Distributed leadership: Building capacity to maximise collaborative practice in a new teaching research aged care service

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Chapter 3: The Research Design

This chapter discusses the action research study design, based on the conceptual framework outlined at the end of Chapter 2. The chapter outlines the methods and techniques which were adopted and applied. It discusses the data collection instruments and provides an outline of how the data were analysed.

Central to this research is the inclusion of a three cycle action research study within the strategic planning process for ViTA South. The action research process facilitated the development of logic models which guided the development of the distributed leadership strategy for ViTA South. A logic model provides a visual picture of how an organisation does its work. It makes explicit the theory and assumptions underlying a program or strategy (Newcomer et al., 2015).

The inclusion of action research within the organisational development process is particularly significant at ViTA South, which aims to be a best practice example of a teaching, research aged care service. Embedding research into practice is a key point of difference between a teaching, research aged care service and a traditional aged care service.

3.1 Research method and design

Action research was chosen for this research study as it enabled experiential learning and reflective practice within the unfolding series of actions at ViTA South. Qualitative methods such as action research are suited to research which study events undertaken in a naturalistic setting (Punch, 2013).

Kurt Lewin is regularly acknowledged as the person who labelled the methodological approach “action research” (Adelman, 1993). There are a variety of definitions available for action research but the underpinning themes are that it is a methodology which is systematic in nature, collective, collaborative, involves self-reflection and is undertaken by participants in the enquiry (Adelman, 1993, Reason & Bradbury, 2008; Stringer, 1996; Zuber-Skerritt, 2002). There are many models that have been developed to guide an action research process describing a series of steps which are often represented by spiral or cyclical diagrams (Adelman, 1993, Reason & Bradbury, 2008; Stringer, 1996; Zuber-Skerritt, 2002). The series of steps are broadly described as planning action, undertaking action, observing action and then undertaking reflection on the action (Adelman, 1993).
In designing the model of action research for this study it was recognised that this research lends itself to qualitative methods as it aims to study the organisational process of developing leadership strategy within the practical or natural setting of ViTA South. As a qualitative method, action research recognises the importance of individual people’s interpretation of reality as they see and experience it (Lincoln & Guba, 1985). This is particularly useful when members wish to study their own actions in order to change or improve the working of some aspects of a system and study the process in order to learn from it (Coghlan & Brannick, 2010).

This research approach is designed to inform and influence practice with a view, ultimately, to improving practice (Koshy, 2005; Reason & Bradbury, 2008). The enquiry nature of action research provided insights that a traditional scientific study would not have been able to achieve (Lincoln & Guba, 1985; Reason & Bradbury, 2006; Stringer, 1996). This research sought to understand how distributed leadership could be conceptualised and practiced at ViTA South over an 18 month period. It was an approach that enabled research to be embedded within practice (French, 2009).

French (2009) identified a number of distinguishing features of action research presented in the left hand column of Table 7. It shows how these features of an action research study are consistent with Health LEADS Australia framework and the concept of distributed leadership which have been re-presented on the right hand side of Table 7.
Table 7 Synergies between features of action research and attributes of distributed leadership expected of staff

<table>
<thead>
<tr>
<th>Features of action research (i.e., enabling conditions for action research)</th>
<th>Desired Collaborative Behaviours (based on Health LEADS Australia)</th>
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</table>
| Empowerment of participants and collaboration through participation. | • Staff seek to establish positive working relationships with other team members  
• Staff show willingness to engage constructively and respectfully in difficult conversations and keep communication channels open  
• Staff feel they are listened to and involved in decision making  
• Staff feel their expertise is respected |
| Facilitate a multidisciplinary approach and enable work across technical, cultural, and functional boundaries. | • Staff are able to make suggestions for improvement  
• Staff agree that decisions that are made are made collegially when their professionalism and knowledge is required in making the decision  
• Individuals step forward to solve problems rather than waiting for others to do so |
| Supportive processes which include reflective practice | • Individuals participate in training that is offered  
• Staff take advantage of mentoring opportunities  
• Show enthusiasm for new ideas and learning  
• Seek out opportunities to learn from colleagues |
| Resources are available | • Utilise time provided to engage with colleagues to develop and maintain health work practices  
• Take advantage of supports available to create effective interprofessional teams  
• Actively engage residents, family members, colleagues and staff in service improvement |

Action research is an appropriate research methodology for improving practice and professional and organisational learning (Reason & Bradbury, 2008; Stringer, 1996; Zuber-Skerritt, 2002). Like leadership, the action research process creates change (Dickson & Tholl, 2014; Jones, 2014).
Action research as a methodology adapts to the unique context in which the research is being conducted. This enables leadership strategy to adapt simultaneously. It is also a method that in its design requires the demonstration of the collaborative leadership behaviour desired of distributed leaders.

### 3.2 Role of the Researcher

During the period over which the research was conducted the researcher held dual roles. Firstly, as an appointed member of the ViTA South formal leadership team and secondly, as a researcher using action research to inform and investigate the ACH Group experience in planning toward distributed leadership modelling within ViTA South. This means the researcher is an insider action researcher (Coghlan, 2007).

