

INVESTIGATING LEADERSHIP: REFLECTIONS ON THE METHODOLOGICAL CHOICES USED TO RESEARCH HOW ALLIED HEALTH CLINICIANS ARE ENABLED TO STEP INTO HEALTH SYSTEMS LEADERSHIP ROLES

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ABSTRACT

This article examines the methodological choices made for a research study into Health Systems Leadership. Reflections on key learnings are provided as a way of offering insight for researchers navigating these decisions for the first time. Embarking on qualitative research to effect change is purposeful but challenging; choosing the most appropriate methodology and methods can often be confounding and stressful for new researchers. This article explores the decision to use Interpretive Descriptive methodology with an Appreciative Inquiry lens and makes visible decision junctures in the development of this research. Literature provides a wealth of expert guidance and excellent insights into research methodology and methods. However, very little expounds on the learnings of those who have gone before and what their insights and learnings may be. Research into allied health clinicians and their journey into health systems leadership roles provides an opportunity to reflect on an applied research journey.

KEYWORDS

Qualitative research, health, methodology, appreciative inquiry, interpretive description, leadership

INTRODUCTION

Good quality health research is needed to address a range of challenges within the health sector and perpetuate improvements in clinical practice, alongside effective policy change. Qualitative research has a long and rich history of researchers seeking to understand perspectives, experiences, and behaviour relevant to a particular phenomenon of interest. It allows in-depth analysis and interpretation, using theoretical foundations and methodologies to explain why the researcher claims what

they claim [1]. However, the full value and significance of qualitative research as an evidence-based source for informing effective health system development waits to be fully realised.

Understanding the complexity, decision-making, and balance of organisational system tensions depends on the knowledge generated through small, in-depth qualitative studies and large-scale clinical trials [1]. Health and disability systems around the globe are inherently complex. Greenhalgh and Papoutsis [2] assert where complexity is

often discussed, it is also 'sub-optimally' studied. Greenhalgh and Papoutsi [2,p.1] recommend 'new standards of research quality, namely (for example) rich theorising, generative learning and pragmatic adaptation to changing contexts'. Using qualitative research is critical to illuminating and investigating contemporary health issues amidst the complexity [5].

Findings revealed by qualitative research can impact and influence how health and disability services are led and delivered, changing the course of investment and system design. Using qualitative research creates a space for subjective focus, embracing different methods of inquiry and epistemological frameworks. The diversity of choice compels the researcher to justify and clarify their philosophy and aligned practical approach. This leads to robust study design and findings founded on integrity [6]. The breadth of methodological choice, however, can elicit discomfort in the researcher when faced with an expansive range of options. Therefore, it is essential to support health researchers in their methodological decisions as they seek to understand systems and influence change.

This paper explicates key methodological decisions, and the outworking of those decisions, in a research study exploring how allied health clinicians are enabled to step into health system leadership roles. The research was prompted by the lack of diversity of clinicians within health systems leadership roles and, in particular, a paucity of allied health clinicians in those roles [3,4]. Research was needed to understand why there is a lack of diversity of clinicians in leadership roles to guide future allied health and health systems leadership development. The overarching objective of this research was to enable a greater diversity of clinicians to inform future health system design, development and delivery.

Giving visibility to the reasoning behind methodological selections and how they are applied supports emergent and developing researchers and optimises the contribution of qualitative health research to service and system design [7]. There is an absence of digestible work that provides detailed accounts of methodological decisions for the

novice health researcher. This article seeks to narrow this gap. It will outline and explore the methodological decisions and challenges encountered during the use of specific methodology applied to a health research question. Given the focus of this paper is to reflect on the methodological choices made and learnings garnered from that, the 'methods' and 'results' sections do not follow usual conventions. Rather, the 'Methods' section focuses on introducing the methodological decisions and rationale. Whereas the 'Results' section includes a reflection on the outcomes of that methodological decision making and the outworking of those in the research process. These insights and experiences are candidly provided to help others feel less daunted by the qualitative research approach.

