related context, such as public health advocacy. It is possible that the variation in terminology in part reflects different contexts and settings where dietitians are employed.

Of course the nature of language means that it will likely always be open to interpretation, however further research should explore whether more clear and consistent language describing the client-dietitian relationship in a therapeutic setting is needed to allow greater specificity and clarity that may aid training efforts. That is, not only terms that reflect the phenomenon, but also which skills need to be targeted, taught and assessed as part of skill development in this area. In the same way that standardised terminology has been developed to identify steps of the Nutrition Care Process, this same approach could be extended to the client-dietitian relationship.[67] For example, terminology for the 'nutrition assessment' step is labelled under five clear domains providing a well-defined structure for dietitians to comprehend how this step might be enacted in practice. Although the client-dietitian relationship forms the centre of the Nutrition Care Process Model, the same level of attention as to what this actually looks like in practice has not been given.[67] A first step might be establishing consistent terminology, such as 'therapeutic relationship', as has been done with 'nutrition assessment', to enable dietitians to recognise and thus connect more meaningfully with the construct. Standardising terminology in this way may mean that dietitians in Australia and across the globe may better connect with the concept of the client-dietitian relationship, as the Nutrition Care Process is applied internationally.[67] In addition, consideration is needed as to whether additional research could establish the client-dietitian relationship as part of the theoretical framework for dietetic practice, and thus enable it to be more formally articulated within curriculum documentation.

The majority of subject outlines seemed to express key elements of the client-dietitian relationship indirectly, where the connection between the key element and the relationship was not explicitly acknowledged. For example, communication skills were articulated in subject outlines however without reference to the importance of communication in the client-dietitian relationship. This was also supported by program coordinators' responses that described teaching communication. The value of this finding lies in recognising that key elements of relationship development appear to already form part of the dietetics curriculum to some extent and suggests the potential for further curriculum development in this area. The subject outline that described students learning 'to explain characteristics of helping relationships' implies there is also some direct recognition of students needing to learn what is important for relationship development, as also confirmed by program coordinators' responses. Furthermore, characteristics listed

as examples within this learning outcome ('warmth' and 'a want to understand') are also supported in healthcare literature as being valuable to the therapeutic relationship.[160, 161] Hence there are some strengths of the curriculum in this area, however there still appears a need for clearer identification of learning opportunities around relationship development across dietetic programs in Australia. This will also assist with improving understanding of the extent that students might absorb and understand this content. This need is apparent because of the crucial role that establishing a positive relationship plays in delivering patient-centred care, and for dietitians to practice in a way that optimises clients' health outcomes.[30]

The need for clear articulation of the client-dietitian relationship is further supported by the current competency standards for dietitians in Australia. Standard 4.1.2 states that dietitians must be able to 'demonstrate empathy and establish trust and rapport to build an effective relationship with clients, carers and families'.[26] Despite this, most subject outlines analysed did not overtly express the phenomenon of the client-dietitian relationship. This may be impacted by requirements for subject outlines set by universities but it also suggests a disjuncture between the competency standard and the expressions used in subject outlines. Therefore a need to more overtly address this competency standard in subject outlines is apparent.

This problem then raises questions on how students are supported in meeting this competency standard, that is how programs ensure students can competently 'build effective relationships'.[26] Of course, teaching and assessing students' relationship development skills can occur without open expression in subject outlines as program coordinators have described. However without these articulations of what is meant by therapeutic relationships, how the relationship is understood and assessed across programs seems ambiguous. These skills are more likely to be presented based on teaching staff knowledge and experiences at various training program sites, as described by one program coordinator. It can thus be argued that because key outcomes that drive students' learning are articulated formally in subject outlines, a lack of documentation may influence the extent to which both teacher and student actively recognises and engages in that area.[121] This is important because limited recognition and engagement is likely to impact how students value the therapeutic relationship as part of their practice, and their skills in developing effective relationships in future practice. It can also raise questions on how teaching and

assessment of this content can be uniformly understood within programs, and across the accredited programs nationally. These questions could be explored in further research investigating the perspectives of educators and students.

A tangible modification to programs that may allow for greater specificity and clarity for students in meeting this competency standard could be more direct observation and practical assessment of elements involved in relationship development, such as communication skills. The DIET-COMMS tool was identified by one program coordinator as a valuable tool for guiding students' learning of communication skills.[86] It consists of 20 items that each articulate specific skills (for example 'outlines what to expect from visit') and thus could assist students in clearly understanding what communication skills for relationship development look like in practice. The DIET-COMMS tool may also assist supervisors to assess students against this competency standard whilst on clinical placement by outlining clear demonstratable actions.[86] Implementation of this tool within dietetics programs in Australia may contribute to alleviating some of the ambiguity around teaching in this area that was evident in program coordinators' responses.

This study has several strengths and limitations. The design of the analysis of curriculum documents assumed that universities have uniform requirements for subject outlines, which was later clarified by program coordinators. In the same way, the level of detail that could be extracted varied between universities and depended on how each university published their subject outlines and whether program coordinators were able to provide full versions. Hence it was recognised that all teaching moments which may reinforce key aspects of therapeutic relationship development might not have been recognised and therefore interviews with program coordinators were conducted. Research that explores students' perspectives would assist in triangulating this data further and provide additional insight into how the client-dietitian relationship is embedded within Australian dietetics education programs. The use of a published model of the client-dietitian relationship derived from the Australian context (described in Chapter 3) to guide data analysis was a strength of this study.[146] It allowed for a more comprehensive exploration of how the relationship is expressed within curriculum documents through analysing key elements and influential factors, rather than a simple summary of content. This is a useful place to commence a more open discussion around what is a meaningful expression of therapeutic relationships

within dietetic practice, and the appreciation of factors such as empathy and trustworthiness that are privileged in that interaction.[26]

4.7 Conclusion

To conclude, the client-dietitian relationship appears inconsistently embedded within accredited Australian dietetics education programs despite widespread acceptance of its importance to practice. The limited and variable extent to which the client-dietitian relationship appeared to be expressed in subject outlines did not reflect the full extent to which program coordinators perceived it be taught. There is potential to make learning content more uniform, thorough and focused within and across education programs, and enable clearer articulation of expected skill development. This study has provided initial evidence for the profession to work more on this important aspect of practice to ensure it is embedded unambiguously in training. Further research is needed to investigate if training programs should consider the use of more consistent language around the therapeutic relationship as learning outcomes, and how this might be achieved to more clearly reflect current competency standards. Additional research should also explore how training programs might be more explicit about how skill aspects of the therapeutic relationship are being addressed.

CHAPTER FIVE: The therapeutic relationship between a client and dietitian: An integrative review of empirical literature

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Statement of Authorship

AN, AM and LT contributed to the study conceptualisation and design. AN conducted the electronic literature search and collection of data from included studies. AN, AM, LT and FD contributed to data analysis. AN developed the formal write-up of the study, which was critically reviewed by AM, LT and FD.

5.1 Prologue

Chapter 5 presents the final research study conducted as part of this thesis, that is an integrative literature review. Given the findings presented previously in Chapters 3 and 4, an integrative literature review was undertaken to confirm a potential knowledge gap around research on the therapeutic relationship between clients and dietitians. The chapter describes how the review was conducted and key findings, followed by a discussion of what these findings mean for the dietetics profession with regard to other healthcare literature and clear areas where further research is needed.

5.2 Abstract

Aim: Scientific evidence underpins dietetics practice, however evidence of how the therapeutic relationship influences outcomes is limited. This integrative review aims to provide a comprehensive overview of the topic of the therapeutic relationship between clients and dietitians in the individual counselling context by summarising empirical literature into qualitative themes.

Methods: An electronic literature search of The Cumulative Index of Nursing and Allied Health Literature, PsychInfo, Scopus and Web of Science databases was conducted in October 2018 and repeated in February 2021. Studies were included if they explicitly referred to the therapeutic relationship (or associated terms), were based on study data and available in full-text. Extracted data were checked by a second researcher and the methodological quality was evaluated using the Mixed Methods Appraisal Tool. An iterative process of qualitatively coding, categorising and comparing data to examine recurring themes was applied.

Results: Seventy-five studies met the inclusion criteria. Five themes were identified which showed the extent and nature of research in this area. Studies revealed the therapeutic relationship: i) is valued within clinical dietetic practice, ii) involves complex and multifactorial interactions, iii) is perceived as having a positive influence, iv) requires skills training, and v) is embedded in practice models and tools.

Conclusion: Studies show the therapeutic relationship is a valued and multifactorial component of clinical dietetic practice and is perceived to positively influence the client and dietitian. Observational data is needed to assess the extent to which the strength of the therapeutic relationship might contribute to clients' health outcomes.

5.3 Introduction

Dietetics is an evidence-based profession where peer-reviewed, scientific research underpins practice. The International Confederation of Dietetic Associations (ICDA) describes evidence-based practice as a skill for dietitians to guide their decision-making. They describe dietitians having to combine their assessment of how valid, applicable and important evidence is with their own expertise and the client's values and circumstances.[162] Hence an evidence-based approach requires critical skills of the dietitian in understanding, evaluating and applying scientific knowledge in a meaningful way for the client. In Australia, dietitians are required to practise within an evidence-based approach as outlined by the Statement of Ethical Practice[163] and National Competency Standards[26], a requirement that is supported by the International Code of Good Practice published by the ICDA.[164] Thus practising in a way that is built upon credible, scientific evidence is fundamental to the dietetic profession. This evidence should also relate to *how* effective practice is conducted, including considerations of the therapeutic relationship with clients.

Although governing documents depict the therapeutic relationship as crucial for clinical dietetic practice, comprehensive descriptions of its key components are scarce.[26, 67] For example, the competency standards for dietitians in Australia state dietitians must 'build an effective relationship' with little articulation of what an effective relationship might look like.[26] Findings from Study 1 (Chapter 3) show that meaningful therapeutic relationship development is a complex and multi-faceted process. However prior to this many studies simply identified stand-alone qualities (such as 'trust') as important for relationship development without detailed descriptions of the process of meaningful relationship development as a whole.[71, 72, 79] The limited descriptions of important relationship components may in part be due to the heavy influence of biomedical and nutritional sciences as sources of evidence for practice. A qualitative study that explored dietitians' perceptions of evidence-based practice reported that dietitians did not perceive knowledge about communication skills to be 'evidence-based'.[165] In contrast to biomedical and nutritional information, dietitians did not feel they needed to retrieve information from the scientific literature to understand the evidence-base around communication skills. These skills were instead considered as 'know-how', gained through professional development opportunities rather than scientific literature.[165] The therapeutic relationship is integral to communication and counselling practices, as they are pivotal to how effectively the client and dietitian engage and are able to work

together.[90] However, these findings suggest dietitians may also not consider knowledge and skills in development of therapeutic relationships as part of the 'evidence-based' reference framework. This suggests a need for more scientific knowledge of therapeutic relationships, particularly as it can indeed provide evidence that informs practice.

Exploratory research may be required in the first instance. Integrative literature reviews are appropriate as they can provide a more comprehensive understanding of a specific healthcare phenomenon by summarising relevant literature and allowing for various methodologies to be included.[117] Integrative reviews on therapeutic relationships can be found in other health disciplines such as nursing, physiotherapy and occupational therapy, but are limited in dietetics.[61, 159, 166-168] We found one integrative review of published studies from 1997 to 2016, focusing on patient-centred care in dietetics.[30] It highlighted the significance of the therapeutic relationship and noted this relationship as an important dimension in delivering patient-centred healthcare. Although patient-centred care and the therapeutic relationship are related concepts, the integrative review on patient-centred care did not comprehensively focus on the therapeutic relationship. The inclusion criteria specified 'relationship' only and did not include other terms known to represent the phenomenon of the therapeutic relationship, for example 'alliance', 'connection' and 'rapport'. Dietetic students were also excluded and hence the review on patient-centred care did not capture literature describing how students might be trained in therapeutic relationship development. There remains a need to review research that comprehensively focuses on the concept of the therapeutic relationship (including other like terms), particularly those published prior to 1997 and since 2016.

The integrative review reported here addresses the research question 'What does research on the therapeutic relationship tell us about the phenomenon in clinical dietetic practice?'. The aim of this study was to provide a comprehensive overview of the topic of the therapeutic relationship between clients and dietitians in the individual counselling context by summarising empirical literature into qualitative themes. The term 'therapeutic relationship' is widely used across healthcare literature and hence is used throughout to refer to the purposeful relationship between a client and dietitian for the client's therapeutic benefit.[34] 'Therapeutic alliance' is also used, as it is a term used within the psychology discipline that refers to a component of the therapeutic relationship.[36]

5.4 Methods

This integrative review was written in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.[169] The integrative review methodology was guided by Whittemore and Knafl who specify five key stages: problem identification, literature search, data evaluation, data analysis and data presentation.[117] The approach has been applied previously by Sladdin et al in a study of patient-centred care in the dietetic context.[30]

5.4.1 Literature Search

A systematic electronic literature search was conducted in October 2018 and repeated in February 2021 to account for studies published after the original search date. The terms 'dietitian', 'client' and 'relationship' were used as a foundation to identify other relevant search terms. To ensure a comprehensive list of terms was achieved a health sciences librarian was consulted and the online version of the Oxford thesaurus was used in addition to the primary researcher's [AN] knowledge of terminology expressed in the literature.[170] Medical subject headings (MeSH) were also utilised to ensure key terms were included and truncated appropriately, for example searching for 'relation*' rather than 'relationship'. Search terms corresponding to the dietitian and client included: 'dietitian', 'dietician', 'nutritionist', 'client' and 'patient'. Search terms corresponding to 'relationship' included: 'relation*', 'alliance', 'partner*', 'collaborat*', 'connect*', 'rapport', 'bond*' and 'interaction*'. Boolean connectors 'AND' and 'OR' were used. Four electronic databases were searched: Cumulative Index of Nursing and Allied Health Literature (CINAHL), PsychInfo, Scopus and Web of Science. Research shows electronic database searches may yield only half of eligible studies and therefore other strategies were applied, including ancestry searching and hand searching of key dietetics journals.[171] Google Scholar and Scopus databases were used to attain articles identified through ancestry and hand searching. All citations obtained through searching were imported into EndNote for data management purposes.[172]

The primary researcher [AN] screened the titles and abstracts of articles according to the inclusion and exclusion criteria. Studies were included if they: i) explicitly referred to the relationship, alliance, partnership, collaboration, connection, rapport, bond or interaction between a client and dietitian, nutritionist or nutrition and/or dietetic student concerning the study being reported, ii) were empirical (that is based on data collected for a study), and iii) were available as full text. Studies were excluded if

they referred to the relationship (as outlined in the inclusion criteria above) but only with regard to group-based interventions, or described a multidisciplinary context but it was unclear if the relationship was between a client and dietitian, nutritionist or nutrition and/or dietetic student specifically. No exclusion criteria for study language or year was applied to maximise the opportunity for relevant data to be captured. English translations of the full-text version of published articles were requested from authors via email. Articles were obtained and each full text article was read by AN to determine if they met the inclusion criteria.

5.4.2 Data Extraction

Data was systematically extracted into a Microsoft Excel[157] table which included study authors, year and country, study design and aim, inclusion criteria, sample, data collection and analysis methods, and findings concerning the therapeutic relationship or associated terms. The primary researcher [AN] extracted all data which were checked by a second researcher [EB] using a method for source data verification (that is comparing original documents to recorded data).[173] Both researchers met several times to discuss this process and to ensure clarity around the data checking method (such as what is considered an 'error'). The percentage of errors identified was within the acceptable error rate (≤ 5%) meaning no further checking of data was required.[173] Any identified errors were corrected in the original data before analysis commenced.[173]

5.4.3 Quality Evaluation

The methodological quality of each study identified in the initial search was independently scored by both researchers [AN and EB] (n = 64). This was performed due to the subjectivity of the quality appraisal tool used, the Mixed Methods Appraisal Tool (MMAT).[118] Studies were scored using the design-specific appraisal criteria specified in the MMAT (5 differing criteria for each type of study design). Total scores were calculated. For example, studies received a score of 5 if all criteria were met or a score of 0 if no criteria were met. Researchers used the scoring guide included within the MMAT to score each study.[118] Researchers discussed differences between scores and an agreed score was decided. Justification for the agreed scores was documented and used to score studies identified in the repeated search.

5.4.4 Data Analysis

Following processes outlined by Whittemore and Knafl, the data were 'ordered, coded, categorised and summarised' by the primary researcher [AN] and refined through discussions with the interdisciplinary research team (dietetics and psychology).[117] Initially, studies were ordered according to whether they referred to the 'relationship' or 'alliance', or associated terms such as 'connection'. Data concerning the terms 'relationship' and 'alliance' were analysed together because both are established terms in the psychology discipline with evidence-based constructs (e.g. psychologist Bordin's 'working alliance').[36] These terms were initially analysed separately from other terms in anticipation of a possible difference in findings given their link to evidence-based constructs. Data were then ordered according to study design (either qualitative, quantitative or mixed methods).

Whittemore & Knafl suggest applying the constant comparative method particularly for analysing data from different methodologies.[117] All extracted data were copied directly from the data extraction table into a Microsoft Excel document for coding by AN. Data concerning the relationship and alliance were coded first, followed by data concerning associated terms. The coding process began with assigning initial codes, which were codes that described evidence in the data extract for either 'relationship', 'alliance' or associated terms. These codes were then compared, where similarities between codes were identified and consequently grouped together to form common themes.[117] This process involved re-reading codes and adjusting preliminary themes to ensure the themes reflected the codes. Once themes were developed for data within each study design, they were then compared across study designs and merged where similarities were seen (e.g. quantitative and qualitative data showing the relationship is important). Data were collated across study designs to reflect these merged themes.[117] This process occurred separately as part of the analyses for both primary terms ('relationship' and 'alliance) and associated terms (e.g. 'connection').

Established themes within both primary and associated terms analyses were compared, with similarities and differences documented. These notes allowed identification of major themes across both analyses, and where appropriate these were adapted to reflect data from both analyses. Following this, data were collated and findings were reviewed to confirm each theme. The final phase of the analysis involved drafting a summation of each theme where its meaning was further crystallised.[117] Meetings were also

held with the research team where the emerging analysis (as coded by AN) was discussed, critiqued and refined. This team consisted of researchers from both dietetics and psychology and allowed for themes that were developed from a dietetics lens to be challenged from a psychology perspective. Additional notes were kept by AN to document the emerging analysis, analytical decisions and possible directions for further analysis.[117] Examples of the data analysis process from raw data to the final theme is shown in Table 5.1 .

Table 5.1 Examples of how raw data was qualitatively analysed to form the final qualitative themes as part of the integrative literature review

	Raw Data	Initial Code	Examples of Common Themes	Final Theme	Examples of Memo Notes
Example 1	*'A collaborative relationship with patients was strongly desired because it contributed to feelings of pride and satisfaction'* [75]	Dietitians strongly desiring collaborative relationships	Importance of relationship A crucial component of practice Valuing the relationship	A valued component of clinical dietetic practice	Wanting and valuing a particular type of relationship
	'The most commonly named positive aspects of working as a renal dietitian consisted of… developing long-term relationships with patients (33%)' [174]	Identifying 'developing long-term relationships with patients' as most commonly named positive aspect of working as renal dietitian			Dietitians wanting to build relationships with clients. They are aware of needing to do so, particularly needing to build a relationship first.
Example 2	'*Clients were appreciative of this disclosure as it often provided potentially helpful examples, as well as enhancing the depth of practitioner–client relations.'* [72]	Clients perceiving self-disclosure as enhancing depth of relationship	Being perceived as enhancing relationship development Being perceived as facilitating relationship development Multiple factors facilitating relationship development	Involves complex and multifactorial interactions	Data mostly shows clients recognising the dietitian's role in relationship development, without recognising their own role in relationship development (as a client)
	'The majority of RDs (Registered Dietitians) perceived that the use of ET (expressive touch) in client encounters may … enhance the therapeutic relationship (68%) while < 5% disagreed.' [175]	Dietitians perceiving that expressive touch may enhance therapeutic relationship			

5.5 Results

5.5.1 Study Characteristics

From 2433 studies identified for screening, 75 studies were included (Figure 5.1). Most quantitative studies were descriptive, and predominantly utilised surveys (n=21) and ratings of observed practice (n=7). One study involved a secondary analysis of control and intervention data from a randomised controlled trial. Qualitative study designs mostly utilised interviews (n=25) and focus groups (n=9). Most studies were conducted in Australia (n=26) or the USA (n=18) and published between 2010 and 2020 (n=49). Most studies had between 11 and 395 participants (n=65) which included dietitians or nutritionists (n=46), clients or patients, and their family or carer (n=25), or nutrition and dietetic students (n=11). Dietitians in the studies were working in private practice (n=11), hospitals and outpatient clinics (n=13) and community or public health services (n=6). From the studies that articulated the health conditions of clients, most were described as managing chronic diseases (n=13). A summary of included studies is provided in Appendix 6.

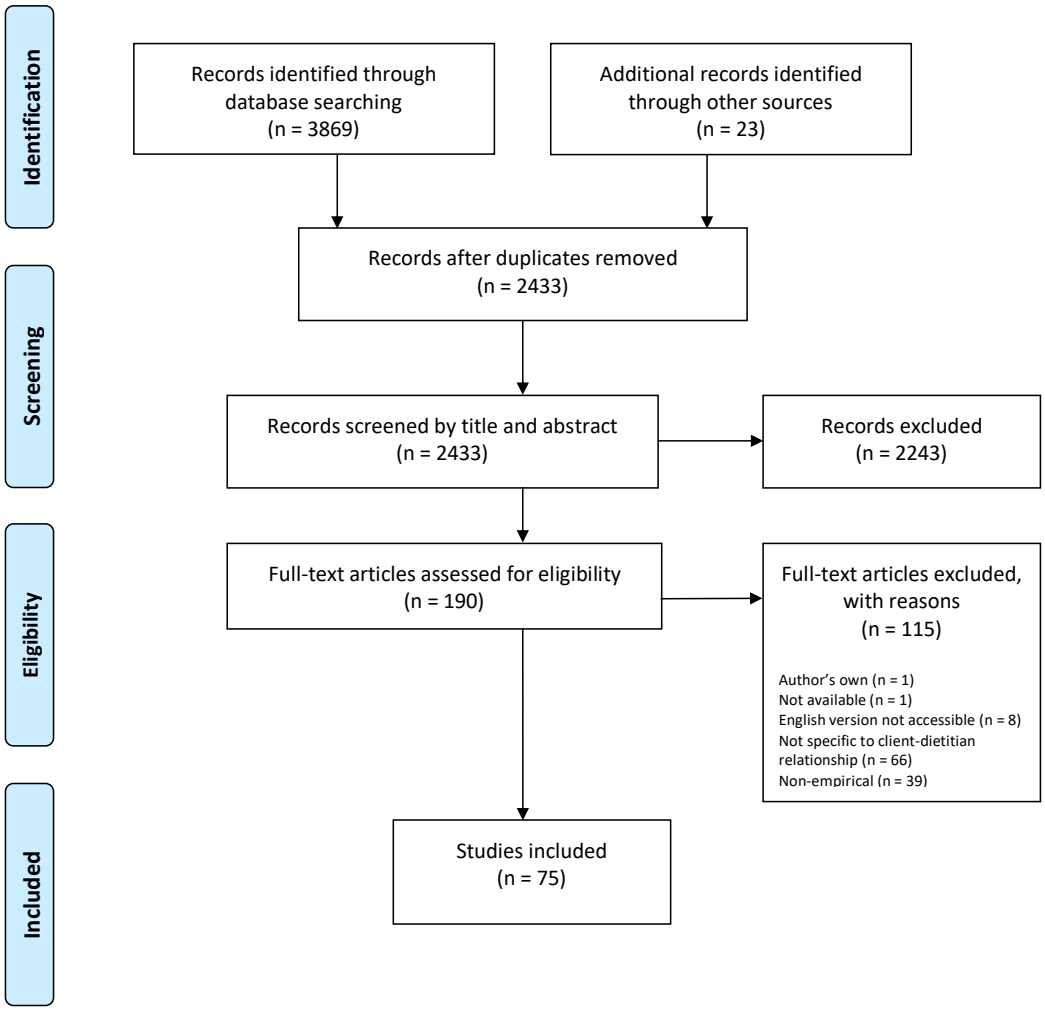

Figure 5.1 PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) flow diagram showing the selection of included studies for the integrative literature review (combined results from initial and repeated searches)

5.5.2 Quality Evaluation

Studies varied in their methodological quality (Table 5.2). The number of studies that fulfilled all five design-specific criteria in the MMAT was 30 (of 75 eligible studies), with most being qualitative (n=24).