The dual nature of the researcher's role is significant as it has enabled this research to explore the establishment of distributed leadership within a real world setting. It has provided the opportunity for research participants including the researcher to draw on their own experience and describe their own reality (Orlikowski, 2002).

Such an approach emphasises applied research and its application to a real world setting which in this case is ViTA South. From this interaction new knowledge will be developed to understand strategy and planning in distributed leadership modelling in a particular setting.

### 3.3 Research method

The ontology of the researcher is that leadership development is dependent upon contextual factors and this is aligned with a realist perspective (Pawson, 2006). The epistemological perspective of a realist researcher recognises that the world we live in is made up of social interactions. In realist terms reality constructs and constrains interpretation (Pawson, 2006). This perspective reinforces the qualitative nature of this research which was an inquiry process designed to help understand and explain social phenomena (Reason & Bradbury, 2006).
Lincoln and Guba (2009), Cohen, Manion, and Morrison (2000) and many others identify two epistemological paradigms for making sense of the world: normative and interpretive. The normative paradigm suggests that human behaviour is rule-bound and best tested by methods of natural science. This approach lends itself to much research done in clinical dimensions of the health system. In comparison, the interpretive paradigm seeks to understand the subjective nature of human experience through understanding people's points of view (Thornton, 2009). The interpretative paradigm fits well within the context of this study which recognises the leader – follower dynamic as inherently subjective.

It is the realist interpretative paradigm that acknowledges this research as context driven in the unique setting of ViTA South. The contextual factors for this research include ViTA South as an aged care organisation, based in Adelaide, with a unique set of social relationships. This ontology and epistemology influenced the perspective that strategies employed toward leadership development will play out differently within different organisations dependent upon the context in which they are undertaken (Avery, 2004; Dickson & Tholl, 2014). Spillane et al. (2004) state that there is not a 'one size fits all' approach to creating the conditions for staff to exercise distributed leadership. Strategies adopted by one person or organisation may not work for another or in another organisation. The interpretative paradigm will increase the understanding of phenomena in natural settings and allow research participants to draw on their own experiences and describe their own reality (Lincoln & Guba, 1985). The interpretive paradigm fits well with applied research and application to real-world settings rather than a normative paradigm.

There are many qualitative research methods which could be employed to operationalise the interpretive paradigm; those explored included ethnography (Robson, 2002), appreciative enquiry (Egan & Lancaster, 2005), case study (Zucker, 2009) and action research. The methodology for this qualitative research study is governed by the objective to translate research into practice. Action research was identified as the most appropriate for initiatives such as the current proposed study which is designed to inform and influence practice with a view, ultimately, to improving practice (Koshy, 2005). Like
leadership, the action research process creates change (Dickson & Tholl, 2014; Jones, 2014). This is recognised as adopting a realist approach which can be used as an approach to inform understandings as to “what works for whom and in what circumstances” (Pawson, 2013, p. 15).

The realist approach recognises the real starting point of research lies in ‘theory’ in the form of our ideas on the nature of the problem – and on the nature of its solution (Pawson, 2013). Therefore, to present the required perspective, the action research method chosen to answer the research questions incorporated a realist approach, which involved using logic modelling as a tool to guide implementation of the three action research cycles. Theory alone has little power to create change and there is a need for more complex interplay between theory and practice (Reason & Bradbury, 2008). In this research study action research facilitates this interplay.

In adopting a realist approach the starting point for planning the research design drew from the theory relating to distributed leadership presented in Chapter 2. It identified three ideas required to understand the nature of the business problem associated with developing distributed leadership within an organisation:

1. Traditional leadership development approaches focus on individual skill development rather than organisational development.
2. There is not a one-size fits-all approach to its development.
3. There is little guidance in the literature as to how to implement distributed leadership in context.

This understanding of the nature of the problem encouraged a realist perspective to understand and identify the nature of potential solutions. These following three ideas inform the nature of the solutions factored into this research design:

1. **Utilising action research as a process** – This recognises that action research contributes to developing leadership as an action of a group which aligns with the
recommended organisational development approach for distributed leadership development.

2. **Enabling an approach to learning from other organisations’ experiences in developing distributed leadership** – This research did not seek to identify a specific approach to developing distributed leadership that could be directly replicated for ViTA South. Rather, it reviewed other organisations’ strategies for developing distributed leadership to learn from their experience, by gaining an understanding of the theories of action behind how each strategy was understood to work in practice. The learnings from understanding how a strategy was intended to work then influenced the design of tailored strategies suitable for the context of ViTA South.

3. **Presenting the research findings from this study** – The research design recognised that the research would not develop specific implementation strategies that could be replicated within other organisations. Rather, the output from the action research design would provide one case example with a level of detail behind what strategies were adopted for ViTA South and why. It was anticipated this output would have value in informing future evaluations. This would include evaluations of strategies in action to inform an understanding of what works, for whom and in what context. It was anticipated that this output would contribute to a deeper understanding of the application of distributed leadership in practice and how strategies could be developed to create it.