METHOD

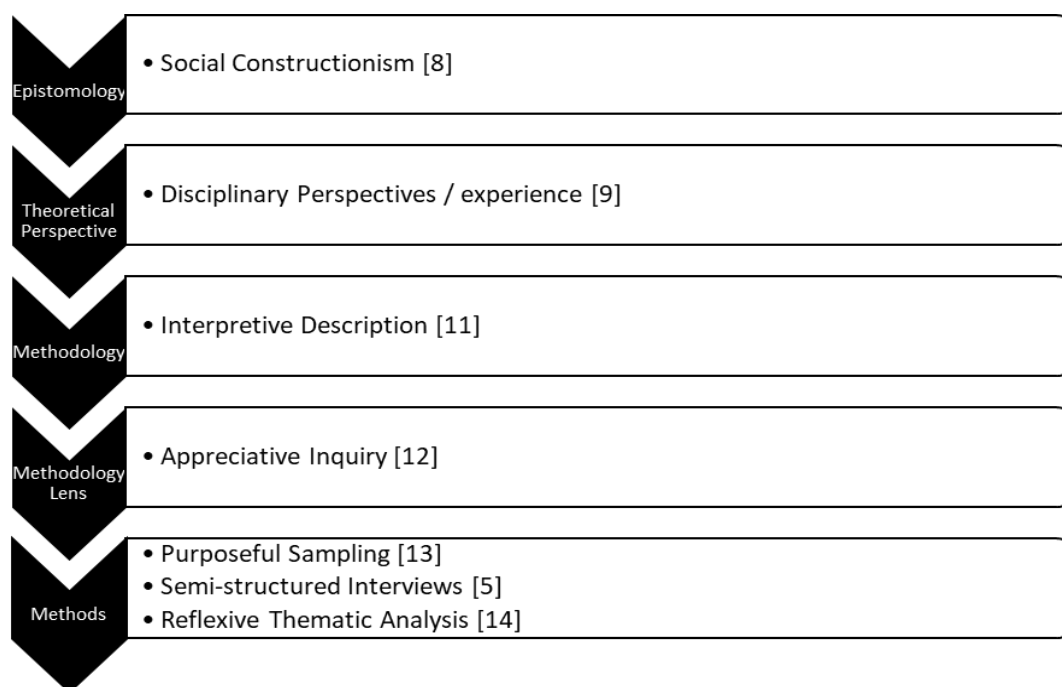
Ethical approval #21/353 for the associated doctoral research undertaken was granted by the Auckland University of Technology Ethics Committee in October 2021, and all participants gave informed written consent.

POSITIONING THE RESEARCH

How a research study is approached amidst the interplay of external influences will impact the researcher's thoughts and actions and influence their findings. Determining the positioning of a research study within its field and the researcher's own position within the research topic is essential. Crotty [8] suggests that researchers use four key elements when determining and describing their research approach: epistemology, theoretical perspective, methodology, and methods. He argues for congruence across these four elements to ensure coherence. While many novice researchers find determining these elements challenging, achieving coherence supports the theoretical logic, rigour and credibility of their research findings. The use of these four elements to inform the development of the methodological framework underpins this research study.

Figure 1 provides an overview of the four key elements relevant to the research study, and a further detailed discussion of each element follows.

FIGURE 1: STUDY DESIGN OVERVIEW, BASED ON THE WORK OF CROTTY [8]



WHY SOCIAL CONSTRUCTIONISM?

Social Constructionism contends that reality is constructed, and meaning is attributed to that reality. 'All reality, as meaningful reality, is socially constructed' and includes the likelihood that people can generate a collective meaning from 'interactive human community' [8]. Given the multiple and varied experiences of the allied health workforce progressing into leadership roles, social constructionism frames and facilitates the exploration of participants' social, interpersonal, and contextual constructs. Social Constructionism stems from the work of Karl Mannheim and the 'sociology of knowledge', which Crotty evolved to recognise that the individual's social reality is absolute and relative to them [8, 15].

A health systems leader experiences constant change, competing demands and dynamic social interactions that require flexible collaboration, consultation, and the management of diverse teams [16]. Their social reality is rapid decision-making, strategic planning, and interpersonal dynamics, which rely on their values, experience, and leadership skills. People step into leadership roles for different reasons, motivated by a variety of factors, both internal and external. Since there is no specific pathway in New Zealand Aotearoa for allied health clinicians to progress into leadership roles, they typically experience different realities. Given this, each participant's perspective provides rich insight and

contributes to a broader view of the phenomenon of interest.

WHY INTERPRETIVE DESCRIPTIVE METHODOLOGY?

Interpretive Description is an approach to qualitative research that can address complex questions. Consistent with social constructionism, it assumes that 'realities are local in nature, socially and experientially based, and contingent in form and content on the persons who hold them' [16]. Rooted in the social sciences, Interpretive Description provides a way to conduct applied qualitative research that produces valuable insights into 'complex experiential phenomena', applicable and useful for health professionals [17]. Interpretive Description was designed to 'explore and understand how individuals and groups make meaning and act in real-world situations' to build knowledge that will inform clinical practice [9, 10]. While it originated in nursing, Interpretive Description has since been used to inform practice-based research in various other disciplines [18, 7].

Thorne [17] upheld the value of motivated health professionals asking pertinent clinical questions in methodological development. Interpretive Description methodology was developed to provide rigour and credibility for clinical research so that research findings could be applied to address real-world practice challenges. According to Thorne [20], using the researcher's perspectives and experience can enrich the discovery and understanding of the data. However, using

a single theoretical perspective can influence the interpretation of data and obscure insights likely to be gained. The interaction between participant and researcher will also provide an encounter with multiple realities [19]. Therefore, it is essential to employ reflexive practice to prevent these pre-existing perspectives from limiting analysis or influencing interpretation.

Bias typically exists in objectivism, where external influences are identified and their scope of influence over the research is controlled for. In contrast, in qualitative research, the subjectivity of the approach allows for influences to have an effect, and therefore this effect needs to be analysed as part of the methodology. When using Interpretive Description, bias does not exist as an external entity but as multiple factors that interplay as part of the subjective perspective, explained and interwoven into analysis and discussion. A researcher must retain humility to appreciate their impact and balance it appropriately with their curiosity about the topic [20].