Table 5.2 The proportion of quantitative, qualitative or mixed method studies (n=75) meeting a number of criteria specified within the Mixed Methods Appraisal Tool[118]

MMAT[a]	
Number of Criteria Met	**n (%)**
0	2 (4)
1	7 (9)
2	10 (13)
3	20 (26)
4	6 (8)
5	30 (40)

[a] Mixed Methods Appraisal Tool

5.5.3 Examination of Themes

Five themes were identified across both analyses, that pertained to the primary terms ('relationship' and 'alliance') and associated terms (e.g. 'connection'). The themes showed that the therapeutic relationship: i) is valued within clinical dietetic practice, ii) involves complex and multifactorial interactions, iii) is perceived as having a positive influence, iv) requires skills training, and v) is embedded in practice models and tools. The findings are described below by theme and whether they correspond to primary terms or associated terms.

Theme 1: A valued component of clinical dietetic practice

Primary Terms:

The first theme reflects the finding that the therapeutic relationship appears important and valued by both parties as a component of the clinical dietetic consultation. This was mostly seen within qualitative

findings, however was also reported from quantitative and mixed methods findings. For example, Sladdin et al undertook semi-structured telephone interviews with patients to explore their perspectives of patient-centred care and concluded that 'patients want to have caring relationships with dietitians'.[76] Descriptors of the type of relationship valued by dietitians and clients included 'caring', 'genuine', 'positive', 'supportive' and 'ongoing'. However, a qualitative study described clients perceiving that an 'ongoing' relationship would not be useful in the context of type 2 diabetes management, based on the content and delivery of initial consultations attended.[71] Authors specified that this was the case for clients who were both satisfied and unsatisfied with their consultation, however only specified a reason for those that were satisfied. Authors described these clients as perceiving that they had obtained the information they needed and did not perceive the need for an additional consultation.[71] Hence the majority of data indicated that the therapeutic relationship is valued but one study found clients with diabetes did not view an ongoing relationship as being of value.

'Participants valued the relationship built because they felt supported, empowered, and confident in discussing diet-disease mechanisms, goals, motivators, challenges, and fears, which helped them to feel their diet-related comorbidities and lifestyle needs were thoroughly considered'

(Warner et al 2019, p1368)

Associated Terms:

The importance of the client and dietitian establishing a 'connection', 'rapport', 'partnership' and 'collaboration' was apparent, reflected through the descriptors 'essential', 'critical' and 'important'. One study that used qualitative interviews with dietitians about their weight management practice with children found that establishing rapport in initial interactions with paediatric clients was particularly important.[176]

'To begin with, many dietitians pointed to the importance of initial greetings and introductions... building rapport with them and trying to alleviate some of the child's nervousness' (Raaff et al 2014, p306)

Theme 2: Involves complex and multifactorial interactions

Primary Terms:

The second theme reflects the complex and multifaceted nature of the therapeutic relationship between clients and dietitians that was apparent from the identification of multiple factors and their influence on the relationship within numerous studies. This finding is typified by the description of the relationship as a 'complex interpersonal experience'.[73] The majority of factors appeared to be either attributes of the dietitian or client, techniques used by the dietitian or contextual factors (e.g. setting). Factors specific to either the dietitian or client are summarised in Table 5.3. Some examples include the dietitian being trustworthy and respectful, and the client's expectations of the consultation. Expressive touch was defined by Green et al as 'relatively spontaneous, responsive, and affective contact by dietitians' and was identified as both a facilitator and barrier to relationship development. In their survey of 135 dietitians, Green et al reported that the majority of dietitians (68%) agreed that expressive touch enhances the therapeutic relationship whilst <5% disagreed.[175] Dietitians also identified the potential for expressive touch to 'erode' trust in their relationship with a client.[175] Three contextual factors were identified; the type of care setting where the client-dietitian interaction occurs, the duration and frequency of interactions, and documentation requirements for the consultation. For example, two qualitative studies described long-term care (versus acute care) and private practice settings as conducive to relationship development.[73, 177]

'The unique context of private practice compels dietitians to modify their practices and foster mutually beneficial therapeutic relationships with their patients' (Harper & Maher 2017, p16)

Table 5.3 Summary of identified dietitian and client-related factors as facilitators or barriers to the development of the therapeutic relationship between client and dietitian

Dietitian-Related Factors	Attributes		Techniques	
	Facilitators	**Barriers**	**Facilitators**	**Barriers**
	Genuineness Supportiveness Caring Positivity Enthusiastic Empathic Understanding Respectful Honesty Having integrity Trustworthy Invested in client's wellbeing Friend/Friendliness Non-judgemental Openness Dress	'Unhelpful engagement style':[178] patronising tone, not listening to patients' needs, biochemical agenda, instructive advice giving, overbearing support Manipulative Dishonest Unaccepting of client Anxious Lacking confidence	Individualising recommendations Organising content Quality of introduction Clarifying reason for referral early in consultation Clarifying client's understanding of role of diet Using theories and models of behaviour change Explanation of health consequences to client Developing rapport Mode of communication e.g. telephone calls Communication skills: using advanced level language and visual means, listening skills, questioning and reflection, warmth, courtesy, attentiveness Acknowledging client's challenges Self-disclosure	Sub-optimal counselling skills Creating parent-child dynamic Leading practitioner-centred consultation from parental ego state Expressive touch

			Holistic understanding of client Asking client evaluative questions Respecting the client's expertise Using knowledge effectively with clients Clarifying dietetic approach Enabling client choice in continuing relationship Prioritising relationship in first consultation Expressive touch Specific named approaches: 'Healthy Conversation Skills' intervention,[179] 'Narrative Dietary Counselling' (use of whiteboards and narrative learning strategies),[79] 'Counselling and Therapeutic' approach[180]	

Client-Related Factors	Facilitators	Barriers
	Completing preparatory work for consultations Attending follow-up consultations Respect for dietitian Client response to dietitian interaction: feeling prioritised, heard and remembered, comfortable, engaged, empowered, an important individual, motivated by sense of accountability, having received personalised care, reassured by expertise of dietitian	Poor perception of dietitian: lacking integrity, untrustworthy Unrealistic expectations of diet Prejudices and assumptions Lack of openness to disclosing eating behaviours

Associated Terms:

Factors were identified as influencing the 'rapport', 'connection', 'collaboration', 'partnership' and 'interaction', which were also specific to either the dietitian or client, or the context of their interaction (Table 5.4). Most factors were similar to those identified from the analysis of primary terms, however some differed. For example, perceiving the dietitian as approachable and sensitive was thought to facilitate collaboration and rapport building. Contextual factors described were specific to developing a 'connection', 'rapport' and 'therapeutic interaction'. These included the amount of allocated time for the consultation as determined by the workplace, (that is having more time facilitated rapport building)[181-183] and having a patient-centred physical environment where consultations occurred (e.g. 'neutralising hierarchy' by removing physical barriers such as a desk).[182] Qualitative studies that explored dietitians' perspectives identified that dietitians felt pressure from physicians to prioritise addressing clients' health rather than building rapport,[183] and consequently spent less time focusing on rapport, and that the private practice context was a 'motivator' to develop rapport with clients.[73] Reasons for this included maintaining their professional reputation and source of income. Another qualitative study that explored preferences of clients managing coeliac disease described clients preferring to engage with the same dietitian over repeated consultations. This was explained as assisting with rapport development.[184]

> *'Participants preferred to see the same dietitian at each appointment, 'I think the continuity of care is important' (CD013) and 'it would have been great if I'd had the same person building up that rapport' (CD004).'* (Madden et al 2016, p611)

Table 5.4 Summary of identified dietitian-related factors as facilitators or barriers to the rapport, collaboration, partnership and interaction between clients and dietitians

	Associated Term	Facilitators	Barriers
Attributes	*Rapport*	Approachable Friendly Sensitive Relaxed, comfortable and natural Confident Non-judgemental Genuine Unconditionally accepting Empathic	
	Collaboration	Sensitive Aware	
Techniques	*Rapport*	Humour Immediacy Facilitating client autonomy Giving clients opportunity to ask questions and express concerns Applying a person-centred approach Individualising instructions Putting client at ease	Interrupting client through verbal or non-verbal behaviour Phrasing questions to client with implied answers Using telephone interviews as form of follow-up Using series of direct questions Trying to meet client's perceived expectations in first consult Feeling the need to address all relevant content immediately

		Interviewing skills Layering advice Attending to client's non-verbal communication Socratic interview style Self-disclosure Using continuing responses Shared decision making Communicating interest in patient's dietary problems Active listening: paraphrasing, restating, verbal and non-verbal encouragement, silence, reflecting feelings Introductions Gradually directing more specific enquiries Asking client about their preferences Changing questioning approach to prioritise rapport development Providing feedback and social support Verbal and non-verbal communication skills Expressive touch	
	Collaboration	Verbal and non-verbal communication skills Establishing shared understanding at beginning of consultation 'Narrative Dietary Counselling' (specific approach named in study):[79] narrative learning strategies including use of whiteboards	

		'Nutrition Counselling Approach' (specific approach named in study)[185]	
	Partnership	Desirable communication style Working as a team 'Counselling & Therapeutic Approach' (specific approach named in study)[180]	
	Interaction	Applying a person-centred approach Sending individualised text messages	

Theme 3: Perceived as having a positive influence

Primary Terms:

The third theme indicates that a good therapeutic relationship appears to have a positive influence on clients and dietitians. Most findings were qualitative and taken from dietitians and clients' perspectives expressed through semi-structured interviews. For example, Morris et al explored renal patients' perspectives of dietitians' communication styles and found that a 'good working relationship' facilitated patients 'feeling good' about themselves.[178] No studies were identified that analysed the statistical impact of the strength of the therapeutic relationship on tangible outcomes (such as improved diet quality scores) and as a result the apparent positive influence of a good therapeutic relationship appears based on the perspectives of clients and dietitians only.

Associated Terms:

Findings pertaining to 'rapport', 'interaction', 'connection' and 'partnership' also mostly came from qualitative interview data. Perceptions of a positive influence on client's attendance and adherence to the treatment plan was described within several studies. For example, findings from a mixed-methods study in an Indigenous Australian context described establishing a 'personal connection' as encouraging patients to attend their appointments.[134]

> *'The receptionist noted that patients refer to the dietitian by name, which is unusual. When health professionals do not establish a presence in the community, they are more likely to be referred to by a generic label like 'the lady'. This personal connection with patients facilitates improved attendance at the clinic.'* (Foley & Houston 2014, p219)

Developing rapport was reported within qualitative studies as influencing clients' thoughts and feelings, specifically their trust and respect for the dietitian and confidence in engaging with the dietitian.[72, 186] For example, results from a qualitative study that explored clients' and dietitians' perceptions of trust across multiple healthcare settings found that dietitians 'aimed' to build rapport to 'gain' the trust and respect of their client.[72]

Theme 4: Requires skills training

Primary Terms:

The fourth theme shows that therapeutic relationship development seemed to be a valued component of training for dietitians, and should be a skill dietitians are trained in. This was identified across three areas: 1) the inclusion of relationship development skills in training programs, and findings describing 2) training adequacy and 3) the impact of training. Several studies described training programs for students and dietitians that focused on, or included components of relationship development.[81, 82, 84, 135] One study described a training program designed to teach 'relationship-establishing skills' to nutrition students and thus appeared focused on the relationship itself.[84] In contrast, other studies listed the relationship as a component of training programs but often focused on different skill aspects of relationship development, such as counselling or communication skills.[81, 82, 135] Factors contributing to relationship development were articulated as part of these training programs and reflected those identified in the second theme (e.g. listening skills).[82] One study surveyed dietetic internship directors and reported that 73% thought students' preparation in developing a trusting relationship was adequate, whilst 19% indicated more training was needed (from a total sample of 66).[187]

Results concerning the impact of dietitians' training on the relationship varied. In a quantitative survey, post-registration training was reported as contributing to improved relationships by 90% of dietitians surveyed. Unfortunately, details of the type of training was not elaborated upon.[188] Results from a mixed methods study suggested clients who engaged with dietitians trained in a particular program identified as being helpful in building relationships, felt 'more supported' than clients whose dietitian had not undertaken this training.[179] In addition, a non-randomised cross-sectional study reported findings that students trained in relationship-building skills displayed different verbal behaviours that were conducive to relationship development (e.g. responses that facilitated trust), compared to those students who were not trained.[83] These studies seemed to suggest a positive influence of training, but the aspects of the relationship that improved were often unclear. A secondary analysis of data from a stepped-wedge cluster-randomised controlled trial that evaluated the impact of motivational interviewing-based (MIB) training on clients' and dietitians' ratings of therapeutic alliance found no evidence that MIB training supported improvements in therapeutic alliance.[87]

Associated Terms:

The value of dietitians' training was also evident with regard to building 'rapport' and the 'therapeutic interaction'. A quantitative survey found dietitians felt adequately trained in rapport building in the context of eating disorder management.[189] In contrast, a qualitative study found dietitians working in both public hospitals and private clinics in Israel did not feel adequately trained in managing 'emotional aspects' of the therapeutic interaction.[182] In addition, three quantitative studies presented data on nutrition students' rapport building skills after undergoing training.[84, 145, 190] Two studies found that students' skills in rapport building did not improve post training,[84, 145] and one study reported that students' rated their rapport-building skills as more proficient than their assessors.[190] An Australian study found that competency standards had evolved to focus more on dietitians 'collaborating' and 'negotiating in partnership' with clients, further highlighting the need for dietitians to be trained in relationship building skills.[151]

Theme 5: Embedded in practice models and tools

Primary Terms:

The fifth theme indicates that the therapeutic relationship was embedded to varying degrees throughout practice models and assessment tools for clinical practice. The development of a conceptual model and inventory for assessing patient-centred care was described by one quantitative study, which included establishing a genuine, caring and reciprocal therapeutic relationship.[191] A mixed methods study articulated 'relationship-building skills' as the first step in a process model for nutrition education and counselling.[77] Another mixed methods study described the development of the DIET-COMMS tool for assessing dietitians' communication skills with clients.[86] Unlike earlier models described, the therapeutic relationship was not the specific focus of the DIET-COMMS tool, nor was it an explicit component. Instead the authors described the tool as a response to the relationship being at the core of the 'Nutrition and Dietetic Process', which may suggest the DIET-COMMS tool was developed to address some relationship development skills (i.e. communication skills specifically).[86]

"The relationship between the patient and the dietitian is at the core of the Nutrition and Dietetic Process and the DIET-COMMS responds to this agenda" (Whitehead et al 2014, p331)

Associated Terms:

'Rapport', 'partnership' and 'collaboration' were embedded as components of assessment tools and practice models. 'Rapport' formed part of two different assessment tools, one that evaluated dietitians' interviewing skills[192] and another that evaluated their communication skills.[86] Rapport was also described as part of a nutrition counselling model[190] and trialled within a scale that measured dietitians' confidence working with clients managing psychological conditions.[193] 'Partnership' and 'collaboration' were identified as components of models for both communication and nutrition education in two different studies by the same authors.[77, 90]

'Overall the current process model describes teaching, collaboration and partnership within a nutrition education and counselling consultation with individual clients.' (Cant & Aroni 2009, p52)

5.6 Discussion

This integrative literature review provides a comprehensive overview of the topic of the therapeutic relationship between clients and dietitians in the individual counselling context. It has done so by summarising existing research into qualitative themes. This review builds on previous knowledge gained from earlier research (including an integrative review on patient-centred care)[30] by including data that not only relates to explicit terms (such as 'relationship'), but also other terms with similar meanings (such as 'connection' and 'partnership'). Further, this review builds on previous knowledge by including empirical research on students' training and studies published across all years. Hence this review adds to the evidence base by summarising literature that focuses more thoroughly on the phenomenon of the therapeutic relationship from all publication dates, including more recent evidence. In doing so, this comprehensive review has provided a footing for further work to be done on this crucial aspect of clinical dietetic practice by identifying clear avenues for further research.

Major findings were that the therapeutic relationship appears to be a valued component of clinical dietetic practice and is perceived to have a positive influence on both clients and dietitians. This was evident from mostly qualitative data describing dietitians' and clients' perspectives and aligns with the philosophies of patient-centered, and relationship-centred healthcare paradigms.[20, 124] These findings are consistent with other healthcare literature which also emphasise the importance of client-practitioner relationships,

particularly with regard to improved health outcomes for clients. Within psychotherapy, a multilevel longitudinal meta-analysis by Flückiger et al concluded that the therapeutic alliance, a recognised component of client-practitioner relationships, is a 'critical therapeutic element'.[194] Flückiger et al confirmed robust findings from previous meta-analyses that have shown the therapeutic alliance accounts for approximately seven percent of the variance in therapy outcomes across therapy types and study designs.[36, 194-196] Although modest, Flückiger et al describe this relation between therapeutic alliance and therapy outcomes as greater than those of other treatment variables, such as the therapist's adherence to the treatment manual.[194] Hence psychotherapy research has clearly identified and quantified the importance of the therapeutic alliance in relation to its positive impact on various treatment outcomes.

Interestingly, the current review did not identify any studies that quantitatively analysed the strength of the therapeutic relationship with tangible outcomes for clients in a dietetic context (such as diet quality scores). Unlike psychotherapy, this review has shown that the value of the therapeutic relationship and its positive influence on clients and dietitians appears to mostly come from qualitative data describing clients' and dietitians' perspectives. The extent of the research undertaken in psychotherapy highlights that substantial quantitative data that describes client-dietitian relationship strength is lacking, and furthermore to what extent relationship strength accounts for client's therapeutic outcomes. Hence there is a need for observational studies that assess the strength of these relationships in clinical dietetic practice from all perspectives (client, dietitian and observer) and their associations with client outcomes. For example, this could include investigating the correlation between client-rated relationship scores and their levels of motivation or self-efficacy. Quantitative data of this nature, that is alliance-outcome data, would assist the profession in better understanding how the therapeutic relationship may impact clients' health outcomes and support existing qualitative descriptions of the relationship's positive influence.

A starting point for dietetics may be to focus on psychotherapist Bordin's 'working alliance' which captures several components of therapeutic alliance.[35] Key factors of the client-dietitian relationship identified in this review reflect Bordin's conceptualisation of the therapeutic alliance which articulates three components: 1) agreement on goals between therapist and client, 2) agreement on tasks to achieve the client's goals, and 3) their bond.[35] For example, this review has identified clients' unrealistic expectations of dietary change as a factor impacting relationship development, which can be interpreted

as reflecting Bordin's 'Agreement on Goals'.[35] If a client has unrealistic expectations about the extent to which they can change their diet, it may be more difficult for the dietitian and client to agree on the client's goals. According to Bordin, this would impact the extent to which they can develop a strong alliance.[35] The current review has identified several relationship factors that are consistent with Bordin's conceptualisation of the therapeutic relationship. Of course, additional research is needed since the nature and importance of therapeutic relationships for health outcomes may be different in a dietetics context compared to a clinical psychology or psychotherapy context. Measures to assess the therapeutic alliance (e.g. Working Alliance Inventory)[197] have been used in one dietetic context already and other allied health disciplines.[87, 198] The 'Working Alliance Inventory' has been adapted for use in other disciplines, such as physiotherapy.[62, 199] This tool consists of 32 items, such as 'the client and therapist feel they trust one another'.[197] Additional research is needed to assess the validity and reliability of this tool in dietetics, but it appears a feasible measure for the profession to begin to collect alliance-outcome data. This tool may also be useful for clinical dietitians to use within clinical supervision sessions to guide critical reflective practice and assist dietitians in articulating nuanced components of relationship development they feel they are doing well or could improve.

Findings from this review also provide some guidance as to what client outcome measures may be helpful to examine. Establishing a good 'relationship, 'connection' or 'rapport' were identified from primarily qualitative data as being important for treatment adherence, attendance, and gaining the client's trust and respect. Thus, the relationship between therapeutic alliance and attendance and/or treatment adherence may be useful outcomes. Client engagement, how they felt about themselves and their ability to self-manage their diet were also identified in the review.

Studies from other allied health disciplines have applied the Working Alliance Inventory[197] to assess the impact of the therapeutic alliance on client outcomes. For example, Sønsterud et al evaluated whether the therapeutic alliance between clients and speech therapists correlated with clients' motivation as part of stutter therapy.[200] A systematic review by Hall et al also identified multiple studies that assessed whether the therapeutic alliance is related to client outcomes in a physiotherapy context. Hall et al identified studies that also examined treatment adherence and satisfaction as outcomes.[62] The findings reported here and those from other allied health disciplines suggest that clients' attendance, as well as their self-

efficacy and motivation might be useful outcome measures to begin to examine to support existing qualitative data in dietetics. Longitudinal designs would be useful in assessing how relationship quality may change over a treatment period and therefore how this may impact longer-term health outcomes.

There are strengths and limitations of this integrative literature review. The therapeutic relationship is a challenging, 'broad and complex' construct.[61] In order to capture this complexity, a comprehensive review was achieved by applying a systematic and healthcare-specific method.[117] In doing so, a number of search terms that reflected the therapeutic relationship (other than 'relationship' itself) were included. Several sources were searched, resulting in 75 included studies that were conducted in a variety of countries and employed different study designs. Despite this, grey literature was not searched and therefore some data concerning the therapeutic relationship is likely to have been missed. It is also plausible that despite every effort to ensure a comprehensive search strategy, some applicable studies may not have been retrieved.