As a result of the objective of this research a single site action research methodology was chosen. It provided an investigative methodology to explore how distributed leadership can be embedded within a new operational model as a driver for sustained collaborative practice. The participatory approach was necessary because the researcher was an organisational member of the ViTA South formal leadership team. This role involved leading the organisational development required to develop the operational model guiding service delivery toward achieving the vision established for ViTA South.
3.4 The action research study process

The action research design facilitated a process for improving practice and professional and organisational learning by addressing the business need of developing a leadership strategy to create the conditions for staff to exercise distributed leadership within ViTA South (Reason & Bradbury, 2008; Stringer, 1996; Zuber-Skerritt, 2002). Similar to the capacity of leadership to contribute to change, action research can also be designed to contribute to enabling change (Bolden et al., 2015; Dickson & Tholl, 2014).

The planning and decisions associated with designing and implementing the operational model for ViTA South were split into three distinct planning phases. Each planning phase was driven by an action research cycle which involved three steps referred to as ‘discover’, ‘take action’ and ‘reflection’. All three phases and steps within the action research cycles were completed sequentially.

During the ‘discover’ stage literature was reviewed to inform development and proposed application of organisational strategies. During the ‘take action’ stage these strategies were executed. Then during the ‘reflection’ stage a comparison was undertaken of the strategies to compare the theory of action with the theory-in-use.

3.5 The use of logic models throughout the research

To correspond to the realist approach, the process of developing diagrammatic logic models was incorporated into this action research study. As part of this study, three logic models were developed, one during each planning phase. These logic models are presented in Chapter 4. The process enabled the identification and articulation of the underlying theories and assumptions which guided the action undertaken within this research. Research demonstrates that the process of developing a logic model also helps develop a shared understanding and shared expectations (Newcomer et al., 2015). Developing shared understandings should also contribute to creating the conditions for distributed leadership.
Once developed, the logic models were seen to have potential benefit to the broader research and practitioner community. This is because the logic models provided a framework to present a logical argument for how and why the strategies developed for ViTA South were intended to work in practice. In essence, the logic models articulate the theory of action behind strategies which were chosen for ViTA South.

An outcome evaluation was not incorporated into the scope of this research study. This research was not designed to test the theories of action behind strategies chosen by ViTA South and articulated in the logic models. This would need to be part of a future research study. However it was anticipated that the logic models developed within this research would be useful in informing any future outcomes evaluation developed to measure the effectiveness of strategies employed to embed and encourage distributed leadership.

This research study formed a significant component of the strategic planning process for ViTA South. It was planned that the action research process in its design would inform the development of a leadership strategy. The ViTA South leadership strategy aimed to influence the development of organisational routines and tools which would create the conditions for staff to exercise distributed leadership. So in essence this research sought to understand how distributed leadership could be conceptualised and put into practice at ViTA South.

To implement this research design, ACH Group was required to develop a longer term view of the development of leadership strategy. To use the words of the realist Pawson (2013); ViTA South strategies needed to construct ‘runways’ rather than ‘springboards for change’. This meant that in the context of ViTA South time was needed to develop preparatory and anticipatory linkages. It is for this reason this research has not attempted to develop and test strategies within the same research study timeframe. The focus of this research was dedicated to the initial six month planning and 12 month early commissioning and operationalising stages which informed the design of strategies aimed at creating the conditions for staff to exercise distributed leadership at ViTA South. To apply Pawson’s (2013) analogy, this research and the model developed
through this research provides ‘the runway for change’ in leadership with an ongoing long term vision.

The process of developing a logic model for this research involved an iterative process incorporated within the action research design. The discovery stage of each of the three action research cycles had a focus on the identification of problems to be solved, proposed strategies and expected outcomes. In identifying the problem relevant information from a range of sources (research literature, document analysis and interviews) was analysed to define the major causes of the identified problem. The process ensured strategies identified were grounded in an understanding of the problem that the participants were trying to solve. The next step aimed to define and describe the strategies and the logic underpinning each strategy in a table format. The table format helped to guide and distill thinking. Due to space constraints the use of a table also encouraged clear and concise articulation of how the strategies were intended to work. Following the testing of action, the reflection stage of the action research process contributed to the refinement and further development of the content of the logic model. The logic model continuously evolved throughout the research process as understanding about distributed leadership in ViTA South matured.

The researcher facilitated the process of developing logic models as part of the ViTA South Formal Leadership Team meetings. This process involved working with the members of the formal leadership to articulate and explain how the strategies they selected to create the condition for staff to exercise distributed leadership were expected to work in practice. This explanation behind how a strategy is intended to work is what is referred to in realist research terms as the ‘theory of action’ behind a strategy. At the conclusion of this research it was planned that the development of the logic models would be an ongoing embedded tool and process used with ViTA South Formal Leadership Team meetings.
3.6 The process of thesis writing and how it fits within the research design

The objective of the organisational action research was to answer the research questions for the benefit of ViTA South. The thesis research design and thesis writing utilised the core action research project as fieldwork to answer the research questions for ACH Group and analyse the practical experience to expand on the limited research literature about distributed leadership in practice.