Strategies to retain humility throughout a qualitative study are essential to developing the findings. Where there is value in discovering multiple realities, it is essential to explore those realities with a robust 'theoretical scaffold' [21]. According to Thorne, there are two key elements to theoretical scaffolding: the literature review [22] and understanding the researcher's position within the study, which Thorne refers to as 'theoretical baggage' [17]. The exploration of the researcher's theoretical baggage, in balance with the curiosity for the topic, will guide and shape the theoretical fore-structure of the research. Although it can be a challenging process, the practice of reflexive thinking to understand this theoretical baggage is very productive. It reveals insights that add depth and colour to the contextual nature of the research. It allows the researcher to expand their thought connections and better understand their practice. Most notably, reflexive practice provides the scope and space to explore a deeper understanding of the data and its interpretation. The theoretical baggage brought into this particular research study includes professional practice and relational and developmental experiences. This includes suppositions of bias towards and inequities for allied health clinicians' leadership development, recruitment into health system leadership roles and inclusion within strategic health system design. As Thorne argues, detailing these reflections enables the researcher to 'convey an integrity of purpose that will not be confused with misuse of methods or erroneous claims' [17]. Working within the same landscape

as the participants, the theoretical forestructure supports and provides rigour to explore a complex phenomenon while acknowledging the experience and learnings brought into the study.

Interpretive Description is consistent with the intent and purpose of this research, which seeks to provide applicable findings based on new knowledge about the experiences of allied health clinicians stepping into leadership roles. Interpretive Description aligns with a constructivist and naturalistic orientation to inquiry, affirming the qualitative approach, the engagement with a specific population, and investigating meaning as applied to a particular phenomenon [7, 9]. As such, the research findings need to be tangible, applicable, and able to be used to help change the current approach to health leadership development. To uncover applicable findings and inform the leadership development of allied health clinicians, the study sought to explore experiences, events and memories allied health leaders attribute meaning to as being formative to their progress into leadership roles.

WHY AN APPRECIATIVE INQUIRY LENS?

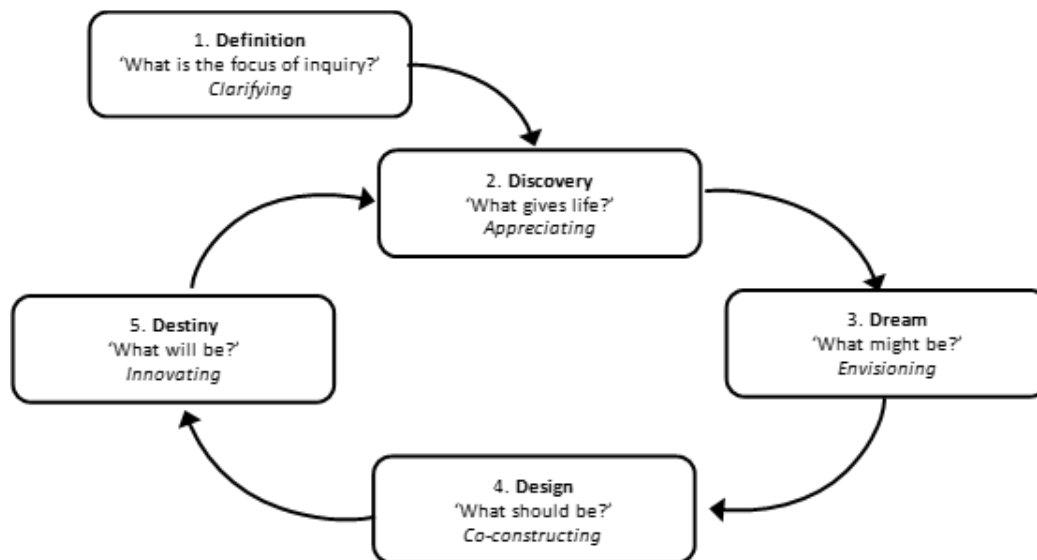
Appreciative Inquiry provides the opportunity to apply a positive lens and assumes that the system in focus has 'rich and untapped' descriptions of its strengths, possibilities and successes [12, 23]. Tapping into these descriptions can facilitate positive growth for both individuals and organisations. Cooperrider and Whitney (12, p. 9) assert that when the means and ends of a change inquiry are positively correlated, the outcome is more robust and sustainable. Drawing on an Appreciative Inquiry lens in the study design of this research underpins the intent to elicit positively constructive findings.

Appreciative Inquiry is identified as a social constructionist approach to change, supporting inclusion, magnifying the voices of recognised experts, and engaging with a whole system perspective [24]. This approach aligned closely with the experience intended for participants, empowering them through their valued perceptions and shared experiences. Therefore, the Interpretive Description methodology was chosen to support and underpin the study rigour for clinically applicable research and an Appreciative Inquiry lens to shape the methods.