5.7 Conclusion

To conclude, empirical literature recognises and discusses the therapeutic relationship between a client and dietitian to an extent, both explicitly and through other similar terms. A variety of studies support a good therapeutic relationship as a valued and multifactorial component of clinical dietetic practice that is perceived to positively influence the client and dietitian. There are limited descriptions of how the relationship exists in everyday clinical practice and the extent to which relationship strength might contribute to clients' health outcomes. Data describing how dietitians are trained and assessed in relationship-development skills and the impact of this training is also limited. Observational studies are needed to assess the extent to which the therapeutic relationship might be associated with health outcomes specific to dietetic interventions, and further support the data identified in this review.

CHAPTER SIX: Conclusions & Recommendations

6.1 Prologue

As the final chapter, Chapter 6 concludes this thesis by summarising key methods and findings presented in Chapters 3-5. Following on from this, this chapter then integrates and interprets the findings from across the studies reported within this thesis. Based on this interpretation, recommendations are outlined for future clinical dietetic practice, research and training before concluding remarks are made.

6.2 Summary of Key Methods and Findings

Meta-analyses have shown a small to moderate, yet consistent, positive relationship between the quality of the therapeutic relationship between client and therapist and a variety of health outcomes for the client across different treatment types.[36] These data raise questions as to whether the quality of the relationship between a client and dietitian might similarly impact the client's health outcomes. The relationship between a client and dietitian appears to form the theoretical core of clinical dietetic practice as articulated in the Nutrition Care Process Model and supported by competency standards for dietitians in Australia.[26, 67] The client-dietitian relationship therefore seems to be recognised and valued as an important component of clinical dietetic practice. However despite this, it appears there is limited understanding of what this relationship means within a dietetic context, how it exists in practice and, how it is taught and assessed from both knowledge and skills perspectives. Hence a disconnect is apparent between how the client-dietitian relationship is valued in governing documents and the extent to which this relationship seems to be understood and integrated into everyday practice and training. Understanding more about the therapeutic relationship between clients and dietitians appears crucial given the potential for it to positively impact clients' health outcomes.

This thesis has addressed this disconnect by utilising a qualitative multimethod research design to tackle the broad overarching aim to 'investigate the phenomenon of the therapeutic relationship between a client and dietitian'. This multimethod design consisted of three major research studies. Given the highly exploratory nature of this topic, each study was designed purposefully to target a key area of knowledge and skill attainment for clinical dietitians. This was done to ensure that the overarching aim could be addressed in a way that would be most useful for the profession moving forward. That is, by producing data that would provide a strong foundation for further research and tangible advancements to the knowledge and skills of dietitians in this area. The three keys areas of knowledge and skill attainment for

dietitians targeted in this thesis were clinical practice (Study 1), education and training (Study 2) and empirical literature (Study 3). This thesis was designed to enhance understanding through the various studies. Study 1 provided an in-depth analysis of how the client-dietitian relationship might develop in an Australian practice context, and developed a conceptual model of this relationship for further application (Chapter 3). The second study linked this to professional preparation around therapeutic relationship development across the country (Chapter 4), whilst the third study looked at the global understanding of the client-dietitian relationship through an integrative literature review and identified the need for further research (Chapter 5).

As a starting point a conceptual model of what the client-dietitian relationship might look like in practice was developed in response to the research question 'How do dietitians perceive their process of developing meaningful relationships with clients managing lifestyle-related chronic diseases?'. It was recognised that processes of relationship development may differ between areas of clinical practice (such as acute versus chronic care) and so lifestyle-related chronic disease management was selected as an area to focus on. This context was justified as most appropriate as contact with the client was likely to occur over repeated consultations due to its chronic nature. Hence the repetition in contact was expected to have allowed more opportunities for relationship development to occur. A constructivist Grounded Theory approach guided the collection and analysis of data, as emphasis was placed on articulating action and process, rather than stand-alone qualities already identified as important for relationship development.[98] Semi-structured interviews with 22 qualified dietitians showed that through the theoretical lens of patient-centred care and role theory, relationship development seemed to be a complex process. This complexity arose from the key finding that the dietitian manages both their direct interaction with the client as well as a variety of external factors that compete with the dietitian practising in a way that facilitates relationship development. Three major categories were identified that were able to explain at a more abstract level what might happen in the process of relationship development. These were dietitians *sensing a professional chemistry* with their client, having to *balance both a professional and social relationship* with their client, and also having to *manage tension with competing influences*. This was depicted visually as shown in Figure 3.1. Each major category and subcategory were clarified with exemplary quotes providing a novel portrayal of relationship development from the dietitian's perspective.

Study 1 was pivotal in providing a richer understanding of what the therapeutic relationship looks like in a type of clinical dietetic practice and a unique insight into the complexity of the dietitian's role. In doing so, findings from Study 1 provided a theoretical framework for Study 2 to explore how relationship development is embedded within dietetics education and training in Australia. Study 2 comprised two main components; an analysis of how the client-dietitian relationship was expressed and addressed in subject outlines of dietetics education programs and, interviews with dietetics education program coordinators. These interviews explored program coordinators' perspectives of the analysis of subject outlines and how they perceived relationship development was taught within their programs. University curriculums are made up of several components and two different data sources were used (subject outlines and interviews) to ensure a more comprehensive depiction of how relationship development is embedded in dietetics training. A key finding was the high degree of variability in the terms used to characterise the client-dietitian relationship within subject outlines of Australian dietetics education programs. This was found in relation to descriptors of the phenomenon itself (such as 'relationship', 'alliance' and 'partnership'), as well as key elements and influential factors of the relationship (as identified in Study 1). Key elements and influential factors were mostly expressed in subject outlines without clear articulation of their role in relationship development. Program coordinators expected this variability because of the nature of the subject outline document as well as their perception that the relationship could be described in many ways. Program coordinators were able to describe how relationship development is taught within their programs, however some also recognised shortfalls of their programs in doing so. Overall across Australian dietetics education programs, the client-dietitian relationship appeared to be an ambiguous concept and hence 'how' and 'what' is taught with regard to relationship development appeared inconsistent.

Key findings from Study 1 and Study 2 showed the client-dietitian relationship to be a complex phenomenon and one that appeared to be embedded inconsistently amongst dietetics education programs in Australia. Given these observations, an integrative literature review was undertaken as the final component of this thesis to confirm a potential knowledge gap around research on therapeutic relationships in dietetics (Study 3). This integrative literature review asked 'What does research on the therapeutic relationship tell us about the phenomenon in clinical dietetic practice?'. In recognition of the many ways the therapeutic relationship may be described, this study not only looked at the term

'relationship' but also related terms such as 'alliance' and 'rapport' for a more comprehensive analysis. Five themes were identified from 75 studies which confirmed that from empirical findings the therapeutic relationship between a client and dietitian appears to be valued and is perceived as having a positive influence on both clients and dietitians. Furthermore, the client-dietitian relationship appeared to involve complex and multifactorial interactions and was recognised as requiring skills training which resonates with the findings from Study 1 and 2. The final theme showed that the client-dietitian relationship has been embedded to an extent within practice models and tools but how often these are deployed in teaching or skill monitoring is not known. Hence the integrative literature review (Study 3) confirmed findings raised in Study 1 and 2 about the client-dietitian relationship within empirical literature more broadly in terms of being valued, complex and requiring training and review. Study 3 also highlighted that defensible empirical data based on observational studies is clearly needed to confirm the key skills required and evidence-based approaches for best practice.

6.3 Overarching Interpretation of Major Findings

First and foremost, the results of this body of research show the phenomenon of the therapeutic relationship between a client and dietitian to be a multifactorial and highly complex interaction between two people. This thesis shows that this is because there are intricate processes happening directly between the people involved in the interaction (in roles as both 'health professional and client' and 'humans'), and a multitude of external factors that influence how the individuals interact. Psychology literature can help us to make sense of this complexity. As explained in Chapter 1, the concept of the therapeutic relationship has been studied for decades and debate remains over the 'structure' of the therapeutic relationship in a psychotherapy context.[32] Several models of what the relationship consists of have been put forth yet Horvath acknowledges there has been limited consensus.[32] This suggests a difficulty in articulating and agreeing on the therapeutic relationship as a standardised construct within psychotherapy, and is recognised as a result of the complex and intricate layers of the relationship itself.[32, 38] Hence describing the 'complexity' of the therapeutic relationship between client and dietitian, as this thesis has done, appears strongly aligned to the ongoing discussion in psychotherapy research.

Looking more specifically at models of therapeutic relationships described in psychotherapy literature might also help us to understand where this complexity comes from. An example that is useful in

interpreting the findings from this thesis is Gelso's three-part model.[38] This model describes the therapeutic relationship as consisting of: 1) a working alliance (based on therapeutic techniques), 2) a real relationship (non-work, person to person connection), and 3) transference and countertransference (the unconscious transfer of feelings and attitudes from the client and therapist's past onto the other). Gelso also describes an interplay between these components, that is each component influencing the other.[38] This means that not only is the relationship recognised as being made up of several different components, but each component is seen to interact and affect the other. Gelso explains that this adds to the intricacy and complexity of the relationship.[38] Our findings describe a similar occurrence within client-dietitian relationships. The conceptual model of relationship development (Study 1) describes dietitians needing to balance both a professional and social relationship with their client, where the professional relationship concerns the therapeutic work needing to be undertaken and the social relationship reflects two humans interacting without labels of 'dietitian' or 'client'. Study 1 also describes an interplay between dietitians needing to balance professional and social relationships and other factors such as sensing a professional chemistry. In addition, findings from the integrative literature review (Study 3) showed that the client-dietitian relationship appears to be a complex and multifactorial interaction. Hence in a similar way to Gelso, our findings identify multiple layers of the client-dietitian relationship and describe an interplay between them.[38] Having an understanding of the psychotherapy literature can therefore assist in interpreting key findings from this thesis, particularly that perhaps the complexity of the relationship in dietetics comes from the relationship consisting of multiple, interrelated components that each influence the other.[38]

Secondly, the complexity of the client-dietitian relationship identified within this thesis may somewhat explain the ambiguity of the client-dietitian relationship as a teaching concept described by coordinators of dietetics education programs in Australia (Chapter 4). This is the first known research to delve deeply into what characterises a strong therapeutic relationship between clients and dietitians, and as explained previously, there appeared to be limited articulation of this more generally prior to this research. Although program coordinators were each able to describe how the client-dietitian relationship was taught within their respective programs, how and what was taught with regard to developing therapeutic relationships appeared inconsistent between Australian programs. Without clear and detailed definitions of what constitutes this complex interaction, it seems unavoidable that the client-dietitian relationship could be

interpreted differently and therefore embedded within dietetics training programs in different ways. It is perhaps unsurprising that this could happen with a phenomenon like the therapeutic relationship, which appears to have many moving parts (as demonstrated in Chapter 3). Section 6.4 will outline recommendations for the profession based on these key findings around the complexity and apparent ambiguity of the client-dietitian relationship as a concept in dietetics.

Finally, similar qualities were identified within each study that appear important for developing and maintaining strong relationships with clients. Such qualities were identified from the interview data with dietitians (Chapter 3), the analysis of dietetics curricula (Chapter 4) and from empirical findings (Chapter 5). For example, 'empathy' was described by dietitians as being important for relationship development (Chapter 3), included within dietetics education programs across Australian universities (Chapter 4) and acknowledged within empirical findings (Chapter 5). Hence this thesis has also identified which qualities are well-recognised in dietetics as being important for relationship development. Importantly, when considered as a complete body of work this thesis extends existing knowledge by being able to explain how these qualities interact with each other and form meaningful processes that underpin relationship development (Chapter 3). This provides the profession with a deeper level of understanding around what might be involved in the intricate process of relationship development, rather than simply acknowledging several 'stand-alone' skills or qualities (such as 'communication', 'trust' or 'empathy'). In addition, this research further extends existing knowledge by outlining which qualities of relationship development are addressed in Australian dietetics curricula and describing how they are taught (Chapter 4). In doing so, a richer understanding of what this relationship means for dietetics, how it may exist in clinical dietetic practice and how it is taught and assessed within dietetics education and training is provided.

6.4 Recommendations and Future Directions

From the novel findings presented within this thesis, several key recommendations are described below to further advance the profession of dietetics in developing and maintaining strong therapeutic relationships and ultimately provide a healthcare service that is firmly patient-centred:

1. Clearer articulation of what constitutes the therapeutic relationship between client and dietitian and of important relationship components that contribute to positive client outcomes

Study 1 of this thesis has presented a conceptualisation of what the client-dietitian relationship may look like in practice from the dietitian's perspective (Chapter 3). Although it is the only known study that attempts to comprehensively explain processes underpinning this relationship, it is only one study that focuses on one perspective of the relationship (the dietitian's) and on one particular type of dietetic care (that is lifestyle-related chronic disease management in an Australian context) with a small number of informants. Hence the conceptual model of relationship development presented within this thesis can be considered a preliminary step in more clearly articulating the phenomenon of the client-dietitian relationship rather than providing a definitive answer. Decades have been dedicated to understanding the client-therapist relationship within the field of psychology, and debate remains over how to best conceptualise this relationship. Given this history, it would be naïve to suggest that the client-dietitian relationship can be understood 'completely', but what this thesis has shown is that steps can be taken to 'better' understand this relationship.

More clearly articulating what constitutes the client-dietitian relationship, and more importantly what elements might contribute to positive outcomes for clients, may be enhanced through interdisciplinary collaboration and education between dietetics and psychology. This is because research into the therapeutic relationship in psychology is well advanced. There has been greater development of theory, construct definitions, measurement and research investigating the association between these relationship constructs and health outcomes (mostly mental health).[36, 102] Enabling interdisciplinary collaboration and education would align with the International Code of Good Practice published by the International Confederation of Dietetics Associations that describes dietitians needing to 'competently apply the knowledge of nutrition and dietetics and integrate this knowledge with other disciplines in health and social sciences'.[164] Identification of important relationship components for dietetics should be driven by

prior research, particularly given this thesis has shown ambiguity in how the relationship is referred to and taught within dietetics in Australia. 'Borrowing' constructs of therapeutic relationships from psychology and other disciplines would be useful as an initial strategy to better understand important components of client-dietitian relationships.

Application of the Working Alliance Inventory was discussed in Chapter 5 as an example of a validated tool that could be used to measure an aspect of the therapeutic relationship in dietetics (the 'therapeutic alliance').[197] This tool was developed based on construct definitions of the therapeutic alliance.[35] Its application would allow dietetics to begin to examine which relationship components may be related to specific client outcomes such as behaviour change, attendance, satisfaction, or objective health outcomes (e.g. blood cholesterol levels).[35] Examples of potential questions include, to what extent is client and dietitian agreement on the tasks in treatment positively associated with increased client motivation? And to what extent is a greater 'bond' between client and dietitian positively associated with increased client satisfaction with treatment? Using this construct and its components would allow the dietetics profession to begin more clearly articulating which components of the client-dietitian relationship might be important for client outcomes. Tangible recommendations to facilitate this type of quantitative research might include establishing multidisciplinary research teams that consist of both dietitians and psychologists with knowledge of the literature around therapeutic relationships so that knowledge can be shared. Multidisciplinary research teams would also be useful in conducting further qualitative research on therapeutic relationships, for example through assisting in developing nuanced questions or probes within an interview guide.

Other avenues for further research can also be recommended. Of particular importance, is the need to explore the client's (or patient's) perspective and experiences of their relationships with dietitians. This would mean paying particular attention to what clients perceive as facilitating and hindering the relationship with their dietitian, and why. A starting point may also be seeking client's opinions on the conceptual model of relationship development described in this thesis and analysing how their perspectives may differ. In working within the patient-centred healthcare paradigm, incorporating the perspective of the patient would be crucial and greatly assist in understanding how dietitians can build strong therapeutic relationships to help clients achieve optimal health outcomes. Other research avenues

should include exploring how relationship development may differ within other clinical areas, such as within acute clinical care (for example acute hospital wards) or specific patient groups including paediatrics. Understanding the possible intricacies of many types of client-dietitian interactions and from different perspectives may greatly assist in articulating important relationship components, and if particular components are more important than others for specific patient cohorts.

2. Further research exploring which relationship components should be prioritised, and when, in dietetics training

The second recommendation from this thesis is for further research that can more clearly identify which relationship components should be prioritised in dietitians' training, and when it would be most appropriate for this teaching to occur. This recommendation comes from a key finding of this thesis that how the 'relationship' is referred to and taught within dietetics education programs in Australia is highly ambiguous. The importance of relationship components should directly relate to whether they contribute in a positive way to clients' outcomes. Understanding which relationship components are important to teach in dietetics should therefore be guided by research studies that have assessed which relationship components might positively contribute to clients' outcomes. This could include potential studies already described in this thesis, such as cross-sectional designs that assess the relation between therapeutic alliance (via the Working Alliance Inventory) and particular outcomes for clients (such as behavioural change via diet quality scores). Program coordinators acknowledged the already large amount of content within a dietetics curriculum, and hence questions to also consider are what skills should be prioritised within early university training? For example, this could include room set-up, eye contact and body orientation. It would also be useful to identify which skills are more complex and should be included later in the university curriculum or as postgraduate training. As an example, this might include managing the goal-setting process, and in particular how to do so with disengaged or challenging clients. Clearer recommendations around this are dependent on the profession collecting relationship-outcome data.

To assist with exploring which relationship components should be prioritised and when within dietetics training, it would also be useful to look further into how dietitians are currently being trained in specific relationship components. The findings from Study 2 of this thesis provided preliminary data as to how dietitians are trained in relationship development skills within Australian university programs, however a

broader focus was taken and training of each relationship component was not concentrated on in detail. For example, teaching around 'empathy' was identified in some subject outlines and described by program coordinators however it was not within the scope of Study 2 (Chapter 4) to explore in detail how dietitians were trained in empathy specifically. Empathy is acknowledged as a key skill for dietitians and articulated within current Australian competency standards.[26, 201] Yang et al has explored the extent to which dietitians and dietetics students in Malaysia can practice empathically using the Toronto Empathy Questionnaire.[147, 202] Parkin et al has also examined how the dietitian's empathy impacts the level of agreement between client and dietitian on decisions made within the consultation.[89] Hence there is some data describing dietitians' and students' use of empathy however detailed descriptions of how dietitians are being trained to practise empathically as part of therapeutic relationship development appears limited. A 2015 meta-analysis has shown the efficacy of training health professionals and university students in empathy skills, and therefore to build on the findings from Study 2 it seems appropriate that further research should explore both theoretical and practical training approaches for empathy within dietetics education programs, including the use of validated measures.[203] A better understanding of how dietitians are trained in relationship components, as has been described here using empathy as an example, would provide useful data to assist in exploring which relationship components should be prioritised and when within dietetics training. This is because research of this nature would provide a more detailed insight as to what is already being taught and how, particularly how students are understanding this skills training and the variability in knowledge and skill development that might occur depending on the teacher's expertise and experience.

3.Further research exploring the use of a more standardised and nuanced relationship language as a means to help practising dietitians and dietitians in training connect with the phenomenon and integrate into training and practice

Further research is needed to investigate whether more clear and consistent language describing the client-dietitian relationship is indicated. As emphasised in Chapter 4, this relates to not only terms that reflect the phenomenon (that is 'relationship' or 'partnership' for example) but also the components of the relationship that need to be targeted in training as part of skill development. This thesis has shown that a variety of terms are used within curriculum documentation of dietetics education programs in Australia (such as 'helping relationship', 'therapeutic relationship' and 'working alliance') (Chapter 4). A lack of

clear terminology was also seen from clinical dietitians in Study 2, where words like ‘vibe’, ‘gelling’ and ‘clicking’ were used to describe their relationships with clients (Chapter 3). These responses from dietitians indicate that they are recognising that something positive is happening in their relationship, but they have limited language and skills to be able to more clearly articulate what that is. For example, ‘vibe’ could reflect several elements. It could reflect a positive affect such as smiling, clear non-verbal communication such as appropriate nodding, or the ability to move from ‘dietetics’ content to more informal social exchanges in a friendly but professional manner. Hence these terms used by dietitians in Study 2 demonstrate imprecise language that is unable to detail specific behaviours that facilitate a good therapeutic relationship. The use of these nonspecific and idiosyncratic terms by clinicians adds to the ambiguity of relationship terms identified in the review of dietitians’ training (Study 2).

It would be interesting to further explore which terms dietitians, educators and students are already identifying and connecting with and their perspectives on whether the use of more standardised language would be helpful. It is thought that a more appropriate and nuanced relationship language may enable dietitians to become more skilled observers of relationship components. This might mean they are better able to provide appropriate responses and further enhance where there appears to be problems in the relationship. For example, a dietitian may adjust their practice if they notice a client having longer verbal response latencies to a question about weight. The client’s hesitancy to respond may signal to the dietitian to verbally acknowledge the difficulty that some people can have in talking openly about their weight and strategically allow more time for relationship development. A more standardised and nuanced language around relationship development may help students and dietitians better identify and connect with this crucial component of practice. Suggestions for further research include quantitative surveys to capture which terms (if any) dietitians and students are familiar with but also qualitative research to explore how and why dietitians, educators and students might connect with and use particular terms over others, and why a more standardised and nuanced language around the phenomenon may or may not be useful. Study 2 only looked at an Australian context, and therefore conducting similar research in other countries would also be useful. In addition, developing standardised terminology for components of the client-dietitian relationship would require clearer articulation of what constitutes the client-dietitian relationship (as described in the first recommendation) and therefore is anticipated to require a significant amount of work.

A starting point to begin to develop a more standardised and nuanced relationship language within dietetics may be through the Nutrition Care Process Model. Chapter 1 explained that the relationship between client and dietitian sits firmly at the centre of the Nutrition Care Process Model which is a cyclic representation of the dietetic consultation and is intended to 'guide the provision of high quality nutrition care' (Figure 1.1).[67] Four steps are described using specific terminology: Assessment, Diagnosis, Intervention and Monitoring & Evaluation. Each step is described in detail where well-defined structures are provided for the dietitian to comprehend how they would enact this in practice. For example, five clear domains are provided for 'Assessment' which details types of information the dietitian should collect as part of their assessment (for example height and weight).[67] Despite the client-dietitian relationship forming the central component of this model, the same degree of consideration as to how the dietitian might operationalise this in their practice has not been given. Hence in the same way that standardised terminology has been developed to identify and describe steps of the Nutrition Care Process, the same approach may be useful in extending to the client-dietitian relationship. Furthermore, as the client-dietitian relationship forms the central component of this model, consideration should also be given to more clearly articulating relationship components as part of each 'step' (e.g. 'rapport building' as part of 'Nutrition Assessment'). Although further research is needed, a starting point may be allocating a standard term for the phenomenon of the client-dietitian relationship and including this term consistently within descriptions of the Nutrition Care Process Model (Figure 1.1) as has been done with other 'steps' outlined by this model. It is suggested that 'therapeutic relationship' may be appropriate as it is a term already used within other healthcare disciplines. Enabling dietitians and students to better connect with this term would rely on 'therapeutic relationship' being used within other formal documentation including curriculum documents. Hence there appears to be a substantial amount of work in considering how changes in terminology would be best implemented, however beginning with the Nutrition Care Process Model seems an important place to start.