The lead researcher held a dual role, as facilitator of the organisational action research project at ViTA South and also undertaking the associated thesis research and associated thesis writing. Figure 5 has been developed to show the relationship between the thesis research and the organisational action research.

Figure 5 The relationship between the organisational action research and thesis research

The diagram aims to show that the thesis writing was distinct from the organisational action research. The thesis research took a step back from an
organisational focus to answer the thesis research questions for the benefit of the broader research community. Specifically the action research is for the benefit of the ViTA South community and the thesis research aims to share the learnings and experience beyond the ViTA South community.

3.7 The systematic review design and protocol

An important part of this research was a systematic review. The objective of the systematic review was to bring together meaningful perceptions of health and aged care professionals regarding future utilisation of distributed leadership in health and aged care. The outcomes from this systematic review were applied to guide the utilisation of distributed leadership at ViTA South.

The systematic review featured as part of the discovery stage within the second action research cycle. The systematic review questions were:

What factors need to be considered when deciding how to utilise distributed leadership in practice in health and aged care?

What are the barriers and facilitators to utilisation of distributed leadership in health and aged care?

The answers provided insights into and directions for planning organisational development to create the conditions for staff to enact distributed leadership within the context of health and aged care. The systematic review was undertaken according to Joanna Briggs Institute (JBI) systematic review methodology (Joanna Briggs Institute, 2011). The systematic review protocol reviewed and approved by JBI which was used to guide the review is presented below.
3.7.1 Phenomena of interest

The systematic review considered studies that investigated the experiences of health and aged care professionals, including health managers, who had utilised distributed leadership modelling in the health and aged care sector.

The review also aimed to identify the barriers and facilitators to utilisation of distributed leadership. Research studies that have investigated leadership broadly and not distributed leadership specifically were excluded.

3.7.2 Inclusion criteria

The systematic review considered studies that included healthcare professionals, health service planners and/or managers who have experienced utilisation of distributed leadership. The healthcare professionals included health managers who have been working in the acute, aged care and/or community sectors. To be included, participants must have been actively engaged in distributed leadership.

3.7.3 Context

An international perspective was considered regardless of relationship, age, sex, ethnic origin and socioeconomic status. A comprehensive coverage of all representations in health and aged care was required to distinguish between differences in experience and support systems as per the varied contexts of health and aged care professionals, that is, relationships, age, ethnic origin/language, sex and socio-economic status, and workplace. There were no limitations to country of residence.

3.7.4 Types of studies

The review included all qualitative studies published in English that have examined the phenomena of interest including, but not limited to, research designs such as phenomenology, grounded theory, ethnography, action research and feminist research.
3.7.5 Search strategy

The search strategy aimed to find both published and unpublished studies. A three-step search strategy was utilised in this review. An initial limited search of the CINAHL was undertaken. Subsequent searches of E-Journals, Health Source Academic Edition and the Psychology and Behavioural Science Collection were then undertaken, followed by an analysis of the text words contained in the title and abstract and of the index terms used to describe the article. A second search followed using all identified keywords and index terms across all included databases. Thirdly, the reference lists of all identified reports and articles were searched for additional studies. Studies only published in English were considered for inclusion in this review. International studies published between 2000 and 2015 were considered for inclusion in this review. These years were chosen because publications related to distributed leadership in healthcare began to appear in the literature during this time period.

The databases searched were CINAHL, Embase, ProQues and, PsycINFO. The search for unpublished studies included ProQuest Dissertations and Theses, OpenGrey, Mednar and Index to Theses. Hand searching was not undertaken.

Initial keywords used were as follows: distributed leadership, aged care, health, shared leadership, collaborative leadership, strategies, designing, planning, building, utilisation.

3.7.6 Method of the review

Papers selected for retrieval were assessed by the lead researcher and second independent reviewer for methodological validity prior to inclusion in the review using standardised critical appraisal instruments from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) (Appendix A). A third reviewer was used to assess and discuss one paper where there was a disagreement between the first two reviewers which could not be resolved through discussion.
3.7.7 Data extraction

Data were extracted from papers included in the review using the standardised data extraction tool from JBI-QARI (Appendix A). The data extracted included specific details about the phenomena of interest, populations, study methods and outcomes of significance to the review question and specific objectives. There were no instances which required researchers to contact the authors of primary studies for missing information, or to clarify unclear data.

3.7.8 Data synthesis

Findings were collated using JBI-QARI Software. Findings were then assembled and assessed for their quality, and categorised on the basis of similarity in meaning. These categories were then subjected to a meta-synthesis in order to produce a single comprehensive set of synthesised findings.