Appreciative Inquiry methodology draws on the 5-D cycle (Figure 2). Using an Appreciative Inquiry lens facilitated the application of the general tenets of these 5-D stages within the interviews. Beginning with 'define,' participants were

invited to articulate an understanding of the topic and identify their positioning. The remaining stages helped to frame subsequent questions.

FIGURE 2: THE 5-D CYCLE OF APPRECIATIVE INQUIRY



Reproduced from The David L. Cooperrider Center for Appreciative Inquiry [25]

Using a problem-solving approach to answer questions focusing on the potential for change is more common. However, this approach can focus heavily and unhelpfully on the problem, a deficit approach to finding solutions [26]. Unfortunately, the societal culture in which health and disability exist nurtures this focus, and the health and disability system regularly endures critique and unfavourable commentary from various stakeholders [27, 9]. This commentary impacts the health workforce but is not the only negative cultural influence.

Considering the contextual positioning of many allied health professions, a deficit-focused approach to interviewing can undermine the aim to effect positive

change. To question the participants on barriers may result in a negative focus on the problems, and deficit-focused discussion is known to have demoralising effects [29]. The aim was to empower participants during the interview and focus on enablers. Therefore, it was important to lean on the principles of Appreciative Inquiry as a strength-based approach to guide and give positive focus to the conversational framework.

The five Principles of Appreciative Inquiry also informed the theoretical rigour and evidence base for pursuing the positive experiences identified within the participants' narratives. Table 1 provides an overview of the five principles.

TABLE 1: THE FIVE PRINCIPLES OF APPRECIATIVE INQUIRY [12]

	Constructionist	We are constantly involved in understanding and making sense of people and the world around us.	The experience and perspectives of allied health clinicians are all valid and hold value in making sense of the leadership journey.
	Simultaneity	Inquiry and change are simultaneous.	The sharing of insights promotes awareness and understanding of positive outcomes.
	Poetic	Pasts, presents, and futures are endless sources of learning, inspiration and interpretation.	The diversity and rich breadth of experiences shared will be empowering and informative.
	Anticipatory	Our positive images of the future lead to positive actions.	Future casting questions will encourage positive ideas and promote change.
	Positive	Building and sustaining momentum for change requires large amounts of positive affect.	Validating the allied health practitioners provides positive affirmation, and disseminating the research findings creates momentum.

Each of these principles contributed to establishing the authenticity of the study findings and their subsequent interpretation. Williams and Haizlip (2013) endorsed using Appreciative Inquiry for positive culture change, an aim consistent with this research's goals: to elicit findings for application across the health and disability system and create positive change. Appreciative Inquiry allows for an organic and iterative process using a strengths-based approach to build positive knowledge for future applications [30]. In a societal context where the health and disability system faces a persistent deficit focus, creating change using an alternate lens provided a new and

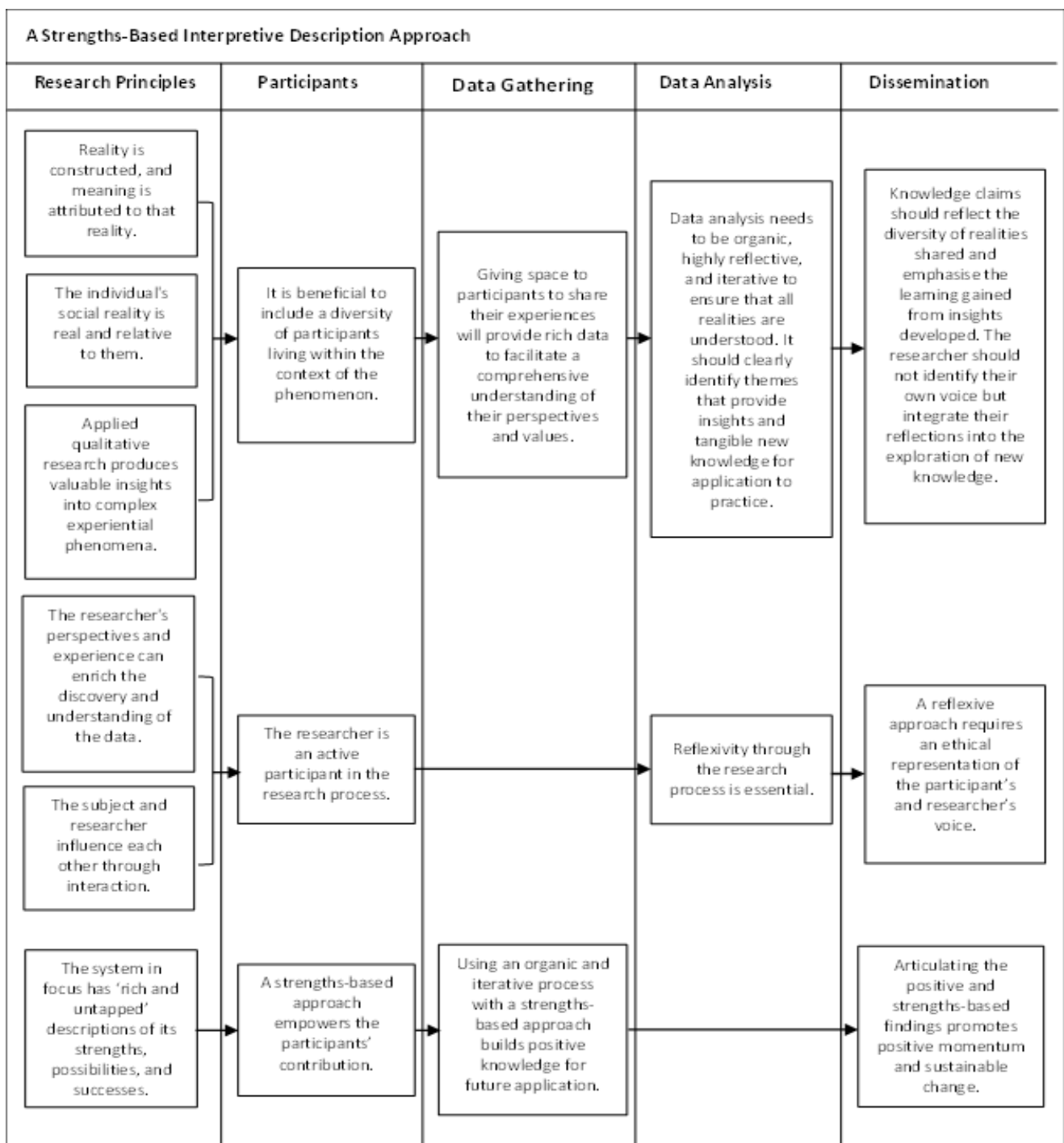
refreshed perspective from which participants could contribute.