4. Use of the DIET-COMMS tool to guide training and professional development opportunities for practising dietitians and dietitians in training

The DIET-COMMS tool by Whitehead et al was identified in the integrative literature review (Chapter 5) as a response to the British Dietetic Association's emphasis of the client-dietitian relationship in their 'Model and Process for Nutrition and Dietetic Practice'.[68, 86] It was also described by program

coordinators in Study 2 (Chapter 4) as a valuable framework to guide dietetics students' learning. Although the DIET-COMMS tool does not focus on relationship development specifically, it was developed in recognition of the value of the client-dietitian relationship and the importance of communication skills in relationship development. For the purpose of measuring communication skills in patient consultations, the tool lists 20 items that are scored from 0-2 (not done or achieved, to fully achieved) some of which correspond directly to the key elements of relationship development identified in Study 1 (Chapter 3).[86] Examples of these items include 'listening to and demonstrating understanding of the client's story', 'maintains a non-judgemental attitude' and 'acknowledges clients' views and feelings'. Study 2 showed that the value of this tool for dietetics training has already been acknowledged in Australia as it has been implemented within some dietetics education programs. Furthermore the DIET-COMMS tool has been trialed in workplaces in Australia, and consequently recommended as standard practice to assess dietitians' communication skills.[85, 135] Given the DIET-COMMS tool is a valid and reliable evidence-based tool, and already integrated within some dietetics training in Australia, it appears to be a valuable tool that can be implemented immediately to guide training and assessment of particular aspects of relationship development. This refers to training and assessment for not only practising dietitians who are engaging with patients or clients, but also dietitians in training. Until a tool can be developed that addresses the totality of therapeutic relationship development (for example consideration of the influence of the dietitian's values, beliefs and opinions), the DIET-COMMS tool is recommended as an appropriate tool to guide skill development in the meantime.[86]

Tangible suggestions can be made for integrating the DIET-COMMS tool within clinical dietetic practice and training for both practising dietitians and dietitians in training. The first suggestion supports that of Notaras et al in that the DIET-COMMS tool be used for peer assessment amongst dietitians, and for documentation of direct observations of client-dietitian relationships in practice.[85] Although Whitehead et al recognise that some professionals may be apprehensive about engaging in peer assessment, findings from the integrative literature review as part of this thesis (Chapter 5) show there is limited data describing direct observations of how the relationship exists in everyday practice.[86] Notaras et al provide an example of how the DIET-COMMS tool can be implemented within an acute hospital setting to assess dietitians' communication skills by including an initial training period followed by the peer assessment process.[85] An online training resource that includes video simulations has been developed by the author

of the DIET-COMMS tool and this was also used by Notaras et al to train dietitians involved in the study.[204] Notaras et al describe the successful implementation of the DIET-COMMS tool and hence further attempts to do so in other clinical settings may benefit from using their study as a guide.[85] Furthermore Study 2 (Chapter 4) identified that some dietetics education programs in Australia are using the DIET-COMMS tool, suggesting that it is an appropriate resource for dietetics education programs to implement to aid training in this area. However further research is needed to explore in more detail how the DIET-COMMS tool is used currently in dietetics education programs, and how it might be included in other education programs for both training and assessment of relationship development skills.

Training and assessment of practising dietitians and dietitians in training may also benefit from including the client or patient as the 'assessor'. Psychology-based tools for assessing the strength of the therapeutic relationship (such as the Working Alliance Inventory) have client-rated versions of the tool. This allows the client to give feedback as to how they perceive the quality of the relationship and highlight key areas for improvement (e.g. 'my therapist and I agree on what is important for me to work on').[205] Further research is needed as to how client feedback may be best incorporated within a dietetics training context, particularly as a client-rated version of the DIET-COMMS tool has not yet been established.[86] However it seems that obtaining feedback from clients on the quality of the therapeutic relationship would enable dietitians to be more aware of clients' preferences in developing therapeutic relationships and likely benefit the overall process. Involving patients or clients in the training and assessment of dietitians in therapeutic relationship development would also be synonymous with the overarching philosophy of patient-centred care, that is to honour and respect the client's expertise in their own healthcare.[20]

A second suggestion is for the DIET-COMMS tool to be used as a resource to guide dietitians' self-reflection.[86] Each item of the tool could be used to facilitate critical self-reflection on how each item is operationalised in practice and any difficulties they have in doing so. These reflections could then be used as discussion points within formal clinical supervision sessions or within more informal discussions with peers. This also applies to the training context, as the DIET-COMMS tool may also assist students to reflect on their skills in relationship development, particularly what they are already doing well and what they could improve on. This thesis has identified that relationship development from the dietitians' perspective is a complex phenomenon, and hence the items expressed in the DIET-COMMS tool may

provide a tangible starting point for dietitians and dietitians in training to reflect on relationship development in their practice.[86] It also may provide a means for dietitians to begin using the same terminology and descriptors around aspects of relationship development.

6.5 Concluding Remark

The research presented in this thesis contributes novel and important findings that assist the dietetics profession in better understanding how clinical dietetic practice 'works' through investigating the phenomenon of the therapeutic relationship between client and dietitian. The findings from this body of research provide a richer understanding as to how the therapeutic relationship between a client and dietitian might exist in clinical dietetic practice and within dietitians' education and training in Australia. In doing so, this thesis has also contributed valuable knowledge to better support clinical dietitians to practise in a patient-centred way. The key finding from this body of research is the apparent complex and ambiguous nature of the client-dietitian relationship which needs more focused attention and research for dietitians to be able to deliver in an evidence-based way. In consideration of this, several key recommendations were made. Clearer articulation of what constitutes the client-dietitian relationship within clinical dietetic practice is needed, particularly of important relationship components that contribute to positive client outcomes. Further research should also explore which relationship components should be prioritised in dietitians' education and training, and the use of a more standardised and nuanced relationship language to help dietitians and students connect with the phenomenon. Use of the reliable and valid DIET-COMMS tool to guide training and professional development opportunities for practising dietitians and dietitians in training was also recommended.

List of References

1. Nagy A, McMahon A, Tapsell L, Deane F, Arenson D. Therapeutic alliance in dietetic practice for weight loss: Insights from health coaching. Nutr Diet 2018;75(3):250-5.

2. Proceedings of The Nutrition Society of Australia: Thirty-Ninth Annual Scientific Meeting of The Nutrition Society of Australia In Conjunction with The Nutrition Society of New Zealand [Internet]; 2015 Dec 1-4; Wellington, New Zealand: Journal of Nutrition & Intermediary Metabolism; 2016 [cited October 2021]. Available from: https://www.sciencedirect.com/journal/journal-of-nutrition-and-intermediary-metabolism/vol/4/suppl/C

3. Capra S. Dietitians as leaders, past, present and future. Nutr Diet 2012;69(3):179-82.

4. Judd P. Dietetics. In: Caballero B, Finglas P, Toldra F, editors. Encyclopaedia of Food Sciences and Nutrition. 2nd ed. Cambridge, Massachusetts: Academic Press; 2003. p. 1886-89.

5. Hwalla N, Koleilat M. Dietetic practice: the past, present and future. East Mediterr Health J 2004;10(6):716-30.

6. Ferraro K. The History of Dietetics in North America. In: Ferraro K, editor. Introduction to Dietetic Practice. New York: Momentum Press 2016. p. 45-54.

7. Dietitians Association of Australia. Where do dietitians work? [Internet]. Canberra (ACT): Dietitians Association of Australia; 2020 [cited January 2021]. Available from: https://daa.asn.au/what-dietitans-do/what-do-dietitians-work/

8. Mantzioris E. The science and art of dietetics: Why science needs to underpin our practice. Nutr Diet 2018;75(3):247-9.

9. International Confederation of Dietetic Associations. International Standards for Dietitians-Nutritionists. [Internet] Toronto (ON): International Confederation of Dietetic Associations; 2014 [cited January 2021]. Available from: https://www.internationaldietetics.org/Downloads/International-Definition-of-Dietitian.aspx

10. Australian Institute of Health and Welfare. Risk factors to health: Insufficient physical activity. [Internet] Canberra (ACT): Australian Institute of Health and Welfare; 2018 [updated November 2020; cited February 2022]. Available from: https://www.aihw.gov.au/reports/risk-factors/insufficient-physical-activity/contents/insufficient-physical-activity

11. Holli B, Maillet J, Beto J, Calabrese J. Communication and Education Skills for Dietetics Professionals. 5th ed. Philadelphia: Wolters Kluwer Health; 2009.

12. Fieldhouse P. Food and Nutrition: Customs and culture. Boston: Springer; 1995. Chapter 9, Psychological aspects of food choice; p. 184-205.

13. Fieldhouse P. Food and nutrition: Customs and culture. Boston: Springer; 1995. Chapter 4, Social Functions of Food; p. 78-105.

14. Brown L, Capra S, Williams L. Profile of the Australian dietetic workforce: 1991-2005. Nutr Diet 2006;63(3):166-78.

15. Dietitians Association of Australia. Annual Report 2018-2019. [Internet] Canberra (ACT): Dietitians Association of Australia; 2019 [cited March 2020]. Available from: https://dietitiansaustralia.org.au/sites/default/files/2021-12/Annual%20Report-2018-19.pdf

16. Health Workforce Australia. Australia's Health Workforce Series - Dietitians in Focus. [Internet] Adelaide (SA): Dietitians Association of Australia; 2014 [cited March 2020]. Available from: https://www.myhealthcareer.com.au/wp-content/uploads/2019/03/2014-Dietitians-in-Focus.pdf

17. Dietitians Association of Australia. Accreditation of Dietetics Education Programs. [Internet] Canberra (ACT): Dietitians Association of Australia; 2020 [cited March 2020]. Available from: https://daa.asn.au/becoming-a-dietitian-in-australia/accreditation-of-dietetics-education-programs/

18. Australian Institute of Health and Welfare. Australia's Health 2018. [Internet] Canberra (ACT): Australian Institute of Health and Welfare; 2018 [cited March 2020]. Available from: https://www.aihw.gov.au/getmedia/7c42913d-295f-4bc9-9c24-4e44eff4a04a/aihw-aus-221.pdf

19. Australian Bureau of Statistics. 4364.0.55.001 - National Health Survey: First Results, 2017-18. [Internet] Canberra (ACT): Australian Bureau of Statistics; 2019 [cited January 2020]. Available from: https://www.abs.gov.au/ausstats/abs@.nsf/mf/4364.0.55.001

20. Delaney L. Patient-centred care as an approach to improving health care in Australia. Collegian 2015;25(1):119-23.

21. Australian Institute of Health and Welfare. Patient-centred care: Improving quality and safety through partnerships with patients and consumers. [Internet] Canberra (ACT): Australian Institute of Health and Welfare; 2011 [cited March 2020]. Available from: https://www.safetyandquality.gov.au/publications-and-resources/resource-library/patient-centred-care-improving-quality-and-safety-through-partnerships-patients-and-consumers

22. World Health Organization. WHO global strategy on people-centred and integrated health services. [Internet] Geneva: World Health Organization; 2015 [cited March 2020]. Available from: https://apps.who.int/iris/bitstream/handle/10665/155002/WHO_HIS_SDS_2015.6_eng.pdf

23. Rogers C. Client-Centred Therapy. London: Constable & Robinson Ltd; 2003.

24. Picker Institute Europe. Influence, inspire, empower: Impact Report 2019-2020. [Internet] Oxford: Picker Institute Europe; 2020 [cited April 2021]. Available from: http://picker.org/wp-content/uploads/2021/12/Picker_Impact-Report-2020_Web_spreads.pdf

25. International Confederation of Dietetic Associations. International Competency Standards for Dietitian-Nutritionists. [Internet] Toronto (ON): International Confederation of Dietetic Associations; 2015 [cited February 2020]. Available from: https://www.internationaldietetics.org/Downloads/ICDA-Intl-Competencies-for-Dietitian-Nutritionists.aspx

26. Dietitians Association of Australia. National Competency Standards for Dietitians in Australia. [Internet] Canberra (ACT): Dietitians Association of Australia; 2015 [cited March 2017]. Available from: https://dietitiansaustralia.org.au/sites/default/files/2022-01/NCS-Dietitians-Australia%20%28PDF%2C%20546KB%29_0.pdf

27. European Federation of the Associations of Dietitians. Revised Dietetic Competence and the six domains of dietetic competency in Europe. [Internet] Naarden: European Federation of the Associations of Dietitians; 2016 [cited July 2019]. Available from: http://www.efad.org/media/1418/revised-dietetic-competence-and-6-domains-of-competency.pdf

28. Health & Care Professions Council. Standards of Proficiency: Dietitians. [Internet] London: Health & Care Professions Council; 2013 [cited July 2019]. Available from: https://www.hcpc-uk.org/globalassets/resources/standards/standards-of-proficiency---dietitians.pdf

29. Mead N, Bower P. Patient-centredness: a conceptual framework and review of the empirical literature. Soc Sci Med 2000;51(7):1087-110.

30. Sladdin I, Gillespie B, Ball L, Chaboyer W. Patient-centred care to improve dietetic practice: an integrative review. J Hum Nutr Diet 2017;30(4):453-70.

31. Elvins R, Green J. The conceptualization and measurement of therapeutic alliance: An empirical review. Clin Psychol Rev 2008;28(7):1167-87.

32. Horvath A. The Psychotherapy Relationship: Where does the alliance fit? In: Tishby O, Wiseman, H, editors. Developing the Therapeutic Relationship: Integrating Case Studies, Research, and Practice. Washington DC: American Psychological Association; 2018. p. 15-28.

33. Hughes P, Kerr I. Transference and countertransference in communication between doctor and patient. Adv Psychiatr Treat 2000;6(1):57-64.

34. Horvath A. The therapeutic relationship: Research and theory. Psychother Res 2005;15(1-2):3-7.

35. Bordin E. The Generalizability of the Psychoanalytic Concept of the Working Alliance. Psychother: Theory Res Pract 1979;16(3):252-60.

36. Horvath A, Del Re A, Flückiger C, Symonds D. Alliance in Individual Psychotherapy. Psychotherapy 2011;48(1):9-16.

37. Gelso C. Emerging research findings about the real relationship in the process and outcome of psychotherapy. In: Gelso C, editor. The Real Relationship in Psychothearpy: The Hidden Foundation of Change. Washington DC: American Psychological Association; 2011. p.129-152.

38. Gelso C. A tripartite model of the therapeutic relationship: Theory, research, and practice. Psychother Res 2014;24(2):117-31.

39. Wampold B, Budge S. The Relationship - and Its Relationship to the Common and Specific Factors of Psychotherapy. Couns Psychol 2012;40(4):601-23.

40. Peabody F. The Care of the Patient. JAMA 1927;88(12):877-82.

41. Kaba R, Sooriakumaran P. The evolution of the doctor-patient relationship. Int J Surg 2007;5(1):57-65.

42. Eveleigh R, Muskens E, van Ravesteijn H, van Dijk I, van Rijswikj E, Lucassen P. An overview of 19 instruments assessing the doctor-patient relationship: different models or concepts are used. J Clin Epidemiol 2012;65(1):10-5.

43. Windover A, Boissy A, Rice T, Gilligan T, Velez V, Merlino J. The REDE model of healthcare communication: Optimizing relationships as a therapeutic agent. J Patient Exp 2014;1(1):8-13.

44. Lacey C, Huria T, Beckert L, Gilles M, Pitama S. The Hui Process: a framework to enhance the doctor-patient relationship with Maori. N Z Med J 2011;124(1347):72-8.

45. Zugai J, Stein-Parbury J, Roche M. Therapeutic Alliance in Mental Health Nursing: An Evolutionary Concept Analysis. Issues Mental Health Nurs 2015;36(4):249-57.

46. Feo R, Conroy T, Wiechula R, Rasmussen P, Kitson A. Instruments measuring behavioural aspects of the nurse-patient relationship: A scoping review. J Clin Nurs 2019;29(11-12):1808-21.
47. Hartley S, Raphael J, Lovell K, Berry K. Effective nurse-patient relationships in mental health care: A systematic review of interventions to improve the therapeutic alliance. Int J Nurs Stud 2020;102:103490.
48. McCormack B. A conceptual framework for person-centred practice with older people. Int J Nurs Pract 2003;9(3):202-9.
49. Carstensen T, Bonsaksen T. Differences and similarities in therapeutic mode use beween occupational therapists and occupational therapy students in Norway. Scand J Occup Ther 2017;24(6):448-54.
50. Fourie R, Crowley N, Oliviera A. A Qualitative Exploration of Therapeutic Relationships from the Perspective of Six Children Receiving Speech-Language Therapy. Top Lang Disord 2011;31(4):310-24.
51. Gorenberg M. Instructional Insights: Continuing Professional Education to Enhance Therapeutic Relationships in Occupational Therapy. Occup Ther Health Care 2013;27(4):393-8.
52. Palmadottir G. Client-Therapist Relationships: Experiences of Occupational Therapy Clients in Rehabilitation. Br J Occup Ther 2006;69(9):394-401.
53. McLellan K, McCann C, Worrall L, Harwood M. Maori experiences of aphasia therapy: “But I’m from Hauiti and we’ve got shags”. Int J Speech Lang Pathol 2014;16(5):529-40.
54. Crom A, Paap D, Wijma A, Dijkstra P, Pool G. Between the Lines: A Qualitative Phenomenological Analysis of the Therapeutic Alliance in Pediatric Physical Therapy. Phys Occup Ther Pediatr 2020;40(1):1-14.
55. Fourie R. Qualitative study of the therapeutic relationship in speech and language therapy: perspectives of adults with acquired communication and swallowing disorders. Int J Lang & Commun Disord 2009;44(6):979-99.
56. Hersh D. Aphasia Therapists’ Stories of Ending the Therapeutic Relationship. Top Stroke Rehabil 2010;17(1):30-8.
57. AlGhurair S, Simpson S, Guirguis L. What elements of the patient-pharmacist relationship are associated with patient satisfaction? Patient Prefer Adherence 2012;6:663-76.
58. Lawton M, Conroy P, Sage K, Haddock G. Aphasia and stroke therapeutic alliance measure (A-STAM): Development and preliminary psychometric evaluation. Int J Speech Lang Pathol 2019;21(5):459-69.

59. Lawton M, Haddock G, Conroy P, Serrant L, Sage K. People with aphasia's perspectives of the therapeutic alliance during speech-language intervention: A Q methodological approach. Int J Speech Lang Pathol 2020;22(1):59-69.

60. Morrison T, David Smith J. Working alliance development in occupational therapy: A cross-case analysis. Aust Occup Ther J 2013;60(5):326-33.

61. Babatunde F, MacDermid J, MacIntyre N. Characteristics of therapeutic alliance in musculoskeletal physiotherapy and occupational therapy practice: a scoping review of the literature. BMC Health Serv Res 2017;17(1):375-97.

62. Hall A, Ferreira P, Maher C, Latimer J, Ferreira M. The Influence of the Therapist-Patient Relationship on Treatment Outcome in Physical Rehabilitation: A Systematic Review. Phys Ther 2010;90(8):1099-110.

63. Manzoni A, de Oliveira N, Cabral C, Ricci N. The role of the therapeutic alliance on pain relief in musculoskeletal rehabilitation: A systematic review. Physiother Theory Pract 2018;34(12):901-15.

64. Taylor R. The Intentional Relationship. Philadelphia: F.A. Davis Company; 2008.

65. Worley M, Schommer J. Pharmacist-patient relationships: Factors influencing quality and commitment. J Soc Adm Pharm 1999;16(3-4):157-73.

66. Worley-Louis M, Schommer J, Finnegan J. Construct identification and measure development for investigating pharmacist-patient relationships. Patient Educ Couns 2003;51(3):229-38.

67. Swan W, Vivanti A, Hakel-Smith N, Hotson B, Orrevall Y, Trostler N, et al. Nutrition Care Process and Model Update: Toward Realizing People-Centered Carea and Outcomes Management. J Acad Nutr Diet 2017;117(12):2003-14.

68. British Dietetic Association. Model and Process for Nutrition and Dietetic Practice. [Internet] Birmingham: British Dietetic Association; 2016 [cited February 2020]. Available from: https://www.bda.uk.com/practice-and-education/nutrition-and-dietetic-practice/professional-guidance/model-and-process-for-dietetic-practice.html

69. Hammond M, Myers E, Trostler N. Nutrition Care Process and Model: An Academic and Practice Odyssey. J Acad Nutr Diet 2014;114(12):1879-94.

70. Dietitians Board. Professional Competencies & Standards for Dietitians. [Internet] Wellington: Dietitians Board; 2017 [cited January 2020]. Available from: https://www.dietitiansboard.org.nz/wp-content/uploads/2019/04/Professional-Standards-and-Competencies-for-Dietitians-Web-Version.pdf

71. Ball L, Davmor R, Leveritt M, Desbrow B, Ehrlich C, Chaboyer W. The nutrition care needs of patients newly diagnosed with type 2 diabetes: informing dietetic practice. J Hum Nutr Diet 2016;29(4):487-94.

72. Cant R. Constructions of competence within dietetics: Trust, professionalism and communications with individual clients. Nutr Diet 2009;66(2):112-8.

73. Harper C, Maher J. Investigating Philosophies Underpinning Dietetic Private Practice. Behav Sci 2017;7(1):11-29.

74. Jones N, Furlanetto D, Jackson J, Kinn S. An investigation of obese adults' views of the outcomes of dietary treatment. J Hum Nutr Diet 2007;20(5):486-94.

75. Lambert K, Mansfield K, Mullan J. Qualitative exploration of the experiences of renal dietitians and how they help patients with end stage kidney disease to understand the renal diet. Nutr Diet 2018;76(2):126-34.

76. Sladdin I, Chaboyer W, Ball L. Patients' perceptions and experiences of patient-centred care in dietetic consultations. J Hum Nutr Diet 2018;31(2):188-96.

77. Cant R, Aroni R. Validation of performance criteria for Australian dietitians' competence in education of individual clients. Nutr Diet 2009;66(1):47-53.

78. Cant R. Communication competence within dietetics: dietitians' and clients' views about the unspoken dialogue - the impact of personal presentation. J Hum Nutr Diet 2009;22(6):504-10.