The studies identified from the systematic review which were critically appraised are discussed in Section 2 of Chapter 2. The findings from the systematic review and how they were applied are discussed as part of the discovery stage of the second cycle in Chapter 4.
3.8 Data Collection Instruments and Techniques

The iterative approach associated with action research influenced the design of the data collection for this research. Lines of inquiry were developed to answer specific business questions relevant at different stages within the three action research cycles. A final analysis of all the data that were collected (data corpus) answered the overall research questions. Braun and Clarke (2006) suggest that the choice of methods including approach to data collection and analysis should align with what the researcher wants to know (Braun & Clarke, 2006). For example, in the initial discovery stage of the first action research cycle, the line of inquiry aimed to ascertain what advice other existing site managers at ACH Group could provide to assist in planning to create the conditions for staff to exercise distributed leadership within the ACH Group context. Therefore the line of inquiry and method adopted was semi-structured interviews designed to draw on the existing ACH Group site managers’ experiences.

The presentation of the data and associated findings has been incorporated into the development of the logic model presentations within Chapter 4. This provides an audit trail to show how data were used to determine new strategies which aimed to create the conditions for staff to exercise distributed leadership. The theory of action behind each of the strategies is presented to justify the application of evidence used to inform action. The presentation of this audit trail provides evidence of the rigor applied in answering the research questions.

The data collection methods chosen were interviews, document analysis, reflective journaling and a systematic review. These methods aimed to capture data as part of the real world process for ViTA South.

3.8.1 Interviews

There were two sets of semi-structured interviews undertaken during the research study. Participation in the interviews was voluntary with each participant providing written consent.
The first set of semi-structured interviews was undertaken with existing *ACH Group* site managers before designing the operational model as part of the discovery stage of the first action research cycle. These semi-structured interview questions aimed to develop a line of inquiry to draw on the existing *ACH Group* site managers’ experiences. The interviews were designed to identify potential barriers and enablers to create the conditions for staff to exercise distributed leadership within the *ACH Group* context. There were four site managers who were available to be interviewed.

The guiding interview questions are provided in Appendix B. The interview technique included a prompt in the form of a written definition for distributed leadership provided to each interviewee (Appendix C). This written definition was provided following their answer to the question “what is your understanding of distributed leadership as an approach to leadership?” The written definition on an A4 piece of paper provided a common point of reference to refer to in answering the interview questions. In applying a semi-structured interview technique at times it was necessary to stimulate further discussion to explore the themes the interviewees were raising to draw out the necessary data to answer the interview questions. The interview allowed for follow up questions to enable in-depth descriptions of experiences (Robson, 2002; Weiss, 1995).

The process of categorising themes from the data collected through the interviews with the existing *ACH Group* site managers took place within the week after the interview transcriptions were confirmed as complete and accurate. This time frame ensured the interview was still fresh in the researcher’s mind and the insight gained from the interviews could be applied in real time within the design process being undertaken for the *ViTA South* operational model.

The second set of semi-structured interviews with the three members of the *ViTA South* formal leadership team members were undertaken as part of the reflection stage of the third action research cycle. The guiding interview questions are provided in Appendix D. These semi-structured interview questions aimed to develop a line of inquiry to draw on the members of the *ViTA South* formal leadership team’s firsthand experience in trying to create the conditions for staff to exercise distributed leadership at
ViTA South. The interviews were designed to identify what the actual perceived barriers and enablers to creating the conditions for staff to exercise distributed leadership were within the ViTA South context and experience. The process of categorising themes from the data collected through these interviews did not take place until after all of the interviews were complete.

The process adopted for both sets of semi-structured interviews was designed to ensure accuracy and rigor. Notes were taken during the interview process to assist with extrapolating further information relating to key points raised. The benefit of including interviews was that they enabled a flexible and adaptable way of seeking out the required information. The semi-structured approach enabled a process to follow up on interesting responses and investigate them further (Robson, 2002). Times for the interviews were planned in advance and the interviews were undertaken at the participant’s place of work at a time that suited them. Each interview was audio-recorded to aid with transcription. Notes were taken during the interview process to assist with extrapolating further information relating to key points raised.

Orthographic transcriptions whereby every word is recorded and transcribed were completed to ensure it stayed true to its original nature and to assist with the thematic analysis process. It is recognised that while time consuming the process of transcribing the verbal recordings enhances the researcher’s familiarity with the data (Riessman, 1993). Transcripts were provided to the participants to confirm the transcriptions were complete and accurate. The process of developing an orthographical transcription also enabled the researcher to start an initial analysis. Lapadat and Lindsay (1999) state that the process of transcription can facilitate the attentive reading and interpretative skills needed to analyse data. Once transcribed the audio recording was listened to in its entirety and compared against the written transcription to confirm accuracy.
3.8.2 Meeting documentation

ViTA South formal leadership team meetings were held monthly throughout the life of the research study. All four members of the ViTA South formal leadership team participated in all of the scheduled meetings throughout the research study. It was during the ViTA South formal leadership team meetings that the theory guiding strategies aimed at creating the conditions for staff to exercise distributed leadership was designed and refined as an ongoing organisational process.