Results

A SYNTHESIS OF THE METHODOLOGY

Understanding how the theoretical aspects align and enable the practical logistics of the study to sequence logically is essential. Figure 3 demonstrates the coherent alignment and helps to articulate and identify how the methodology supports and underpins each practical step of the study. Figure 1: **DUMMY TEXT**

FIGURE 3: SYNTHESIS OF METHODOLOGY AND STUDY PROCESS



Demonstrating theoretical and methodological coherence adds credibility and articulates the reasoning and evidence employed. Sharing this overview supports and guides emergent researchers to appreciate the 'big picture' perspective and avoid getting overwhelmed.

CHOOSING THE METHODS

THE IMPORTANCE OF CONTEXT

This research process commenced during the early stages of the COVID-19 global pandemic. Therefore, as well as being informed by the epistemological and methodological influences described above, the decision-making for methods was guided by the social context in which this research was undertaken. Key characteristics of this context included: a) potential participants were busy responding to the demand of health care needs within a pandemic situation; and b) the New Zealand Government had introduced restrictions on the movement of, contact with and interaction between people due to the rise in COVID-19 case numbers. In alignment with these conditions, in-person interviews were unable to be conducted. Therefore, in response, the methods required needed to be flexible to work around participants' schedules, minimise their burden, enable allied health leaders to take part in the context of other competing demands, and be managed remotely to mitigate the impact of government restrictions. For these reasons, participant interviews were conducted remotely using the institute's Microsoft Teams programme, which provided recording functionality and delivered the additional benefit of the institute's information security and protection protocols.

PARTICIPANT RECRUITMENT

Purposive sampling was used to recruit a suitable pool of Allied Health clinicians, chosen to provide rich detail relevant to the research objectives [13]. This sampling method provided the opportunity to engage with specific participants living the experience under focus. It ensured that the data was relevant and contemporary to the applicable contexts for new knowledge. As such, purposive sampling is congruent with Social Constructionism and Interpretive Description; it focuses on potential participants within the environment and context that the research applies to and creates the opportunity to explore meanings provided by the sample specifically identified.

Eligibility criteria ensured that the appropriate participants could share current and contemporary experiences. Allied health clinicians were eligible to take part if they:

1. Identified with one of the Allied Health professions listed by the Ministry of Health [31].
2. Worked in a position of authority that aligned with the Edmonstone definition of 'health systems leadership': 'Leadership within and across organisational and geopolitical boundaries, beyond individual professional disciplines, involving a range of organisational and stakeholder cultures, often without direct managerial control of resources and working on issues of mutual concern that cannot be addressed by any one person or agency.' [32]

People were excluded if they were concurrently accredited with a medical or nursing professional qualification. This exclusion criterion was critical to understanding the perception of participants who only had the experience of the 'allied health' collective and did not have insights blurred by the experience of other professional training and practice.