79. Jakobsen N, Kaufman L, Hennesser Y, Kristensen S. Narrative Dietary Counseling: A New Approach for the Dietitian That Strengthens the Relationship and Collaboration With Clients. Top Clin Nutr 2017;32(3):229-42.

80. Devine C, Jastran M, Bisogni C. On the Front Line: Practice Satisfactions and Challenges Experienced by Dietetics and Nutrition Professionals Working in Community Settings in New York State. J Am Diet Assoc 2004;104(5):787-92.

81. Isselmann M, Deubner L, Hartman M. A nutrition counseling workshop: integrating counseling psychology into nutrition practice. J Am Diet Assoc 1993;93(3):324-6.

82. Karupaiah T, Reinhard T, Krishnasamy S, Tan S, Se C. Incorporating the Nutrition Care Process model into dietetics internship evaluation: A Malaysian university experience. Nutr Diet 2016;73(3):283-95.

83. Laquatra I, Danish S. Effect of a helping skills transfer program on dietitians' helping behavior. J Am Diet Assoc 1981;78(1):22-7.

84. Lewis N, Hay A, Fox H. Evaluation of a workshop model for teaching counseling skills to nutrition students. J Am Diet Assoc 1987;87(11):1554-5.

85. Notaras S, Smythe K, Mak M, Whitehead K. Implementation of a peer review program using the validated DIET-COMMS tool to assess dietitians' communication skills in the workplace. Nutr Diet 2021;78(3):324-32.

86. Whitehead K, Langley-Evans S, Tischler V, Swift J. Assessing communication skills in dietetic consultations: The development of the reliable and valid DIET-COMMS tool. J Hum Nutr Diet 2014;27(S2):321-32.

87. Murray R, Baker A, Halpin S, Britton B, McCarter K, Palazzi K, et al. Therapeutic Alliance Between Dietitians and Patients With Head and Neck Cancer: The Effect of Training in a Health Behavior Change Intervention. Ann Behav Med 2018;53(8):756-68.

88. Cahill J, Stiles W, Barkham M, Hardy G, Stone G, Agnew-Davies R, et al. Two short forms of the Agnew Relationship Measure: The ARM-5 and ARM-12. Psychother Res 2012;22(3):241-55.

89. Parkin T, de Looy A, Farrand P. Greater professional empathy leads to higher agreement about decisions made in the consultation. Patient Educ Couns 2014;96(2):144-50.

90. Cant R, Aroni R. Exploring dietitians' verbal and nonverbal communication skills for effective dietitian-patient communication. J Hum Nutr Diet 2008;21(5):502-11.

91. Carter S, Little M. Justifying Knowledge, Justifying Method, Taking Action: Epistemologies, Methodologies, and Methods in Qualitative Research. Qual Health Res 2007;17(10):1316-28.

92. Birks M, Mills J. Grounded Theory: A Practical Guide. California: SAGE Publications; 2011.

93. Kaplan A. The conduct of inquiry: Methodology for behavioral science. San Francisco: Chandler; 1964.

94. Denzin N, Lincoln Y. Introduction: The Discipline and Practice of Qualitative Research. In: Denzin N, Lincoln Y, editors. The SAGE Handbook of Qualitative Research. 5th ed. California: SAGE Publications; 2017. p. 1-19.

95. Swift J, Tischler V. Qualitative research in nutrition and dietetics: getting started. J Hum Nutr Diet 2010;23(6):559-66.

96. Creswell J. Qualitative Inquiry & Research Design. California: SAGE Publications; 2013.

97. Given L. The SAGE Encyclopedia of Qualitative Research Methods. California: SAGE Publications; 2008.

98. Charmaz K. Constructing Grounded Theory. California: SAGE Publications; 2006.

99. Collins C, Stockton C. The Central Role of Theory in Qualitative Research. Int J Qual Methods 2018;17(1):1-10.

100. Alderson P. The importance of theories in health care. BMJ 1998;317(7164):1007-10.

101. Reeves S, Albert M, Kuper A, Hodges B. Why use theories in qualitative research? BMJ 2008;337:a949.

102. Gelso C, Carter J. The Relationship in Counseling and Psychotherapy: Components, Consequences, and Theoretical Antecedents. Couns Psychol 1985;13(2):155-243.

103. Australian Psychological Society. What is Psychology?. [Internet] Melbourne (VIC): Australian Psychological Society; 2020 [cited February 2020]. Available from: https://www.psychology.org.au/for-the-public/about-psychology/What-is-psychology

104. Biddle B. Role Theory: Expectations, Identities and Behaviour. New York: Academic Press; 1979.

105. McEwen M, Wills E. Theoretical Basis for Nursing. Philadelphia: Wolters Kluwer Health; 2014.

106. Guirguis L, Chewning B. Role theory: Literature review and implications for patient-pharmacist interactions. Res Social Admin Pharm 2005;1(4):483-507.

107. Ivey A, Robin S. Role Theory, Role Conflict, and Counseling: a Conceptual Framework. J Couns Psychol 1966;13(1):29-37.

108. McGuire R, McCabe R, Priebe S. Theoretical frameworks for understanding and investigating the therapeutic relationship in psychiatry. Social Psychiatry Psyhciatr Epidemiol 2001;36(11):557-64.

109. Mason P, Augustyn M, Seakhoa-King A. Exploratory Study in Tourism: Designing an Initial, Qualitative Phase of Sequenced, Mixed Methods Research. Int J Tourism Res 2010;12(5):432-48.

110. Patton M. Qualitative Research & Evaluation Methods. California: SAGE Publications; 2002.

111. Sarantakos S. Social Research. London: Red Globe Press; 2013.

112. Babbie E. The Practice of Social Research. Wadsworth: Cengage Learning; 2010.

113. Hesse-Biber S, Rodriguez D, Frost N. A Qualitatively Driven Approach to Multimethod and Mixed Methods Research. In: Hesse-Biber S, Johnson, RB, editors. Oxford Handbook of Multimethod and Mixed Methods Research Inquiry. Oxford: Oxford University Press; 2015. p. 3-20.

114. Fetters M, Molina-Azorin J. Journal of Mixed Methods Research Starts a New Decade: Principles for Bringing in the New and Divesting of the Old Language of the Field. J Mixed Methods Res 2017;11(1):3-10.

115. Anguera M, Blanco-Villasenor A, Luis Losada J, Sanchez-Algarra P, Onwuegbuzie A. Revisiting the difference between mixed methods and multimethods: Is it all in the name? Qual Quant 2018;52(6):2757-70.

116. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006;3(2):77-101.

117. Whittemore R, Knafl K. The integrative review: updated methodology. J Adv Nurs 2005;52(5):546-53.

118. Hong Q, Pluye P, Fabregues S, Bartlett G, Boardman F, Cargo M, et al. Mixed Methods Appraisal Tool Version 2018 User Guide. Montreal: McGill University; 2018.

119. Robson C. Real World Research: A Resource for Social Scientists and Practitioner Researchers. Oxford: Blackwell Publishing; 2002.

120. Draper A, Swift J. Qualitative research in nutrition and dietetics: data collection issues. J Hum Nutr Diet 2010;24(1):3-12.

121. Rohwer A, Schoonees A, Young T. Methods used and lessons learnt in conducting document reviews of medical and allied health curricula - a key step in curriculum evaluation. BMC Med Educ 2014;14:236-42.

122. Fade S, Swift J. Qualitative research in nutrition and dietetics: data analysis issues. J Hum Nutr Diet 2011;24(2):106-14.

123. Broome M. Integrative literature reviews for the development of concepts. In: Rodgers B, Knafl, KA, editors. Concept Development in Nursing. Philadelphia: WB Saunders Co; 1993. p. 231-50.

124. Nundy S, Oswald J. Relationship-centred care: A new paradigm for population health management. Healthcare 2014;2(4):216-9.

125. Brener R. Dietitian and patient: evaluation of an interpersonal relationship. J Am Diet Assoc 1952;28(6):515-9.

126. Cotugna N, Vickery C. Diabetic Diet Compliance: Student Dietitians Reverse Roles. Diabetes Educ 1990;16(2):123-6.

127. World Health Organization. Global Action Plan for the Prevention and Control of Noncommunicable Diseases. [Internet] Geneva: World Health Organization; 2013 [cited April 2019]. Available from: https://apps.who.int/iris/handle/10665/94384

128. Lambert M. Bergin and Garfield's Handbook of Psychotherapy Behaviour and Change. New Jersey: John Wiley & Sons; 2013.

129. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care 2007;19(6):349-57.

130. Mensinger J, Calogero R, Stranges S, Tylka T. A weight-neutral versus weight-loss approach for health promotion in women with high BMI: A randomized-controlled trial. Appetite 2016;105:364-74.

131. SurveyMonkey. SurveyMonkey. [Internet] San Mateo: SurveyMonkey; 2019 [cited March 2019]. Available from: www.surveymonkey.com

132. University of Wollongong. University of Wollongong Connect Lounge. [Internet] Wollongong: University of Wollongong, 2018 [cited January 2018]. Available from: https://connect.uow.edu.au/system/login?domain=connect.uow.edu.au&next=%2Fadmin%3Fdomain%3Dconnect.uow.edu.au&set-

133. Gelso C, Kivlighan D, Markin R. The Real Relationship and Its Role in Psychotherapy Outcome: A Meta-Analysis. Psychotherapy 2018;55(4):434-44.

134. Foley W, Houston A. Closing the gap by increasing access to clinical dietetic services for urban Aboriginal and Torres Strait Islander people. Nutr Diet 2014;71(4):216-22.

135. Notaras S, Mak M, Wilson N. Advancing practice in dietitians' communication and nutrition counselling skills: a workplace education program. J Hum Nutr Diet 2018;31(6):725-33.

136. British Dietetic Association. Code of Professional Conduct. [Internet] Birmingham: British Dietetic Association; 2017 [cited February 2020]. Available from: https://www.bda.uk.com/practice-and-education/nutrition-and-dietetic-practice/professional-guidance/regulation-codes-and-practice-guidance.html

137. Dietitians Association of Australia. Statement of Ethical Conduct. [Internet] Canberra (ACT): Dietitians Association of Australia; 2014 [cited February 2020]. Available from: https://member.dietitiansaustralia.org.au/common/Uploaded%20files/DAA/Resource_Library/2020/2020-Statement-of-Ethical-Practice-Member-and-APD.pdf

138. Zur O. Therapeutic Boundaries and Effective Therapy: Exploring the Relationships. In: O'Donohue W, Graybar SR, editors. Handbook of Contemporary Psychotherapy: Toward an Improved Understanding of Effective Psychotherapy. California: SAGE Publications, 2009. p. 341-358.

139. Diversi T, Hughes R, Burke K. The prevalence and practice impact of weight bias amongst Australian dietitians. Obes Sci Pract 2016;2(4):456-65.

140. Panza G, Armstrong L, Taylor B, Puhl R, Livingston J, Pescatello L. Weight bias among exercise and nutrition professionals: a systematic review. Obes Rev 2018;19(11):1492-503.

141. Campbell K, Crawford D. Management of obesity: attitudes and practices of Australian dietitians. Int J Obes 2000;24(6):701-10.

142. Nissen-Lie H, Havik O, Hoglend P, Monsen J, Helge Ronnestad M. The Contribution of the Quality of Therapists' Personal Lives to the Development of the Working Alliance. J Counsel Psychol 2013;60(4):483-95.

143. Vandenberghe L, Martins da Silveira J. Therapist Self-as-Context and the Curative Relationship. J Contemp Psychother 2013;43(3):159-67.

144. Danish S. Developing helping relationships in dietetic counseling. J Am Diet Assoc 1975;67(2):107-10.

145. Danish S, Ginsberg M, Terrell A, Hammond M, Adams S. The anatomy of a dietetic counseling interview. J Am Diet Assoc 1979;75(6):626-30.

146. Nagy A, McMahon A, Tapsell L, Deane F. Developing meaningful client-dietitian relationships in the chronic disease context: An exploration of dietitians' perspectives. Nutr Diet 2019;77(5):529-41.

147. Yang W, Low Y, Ng W, Ong S, Jamil J. Investigation of empathy amongst dietetic interns at selected primary and tertiary health-care facilities. Nutr Diet 2019;77(2):1-9.

148. Dietitians Association of Australia. Accredited Dietetics Education Programs. [Internet] Canberra (ACT): Dietitians Association of Australia; 2019 [cited March 2019]. Available from: https://daa.asn.au/becoming-a-dietitian-in-australia/currently-accredited-dietetic-programs/

149. Dietitians Association of Australia. Accreditation Standards for Dietetics Education Programs Version 2.0. [Internet] Canberra (ACT): Dietitians Association of Australia; 2017 [cited August 2019]. Available from: https://dietitiansaustralia.org.au/sites/default/files/2022-01/DAA-Accreditation-Standards.pdf

150. Dietitians Association of Australia. Overview of process for revision of the Competency Standards. [Internet] Canberra (ACT): Dietitians Association of Australia; 2019 [cited May 2020]. Available from: https://dietitiansaustralia.org.au/sites/default/files/2022-01/NCS-Dietitians-Australia%20Methodology%20%28PDF%2C%2041MG%29.pdf

151. Ash S, Palermo C, Gallegos D. The contested space: The impact of competency-based education and accreditation on dietetic practice in Australia. Nutr Diet 2019;76(1):38-46.

152. Ackerman S, Hilsenroth M. A Review of Therapist Characteristics and Techniques Negatively Impacting the Therapeutic Alliance. Psychother 2001;38(2):171-86.

153. Ackerman S, Hilsenroth M. A review of therapist characteristics and techniques positively impacting the therapeutic alliance. Clin Psychol Rev 2003;23(1):1-33.

154. McCarter K, Baker A, Britton B, Halpin S, Beck A, Carter G, et al. Head and neck cancer patient experience of a new dietitian-delivered health behaviour intervention: 'you know you have to eat to survive'. Support Care Cancer 2018;26(7):2167-75.

155. Braun V, Clarke V. Thematic Analysis. In: Cooper H, editor. APA Handbook of Research Methods in Psychology. 2nd ed. Washington DC: American Psychological Association; 2012. p. 57-71.

156. Microsoft Word for Mac [Computer Program]. Version 14.7.7. Redmond, Washington: Microsoft Cooperation; 2010.

157. Microsoft Excel for Mac [Computer Program]. Version 14.7.7. Redmond, Washington: Microsoft Cooperation; 2010.

158. Prochaska J, Velicer W. The Transtheoretical Model of Health Behavior Change. Am J Health Promot 1997;12(1):38-48.

159. Kornhaber R, Walsh K, Duff J, Walker K. Enhancing adult therapeutic interpersonal relationships in the acute health care setting: an integrative review. J Multidiscip Healthc 2016;6(9):537-46.

160. Lambert M, Barley D. Research Summary on the Therapeutic Relationship and Psychotherapy Outcome. In: JC N, editor. Psychotherapy Relationships That Work: Therapist Contributions and Responsiveness to Patients. Oxford: Oxford University Press; 2002. p. 17-35.

161. Patterson C. Empathy, Warmth, and Genuineness in Psychotherapy: A Review of Reviews. Psychol Psychother 1984;21(4):431-8.

162. International Confederation of Dietetic Associations. Evidence-Based Dietetics Practice. [Internet] Toronto (ON): International Confederation of Dietetic Associations; 2010 [updated 2010, cited March

2020]. Available from: https://www.internationaldietetics.org/International-Standards/Evidence-based-Dietetics-Practice.aspx

163. Dietitians Association of Australia. Statement of Ethical Practice. [Internet] Canberra (ACT): Dietitians Association of Australia; 2014 [cited March 2020]. Available from: https://member.dietitiansaustralia.org.au/common/Uploaded%20files/DAA/Resource_Library/2020/2020-Statement-of-Ethical-Practice-Member-and-APD.pdf

164. International Confederation of Dietetic Associations. International Code of Ethics and Code of Good Practice. [Internet] Toronto [ON]: International Confederation of Dietetic Associations; 2014 [cited March 2020]. Available from: https://www.internationaldietetics.org/Downloads/ICDA-Code-of-Ethics-and-Code-of-Good-Practice.aspx

165. Soguel L, Vaucher C, Bengough T, Burnand B, Desroches S. Knowledge Translation and Evidence-Based Practice: A Qualitative Study on Clinical Dietitians' Perceptions and Practices in Switzerland. J Acad Nutr Diet 2019;119(11):1882-9.

166. Bentley M, Stirling C, Robinson A, Minstrell M. The nurse practitioner-client therapeutic encounter: an integrative review of interaction in aged and primary care settings. J Adv Nurs 2016;72(9):1991-2002.

167. Harris B, Panozzo G. Therapeutic alliance, relationship building, and communication strategies - for the schizophrenia population: An integrative review. Arch Psychiatr Nurs 2019;33(1):104-11.

168. Teofilo T, Veras R, Silva V, Cunha N, dos Santos Oliveira J, Vaconcelos S. Empathy in the nurse-patient relationship in geriatric care: An integrative review. Nurs Ethics 2019;26(6):1585-600.

169. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffman TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. Syst Rev 2021;10(89):1-11.

170. Oxford University Press. Lexico Thesaurus. [Internet] Oxford: Oxford University Press; 2018 [cited October 2018]. Available from: https://www.lexico.com

171. Conn V, Isaramalai S, Rath S, Jantarakupt P, Wadhawan R, Dash Y. Beyond Medline for Literature Searches. J Nurs Scholarsh 2003;35(2):177-82.

172. EndNote X8 [Computer Program]. Version 8.2. London: Clarivate Analytics; 2013.

173. Houston L, Probst Y, Humphries A. Measuring Data Quality Through a Source Data Verification Audit in a Clinical Research Setting. Stud Health Technol Inform 2015;214:107-13.

174. Sullivan C, Leon J, Sehgal A. Job satisfaction among renal dietitians. J Ren Nutr 2006;16(4):337-40.

175. Green C, Vandall-Walker V, Rysdale L, Stevens M, Feldmann H, Tymura S, et al. You Can't Touch ... or Can You? Dietitians' Perceptions of Expressive Touch in Client Encounters. Can J Diet Pract Res 2020;81(3):112-9.

176. Raaff C, Glazebrook C, Wharrad H. Dietitians' perceptions of communicating with preadolescent, overweight children in the consultation setting: the potential for e-resources. J Hum Nutr Diet 2014;28(3):300-12.

177. Lordly D, Taper J. Gaining Entry-level Clinical Competence Outside of the Acute Care Setting. Can J Diet Pract Res 2008;69(1):32-6.

178. Morris A, Herrmann T, Liles C, Roskell C. A qualitative examination of patients' experiences of dietitians' consultation engagement styles within nephrology. J Hum Nutr Diet 2018;31(1):12-22.

179. Jarman M, Adam L, Lawrence W, Barker M, Bell R. Healthy conversation skills as an intervention to support healthy gestational weight gain: Experience and perceptions from intervention deliverers and participants. Patient Educ Couns 2018;102(5):924-31.

180. Endevelt R, Gesser-Edelsburg A. A qualitative study of adherence to nutritional treatment: Perspectives of patients and dietitians. Patient Prefer Adherence 2014;4(8):147-54.

181. Cant R. Patterns of delivery of dietetic care in private practice for patients referred under Medicare Chronic Disease Management: Results of a national survey. Aust Health Rev 2010;34(2):197-203.

182. Gesser-Edelsburg A, Birman Y. Does the Transformation of Dietitians from Counseling to Therapy Also Apply to the Physical and Therapeutic Environment? A Case Study of Israeli Practice. J Acad Nutr Diet 2018;118(6):1047-56.

183. Levey R, Ball L, Chaboyer W, Sladdin I. Dietitians' perspectives of the barriers and enablers to delivering patient-centred care. J Hum Nutr Diet 2019;33(1):106-14.

184. Madden A, Riordan A, Knowles L. Outcomes in coeliac disease: a qualitative exploration of patients' views on what they want to achieve when seeing a dietitian. J Hum Nutr Diet 2016;29(5):607-16.

185. Taylor L, Moriartey S, Stadnyk J, Basualdo-Hammond C. Assessment of Registered Dietitians' Beliefs and Practices for a Nutrition Counselling Approach. Can J Diet Pract Res 2016;77(3):140-7.

186. Hancock R, Bonner G, Hollingdale R, Madden A. 'If you listen to me properly, I feel good': A qualitative examination of patient experiences of dietetic consultations. J Hum Nutr Diet 2012;25(3):275-84.

187. Sullivan B, Schiller R, Horvath M. Nutrition education and counseling: Knowledge and skill levels expected by dietetic internship directors. J Am Diet Assoc 1990;90(10):1418-22.
188. Whitehead K, Langley-Evans S, Tischler V, Swift J. Communication skills for behaviour change in dietetic consultations. J Hum Nutr Diet 2009;22(6):493-500.
189. Cairns J, Milne R. Eating Disorder Nutrition Counseling: Strategies and Education Needs of English-Speaking Dietitians in Canada. J Am Diet Assoc 2006;106(7):1087-94.
190. Horacek T, Salomón J, Nelsen E. Evaluation of dietetic students' and interns' application of a lifestyle-oriented nutrition-counseling model. Patient Educ Couns 2007;68(2):113-20.
191. Sladdin I, Gillespie B, Ball L, Chaboyer W. Development and psychometric testing of an inventory to measure patient-centred care in dietetic practice - dietitian version. J Hum Nutr Diet 2019;32(4):535-46.
192. Gregory R, Pichert J, Lorenz R, Antony M. Reliability and validity of a scale for evaluating dietitians' interviewing skills. J Nutr Educ 1995;27(4):204-8.
193. Buttenshaw K, Ash S, Shakespeare-Finch J. Development and validation of the Dietetic Confidence Scale for working with clients experiencing psychological issues. Nutr Diet 2017;74(1):36-45.
194. Flückiger C, Del Re A, Wampold B, Symonds D, Horvath A. How Central Is the Alliance in Psychotherapy? A Multilevel Longitudinal Meta-Analysis. J Couns Psychol 2012;59(1):10-7.
195. Martin D, Garske J, Davis K. Relation of the therapeutic alliance with outcome and other variables: A meta analytic review. J Consul Clin Psychol 2000;68(3):438-50.
196. Horvath A, Symonds B. Relation between working alliance and outcome in psychotherapy: A meta-analysis. J Couns Psychol 1991;38(2):139-49.
197. Horvath A, Greenberg L. Development and Validation of the Working Alliance Inventory. J Couns Psychol 1989;36(2):223-33.
198. Lawford B, Bennell K, Campbell P, Kasza J, Hinman R. Association between Therapeutic Alliance and Outcomes Following Telephone-Delivered Exercise by a Physical Therapist for People with Knee Osteoarthritis: Secondary Analyses from a Randomised Controlled Trial. JMIR Rehabil Assist Technol 2021;8(1):e23386.
199. Sturgiss E, Rieger E, Haesler E, Ridd M, Douglas K, Galvin S. Adaption and validation of the Working Alliance Inventory for General Practice: qualitative review and cross-sectional surveys. Fam Pract 2019;36(4):516-22.

