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"Just Imagine That...": A Solution Focused Approach to Doctoral Research Supervision in Health and Social Care

Kenneth Walsh, Kathleen Doherty, Loretta Andersen, and Sharon Bingham University of Tasmania

Karen Ford
Tasmanian Health Service

Patrick Crookes
Australian Catholic University

Robert McSherry Teesside University

Effective supervision in doctoral research is critical to successful and timely completion. However, supervision is a complex undertaking with structural as well as relational challenges for both students and supervisors. This instructional paper describes an internationally applicable approach to supervision that we have developed in the health and social care disciplines that offers structure, but is also dynamic and responsive to the needs of students and supervisors and aims to develop the research competency of students. Our approach called Solution Focused Research Supervision (SFRS) is based on solution focused approaches, adapted from Solution Focused Brief Therapy and questioning techniques derived from coaching. This approach has enabled our supervision teams to effectively develop focused research questions and decide on appropriate research methodologies and methods. We offer the SFRS approach as a way of working that seeks to recognize and build upon strengths, foster engagement and openness to learning as well as build trust between students and supervisors. The authors, from (countries deleted for peer review), are supervisors and students who have developed the approach and provide practical examples of its application.

"Doing a doctorate" is not something to be entered into lightly, and the undertaking constitutes both an emotional and intellectual journey (Baptista, 2014, Cotterall, 2013). The emotional dimensions of the doctoral experience are poorly articulated but play a key role in both student learning and in supervision. The interplay between positive and negative emotions can variously inspire, guide and enhance the research or delay and even derail it (Cotterall, 2013). In addition, the supervisor/research student relationship in the higher degree research (HDR) process is fundamental to successful completion, yet the relationship is a complex and dynamic one (Emilsson & Johnsson, 2007; Gurr, 2001).

Given the central importance of the quality of supervision in the HDR candidature (Heath, 2002), preparation for supervision would seem essential. Supervisors require different support systems as compared to academics delivering structured course work programs (de Kleijn, Meijer, Brekelmans & Pilot, 2015). While some universities preparation and support for supervisors, many supervisors learn the skills of assisting students to design and undertake research, and eventually craft a thesis, by trial and error. Supervisors have varying degrees of experience and confidence in their ability to adequately supervise the student or the research. In addition to this are the organizational expectations and quality metrics about completion times, publications, and supervisory loads (Owler, 2010).

We do not propose a solution to all of the issues and challenges associated with HDR supervision. However, we offer an approach that we have developed and found to contribute positively to some of the structural challenges doctoral supervision poses for both supervisors and students.

Background

The opportunities and challenges associated with offering quality supervision to both PhD and professional doctorate candidates is well detailed (Carr, Lhussier, & Chandler, 2010; McSherry & Bettany-Saltikov, 2014). Supervision of higher research degree students has traditionally been seen in terms of an expert-disciple or a master-apprentice model (Hemer, 2012; Wolff, 2010) and evaluation of success often limited to discrete, measurable outputs such as timely completion, publication quanta, external funding success and numbers of students supervised. However, such measures do not account for the "messiness," fluidity, and complexity of the supervision process (Spiller, Byrnes & Ferguson, 2013). Vilkinas (2008) notes that the majority of supervision is task focused with limited evidence of innovation and reflection. This problem may be exacerbated by the current climate of metric focused performance for both students and supervisors. Numerous authors have attempted to delineate the components of quality supervision (Carr et al., 2010; Heath, 2002; Lee, 2008; Savage, 2013; Wolff, 2010) and how these may be used to construct sound models or frameworks to facilitate quality supervision systems and processes (Carr et al., 2010; Gatfield, 2006; Lee, 2008; Maxwell & Smyth, 2010).

Different styles of supervision identified in the literature include problem-oriented and process-

oriented styles (Emilsson & Johnsson, 2007; Hemer, 2012). A problem-oriented style focuses on tasks to be undertaken and problems to be solved. In contrast, a process-oriented style focuses on the interpersonal processes and the relationship between student and supervisor/s and the process is seen as both educational and supportive. Person-centered approaches such as the process-oriented style perceive supervision as a collaborative partnership (Hemer, 2012). supervision model presented by Gurr (2001) is based on student-centered learning rather than a teacher-centered stance and also stresses the collaborative nature of the undertaking. The model of Supervisor/Student Alignment stresses the need for the dynamic alignment of supervisory style with the student's level of development as they move to achieve "competent autonomy" (Gurr, 2001, p. 85). Gurr suggests that the development of "competent autonomy" is a goal of excellent supervision. He proposes that indirect/active supervision is desirable and is characterized by eliciting the student response through seeking their opinions, elaborating on their ideas, and building on their suggestions. In his 'Three-S' framework Wolff (2010) prioritizes the place of writing as an activity throughout the doctoral journey rather than an end process of "writing-up." Another model, proposed by Lee (2008), consists of a framework of five supervisory approaches: functionality. enculturation. critical emancipation, and relationship development. Each of these person-centered models conclude that supervisory styles are not fixed, but are dynamic and responsive to changing events and phases of candidature. The models identify critical thinking and independence as indicators of success in the supervisory relationship.