Initially, expert sources were identified from their public profile using available information to characterise them as health systems leaders with an allied health background. These expert sources were approached to participate and also asked to nominate and facilitate introductions to eligible Allied Health clinicians, drawing on their knowledge of eligible potential participants from across New Zealand's health and disability system. A number of strategies were used to mitigate the risk of coercion as part of the recruitment process due to the likelihood that they would be known to the researcher. Additional recruitment methods included advertising through established forums such as the National Allied Health, Scientific and Technical Directors Forum and Ngā Pou Mana, the New Zealand Māori Allied Health forum [33]. Access to publicly available information was also valuable and enabled through online search engines such as Google and LinkedIn. Finally, snowballing was used to identify additional eligible allied health clinicians to optimise sample diversity and address sampling gaps where alternate methods did not work sufficiently to identify eligible participants. Snowballing involved asking known allied health connections to forward the research information to a colleague they considered would be an eligible candidate. This multi-pronged approach to recruitment was necessary because allied

health systems leaders can be hard to find [33]. An Allied Health clinician in a health systems leadership role can typically take on a role and title that does not readily identify their professional or clinical background. Therefore, recruitment strategies aimed to capitalise on the collective allied health community network knowledge and broad connections to identify potential participants.

Decisions about sample size and when to stop data collection in qualitative research are subjective. While it was anticipated that a sample size of $n=15-20$ would be sufficient, the final sample size was $n=19$. All participants provided informed written consent, completing an electronic consent form. Interpretive judgment was applied to decide when to stop data collection based on the need to consider time, resources available, volume, and richness of data accrued. Thompson Burdine et al. (2021) affirm that where a relatively small sample size is available, it can provide sufficient in-depth data to achieve information power and answer the research question [35]. Another key factor contributing to decisions regarding sample sufficiency was the extent to which there was diversity in key characteristics, such as ethnicity, gender, and profession. In particular, given this research was undertaken in New Zealand, it was important to ensure that the research was purposefully inclusive and actively sought Māori (the indigenous population) participation. This inclusive approach reflected the commitment to Te Tiriti o Waitangi obligations [36, 37]. These bi-cultural obligations are upheld through the researcher's professional code of conduct, by their employer and by the academic institution. Recognising the Western perspective brought into the research study as a non-Māori, it was essential to explore any culturally specific 'enablers' experienced by allied health clinicians.

DATA GATHERING

Qualitative interviews are an effective tool and can elicit rich data from those who have experienced the phenomenon of interest [5]. Individual interviews, rather than group interviews, were completed with each allied health clinician for two reasons. First, to give space to their unique experiences and depth of insight, consistent with social constructionism and Interpretive Description. Second, to enable flexible scheduling due to their increased workloads, responding to health service demand, and

shifting priorities in response to case numbers and movement restrictions. Evidence demonstrates that applying an Appreciative Inquiry lens during one-to-one interviews has successfully elicited 'detailed and often intimate information from busy heads' [38].

Using interviews for the accrual of a richly layered data pool, they facilitated an immersive opportunity to explore and develop an intimate understanding of the phenomena and emergent themes. Advice and guidance were sought from the Mātauranga Māori Committee, an advisory forum at the researcher's academic institution, to review design and research plans and ensure cultural alignment and safety. It was agreed that a Māori advisory group to guide, support and ensure bi-cultural interpretation of the findings would also support transferability across the health and disability workforce. The importance given to this bi-cultural application is aligned in the interim to the Whakamaua: Māori Health Action Plan [39] while Te Aka Whai Ora (Māori Health Authority) develops the Hauora Māori Strategy [40]. The plan includes 'Māori leadership' as one of its priorities in achieving Pae ora (healthy families). It seeks 'to increase and support Māori participation in governance, leadership and management decision making at all levels of the health and disability system' [39].

The Individual interviews were used to obtain rich, layered and detailed experiences and support the transferability of findings by allowing others to identify with those experiences and relate the findings to other settings [41]. Online interaction was a necessary method and could have affected the engagement and connection between the interviewer and interviewee. However, many participants had become accustomed to communicating online due to the social conditions, and despite some initial hesitation, participants willingly shared their experiences.

The Appreciative Inquiry lens facilitated a strengths-based perspective and a positive style of questioning. Table 2 lists the questions used during the interviews to collect data. These questions evolved during the data collection phase to capture the information required and extract positive and empowering thoughts and perspectives.

TABLE 2: INTERVIEW QUESTIONS

	Question	Phase of Appreciative Inquiry
1	a. What does Health Systems Leadership in NZ mean to you? b. What makes a good health systems leader?	Definition
2	Tell me about the experiences or events that inspired you to consider leadership.	Discovery
3	Can you describe an event or experience that encouraged you in your leadership journey?	Discovery
4	What factors supported you in achieving your leadership role/s?	Discovery
5	Tell me about when you overcame a challenge or limitation stepping into leadership.	Discovery
6	a. What possibilities do you see for future allied health clinicians leading health systems? b. Are there any roles or conceptual roles you would suggest?	Dream
7	a. What would it look like if you could design a system that was inherently enabling AH clinicians? b. Where/when would this enabling process start?	Design
8	What advice would you give to a colleague on a leadership journey?	Destiny / Delivery

APPROACHING ANALYSIS WITH ATTITUDE

Choosing to use thematic analysis as the preferred approach, in conjunction with a strengths-based perspective, helped define the whole study design. Deciding which thematic analysis method required consideration of the study aim, context, and personal strengths. There was expectation that the participant's stories and experiences would overlap and intermingle, building upon each other to construct themes. Therefore, it was intended that the methods would weave together an analytic framework from which the findings would be produced.