3.8.3 Document analysis

Document analysis featured as an ongoing process throughout each of the three action research cycles. The type of documents analysed included written policies and procedures across the organisation of ACH Group including those specific to ViTA South. The document analysis process sought to identify whether certain policies and procedures would have a potential to impact on enabling or inhibiting the creation of conditions for staff to exercise distributed leadership for ViTA South. The document analysis process involved using the dimensions, values and criteria outlined in the ASERT Enabling Resource framed as questions, for example: “does the policy/procedure enable expertise of individuals to inform decisions?” and “does the policy/procedure recognise informal leadership?” Details pertaining to what documents were analysed, why they were analysed and how the findings from each document analysed influenced action are included within the detailed account of each of the action research cycles presented in Chapter 5.

3.8.4 Reflective diary

The researcher kept a reflective diary throughout the life of the research study. This was particularly important as she was a part of the ViTA South formal leadership team which positions her as an insider action researcher. Coghlan and Brannick (2010) support this as a useful approach to acknowledge the fact that in using an action research approach the researcher is not completely neutral. The reflective diary recorded and reflected thoughts, observations and beliefs as they related to the research process.
Unlike other research methods, data in action research comes through engagement with others in the action research cycles. As a result it is important to note that this engagement which is intended to collect data is itself an intervention. Coghlan and Brannick (2010) explain that asking people questions or observing them at work is not simply collecting data but is also an act of learning for both the researcher and the person answering the question. The researcher in an action research study is never neutral (Coghlan, 2007).

Adopting action research means that the researcher is in a position to generate data. This is not only through their participation in and observation of teams and individuals at work, problems being solved and decisions being made. Data were also generated through the interventions developed as part of the researcher’s work role of facilitating the development of the new operational model for ViTA South. As the researcher was embedded in the culture the significance and meaning of the data could be better understood than by an impartial outsider (Lincoln & Guba, 1985).

The reflective diary was useful as observations within this action research study did not only take place in interview settings. The observations and interventions were happening as part of business operations and during informal interactions such as those undertaken over lunch or during downtime. The researcher could pick up the reflective diary and make relevant entries relating to distributed leadership in real time. This enabled a rich patchwork of experiences to be captured and documented to contribute to capturing the learnings from the overall experience. Coghlan and Brannick (2010) supports that in adopting an action research approach formal and informal interactions can be considered in their entirety as part of data.

3.9 Data Organisation Technique

There were four key data sets within the data corpus. Each data set was analysed individually. The first data set was collated from the interviews with existing ACH Group site managers. This data were collected and analysed as part of the
discovery stage of the first action research cycle. The second data set was collated from the interviews with members of the *Formal ViTA South* formal leadership team. This was undertaken and analysed as part of the reflection stage of the third action research cycle. The third data set was the recordings of *ViTA South* formal leadership team meetings undertaken monthly throughout the life of the research and analysed as part of the reflection stage of the third action research cycle. The final data set was collated from the written information from within the researcher’s reflective diary. This data set included the data from the document analysis which were documented within the researcher’s reflective diary. This data set was analysed as part of the reflection stage of the third action research cycle.

Qualitative research software *NVIVO 10* was used to organise the collected data. *NVIVO* has been shown to be useful in managing, shaping and making sense of unstructured information. In this research it assisted with sorting and categorising for identifying themes. Table 8 outlines the intended purpose for each data collection method.
### Table 8 How the data collection tools contributed to answering the research questions

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Interviews with site managers</th>
<th>Meeting documentation &amp; interviews with VITA South Formal Leadership Team</th>
<th>The Lead Researcher’s reflective diary</th>
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<tbody>
<tr>
<td>How can distributed leadership be incorporated within a new operational model (which includes system design for service delivery, workforce plan and governance structures) as a driver to maximise collaborative practice in service delivery?</td>
<td>Provided practical insight from experienced ACH Group site managers into factors which may impact on enabling distributed leadership and collaboration within operational models.</td>
<td>Captured the practical steps involved in planning to provide insight into where decisions in planning the operational model were made and why.</td>
<td>Captured the incidental learning and reflection that will happen throughout the course of the research project.</td>
</tr>
<tr>
<td>What existing and new workplace structures and processes within VITA South need to be changed to support the operationalisation of distributed leadership as a means of maximising collaborative practice?</td>
<td>Provided practical insights into existing ACH Group site operations as an opportunity to identify existing structures and processes which needed to be reviewed in the process of designing the operational model for VITA South.</td>
<td>As the VITA South Formal Leadership Team were experienced in ACH Group site operations they regularly drew on their experience during the course of planning and decision making.</td>
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</tbody>
</table>
3.10 Data Analysis

The data analysis for this research was designed to analyse the data sets to answer the business questions within each of the action research cycles which would then also contribute to answering the overall research questions. Braun and Clarke (2006) suggest that the choice of methods including approach to data analysis should align with what the researcher wants to know. For example, in the initial discovery stage of the first action research cycle the business question was: what advice can the other existing site managers at ACH Group provide to assist in planning to create the conditions for staff to exercise distributed leadership?

A decision was made to choose a theoretical thematic analysis approach to identifying themes. A theoretical thematic analysis provides a detailed analysis of certain aspects of the data rather than a rich description of the data overall (Braun & Clarke, 2006). This was a good fit with the research study as the questions were already predefined. The alternative, which is interpretative thematic analysis approach, is more suited when research questions evolve through the coding process (Braun & Clarke, 2006). Thematic analysis is recognised for offering a flexible approach to data analysis (Braun & Clarke, 2006) which can be useful in answering real world business questions.