200. Sønsterud H, Kirmess M, Howells K, Ward D, Billaud Feragen K, Seeger Halvorsen M. The working alliance in stuttering treatment: a neglected variable? Int J Lang Commun Disord 2019;54(4):606-19.

201. Grace C. A review of one-to-one dietetic obesity management in adults. J Hum Nutr Diet 2011;24(1):13-22.

202. Yang W, Fu Y. Level of empathy among dietitians: A pilot study. Nutr Diet 2018;75(4):411-7.

203. Teding van Berkhout E, Malouff J. The Efficacy of Empathy Training: A Meta-Analysis of Randomized Controlled Trials. J Couns Psychol 2015;63(1):32-41.

204. Whitehead, K. DIET-COMMS. [Internet] Nottingham: University of Nottingham; 2021 [cited August 2021]. Available from: https://www.nottingham.ac.uk/dietcomms/

205. Horvath A. Working Alliance Inventory Form C. [Internet] Horvath A; 1992 [cited February 2022]. Available from: https://wai.profhorvath.com/sites/default/files/upload/WAI-C.pdf

206. Brody R, Byham-Gray L, Touger-Decker R, Passannante M, Rothpletz Puglia P, O'Sullivan Maillet J. What Clinical Activities Do Advanced-Practice Registered Dietitian Nutritionists Perform? Results of a Delphi Study. J Acad Nutr Diet 2014;114(5):718-33.

207. Brown S, Pope J, Hunt A, Tolman N. Motivational Strategies Used by Dietitians to Counsel Individuals With Diabetes. Diabetes Educ 1998;24(3):313-8.

208. Cant R, Aroni R. From competent to proficient; nutrition education and counselling competency dilemmas experienced by Australian clinical dietitians in education of individuals. Nutr Diet 2008;65(1):84-9.

209. Chapman G, Sellaeg K, Levy-Milne R, Ottem A, Barr S, Fierini D, et al. Canadian dietitians' approaches to counseling adult clients seeking weight-management advice. J Am Diet Assoc 2005;105(8):1275-9.

210. Gibson S, Davidson Z. An observational study investigating the impact of simulated patients in teaching communication skills in preclinical dietetic students. J Hum Nutr Diet 2016;29(4):529-36.

211. Harris-Davis E, Haughton B. Model for multicultural nutrition counseling competencies. J Am Diet Assoc 2000;100(10):1178-85.

212. Harvey E, Summerbell C, Kirk S, Hills A. Dietitians' views of overweight and obese people and reported management practices. J Hum Nutr Diet 2002;15(5):331-47.

213. Hauenstein D, Schiller M, Hurley R. Motivational techniques of dietitians counseling individuals with Type II diabetes. J Am Diet Assoc 1987;87(1):37-42.

214. Jager M, van der Sande R, Essink-Bot M, van den Muijsenbergh M. Views and experiences of ethnic minority diabetes patients on dietetic care in the Netherlands - a qualitative study. Eur J Public Health 2019;29(2):208-13.

215. Jager M, Boeft A, Leij-Halfwerk S, Sande R, Muijsenbergh M. Cultural competency in dietetic diabetes care—A qualitative study of the dietician's perspective. Health Expect 2020;23(3):540-8.

216. Knight A, Baldwin C, Reidlinger D, Whelan K. Communication skills teaching for student dietitians using experiential learning and simulated patients. J Hum Nutr Diet 2020;33(5):601-13.

217. Lambert K, Lau T, Davison S, Mitchell H, Harman A, Carrie M. Does a renal diet question prompt sheet increase the patient centeredness of renal dietitian outpatient consultations? Patient Educ Couns 2020;103(8):1645-9.

218. Lee C, Wong J. Perceived levels of collaboration between cancer patients and their providers during radiation therapy. Can Oncol Nurs J 2019;29(2):110-22.

219. Lok K, Chan R, Sea M, Woo J. Nutritionist's Variation in Counseling Style and the Effect on Weight Change of Patients Attending a Community Based Lifestyle Modification Program. Int J Environ Res Public Health 2010;7(2):413-26.

220. Lovestam E, Fjellstrom C, Koochek A, Andersson A. The power of language on patient-centredness: linguistic devices in the dietetic notes of patient records. Int J Appl Linguist 2015;25(2):225-45.

221. Lovestam E, Orrevall Y, Koocheck A, Andersson A. The struggle to balance system and lifeworld: Swedish dietitians' experiences of a standardised nutrition care process and terminology. Health Sociol Rev 2016;25(3):240-55.

222. Lu A, Dollahite J. Assessment of dietitians' nutrition counselling self-efficacy and its positive relationship with reported skill usage. J Hum Nutr Diet 2010;23(2):144-53.

223. MacLellan D, Berenbaum S. Dietitians' opinions and experiences of client-centred nutrition counselling. Can J Diet Pract Res 2006;67(3):119-24.

224. MacLellan D, Berenbaum S. Canadian Dietitians' Understanding of the Client-Centered Approach to Nutrition Counseling. J Am Diet Assoc 2007;107(8):1414-7.

225. Milosavljevic M, Noble G, Goluza I, Keep A, Ponta G. New South Wales public-hospital dietitians and how they feel about their workplace: An explorative study using a grounded theory approach. Nutr Diet 2015;72(2):107-13.

226. Morley C, Maclellan D, Traviss K, Cividin T. An evidence-based approach to developing the collaborative, client-centred nutrition education (3CNE) framework and practice points. Can J Diet Pract Res 2016;77(2):78-83.

227. Russell M, Caggiula A, Glonginger M. Evaluation of Clinical Skills for Nutrition Counseling. J Am Coll Nutr 1985;4(5):521-9.

228. Sharman S, Powell M, Skouteris H. A qualitative evaluation of the challenges faced by dieticians when interviewing children. Appetite 2016;100:80-5.

229. Sladdin I, Ball L, Gillespie B, Chaboyer W. A comparison of patients' and dietitians' perceptions of patient-centred care: A cross-sectional survey. Health Expect 2019;22(3):457-64.

230. Stetson B, Pichert J, Roach R, Lorenz R, Boswell E, Schlundt D. Registered dietitians' teaching and adherence promotion skills during routine patient education. Patient Educ Couns 1992;19(3):273-80.

229.

231. Sussman K. Patients' Experiences of a Dialysis Diet and Their Implications for the Role of the Dietitian. J Ren Nutr 2001;11(3):172-7.

232. Trudeau E, Dube L. Moderators and Determinants of Satisfaction with Diet Counseling for Patients Consuming a Therapeutic Diet. J Am Diet Assoc 1995;95(1):34-9.

233. Warner M, Tong A, Campbell K, Kelly J. Patients' Experiences and Perspectives of Telehealth Coaching with a Dietitian to Improve Diet Quality in Chronic Kidney Disease: A Qualitative Interview Study. J Acad Nutr Diet 2019;119(8):1362-74.

234. Williamson A, Hunt A, Pope J, Tolman N. Recommendations of Dietitians for Overcoming Barriers to Dietary Adherence in Individuals With Diabetes. Diabetes Educ 2000;26(2):272-9.

Appendices

Appendix 1: Permission Letter for Reproduction of the Nutrition Care Process Model

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July 13, 2020

Ms. Annaliese Nagy
University of Wollongong
Northfields Avenue
Wollongong, NSW 2522
AUTSTRALIA

Dear Ms. Nagy:

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Appendix 2: Semi-Structured Interview Guide (Study 1)

Introductory Statement

Hi (name),

Firstly, thank you very much for taking part in this study. As you probably know my name is Annaliese. I am also a dietitian and am currently completing my PhD which this research is part of.

I understand that you have already read and signed the Participant Information Sheet and Participant Consent Form. Did you have any questions about either of those? (pause) Can I check that you have been able to complete the online survey? Did you have any issues in accessing or completing the survey?

So just to clarify the aim of this research is to understand more about the client-dietitian relationship from the perspectives of dietitians in Australia, like yourself, and in particular from those dietitians seeing clients managing lifestyle-related chronic diseases, which I'm sure you see a number of.

During our interview today I'll be asking you about any successful interactions you've had with clients, including some key elements that may have supported those. I'll then ask you to reflect back on some not so successful interactions you've had with clients and then finish up talking about any training you've had with regard to building relationships and the current competency standards for dietitians.

The findings from this research will be used as part of my PhD, and will be published in scientific journals and presented at conferences, and ultimately I hope this research helps to improve our training and practice.

I did also just want to remind you that we're focusing on your relationships with clients who have lifestyle-related chronic diseases, so that is specifically those clients who are overweight or obese, or have type 2 diabetes or cardiovascular disease. Also, to make sure your clients' privacy is protected during our interview you don't need to mention your clients' names when you are answering questions today.

Before we start, can I confirm that you agree to participate in this interview? (pause)

I also want to remind you that your participation today is voluntary and that you may stop the interview at any time without any consequence. If you would like to stop the interview, or feel like you need to take a break, please just let me know. Similarly, if there is a question that you don't feel comfortable answering please let me know too. Also it is likely that there may be some technical difficulties, so if something does go wrong, please tell me by either sending me an email or giving me a call and hopefully

we can fix it for you.

I want to let you know that I expect our interview today to take between 30 and 60 minutes. Is that okay with you? (pause) I will check with you after 30 minutes to make sure you are okay for time.

Can I also check with you that you are happy to have this interview recorded today? (pause)
The recording helps to make sure I can transcribe what was said in our interview. The recording will be stored securely at the University of Wollongong and all of the data from this recording, including your interview transcript, will be de-identified. We will be using your participant code to analyse the data to ensure your privacy and the file that maps your code to your name will also be kept securely and separately from the rest of the data. My supervisors and I will be the only people who have access to the data, and your name will not appear in any transcripts, my thesis, publications or presentations.

Thank you for agreeing to have this interview recorded, I will start recording now (turn on recording devices if participant agrees).

Do you have any questions you would like to ask before we start? (pause)

Interview Questions

1) So (name), to start with today I'll be asking you some introductory questions. Firstly it would be great to know about your journey of becoming a dietitian. Can you tell me about that and what drove your interest in the profession?

Probes:

- ☐ Aspects of your work as a dietitian that you enjoy
- ☐ Aspects of working with clients that you enjoy
- ☐ Aspects of your work as a dietitian that are not as appealing to you
- ☐ Aspects of working with clients that are not as appealing to you

2) So now if we think about where you are currently working as a dietitian, can you tell me about the kinds of clients you generally see and how your practice runs?

Probes:

- ☐ Range of clients seen and type of conditions normally specialising in
- ☐ Physical environment clients are seen in (e.g. doctor's rooms, private rooms at home, office)
- ☐ General approach taken with clients (e.g. patient centred, motivational interviewing)

3a). As I mentioned earlier, I am particularly interested in understanding your perspective of the relationship between dietitians and clients with lifestyle-related chronic diseases. So firstly I would like you to think about a client you have had a particularly successful interaction with, and think about what may have been some key elements that may have supported your interaction with that particular client?

Probes:

- ☐ Reason client/s come to mind

3b) How did you develop this interaction?

Probes:

- ☐ Skills/techniques used by dietitian (e.g. rapport, setting agreed goals)
- ☐ Specific words/phrases/actions enacted by dietitian

3c) If we think about how relationships may grow or change now, can you tell me about how your relationship with this client played out over time, say through the course of seeing this client?

- ☐ Reasons for change/growth
- ☐ Impact on dietitian and client

4a) You've given me lots of great details about positive client-dietitian relationships so now if it's okay with you I'd like to flip that scenario and ask you about relationships with clients that perhaps weren't so great. So just like we did earlier, if you think back to a client you have been involved with, however this time we are focusing on a particular client where you felt your interaction with them wasn't so positive. Can you tell me about this client?

Probes:

- ☐ Key elements impacting relationship
- ☐ Why client/s come to mind
- ☐ Why relationship with this client wasn't so great
- ☐ How relationship differs with client talked about previously
- ☐ Skills/techniques used by dietitian (e.g. rapport, setting agreed goals)
- ☐ Specific words/phrases/actions enacted by dietitian

4b) Now focusing back on how relationships grow or change, can you tell me about how your relationship with this client played out over time, say through the course of seeing this client?

Probes:

- ☐ Reasons for change/growth

- ☐ Key factors in repairing relationships
- ☐ Impact on dietitian and client

5a) So now I would like for you to think back to when you were training to be a dietitian. Can you tell me what you remember about being trained in developing relationships with clients?

Probes:

- ☐ What the training involved
- ☐ Usefulness of the training

5b) Can you tell me about any additional training you have done to further develop your skills in this area of building strong relationships?

Probes:

- ☐ What the training involved
- ☐ Usefulness of the training

6a). Given what we have spoken about today and hearing your perspective, it would be really interesting now to see how you feel about the current competency standards for dietitians in Australia. I've just put up our latest standards on the screen and you can see there are lots of competencies listed (scroll through), and I am interested to know firstly how you feel about these latest competencies?

6b) As I mentioned earlier, our competencies list lots of things that we need to do as dietitians, but I am interested in what you think is critical in being a competent dietitian?

Probes:

- ☐ Skills/techniques discussed previously in interview

6c) Now you may or may not be aware but one of these competencies relates specifically to the client-dietitian relationship and I've highlighted this competency here. You can see that it says dietitians must *'demonstrate empathy and establish trust and rapport to build an effective relationship with their client'*.

Given what we have talked about today, can I ask how this statement reflects your perspective of the client-dietitian relationship?

Probes:

- ☐ Why it reflects in particular way
- ☐ Interpretation of 'effective relationship'
- ☐ Similarities (based on previous responses)
- ☐ Differences (based on previous responses)

- ☐ Level of detail (based on previous responses)

Closing Statement

That takes us to the end of our interview. Thank you very much (name) for agreeing to be interviewed today. You've given some really great insights into your perspective of our relationships with clients. Before we finish up, can I ask if there is anything else you would like to add? (pause)

If you have any further questions or think of anything you would like to add please do not hesitate to contact me.

Before you go, I need to remind you that the recording from today's interview will be transcribed. You indicated on your consent form that you (preference for reviewing transcript), but I just wanted to double check that you still are happy to (preference for reviewing transcript)? If you would like to review your transcript it will be emailed to you so you can confirm that you are happy with what has been transcribed from your interview.

Thanks very much again (name), enjoy the rest of your day.

Appendix 3: Ethics Approval (Study 1)

Dear Dr McMahon,

I am pleased to advise that the application detailed below has been **approved**.

Ethics Number:	2017/575
Approval Date:	19/12/2017
Expiry Date:	18/12/2018
Project Title:	Australian Dietitians' Perspectives of the Client-Dietitian Relationship in Lifestyle-Related Chronic Disease Management
Researcher/s:	McMahon Anne; Deane Frank; Nagy Annaliese; Tapsell Linda
Documents Approved:	Ethics Application V2 12122017 Response to review V1 12122017 Appendix 1 Research Process Flowchart V1 15112017 Appendix 2 DAA Policy for Distribution and Advertising for Surveys, Research and Quality Activities V1 15112017 Appendix 3 Recruitment Advertisement Email to DAA Interest Group Members V2 12122017 Appendix 4 Initial Contact Script for Recruitment through Online Directories V1 15112017 Appendix 5 Online Semi-Structured Interview Guide V1 15112017 Appendix 6 Participant Consent Form V2 12122017 Appendix 7 Participant Instructions for Adobe Connect V1 15112017 Appendix 8 Participant Information Sheet V2 12122017 Appendix 9 Participant Demographic Survey V1 15112017 Appendix 10 Confirmation of Participation Email V1 15112017 Appendix 11 Participant Email for Confirmation of Inclusion Criteria V1 15112017 Appendix 12 Response to Participants Not Meeting Inclusion Criteria V1 15112017 Appendix 13 Participant Online Interview ! Questions V1 15112017 Appendix 14 Participant Withdrawal Form V1 15112017 Appendix 15 Participant Email for Transcript Approval V1 15112017 Appendix 16 Timeline V1 15112017 Appendix 17 Confirmation of Participant Interview Time V1 15112017 Appendix 18 Reminder of Participant Interview Time V1 15112017

Sites:

Site	**Principal Investigator for Site**
University of Wollongong	Dr Anne McMahon

The HREC has reviewed the research proposal for compliance with the *National Statement on Ethical Conduct in Human Research* and approval of this project is conditional upon your continuing compliance with this document. Compliance is monitored through progress reports; the HREC may also undertake physical monitoring of research.

Approval is granted for a twelve month period; extension of this approval will be considered on receipt of a progress report **prior to the expiry date**. Extension of approval requires:

- The submission of an annual progress report and a final report on completion of your project.
- Approval by the HREC of any proposed changes to the protocol or investigators.
- Immediate report of serious or unexpected adverse effects on participants.
- Immediate report of unforeseen events that might affect the continued acceptability of the project.

If you have any queries regarding the HREC review process or your ongoing approval please contact the Ethics Unit on 4221 3386 or email rso-ethics@uow.edu.au.

Yours sincerely,

Susan Thomas

Appendix 4: Semi-Structured Interview Guide (Study 2)

Introductory Statement

Hi _____(name),

Firstly, thanks very much for agreeing to participate in this interview with me today. As you probably know, my name is Annaliese, I am a dietitian and this interview is a part of my PhD research. I'll be going over a few housekeeping things first, and then briefly summarising the study findings from the curriculum review that was completed, before asking for your perspective on the findings from the review. Does that sound okay?

Our interview today is designed to get your perspective on our findings from our review of subject outlines, which looked at how the client-dietitian relationship is expressed in the curriculum. As someone involved in the education and training of dietitians, we really value your perspective as a key informant in helping us to make sure our findings are valid in the dietetic community.

I expect our interview today to take between 15 and 30 minutes, is that okay with you?
I'd like to remind you also that findings from this research will be used as part of my PhD, and will be published in scientific journals and presented at conferences. I also want to remind you that your participation today is voluntary and that you may stop the interview at any time without any consequence. Please let me know if you'd like to stop the interview or feel like you need to take a break. Similarly, you can choose not to answer any specific question that is asked.

Can I also check with you that you are happy to have this interview recorded today? The recording helps to make sure I can accurately transcribe what was said. In terms of your privacy the recordings will be stored securely at the University of Wollongong and all of the data from this recording, including your interview transcript, will be de-identified. We will be using a code to ensure your and your university's privacy. My supervisors and I will be the only people who have access to the data, and your name will not appear in any transcripts, my thesis, publications or presentations.

Thank you for agreeing to have this interview recorded, I will start recording now.

Do you have any questions or comments before we start?

Brief Summary of Study Findings

Have you had a chance to read the summary of the study findings that I sent through? It might also be handy if you have that document open now so you can follow along with me as we go through the findings.

To quickly recap, we did this study because we know the client-dietitian relationship is important. This is reflected in the Nutrition Care Process, our competency standards in Australia and in the dietetic literature. However, we don't know how dietitians are trained in developing relationships with their clients. So as a starting point to explore this, we aimed to look at how the relationship is expressed in subject outlines of dietetics education programs in Australia.

To do this we extracted data from relevant subject outlines from all accredited programs offered in Australia. We used a conceptual model of relationship development that we published previously as a guide to look qualitatively at how the relationship is expressed in subject outlines.

The overarching finding was the variability in how the client-dietitian relationship was expressed across subject outlines. There were two subthemes. The first subtheme was 'Varied expression of the phenomenon', showing the relationship seemed to be explicitly expressed but in different ways. If you have the summary of the findings I sent through, you'll see that this is summarised in Table 1. So you can see that different variations of the words 'relationship, 'alliance' and 'partnership' were used, but were only seen in subject outlines from 3 out of 15 universities.

The second subtheme was 'Varied expression of relationship elements and influential factors'. This subtheme showed that that key elements and influential factors of the relationship were expressed, however the degree to which their roles in relationship development were overtly articulated varied. The majority of subject outlines did include relationship elements, but their connection to the relationship wasn't explicit. Only one subject outline articulated relationship elements with regard to their role in relationship development (e.g. warmth, and a want to understand). Table 2 in the summary I sent through shows the different key elements and influential factors of the relationship that were seen in subject outlines from each university.

Did you have any questions on that?

Interview Questions

1) So now that we've gone through the main findings of the review, firstly I'm interested to hear your perspective on the findings across the subject outlines as a whole and how they resonate with you?
Probes:

- ☐ First thoughts of the analysis
- ☐ Any findings that stood out to you - Why or why not?
- ☐ Concerns with analysis – What are they and how they could be managed? Do the distinctions between themes make sense?

2) As we've just talked about, our findings showed that the expression of the client-dietitian relationship seemed to vary across subject outlines, and that the phenomenon of the relationship itself seemed to be expressed in 3 out of 15 universities. Considering this, can I ask what's your perspective of where else teaching around this might occur?
Probes:

- ☐ Theoretical learning – lectures or tutorials?
- ☐ Practical learning – simulations/OSCEs or placement?

3) I mentioned earlier that the competency standards for dietitians in Australia include skills in relationship development, and specifically it states that dietitians must '*demonstrate empathy and establish trust and rapport to build an effective relationship'* with their client. Can I ask what your perspective is on whether the relationship could be more clearly articulated in our competency standards, and whether this would be more helpful in training dietitians in these skills (to be more overtly articulated in university-level training)?

4) Was there anything else that you wanted to add?

Closing Statement

That takes us to the end of our interview today. If you have any further questions or anything you would like to add please do not hesitate to contact me. My email and phone number are on your Participant Information Sheet. Thanks very much again _____(name) and enjoy the rest of your day.

Appendix 5: Ethics Approval (Study 2)

Dear Dr McMahon,

I am pleased to advise that the application detailed below has been **approved**.

Ethics Number:	2019/222
Approval Date:	02/07/2019
Expiry Date:	01/07/2020
Project Title:	Exploring Client-Dietitian Relationship Development within the Dietetic Curriculum of Australian Universities
Researchers:	McMahon Anne-Therese; Deane Frank; Nagy Annaliese; Tapsell Linda
Documents Approved:	• UOW Ethics Application V1 09052019 • Response to Ethics Committee V1 24062019 • Appendix A Initial Contact Scripts V1 09052019 • Appendix B Follow-Up Contact Scripts V1 09052019 • Appendix C Interview Guide V1 09052019 • Appendix D Participant Information Sheet V2 24062019 • Appendix E Participant Consent Form V2 24062019 • Appendix G Institution Approval Email Template V1 24062019 • Appendix F Timeline V1 09052019 • Investigator Details Forms

Sites:

Site	Principal Investigator for Site
University of Wollongong	Dr Anne McMahon

The HREC has reviewed the research proposal for compliance with the *National Statement on Ethical Conduct in Human Research* and approval of this project is conditional upon your continuing compliance with this document. Compliance is monitored through progress reports; the HREC may also undertake physical monitoring of research.