To reflect the perspective of data interweaving with each other, the iterative method of Reflexive Thematic Analysis (Reflexive TA) was deemed the most appropriate [14]. This choice linked the interview method, interview questions and method of analysis in congruence to support and underpin the development of themes [5]. Clarke and Braun (2018) assert that 'reflexive' TA is just one of several TA approaches. It embraces qualitative research values, providing an open and organic process for 'iterative thematic development' [14]. It enables the researcher to have an immersive experience with the data, identifying repeated patterns of meaning [43]. Exploring those

patterns, interpreting their meaning and identifying emergent themes provide space and scope to produce robust outcomes for developing guidance and recommendations for policy development. Making it appropriate for use with Interpretive Description [9].

Reflexive TA draws on six analysis phases to uphold the rigour required for credibility;

- Familiarising yourself with the data,
- Generating initial codes,
- Searching for themes,
- Reviewing themes,
- Defining and naming themes
- Producing the report [43].

However, reflexive TA is not a linear process where the researcher moves sequentially from one phase to the next; instead, it requires shifting back and forth throughout the analysis phases to elicit the required refinement [43].

Following the interviews, all the audio recordings were transcribed professionally, reviewed for accuracy and read as part of familiarisation. Tools such as visual mapping and reflexive journaling were used to support data immersion, clarify emerging insights, and continually identify

theoretical baggage. The immersion process was valuable; it allowed for the exploration of coding across the whole data set, consider emergent themes, and use an iterative approach to categorising and grouping the codes differently [44].

While developing codes and analysing the data, the lens of Appreciative Inquiry was applied to sustain a strengths-based perspective for balanced interpretation. The software programme NVivo 14 was used to support the analytical process and provide organisational clarity for the codes. Positive language was applied when coding, such as 'being equipped' and 'self-investment', and the aligned references were contextual and meaningful. This does not mean information shared about barriers or disabling factors was ignored or marginalised. The strengths-based approach emphasised negative examples or experiences because they were contextually different from the interviews' positive focus. As such, the analysis provided rich and detailed information on the full spectrum of participants' social, emotional and interactive experiences.

ACKNOWLEDGING ASSUMPTIONS

Researcher reflexivity was a key strategy used to identify any assumptions about the participants, their context and the research approach. For example, it was assumed that health systems leaders would have experienced an active transitional process when stepping into leadership roles. It was assumed recruitment would be hard because potential participants may not include their professional background as part of their publicly available information. It was also assumed that pre-existing connections might exist between the researcher and participants. The potential for positional power to influence the participants was recognised and strategically mitigated. Employing reflexive practice with techniques such as journaling helped clarify assumptions, evaluate the research process and design the study accordingly. Employing a reflexive journey is as important as the outcome.

ESTABLISHING RIGOUR

To attain rigour in qualitative research, there is a need to achieve and maintain consistency in the approach, analysis, and reporting of outcomes [45, 46, 47]. Establishing rigour in qualitative research is often challenging, and Thorne [21] recommends using evaluation criteria to underpin the research and demonstrate transparency in the process.

Thorne [21] identifies four criteria. The first, 'Epistemological Integrity', refers to evidence of congruity between

epistemology, theoretical perspective, methodology and methods. Figure 3 (see above) makes explicit the methodological alignment. Second, 'Representative Credibility' was established through the sampling process and how individual interviews enabled rich and in-depth data collection. The third is the use of 'Analytic Logic' to detail and demonstrate a coherent progression of analysis from data collection to outcomes. Evidence of audit trails, graphics, and records of progressive thematic development to illustrate this researcher's refinement logic. The final criterion is 'Interpretive Authority', which ensures that the researcher takes responsibility for the significance of data immersion. Techniques to facilitate this included, reading, familiarisation doodling (representative pictures and text of the researcher's thinking), NVivo analysis software, audio playback, visual mapping and reflexive journaling. These techniques integrated the critical questions of, 'What is happening here? [and] Why am I seeing this?' as part of the analytic process [21].

In addition, Thorne [10] urges the researcher to consider a further set of criteria for critiquing qualitative research as part of their accountability and quality assurance. These five criteria include moral defensibility, disciplinary relevance, pragmatic obligation, contextual awareness and probable truth. These criteria underpin the pragmatic approach of Interpretive Description, and each strategy identified achieved the rigour required and endorsed the transferability of findings into practice.

DISCUSSION

As health systems continue to evolve, appropriate research tools are required to provide research rigour to study the adaptive health landscape [48]. This article has detailed insights into the approach taken at key decision junctures of the research journey. In addition to the above, several key learnings emerged; they include the use and application of Appreciative Inquiry, the approach to engaging with Māori values and principles, creating the right interview environment, the study's impact on organisational change and how to approach the power differential between researcher and participants.