Thematic analysis is a data analysis method which identifies, analyses and reports on emerging themes with data (Braun & Clarke, 2006). The design of a thematic analysis aims to organise and describe data in detail (Braun & Clarke, 2006; Punch, 2013). The thematic analysis approach aims to interpret data toward answering the research questions (Punch, 2013) and in this case also the business questions which form part of this real world research study.

This requirement to answer business questions meant that a realist approach to thematic analysis was an appropriate fit. The realist approach reports experiences, meanings and the reality of participants (Braun & Clarke, 2006) and that was what is required to answer the business and research questions for this research. In undertaking the data analysis the realist epistemology of the researcher has meant that the
researcher has assumed that language enables people to articulate meaning and experience. This simple perspective applies the realist thinking that there is mainly a one directional relationship between meaning, experience and language (Pawson, 2006).

In planning for data analysis the researcher adopted the Action Self Evaluating Resource (ASERT) as a tool to guide data analysis. The ASERT was discussed in Chapter 2 as part of the literature review. The reason for this was that the researcher was mindful of potential biases and assumptions that may stem from the researcher having only previously worked in hierarchical leadership structures. To distribute leadership beyond a formal leadership team requires a shift in thinking about how groups function (Bolden et al., 2015). The central organising concept within the theoretical map was the sociological process of distributed leadership which aligned with the dimensions and values of distributed leadership articulated in the ASERT. A central organising concept captures the essence of a theme and ensures coherence (Braun & Clarke, 2006). The theoretical map framed the coding for the data analysis. A theoretical approach requires a familiarity with the research literature prior to data analysis (Braun & Clarke, 2006) so it was appropriate that the theoretical constructs were pre-identified before the data were analysed.

A further decision was made for themes to be identified at a semantic level. In applying the semantic approach the themes were identified by looking for meaning in what the person said at a surface level (Braun & Clarke, 2006). The semantic approach does not look beyond the surface meanings and the researcher is not looking beyond what the participants said (Braun & Clarke, 2006). This is appropriate for this research study as a latent approach to support the theorising of broader meanings, underlying ideas or significance of patterns is not required to answer the research questions for this study (Braun & Clarke, 2006). The use of the ASERT as a thematic map was an appropriate fit within the semantic approach adopted for analysis.

Based on these decisions a thematic analysis process for this research study was pre-designed to ensure it would facilitate a theoretically and methodologically sound approach to data analysis. Braun and Clarke (2006) recommend that good research
presents the thematic analysis process so that the choices which guided the design of the thematic analysis are made explicit. The reflexive dialogue which guided the design and execution of the thematic analysis was seen to contribute to the academic rigor of this research study. A thorough overview of the thematic analysis process and the decision making behind the design is outlined below.

The researcher printed the data sets and read over each one first. The first review identified some initial interests and thoughts. The researcher then undertook the second review electronically with NVivo open. The categorisation began during the second review and continued with subsequent repeated readings. This iterative and systematic approach to repeated reading promoted ongoing active engagement with the data in the search for patterns and meanings.

The process of categorising data involved an ongoing iterative process moving back and forward across each data set. The researcher identified elements of the data which captured something of importance to either the business questions for each cycle and/or the overall research questions. The elements identified were then coded as they related or contributed to the themes associated with the theoretical sociological process of distributed leadership by mapping them against the ASERT. NVivo was used to assist the sorting and categorising of data. Each of the dimensions and values of distributed leadership articulated in the ASERT were allocated a node to aid the coding process.

Each data set was coded individually and analysed to answer the research question it related to. An overview of how each of the data sets contributed to answering the research questions was provided in Table 8 presented in Section 3.9. A final review of themes for each data set was then undertaken to refine and review them. This was supported by a further overall analysis of the data corpus which was undertaken as part of the reflection for action research cycle 3 which identified the overarching themes necessary to answer the research questions.
The analysis and themes are discussed in Chapter 4 in the context of reporting on each of the action research cycles. A further discussion of the themes as they related to the research questions is provided in the presentation of the findings which is also part of Chapter 4.

3.11 Reliability and Validity

In qualitative research quality and rigor is measured in terms of credibility which also relates to internal and external validity and transferability (Joanna Briggs Institute, 2011). Transferability within this research recognises that specific strategies may not be directly transferable from one setting to the next but the learnings may.

Assessment of credibility is multi-dimensional, including goodness of fit and representativeness (Joanna Briggs Institute, 2011). All research must be judged according to appropriateness of methodology, methods and implementation of methods regardless of paradigm (Robson, 2002).

To provide transparency around interpretation and audibility of research findings data analysis was undertaken simultaneously with data collection throughout each iterative cycle. Subjective perspective auditability is critical – rather than telling, the audit trail and analysis show how the data were interpreted.