Approval is granted for a twelve month period; extension of this approval will be considered on receipt of a progress report **prior to the expiry date**. Extension of approval requires:

- The submission of an annual progress report and a final report on completion of your project.
- Approval by the HREC of any proposed changes to the protocol or investigators.
- Immediate report of serious or unexpected adverse effects on participants.
- Immediate report of unforeseen events that might affect the continued acceptability of the project.

If you have any queries regarding the HREC review process or your ongoing approval please contact the Ethics Unit on 4221 3386 or email rso-ethics@uow.edu.au.

Yours sincerely,
Emma Barkus

Appendix 6: Summary of included studies with key findings referring to primary terms ('relationship' or 'alliance') and associated terms (e.g. connection) in alphabetical order by first author

Author, Year, Country	Design	Participants, Sample Size	Study Aim/s	MMAT[a]/ JBI[b] Score	Key findings related to primary terms	Key findings related to associated terms
Ash et al 2019, Australia[151]	Qualitative: Interviews and guided discussions (secondary analysis)	Dietitians (1991 interviews n = 26) (1998 interviews n = 23) (2007 interviews n = 19) Dietitians and employers (2014 guided discussions n = 7)	To explore how a competency-based education framework influenced competency standards and their application and how this influenced dietetic practice in Australia since 1990	*****	Communicating for better care, as part of the therapeutic relationship, remained a central dietetic role (throughout dietetic competency standards in Australia)	Communication skills of dietitians have evolved from educating clients to negotiating with clients. Competency standards have reflected this change, from 'Interprets and translates nutrition information' (1993 competency standards) to 'Collaborates broadly with clients...' (2015 competency standards)
Ball et al 2016, Australia[71]	Qualitative: Semi-structured interviews (telephone)	Clients (n = 10)	To explore the nutrition care needs of newly diagnosed patients over time, as well as their views on how dietitians can best support the long-term maintenance of dietary change	*****	Clients value genuine relationships Few participants perceive an ongoing relationship with their dietitian to be useful The importance of the dietitian treating the patient like a person for the relationship	
Brody et al 2014, USA[206]	Quantitative – Descriptive: Delphi	Dietitians (n = 73)	To describe the practice activities performed by clinical advanced practice registered dietitian nutritionists that reached consensus using the Delphi technique	***		Dietitians reached consensus on 'establishing trust and rapport' being an essential component of advanced dietetic practice
Brown et al 1998, USA[207]	Quantitative – Descriptive: Survey (paper)	Dietitians (n = 395)	1. To identify the motivational strategies used most often by dietitians when counseling individuals with diabetes mellitus 2. To determine those strategies that dietitians perceive as being most effective 3. To identify barriers perceived by dietitians as being the most significant obstructions to dietary adherence experiences by individuals with diabetes 4. To explore the effect of various	****	Identification of effective strategies for establishing a comfortable relationship with client: using positive external motivators, individualising recommendations and exhibiting organisational management of content	The rapport between a patient and dietitian was not identified as a barrier to dietary adherence for patients managing diabetes

			demographic variables such as level of education, years of experience, setting of practice, and certification as a diabetes educator on use of motivational strategies			
Buttenshaw et al 2017, Australia[193]	Quantitative – Descriptive: Survey	Dietitians (n = 185) (Study 1) Dietitians (n = 458) (Study 2)	To develop a reliable instrument to measure generalist dietitians' confidence about working with clients experiencing psychological issues	***		'Build rapport' was included in the initial confidence scale, however it was not included in the final scale
Cairns & Milne 2006, Canada[189]	Quantitative – Descriptive: Survey (mail)	Dietitians (n = 65)	To determine what counseling strategies are being used and identify the educational needs of registered dietitians who work with clients with eating disorders in Canada	***		'Rapport building' was identified as a common type of strategy used by dietitians Some dietitians (10% of sample) did not want more training in rapport-building strategies, with the most common reason being they felt well-trained in this skill already The following strategies were listed as rapport-building strategies: reflective listening, attending to non-verbal communication, person-centred approach, humour, immediacy, socratic interview style, self-disclosure
Cant & Aroni 2008a, Australia[208]	Mixed Methods: Survey (online)	Dietitians (n = 258)	To critically examine practising dietitians' experiences and perceptions of their roles in education of individual clients, both in applying entry level communication skills, and in progressive skill development	***	Dietitians aim to develop a working alliance with their clients as desired in more collaborative relationships	Dietitians who were trained thirty years before the study date commented on the transition in practice from educating clients, to more modern practice utilising a partnership with the client and skills in nutrition counselling
Cant & Aroni 2008b, Australia[90]	Mixed Methods: Focus groups and semi-structured interviews (face-to-face or telephone) (Phase 1) and survey (online) (Phase 2)	Dietitians (n = 46) Clients (n = 34) (Phase 1) Dietitians (n = 258) (Phase 2)	To examine perceptions of both dietitians and their patients about dietitians' skills and attributes required for nutrition education and individuals	*****	Understanding the results of the study (as a guide to communication practice) might help enhance dietitian-patient relations	'Partnership' and 'collaboration' identified as part of interpersonal and communication skills in a model of professional performance in communication Results suggest that collaboration is required in the professional competencies of dietitians in the 21st century
Cant & Aroni 2009,	Mixed Methods: Focus groups and	Dietitians (n = 46) Clients (n = 34) (Phase	To examine dietitians' perceptions of process in education of individual	*****	'Counselling' used by 93% of dietitians (where counselling was	'Rapport' was included in the definition of the first step of the

Australia[77]	semi-structured interviews (face-to-face or telephone) (Phase 1) and survey (online) (Phase 2)	1) Dietitians (n = 258) (Phase 2)	clients and to validate performance criteria for dietitians' nutrition education and counselling of individuals		described as the use of a relationship to problem-solve with clients) 'Relationship-Building Skills' identified as the first step of nutrition education in developed model 'Relationship-Building Skills' defined as 'develop rapport through introductions, informality, verbal, non-verbal communication and own presence' Model for nutrition education suggesting dietitians build a relationship through developing rapport 'Communication Skills' identified as underpinning nutrition counselling practice, and defined as 'applies advanced communication skills to counselling to develop a professional relationship with clients' (where client's own experiences and knowledge are central and carry authority within the relationship)	nutrition education model, 'Relationship-Building Skills'. The definition read 'develop rapport through introductions, informality, verbal, non-verbal communication, own presence'. The developed model suggests dietitians build a relationship with clients through developing rapport 'Collaboration Skill' was identified as a second step of the developed model, and was partly defined as aiming 'for partnership with client to problem solve' The developed model describes collaboration and partnership within a nutrition education and counselling consultation with individual clients
Cant 2009a, Australia[72]	Qualitative: Focus groups and semi-structured interviews (face-to-face or telephone)	Dietitians (n = 46) Clients (n = 34)	To explore dietitians' and clients' perceptions of trust and to develop a model to explain trustworthiness and professionalism in a health care setting	*****	Dietitians desire to build relationships with patients Building relationships assists the development of the patients' trust Dietitians perceive their own integrity as important in building relationships with patients Dietitians perceive the relationship as depending on openness and the client's assessment of their trustworthiness Use of self-disclosure by the dietitian enhances the depth of the relationship Emphasis on the need to keep the relationship 'professional' Developed model of trust showing trust as being affected by the relationship	Dietitians aimed to build rapport to gain the trust and respect of the client Clients viewed a desirable communication style as enabling a positive partnership Clients portrayed collaborative partnerships with their dietitian 'Collaboration' was included as part of 'professionals' verbal and non-verbal communication' within the developed model of trust
Cant 2009b, Australia[78]	Mixed Methods: Focus groups and	Dietitians (n = 46) Clients (n = 34) (Phase	This study focuses on the dress style of dietitians as part of the verbal	*****	There was agreement that professionals' dress formed a	

	semi-structured interviews (face-to-face or telephone) (Phase 1) and survey (online) (Phase 2)	1) Dietitians (n = 258) (Phase 2)	and/or nonverbal communications within individual client consultations. The study aimed to describe how dietitians and their clients interpret this dialogue and to explore the implications for practice.		nonverbal communication relevant to their relationship, however there was no evidence that this applied universally	
Cant 2010, Australia[181]	Mixed Methods: Survey	Dietitians (n = 365)	To explore patterns of delivery of dietetic care for patients referred under Medicare Chronic Disease Management	****		Dietitians reported allocating patients longer consultation times (predominantly for initial consultations) to build rapport
Chapman et al 2005, Canada[209]	Qualitative: Focus groups	Dietitians (n = 104)	To describe Canadian dietitians' approaches to counseling adults seeking weight-management advice, including how dietitians' approaches differ between clients with and without associated risk factors and long histories of dieting	**	Dietitians described their strategy of explaining their approach to clients (when perceived to be misaligned with clients' goals) and enabling clients to decide if they wished to continue the counseling relationship	
Cotugna & Vickery 1990, USA[126]	Quantitative – Descriptive: Food diary and survey	Students (n = 11)	To examine the attempted compliance of 11 student dietitians who were assigned to follow calorie-controlled diabetic diets for one week	**	Students perceived the experience of attempting to comply with a diabetic diet as helping them to demonstrate empathy and build more effective relationships	
Danish et al 1979, USA[145]	Quantitative – Descriptive: Ratings of observed practice	Students (n = 29)	To develop a model whereby the anatomy of a typical dietetic counseling interview can be assessed	*	The length of the 'relationship-establishing phase' (versus 'problem-solving phase') varied among counsellors and interviews	In developing rapport, the dietitian being able to demonstrate 'continuing responses' when engaging with the client is crucial Results indicated that few verbal responses which facilitate rapport development were used by students in interviews A suggestion was made that the length of the 'relationship-establishing phase' (5 minutes) would not be sufficient to develop rapport and trust
Devine et al 2004, USA[80]	Qualitative: Semi-structured interviews (face-to-face or telephone)	Dietitians and nutrition practitioners (n = 24)	To understand dietetics and nutrition professionals' experiences of their practice roles	*****	Dietitians perceived clients' unrealistic expectations as having the potential to interfere with effective therapeutic relationships	
Endevelt & Gesser-	Qualitative: Semi-structured interviews	Clinical dietitians (n = 12)	To ascertain the role of the dietitian-patient relationship and the	*****	Relationship described in a 'counseling and therapeutic	The patient-dietitian interaction has a significant impact on the

Edelsberg 2014, Israel[180]	and focus groups	Supervisory dietitians (n = 5) Clients (not specified, n = 12 focus groups)	counseling approach in influencing individual patients' decisions to adhere to treatment by continuing or not to adhere by terminating their nutritional treatment		approach', versus an 'educational and therapeutic approach', as both parties working together rather than the patient being solely responsible	conception of the dietitian's role The patient-dietitian interaction influences the patient's response to education counselling and the extent of commitment and adherence to their treatment plan A 'counseling and therapeutic approach' to practice was described as enabling a partnership between the dietitian and client There are unique barriers at play in the context of the dietitian-patient interaction
Foley & Houston 2014, Australia[134]	Mixed Methods: Patient referral and attendance data, focus groups and interviews	General practitioners (n = 6) Practice nurses (n = 7) Receptionist (n = 1) Patients (n = 13)	1. To ascertain if changes to dietetic services increased referrals and attendance rates 2. To learn from clinical staff and patients what is important to them in a dietetic service	*		Patients mentioned the dietitian taking time to make a personal connection as a factor contributing to them feeling safe with the dietitian Dietitians forming a personal connection with their patients facilitates improved attendance at the clinic
Gesser-Edelsberg & Birman 2018, Israel[182]	Qualitative: Focus groups and interviews	Dietitians (n = 72)	To ascertain the impact of the physical environment on the dynamics and communication between a dietitian and a client in a meeting, based on perceptions of dietitians	*****	Recognising dietetics as a constantly changing field, and as moving towards needing to develop deeper therapeutic relationships Dietitians defining success as creating a relationship that motivates change for client	Dietitians perceived that a change to the spatial environmental design (according to the dynamic model) might positively impact the therapeutic interaction Dietitians perceived that changes in the physical environment might undermine patients' feeling of wellbeing and unsettle the therapeutic interaction Most dietitians commented that they had not received training in managing the emotional aspects of the therapeutic interaction and there was no permanent or supportive arrangement to do so The concept of the organisation of the space in which the dietitian-patient interaction occurs is neither taught nor addressed in professional or educational frameworks Most dietitians view their profession as a dynamic therapeutic interaction process

Gibson & Davidson 2015, Australia[210]	Quantitative – Cross Section Analytical: Ratings of observed practice	Students (n = 215)	To explore the impact of a student-simulated patient interview on the development of communication skills during formative and summative Objective Structured Clinical Exams	*****		'Building rapport' listed as an example of a foundation skill targeted before students undertook simulations
Green et al 2020, Canada[175]	Mixed Methods: Survey and interview	Dietitians (n = 135) (Phase 1) Dietitians (n=17) (Phase 2)	To explore Registered Dieticians' perceptions about expressive touch as a means to provide client-centred care	No criteria met	Majority of dietitians perceived that the use of expressive touch may enhance the therapeutic relationship Less than 5% disagreed Dietitians working in community health centres, hospitals, and long-term care reported greater agreement with the statement that expressive touch enhances the therapeutic relationship More opportunities existed for expressive touch in lower acuity environments, where dietitians have a physical layout and practice more conducive to meaningful communication (where the relationship is more likely to develop) Dietitians expressed concern that expressive touch would erode trust in therapeutic relationship Dietitians described positive experiences of using expressive touch, including reducing the power differential in the relationship Dietitians are attempting to navigate the complexities of expressive touch to strengthen relationships with clients	Dietitians described positive experiences with the use of expressive touch, using different forms of touch to communicate empathic concern, kindness, teamwork and gratitude which facilitated building rapport More opportunities existed for expressive touch in lower acuity environments, where dietitians have a physical layout and practice more conducive to meaningful communication (where rapport is more likely to develop) Dietitians who were less comfortable with touch used other techniques to build rapport
Gregory et al 1995, USA[192]	Quantitative – Descriptive: Survey and ratings of observed practice	Not applicable	To develop an instrument for evaluating dietitians' interviewing skills	*		'Rapport' was included as a subcategory of interviewing skills within the developed scale, including: Opportunity for client questions/concerns, sensitivity to client concerns, feedback and social support and no undue interruptions

Hancock et al 2012, UK[186]	Qualitative: Focus groups and semi-structured interviews (telephone)	Clients (n = 6) Dietitians (n = 44)	To explore qualitatively patients' experiences of dietetic consultations, aiming to achieve a better understanding of their perspectives	*****		'Partnership' and 'rapport' were identified as factors affecting participants' experience of dietetic consultations Patients reported treating the consultation as a partnership and an important factor in the effectiveness of the consultation Patients described a good rapport between themselves and the dietitian as essential A lack of rapport with the dietitian was listed as contributing to the client's negative experience of dietetic consultations and impacting their outcome achievement and perceived effectiveness of consultations
Harper & Maher 2017, Australia[73]	Qualitative: Semi-structured interviews (face-to-face or telephone)	Dietitians (n = 11)	To develop an explanatory theory of how dietitians in private practice source, utilise and integrate practice philosophies	*****	Dietitians described forming collaborative relationships with clients to nurture change The private practice context compels dietitians to develop mutually beneficial therapeutic relationships with patients Intellectual virtues (episteme, techne and phronesis) are fundamental to how dietitians adapt their strategies for developing therapeutic relationships Dietitians recognise the importance of developing a therapeutic relationship, and identified these relationships as vital to clients' wellbeing and dietitians' livelihoods The need to establish a relationship where the client feels comfortable and engaged, before education or the intervention is delivered, was identified Techniques used to develop the relationship vary, and are dependent on the client and dietitian The relationship as a complex interpersonal experience was recognised	'Facilitating client autonomy' was seen as a necessary part of enhancing rapport Techniques used to build rapport vary according to dietitians and clients Dietitians perceived that facilitating follow-up visits hinged on establishing a rapport and connection from the first consult Building a rapport was shown to be an important aspect of practice The private practice context provided the motivation to establish a rapport with clients and a rich learning environment in which to foster the skills to do so

Harris-Davis & Haughton 2000, USA[211]	Quantitative – Cross Section Analytical: Survey (paper)	Dietitians (n = 343)	To develop and test a model for multicultural nutrition counseling competencies for registered dietitians	***	The factor 'believe that cultural differences do not have to negatively affect communication or counseling relationships' was included under the broader category of 'multicultural awareness' within the multicultural nutrition counselling model	
Harvey et al 2002, UK[212]	Quantitative – Descriptive: Survey (paper)	Dietitians (n = 187)	1. To assess and compare dietitians' views about overweight and obese people 2. To assess and compare dietitians' reported weight management practice of overweight and obese people 3. To explore the associations between dietitians' views and weight management practices	**	Results for the item 'I (would) make sure I spend time developing a good relationship with clients': overweight questionnaire mean = 5.09 (SD = 0.93), obese questionnaire mean = 4.95 (SD = 1.21) Dietitians reported spending time developing good relationships with clients Reduced acceptance of obese people was associated with a reduction in time spent developing a good relationship with a client	
Hauenstein et al 1987, USA[213]	Quantitative – Descriptive: Survey (mail)	Dietitians (n = 194)	To explore dietitians' perceptions of various techniques that are known to affect dietary adherence of patients with Type II diabetes	***		Shared decision making and individualisation of instruction were described as helping to establish a strong rapport between a dietetic educator and client Revealing one's own efforts and problems in achieving dietary adherence was described as a technique used to help build rapport and support behaviour change
Horacek et al 2007, USA[190]	Quantitative – Descriptive: Survey and ratings of observed practice	Students (n = 99)	1. To assess dietetic students' and interns' use of skills to apply a lifestyle-oriented nutrition counseling model 2. To assess if differences exist between their self, client or expert evaluations; or by student type: coordinated program, didactic program in dietetics and dietetic intern	***	Interviewing skills are crucial to establishing the collaborative relationship needed for effective counselling	'Establishing rapport' was included in the developed lifestyle-oriented nutrition counseling model Students (mean = 4.41, SD = 0.44) rated themselves as significantly higher than their supervisor (mean = 4.26, SD = 0.38) (P < 0.01). Students are more confident in their abilities than the experts assessed, indicating room for improvement Students rated their rapport building skills as improving throughout

						training (pre-training: mean = 3.36, SD = 1.19, pre-counselling: mean = 4.01, SD = 0.79, post-counselling: mean = 4.39, SD = 0.74) ($p < 0.001$)
Isselmann et al 1993, USA[81]	Quantitative – Descriptive: Survey and interviews	Participants from variety of nutrition counselling settings (not further specified) (n = 40)	To develop a continuing education workshop in nutrition counseling	No criteria met	'Client-counsellor relationship' was included in the workshop outline The enhancement of the value of the patient-counsellor relationship through the application of skills and techniques from psychological models was recognised	
Jager et al 2019, the Netherlands[214]	Qualitative: Semi-structured interviews	Clients (n = 12)	To explore experiences and views of ethnic minority type 2 diabetes patients regarding a healthy diet and dietetic care in order to generate information that may be used for the development of training for dietitians in culturally competent dietetic care	*****		Further research was suggested, in that observations of dietetic consultations may provide information on the 'actual interaction' between dietitians and clients who are migrants managing type 2 diabetes
Jager et al 2020, the Netherlands[215]	Qualitative: interviews	Dietitians (n = 12)	To explore the experiences of dietitians and the knowledge, skills and attitudes they consider to be important for effective dietetic care in migrant patients	*****	Trust identified as an important factor in the relationship Dietitians aware that a trusting relationship facilitates information sharing Small gestures that facilitated a warm interaction were identified as important for the relationship Some dietitians found it difficult to build a trusting relationship with migrant patients due to the language barrier and cultural differences Dietitians wanted to learn how to build a trusting relationship and convey information with migrant patients	
Jakobsen et al 2017, Denmark[79]	Qualitative: Semi-structured interviews and observations of counselling sessions	Dietitians (n = 2) Counselling session observations (n = 15)	To determine whether narrative dietary counseling applied together with motivational interviewing versus motivational interviewing alone is experienced to strengthen the relationship and collaboration between counsellors, and clients with a chronic disease	**	Identification of a particular practice approach 'narrative dietary counselling' as improving relationship building between a client and dietitian Dietitians perceive trust as the most important, yet challenging, prerequisite of relationship building The use of whiteboards and	Dietitians indicated that using the whiteboard (as part of narrative dietary counselling) strengthened their collaboration with the client Collaboration is both important and challenging in dietary counselling Challenges to collaboration were identified as the clients' expectations of dietary counseling

					narrative learning strategies fosters an equal relationship (as part of 'narrative dietary counselling' approach)	and the dietitian's role, and the presumed private character of food and eating issues Dietitians experienced the narrative approach to dietary counseling to be a powerful tool in collaborating with clients through specific techniques used
Jarman et al 2018, Canada[179]	Mixed Methods: Ratings of observed practice, survey, interviews and focus groups	Clients (n = 50) Dietitians (intervention: n = 1, control: not specified)	1. To compare experiences and perceptions of using Healthy Conversation Skills between the intervention and control Registered Dietitians 2. To compare perceptions of support received from the Registered Dietitians by intervention and control women, as well as the acceptability of the intervention	*****	The intervention dietitian commented that the Healthy Conversation Skills approach was useful for building relationships with participants by exploring and understanding their barriers and solutions to issues they had 'Building relationships' identified as a theme	
Jones et al 2007, UK[74]	Qualitative: Semi-structured interviews (face-to-face)	Clients (n = 24)	To obtain views of patients attending community dietetic clinics, on the dietetic service, the outcomes of dietary treatment in terms of lifestyle change and the impact that attending the dietitian had on their lives	*****	Half of the clients interviewed reported a positive relationship with their dietitian Clients valued ongoing, supportive and positive relationships with their dietitian Clients reported a link between their levels of motivation and their relationship with their dietitian	
Karupaiah et al 2016, Malaysia[82]	Quantitative – Cross Section Analytical: Ratings of observed practice	Dietetic interns (n = 27)	This article shares the experience at the National University of Malaysia in assimilating the Nutrition Care Process into the dietetics curriculum. A performance evaluation tool was designed by incorporating the key elements of the Nutrition Care Process and was applied to assess dietetic interns' competencies and skills in identified clinical areas.	**	A 'collaborative counsellor-patient relationship' was identified as a learning component of the performance evaluation tool Learning attributes and skills were identified: Demonstrating appropriate bedside manner, eye contact and intonation, listening skills and identification of relevant information, involving family members in counselling process, setting priorities for dietary advice and establishing goals for patient, creating individualised plans, providing practical advice, acknowledging and fostering patient's self efficacy	