Appreciative Inquiry allows for discussing numerous factors, dependencies and influences without constraint. Healthcare researchers have used it as a powerful tool to study and facilitate change [49]. The lens of Appreciative

Inquiry was chosen as a proven perspective through which to engage credibly with participants amidst their complex and ever-changing context. Using the 5-D Cycle (Figure 2) provided a framework to lead the participants through sharing their experiences. Asking for contextual insights at the start (Define) critically helped with providing immediate feedback to inform the interview's progress.

Engaging in a culturally appropriate and inclusive research design is critical. In New Zealand, whether a study is explicitly engaging with Kaupapa Māori research [50] or undertaking research involving Māori, the design and methodology should be culturally responsive to support Māori engagement in the research and to optimise the likelihood that the research findings can contribute to Māori aspirations. This researcher's associated academic institution offered access to the Mātauranga Māori Committee. With their support, additional evidence was identified supporting the use of Appreciative Inquiry by Te Tangata Whenua Community and Voluntary Sector Research Centre [51]. The Research Centre endorses Appreciative Inquiry as 'compatible to Kaupapa Māori approaches' and aligned with the research principles within their Code of Practice [52]. Using Māori advisory forums was essential for supporting and underpinning the methodology with rigour and epistemological integrity [17]. Maintaining momentum and energy during data collection helps to facilitate participants' contribution and engagement. Finding a methodology that enabled momentum and energy during the interviews was essential to create an unrestrictive context for data collection. Using an alternate pathway to discussing phenomena challenged the well-known default problem-solving approach for creating change. When a group or individual uses deficit-based discussion, it can bring a negative emotional response that limits vision and creativity of thought. When an individual or group wants to create change, an Appreciative Inquiry approach can elevate their morale, commitment and ongoing discovery of innovative ideas [53]. Appreciative Inquiry was chosen because it helped to frame the interview questions and support the development of a positive tone of engagement for obtaining the data required.

It was evident that despite a strength-based approach to questioning, the participants' experiences were not all positive. Avoiding a discussion of barriers might create a misperception that barriers do not exist, and assumptions could have been made that the allied health collective workforce is successfully enabled and empowered into

health systems leadership roles. Ignoring or restricting the exploration of barriers could have impacted the data extracted, the themes generated and the study's final findings. During the interviews, participants did share experiences that had been challenging and hard for them, often identifying them as limiting factors. These experiences were used to inform the findings and identify limitations that further the understanding of what positively enables allied health clinicians.

This study did not anticipate being able to effect organisational change across each participant's employing agencies [53]. Health and disability systems are complex, multifaceted and constantly changing. Notwithstanding the diversity of research participants, who came from public and private health agencies, ministry, and national and regional leadership situations, the study sought to understand the experiences of a group of individuals whose insights would give rise to common themes or patterns in meaning. These themes, once interpreted and discussed, could be applied across the broad health and disability system to impact those types of individuals who align themselves with the participants.

This research is ongoing at a time when the most extensive national health system reforms New Zealand has experienced in twenty years are underway [54]. As operational clarity emerges, it is an excellent time to explore and share new evidence for the development of future health system leaders. The potential for positive change within the leadership context remains; it will continue beyond the life of this research and is part of a much broader health system agenda [55].

Participation in this research was limited to a small group of eligible people, excluding a large proportion of the broader system's employees. The limitations on the scope of this study potentially reduced the impact for change. Broad socialisation could increase visibility and influence positive change. This socialisation could support uptake and engagement with the findings, enabling individuals to find alignment and influence emergent and developing allied health clinicians.

The influence of a possible power differential between researcher and participant required practical consideration. The Community and Voluntary Sector Research Centre [56] also identified this as a potential issue for individuals participating in Appreciative Inquiry. Differences in perception of power may occur between the concurrent involvement of leaders and staff in group

situations or because of who the employing organisations are for the researcher and participant. While this study did not use groups of participants, the power balance issue between researcher and participant required sensitivity. It was essential to be transparent about employment details, university support and positioning alignment within the information provided to participants. All interviews were conducted outside of the time of paid employment, all communications went through a non-work-related email address, and the demeanour and dress code did not reflect a typical work context. It was apparent that the practical and administrative aspects mattered, along with how this sensitivity influenced the approach and mindset going into the interviews. Overt recognition was given to the value and importance of asking participants to share their treasured experiences. They were handled as precious taonga (sacred), as a gift of memories, received with care and honour.

CONCLUSION

This article has examined the choice to use combined methodologies to deliver new and credible knowledge to guide future allied health and health systems leadership development. Completing an applied health research study with the intention to effect change requires robust methodology and rigour. Sharing these learnings and insights with the research community and identifying how and why those choices were made has the potential to inform how research can be approached, now and into the future. Reflecting on the congruency of a methodological approach and how an additional methodological lens positively influenced the study design identifies opportunities for consideration. Using Interpretive Description with an Appreciative Inquiry lens has demonstrated an effective pathway to engage with research and deliver findings intended to affect positive change across the health system. These shared learnings provide further understanding of an applied qualitative health research process.

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