3.12 Assumptions, Limitations, and Delimitations

3.12.1 Assumptions

There is an underpinning assumption that drawing on the principles within Health LEADS and ASERT as drivers to create the conditions for staff to exercise distributed leadership will positively influence collaborative practice. This is the assumption held by the ViTA South formal leadership team. This research does not seek to test this assumption.
3.12.2 Limitations

This research provided a first step toward filling the deficit in research around distributed leadership in practice in the health and aged care setting. Given the range of different strategies developed for ViTA South and the time frame within which they were implemented it was impractical to be able to draw a direct correlation between distributed leadership and collaborative practice. Consequently, this research study did not measure the effectiveness of collaborative practice within the operational model for ViTA South. The research did, however, identify good examples of distributed leadership and collaboration in practice at ViTA South.

The use of qualitative methods must recognise the importance of individuals’ interpretations of reality as they see and experience it (Lincoln & Guba, 1985). Consequently, in this research study it was recognised that when people are the subject, the data collected was not value-free. The lead researcher was conscious of possible biases, particularly as an insider action researcher. However given the lead researcher was engaged with the real business problem to be solved it made the researcher an agent of change within the organisation.

As an agent of change and an insider action researcher it is recognised that the researcher’s unique perspective, personality, commitment and skills, together with the interpersonal relationships held within ACH Group and ViTA South were contributing factors influencing this research. These factors cannot be identically replicated to other contexts. In line with realist philosophy the researcher believes it is impossible for researchers to avoid discretionary judgement when conducting scientific research (Patton, 2002).

In choosing which data to include and analyse it is recognised that it is often difficult to replicate qualitative research and to generalise beyond the context studied. The detailed insights available from using a qualitative methodology brings its own trade-offs because it also limits the analysis possible. These concerns were acknowledged and were taken into account but, ultimately, the appropriateness of data collection
strategies was considered to be of paramount importance in designing the methodology (Lincoln & Guba, 1985).

This research study was framed around solving a real business problem specifically for ViTA South. It is anticipated that through examining the ViTA South experience in close detail the learnings gained through the process will be of value to other researchers and health and aged care practitioners. That value must be determined by the reader based on his or her assessment of the similarity of their site’s context to the context of ViTA South.

It should be noted that this research was not designed to test the theory of action behind the strategies chosen to create the conditions for staff to exercise distributed leadership at ViTA South. In this research the purpose of articulating the theory of action behind strategies was to capture and articulate the organisational process of designing and refining organisational strategies aimed at creating the conditions for staff to exercise distributed leadership. From the realist researchers’ perspective strategies set out how people actually use available organisational resources such as top management support, financial resources, or training to make the changes happen and to sustain them (Astbury & Leeuw, 2010). Realist research recognises that strategies need to be considered as working wholly or largely through perceptions, reasoning, and actions of people (Astbury & Leeuw, 2010). Therefore it is not the strategy that is of value to understanding how to shape understanding of how to implement distributed leadership, but the theory of action behind how that strategy is intended to work in practice toward implementing distributed leadership.

Similarly this research was not designed to justify or endorse the organisational decision to use Health LEADS Australia in practice to promote sustained collaborative practice.
3.12.3 Delimitations

This research was associated with the service model for permanent residential aged care places at ViTA South. As discussed in detail in the context section of Chapter 1 of this research thesis, within ViTA South there are three distinct service models each of which have their own business plans:

1. 60 permanent residential aged care places
2. 40 transition places (short term stay – not part of this research study)
3. 20 rehabilitation places (run by SA Health and not part of this research study).

It is recognised that the organisational development process of refining the leadership strategy for ViTA South is ongoing and will continue beyond the three action research cycles of this doctoral research study. However for the purposes of this research study the boundary was set to examine the development and refinement of the leadership strategy on the lead up and during the first 12 months that the 60 permanent residential aged care places at ViTA South were in operation.

3.13 Ethical Considerations

The research study received two ethics approvals: through Human Research Ethic Committee of The University of Notre Dame Australia ethics procedures (014124F) and ACH Group. Regular reports were submitted to the respective ethics committees to meet the requirements of the ethics approvals.

All interviews undertaken as part of the research study were voluntary. Only one of the existing site managers from ACH Group declined to be involved in the site manager interviews undertaken as part of the first action research cycle. This meant instead of five site managers to be interviewed only four were available. The omission of this single interview did not affect the overall research study as the interviews were not dependent upon numbers. The only time the study may have been affected would have been if all existing site managers had declined to be interviewed. All participants who did provide their consent to be interviewed signed consent forms. (See Appendix E and F for
copies of plain language statements used and Appendix G for a copy of the consent form used.

The research study posed no more discomfort than inconvenience to participants in the time required to complete/participate in data collection. The inconvenience in participating in data collection was minimised through incorporating reflection as part of the existing business process associated with the ViTA South formal leadership team meetings. This was considered an efficient and effective process which was respectful of business considerations, for when the research was undertaken ViTA South was being commissioned and there was limited time for staff to contribute to activities outside of core business. This process still enabled the rigor needed to meet ethical considerations associated with undertaking research.