Knight et al 2020, United Kingdom[216]	Quantitative – Descriptive: Survey	Nutrition and dietetics students (n = 112)	To measure attitudes of student dietitians with respect to communication skills teaching and how experiential learning using simulated patients impacts confidence in their communication skills	*****	Almost all students rated communication skills as important for relationships with patients (99.1%) Significant difference in number of students who were very or extremely confident in 'Building and sustaining a trusting relationship with patient' before and after communication skills teaching	
Lambert et al 2018, Australia[75]	Qualitative: Semi-structured interviews	Dietitians (n = 27)	1. To explore the experience of renal dietitians regarding the process of educating patients with end stage kidney disease 2. To describe the strategies they perceived to help patients understand the renal diet to support adherence	*****	Dietitians have a strong desire to form a collaborative relationship with their client, as it contributed to their pride and professional satisfaction Dietitians perceived a trusting relationship as important in optimising patients' ability to self-manage Dietitians perceived empathy as an important enabler of trusting relationships Dietitians described a discrepancy between 'ideal' and actual practice in not having adequate time to effectively develop the dietitian-patient relationship	Follow-up phone reviews were perceived by dietitians to be 'cutting corners' and detrimental to maintaining rapport Dietitians perceived layering advice helped to preserve rapport and empower patients which facilitated long-term professional relationships Findings are consistent with previous research confirming the critical role of developing rapport with patients
Lambert et al 2020, Australia[217]	Quantitative – Descriptive: Ratings of observed practice	Dietitians (n=4) Patients (n=24) Carers (n=11)	1. To evaluate the impact of a renal diet question prompt sheet on patient centredness in dietitian outpatient clinics 2. To describe the impact of a renal diet question prompt sheet on the volume and pattern of communication between dietitians and patients/carers	****	The proportion of utterances devoted to building a relationship reduced significantly (from 15.7% to 9.8%) ($P < 0.0001$)	
Laquatra & Danish 1981, USA[83]	Quantitative – Cross Section Analytical: Ratings of observed practice	Nutrition and nursing students (n = 30)	To evaluate an attempt to have nutrition counseling students, who were previously trained by the Danish, D'Augelly, and Hauer method through an academic course, transfer helping skills to the nutrition counseling setting	*	Students in the experimental group differed from the control group in their verbal behaviours which facilitated the development of a helping relationship	

Lee & Wong 2019, Canada[218]	Quantitative - Descriptive: Survey (paper)	Clients (n = 130)	To examine the patterns of patient-provider collaboration among patients undergoing radiotherapy	***		Client scores for collaboration with dietitians were significantly lower than scores for radiation oncologists, radiation therapists and nurses The level of client-dietitian collaboration may depend on the level of symptom distress the client is experiencing
Levey et al 2019, Australia[183]	Qualitative: Semi-structured interviews (telephone)	Dietitians (n = 12)	To explore the barriers and enablers to delivering patient-centred care from the perspective of primary care dietitians	*****		Dietitians explained that it was challenging to build rapport (amongst other required tasks) in the allocated time Dietitians described rushing in an attempt to meet perceived expectations from clients and consequently neglecting to spend time building rapport with them Dietitians felt pressure from physicians to address clients' concerns immediately rather than spend time building rapport
Lewis et al 1987, USA[84]	Quantitative – Cross Section Analytical: Ratings of observed practice	Nutrition students (n = 34)	To evaluate a 3-hour workshop as a method for teaching relationship-establishing skills to nutrition students	**	Some skills that were taught within the workshop were described as 'initial relationship-building skills'	'Establishes rapport' identified as an interviewing skill that was demonstrated by less than half of the experimental group pre-workshop. Post-workshop scores of experimental and control group students did not differ significantly
Lok et al 2010, China[219]	Mixed Methods: Ratings of observed practice and interviews	Nutritionists (n = 4) Clients (n = 24)	To explore the views of four nutritionists and observe their practice and relationship with patients attending a community based Lifestyle Modification Program on lifestyle and behaviour change, and whether this affected the outcomes of the Lifestyle Modification Program in terms of overall weight loss	***	Common themes emerged from all four nutritionists on the importance of establishing a good relationship with the patient Some nutritionists had a shared understanding of the importance of the nutritionist-patient relationship in helping patients find underlying issues and solutions Nutritionists need to be trained to conduct programs in the same way as it can affect their relationships with clients and consequent weight outcomes	Rapport was identified as a subtheme across multiple themes (attitude towards patients, strategy to tackle weight loss and counselling skills) Common themes emerged on the importance of establishing a good rapport with patient Nutritionists identified establishing rapport as a main counselling strategy Unconditional acceptance, genuineness and empathy were identified as highly important to achieve rapport

Lordly & Taper 2008, Canada[177]	Qualitative: Semi-structured interviews (telephone and face-to-face)	New graduate dietitians (n = 8) Program supervisors (n = 6)	To examine dietitians and graduate perceptions of the risks and benefits associated with the acquisition of entry-level clinical competence within a single practice environment	*****	Decreased opportunity to establish relationships in acute care versus long-term care settings was recognised, where greater opportunity to focus on relationship building was identified The long-term care environment was identified as providing rich opportunity to gain important entry-level competencies related to relationship-building
Lovestam et al 2015, Sweden[220]	Qualitative: Analysis of dietitians' documentation of patient consultations	Dietetic entries in patient file (n = 30)	To explore how the dietetic notes contribute to the construction of the dietetic care and patient-dietitian relationship	*****	A lack of representation of the dietitian-patient relationship within dietetic entries identified A negative effect of the dietitian's picture of the patient (constituted through writing in patient notes using a particular language) on the relationship with a patient was suggested The importance of the relationship in dietetics was identified, and justified through the explanation that dietetic counselling involves sensitive personal issues
Lovestam et al 2016, Sweden[221]	Qualitative: Focus groups	Dietitians (n = 37)	To explore Swedish dietitians' experiences of the Nutrition Care Process terminology in relation to patient record documentation, the patient and the dietitians' professional role	*****	Dietitians emphasised the importance of the dietitian-patient relationship over needing to document according to the Nutrition Care Process Terminology Dietitians described postponing and revising their formulation of a diagnosis statement where appropriate, until a stable relationship with their patient was established Dietitians described needing time to develop a relationship in the initial stage of engaging with a client
Lu & Dollahite 2010, USA[222]	Quantitative – Descriptive: Survey (online)	Dietitians (n = 612)	To develop a valid and reliable instrument and use it to measure dietitians' nutrition counselling self-efficacy and reported use of a set of counselling skills. The association between nutrition counselling self-	***	Some skills generated from the survey were described as those most often employed for 'relationship-building purposes' Self-efficacy scores for survey item 'clarify to your clients the roles and

			efficacy and various factors were also examined.		responsibilities of the dietitian-client relationship': All participants (mean = 7.03, SD = 1.76), those participants who counsel more than 50% of their work week (mean = 7.10, SD = 1.79) and those who counsel for less than 50% of their work week (mean = 6.75, SD = 1.61). The difference between those participants who counsel more than 50% of their work week and those who don't was significant ($p < 0.05$).	
MacLellan & Berenbaum 2006, Canada[223]	Quantitative – Descriptive: Delphi	Dietitians (n = 57) (Round 1) Dietitians (n = 48) (Round 2)	To determine the meaning that dietitians ascribe to the client-centred approach and to identify the important concepts and issues inherent in this approach to practice	***	Wording of the survey concerned some participants as it was perceived to suggest an imbalance of power in the client-dietitian relationship Whether dietitians respect the expertise that clients bring to counselling relationships was questioned	Whether dietitians are ready to be working in partnership with clients was questioned
MacLellan & Berenbaum 2007, Canada[224]	Qualitative: Open-ended interviews (telephone)	Dietitians (n = 25)	To explore dietitians' understanding of the client-centered approach to nutrition counseling	***	'Building a relationship' identified as a theme in dietitians' responses as to how they understand client-centred counselling The importance of understanding how to develop a therapeutic relationship with clients as part of being an effective counsellor was identified	
Madden et al 2016, UK[184]	Qualitative: Interviews (telephone or face-to-face) and focus groups	Clients (n = 29) Carers of clients (n = 5)	To identify the preferences for diet and nutrition-related outcome measures of patients with coeliac disease and their carers	*****		Clients preferred to see the same dietitian at each appointment, where an example was given of being able to develop rapport over time
McCarter et al 2018, Australia[154]	Qualitative: Semi-structured interviews (telephone)	Clients (n = 9)	To explore experiences of head and neck cancer patients receiving a novel dietitian-delivered health behaviour intervention based on motivational interviewing and cognitive behavioural therapy as part of a larger investigation examining the effect of this intervention on malnutrition in head	***	The importance of the dietitian being empathetic and supportive for the relationship was identified	A supportive partnership was an important part of valued working relationships between patients and their dietitian

			and neck cancer patients, undergoing radiotherapy. More specifically, to explore the patient's working relationship with the dietitian, specific components of the Eating as Treatment interventions and suggestions for improving the intervention.			
Milosavljevic et al 2015, Australia[225]	Qualitative: Semi-structured interviews	Dietitians (n = 32)	To examine how New South Wales public hospital dietitians perceive their workplace and its influence on their ability to function as healthcare professionals	*****	Relationships were described as a source of value across all career stages, and particularly important for specialist dietitians and mid-career dietitians	
Morley et al 2016, Canada[226]	Qualitative: Discussion groups (telephone)	Dietitians (n = 22)	To develop guidelines for client-centred nutrition education	***	A model for collaborative client-centred nutrition education was developed and described in the context of 'fostering collaborative relationships with clients'	Collaborative client-dietitian partnerships are integral to helping clients find ways of eating, feeding or thinking about food that are actionable and consistent with their lives
Morris et al 2018, UK[178]	Qualitative: Semi-structured interviews (telephone)	Patients (n = 20)	To explore and describe the renal patient's perspectives of the dietitians' different communication styles, and to qualitatively evaluate which approaches provide the best level of patient-satisfaction when engaging with dietetic services	*****	The 'adult-adult ego state', experienced as a helpful engagement style, showed evidence of improved relationships when dietitians employed good counselling skills Risks were identified for the relationship if the 'parent-child dynamic' dominates the client-dietitian relationship Relationships were described as building from collaborative power-sharing between the client and dietitian, and problematic relationships were described when consultations are dietitian-centred The potential of the client's amount of disposable income, food preparation skills and family commitments was suggested as having the potential to diminish the relationship	'Effective partnership' was identified as a subtheme of the main theme 'helpful engagement style' The suggestion was made that prescription interventions should be consciously chosen with caution, awareness and sensitivity by the dietitian to not inhibit further communication and collaboration Good rapport forms part of the foundation needed for a directive message to be well received Higher literacy levels of the client might contribute to a more equal partnership with the dietitian rather than a parent-child dynamic
Murray et al 2018, Australia[87]	Quantitative – Randomised Controlled Trial	Clients (n = 307) Dietitians (n = 29)	To explore whether therapeutic alliance improved after dietitians were trained in Eating as Treatment	****	No effect of the intervention (Eating as Treatment) was found on dietitian-rated alliance (p = 0.237)	

	(secondary analysis): Ratings of observed practice				Patient-rated alliance was 0.29 points lower after intervention training (p=0.016) No specific motivational interviewing techniques predicted patient-rated alliance Dietitian acknowledgement of patient challenges was related to dietitian-related alliance (β= 0.15, p = 0.035), and described as being worthy of inclusion in future efforts to develop a therapeutic alliance No evidence was identified to suggest therapeutic alliance was improved by training dietitians in motivational interviewing The need to further explore motivational interviewing and its impact on therapeutic alliance was identified, specifically using appropriate and sensitive alliance measures
Nagy et al 2018, Australia[1]	Quantitative – Descriptive: Ratings of observed practice	Health coaches (n = 2) Study participants (n = 50)	To explore relationships between therapeutic alliance and various contextual factors in health coaching sessions held within a weight loss trial	****	The session duration was significantly correlated with 'Bond' scores (r = 0.42, p = 0.002). The suggestion that spending more time in a session appears related to increased bonding (a key component of therapeutic alliance) was made Participants who had completed preparatory exercises had significantly higher total alliance (F(2,47) = 4.88, p = 0.012), 'Goal' (F(2,47) = 6.76, p = 0.003) and 'Task' scores (F(2,47) = 4.88, p = 0.012). The suggestions that preparatory work may help build therapeutic alliance and agreement on goals appears to influence follow-up completion were made Participants who completed the follow-up session scored significantly higher for 'Goal' compared to no follow-up' (t (20.61) = 2.29, p = 0.03). The suggestion that findings from this study provide future directions

					for research addressing the professional relationship in dietetic consultations for weight loss was made	
Notaras et al 2018, Australia[135]	Quantitative – Descriptive: Survey (paper)	Dietitians (n = 17) (pilot) Dietitians (n = 34) (second round) Dietitians (n = 50) (pre and post evaluation)	To develop, implement and evaluate an education program on improving communication and nutrition counselling skills for dietitians working in both acute inpatient and outpatient settings within the South Western Sydney Local Health District in New South Wales, Australia	****	The session outline included 'therapeutic relationship between patient-dietitian' The suggestion that sub-optimal nutrition counselling skills may hinder the development of an effective dietitian-patient relationship was made The relationship was identified as the cornerstone of having successful motivating conversations that have the potential to promote patients' intrinsic motivation for eating behaviour change	
Raaff et al 2014, UK[176]	Qualitative: Semi-structured interviews (telephone)	Dietitians (n = 18)	To explore dietetic views, attitudes and approaches to weight management appointments with preadolescent children	*****	Dietitians identified the importance of building relationships with paediatric clients	Dietitians identified the importance of building rapport with paediatric clients (as part of subtheme 'dietitian verbally engages the child in the conversation') Establishing rapport with the child from the beginning of the consultation was identified as a strategy to include the child in verbal disclosure
Russell et al 1985, USA[227]	Quantitative - Descriptive: Survey and ratings of observed practice	Students (n = 7)	1. To assess untrained graduate students in nutrition on their application of a set of 31 specific clinical skills for resolving dietary adherence problems 2. To describe the procedures for and feasibility of the evaluation program	*	Very few students demonstrated possession of listening skills These findings were described as 'concerning' due to these skills being crucial to establishing the collaborative relationship needed for effective counselling	Describing interviewing skills identified in the study as being crucial to developing rapport
Sharman et al 2016, Australia[228]	Qualitative: Semi-structured interviews (telephone)	Dietitians (n = 14)	To explore in detail dietitians' perceptions of the interviewing process, the degree to which this is challenging and the nature (if at all) of any challenges involved in conducting investigative interviews with children	*****		Strategies were identified to overcome disengagement from paediatric clients and build rapport with them Focusing on rapport, rather than in-depth questioning, was identified as a strategy to ensure paediatric

						clients' engagement in consultation
Sladdin et al 2018, Australia[76]	Qualitative: Semi-structured interviews (telephone)	Clients (n = 11)	To explore patients' experiences and perspectives of patient-centred care in individual dietetic consultations	*****	'Fostering and maintaining caring relationships' was identified as a main theme involving developing a holistic understanding of the client, being invested in the client's wellbeing and possessing caring qualities Clients who experienced caring relationships with their dietitian suggested a desire to continue their relationship, thus the importance of caring relationships was identified Clients identified dietitians being positive, enthusiastic, supportive, respectful and trustworthy as valuable to their relationship Some clients described their relationship with a dietitian as being instrumental to their healthcare progress Identified themes suggest an integrated approach to fostering caring relationships The need for dietitians to relinquish control during consultations to facilitate improved relationships was suggested	A participant described having a partnership with their dietitian (forming part of major theme 'fostering and maintaining caring relationships')
Sladdin et al 2019a, Australia[229]	Quantitative – Descriptive: Survey (mail)	Clients (n = 133) Dietitians (n = 180)	To compare patients' and dietitians' perceptions of patient-centred care in dietetic practice	***	Patients reported significantly lower scores compared to dietitians for their perceptions of a caring patient-dietitian relationship ($p = 0.009$) The importance of considering strategies for dietitians to foster and maintain good relationships with patients was identified The suggestions were made that patients may be encouraged to engage in ongoing care with their dietitian if a good relationship is developed, and that establishing a shared understanding at the beginning of a consultation may help foster positive relationships	Establishing a shared understanding at the beginning of the consult may help foster collaboration between patients and dietitians

Sladdin et al 2019b, Australia[191]	Quantitative - Descriptive: Interviews and Survey	Dietitians (n = 10, interviews) Dietitians (n = 180, survey)	To develop and test a dietitian-reported inventory to measure patient-centred care in dietetic practice	***	'Patient-dietitian relationship' identified as component of conceptual model of patient-centred care, described as 'a genuine, reciprocal relationship... based on trust, respect, rapport building and mutual understanding' Fifth factor of developed inventory identified as 'caring patient-dietitian relationships'	
Stetson et al 1992, USA[230]	Quantitative – Descriptive: Ratings of observed practice	Dietitians (n = 30) Clients (n = not specified) Complete recordings (n = 29)	To assess the teaching and adherence promotion skills of dietitians in routine clinical practice	**		Dietitians were described as using accepted strategies for developing and maintaining good interpersonal rapport with patients
Sullivan et al 1990, USA[187]	Quantitative – Descriptive: Survey (mail)	Internship directors (n = 66)	To determine internship directors' expectations for preparedness of entering interns and the emphasis given to preparation for both nutrition education and nutrition counseling in internship programs. The directors' perceptions of the need for students to have advanced preparation in these areas after the internship were also addressed.	*	'Uses helping skills and develops a trusting relationship with client' was listed as a knowledge/skill area questioned in survey Results for internship directors' expectations for intern preparation in nutrition education and counseling knowledge/skills (as percentage): Pre-internship preparation; basic (68) and advanced (21), Internship training; none (3), moderate (39) and extensive (56), Post-internship training needs; preparation adequate (73) and needs more (19)	
Sullivan et al 2006, USA[174]	Quantitative – Descriptive: Survey	Dietitians (n = 40)	To examine overall job satisfaction and specific domains of job satisfaction among renal dietitians	***	The most commonly named positive aspects of working as a renal dietitian consisted of 'developing long-term relationships with patients' (33% of respondents)	
Sussmann 2001, UK[231]	Qualitative: Semi-structured interviews (face-to-face)	Patients' and patients' partners (n = 8)	To examine the difficulties faced by renal dialysis patients on a restricted diet and to ascertain how the dietitian can most effectively help patients deal with these difficulties	*****	The suggestion that findings support the argument for mutually cooperative, genuine and personal relationships was made The recommendation that dietitians develop a friendly and supportive relationship to facilitate a trusting relationship was made	

Taylor et al 2016, Canada[185]	Survey (online and mail)	Dietitians (n = 349)	To elicit registered dietitians' beliefs, guided by the Theory of Planned Behaviour, regarding using a Nutrition Counselling Approach in their daily practice and describe variables influencing registered dietitians use of Nutrition Counselling Approach in their practice	**	The approach used in the study, named as the 'Nutrition Counselling Approach' was described as a 'collaborative counsellor-client relationship'	Dietitians perceived improved collaboration between them and their patients as an advantage of a particular counselling approach (Nutrition Counselling Approach)
Trudeau & Dube 1995, Canada[232]	Survey (mail)	Clients (n = 49)	1. To explore the variation in patients' satisfaction and compliance intentions 2. To measure the effect of a series of individual characteristics and contextual factors on patients' overall satisfaction and compliance intentions	**	A tested component of dietary counselling was identified as 'affective communication skills', and defined as 'interpersonal qualities of the dietitian (e.g. courtesy, warmth and attentiveness) that help build a positive relationship with the patient' No significant impact of affective communication skills on patient satisfaction was identified. The suggestion was made that patients would have needed to be either more extremely pleased or disappointed with the dietitian to make a conscious satisfaction judgement based on communication skills	
Warner et al 2019, Australia[233]	Qualitative: Semi-structured interviews (telephone and face-to-face)	Clients (n = 21)	To describe the patients' acceptability and experiences of a telehealth coaching intervention using telephone calls and tailored text messages to improve diet quality in patients with stage 3 to 4 Chronic Kidney Disease	*****	'Valuing Relationships' identified as one of five major themes consisting of subthemes: Receiving tangible and perceptible support, Building trust and rapport remotely, Motivated by accountability, Readily responding to a personalised approach, Reassured by health professional expertise	'Building... rapport remotely' identified as subtheme of major theme 'Valuing relationships Individualised text messages were found to 'enhance participant-clinician interactions' (between dietitian as telehealth coach and participant)
Whitehead et al 2009, UK[188]	Quantitative – Descriptive: Survey (mail)	Dietitians (n = 1158)	1. To ascertain dietitians' experiences of, and views on, both pre and post-registration dietetic training 2. To identify any barriers to incorporating a patient-centred approach and communication skills for behavior change within the	**	Post-registration training had been undertaken by 73% of respondents, of which 90% perceived had led to improvements in their relationship with patients The suggestion was made that better relationships with patients lead to improved working environment and retention of staff	

			profession			
Whitehead et al 2014, UK[86]	Mixed Methods: Ratings of observed practice, survey and interviews	Dietitians (n = 15) (Face and content validity) Student dietitians and dietitians (n = 113) (Intra-rater reliability, construct and predictive validity) Dietitians (n = 9) (Inter-rater reliability) Dietitians (n = 8) (Face validity)	To develop a short, easy-to-use, reliable, valid and discriminatory tool for the assessment of the communication skills of dietitians within the context of a patient consultation	***	A transition from a 'relationship-building' phase to 'advice-giving' phase in a dietetic consultation was described	'Establishes rapport' was perceived to be important and thus was included in the developed communications tool Observations from interviews suggested that most dietitians established rapport but did not maintain rapport throughout the consultation Rapport was lost when dietitians moved onto the more dietetic-specific content of the consultation
Williamson et al 2000, USA[234]	Quantitative – Descriptive: Interviews (telephone)	Dietitians (n = 75)	1. To identify factors that contribute to barriers to dietary adherence in individuals with diabetes identified in a 1998 study 2. To obtain recommendations from registered dietitians for overcoming the barriers	*		'Building rapport' was identified as a common recommendation for overcoming barriers to dietary adherence in individuals managing diabetes
Yang & Fu 2018, Malaysia[202]	Quantitative - Descriptive: Survey (online and paper)	Dietitians (n = 69)	1. To determine the clinical dietitians' empathy level in Malaysia 2. To determine the factors associated with the dietitian's level of empathy	***	Suggested that the dietitian's capability in expressing empathy will influence the development of 'good' therapeutic dietitian-patient relationships	
Yang et al 2019, Malaysia[147]	Quantitative - Descriptive: Surveys	Dietetic interns (n = 57) Clients (n = 99)	1. To investigate the empathy level of dietetic interns at selected primary and tertiary health-care settings through self-reported measures and patient perception 2. To determine the association between both measures	***		Suggestion that further research should consider the duration of the interaction between clients and dietetic interns as impacting the extent to which dietetic interns can demonstrate empathy

[a] Mixed Methods Appraisal Tool. Quality evaluation tool applied to quantitative, qualitative and mixed methods study designs. Score ranges from meeting none of the five criteria (as specified in table) to meeting all five criteria (*****).