This paper describes a person-centered, solution-focused approach to supervision that offers structure; that is also dynamic and responsive, as recommended by Lee (2008); and that aims to develop "competent autonomy, as described by Gurr (2001). The aims of this paper are the following:

- To outline a research supervisory approach for doctoral students in health and social care based on an adaptation of Solution Focused Brief Therapy (de Shazer, 1985),
- To highlight how a Solution Focused approach can support both the supervisor and student to resolve challenges associated with articulating the research question and deciding on appropriate methodologies and methods, and
- To outline techniques we have found useful and give examples from our supervision practice, based on the experiences of supervisors and students in using these techniques.

The Solution Focus

The approach we call Solution Focused Research Supervision (SFRS) has its roots in Solution Focused Brief Therapy pioneered by de Shazer and colleagues in the 1980s (de Shazer, 1985; de Shazer, 1988; Lethem, 2002). Adaptations of Solution Focused Brief Therapy (SFBT) have since been used in various settings, including education (Woods, Bond, Humphrey, & Symes, 2011), occupational therapy (Duncan, Guhl, & Mousley, 2007), nursing (McAllister, 2003; McAllister, 2010; Walsh, Moss, & FitzGerald, 2006), organizational redesign (Bloor & Pearson, 2004), and coaching (Grant, 2013).

Principles of Solution-Focused Research Supervision

The heart of SFRS is the same as the solution focused approach to coaching or counselling: a strengths focus to help people identify specific goals and preferred outcomes and find ways to achieve them (Grant, 2013). The difference is that SFRS is not counselling as the focus is the completion of a significant body of complex work culminating in a thesis rather than the resolution of personal issues. However, like solution focused counselling or coaching, SFRS is predicated on the assumption that many of the skills and strengths necessary to bring about a preferred future already rest within the individual. These skills and strengths can be mobilized for solution generation through a process which keeps the student (and indeed the supervisors) engaged and open to learning while maintaining trust in the supervisor/student relationship. Trust relationship is distinguished by positive, openhearted communication (Emilsson & Johnsson, 2007). Some strategies for this include:

- Look for what works and do more of it;
- Highlight and build on strengths;
- Cease doing what doesn't work; and
- Use creativity and imagination to imagine a better future and work towards it. (Grant, 2013)

The solution focus approach has many similarities to Appreciative Inquiry (Cooperrider & Srivastva, 1987) which seeks to generate positive images of the future. These "anticipatory realities" have the effect of orientating human effort towards an ideal future state (Yballe & O'Connor, 2000).

However, our experience in supervision is that, far from being positively future focused, there is a tendency to focus on deficits and what is not right or not going well – reflective of the problem-oriented approach for supervision (Hemer, 2012). Such deficit thinking can psychologically disengage students by

mobilizing anxiety and putting them into a psychological "away state" (Rock, 2006), which can rob them of the cognitive resources required to solve the problem or improve the situation (Walsh, Crisp, & Moss, 2011). Deficit thinking can trigger stress, and reasoning can be clouded as a result. This can have a detrimental effect on the student's ability to develop their research and their competent autonomy.

In contrast, the SFRS approach seeks to keep the student in a psychological "towards" state (Rock, 2006). While not ignoring problems, it looks for what works and what is going well. It builds on the strengths of individuals and uses creativity and imagination to focus on a positive possible future—a quality thesis—and how to get there (Walsh, et al., 2006). The approach seeks to build critical thinking capacity and direct the student towards independence. We have found that the action focus of the approach helps the student move forward and progress in their research.

A Solution-Focused Research Supervision Approach to Questioning

SFRS uses solution-focused questioning techniques such as scaling questions and the miracle question (discussed below) (Walsh et al., 2006). Solution focused questions are questions that help the student to clearly articulate purpose and goals, as well as discover and articulate their specific strengths and abilities in constructing and enacting solutions. The questioning process also aims to support and empower the student to discover their own solutions and focus on those issues over which they have control (Grant, 2013). However, of equal importance, the SFRS approach requires the supervisor to adopt an attitude toward the student and the supervision that focuses on assisting the student to acquire the attributes of critical thinking: become questioning, reflective, resourceful, resilient, and independent. From our experiences, many of our students already come with some or all of these attributes but don't recognize this. They are however, often acutely aware of their deficits. The role of the supervisor is, in part, about identifying and maximizing potential by building on the student's strengths. This goal can be realized through making the student, not the thesis, the center of inquiry and using opportunities to build self-esteem and self-efficacy throughout their doctoral journey (McAllister, 2010; Walsh et al., 2006).

To work well, we have found SFRS needs to be based on a shared understanding of the approach, and an explicit agreement to use it. In this way, the student is coached in the SFRS approach and learns to use the principles between, as well as during, supervision sessions. Supervisors should also be open and transparent about the expected outcomes of the questioning and visioning techniques and coach

students in their use. It is important that students and supervisors form a trusting alliance in the supervisory relationship so that students do not feel themselves to be mere objects in a technical approach, but rather active partners in the application of the approach (Lipchik, 2002). In addition, the steps outlined below should be used in flexible, pragmatic, and personcentered ways so that both supervisor and student are able to participate in collaborative solution generation that is exploratory, experiential, and constructive.

As mentioned above, a key technique of the approach is asking good questions of the student and of the proposed research. Therefore, before discussing the steps in the SFRS process it is worth outlining the SFRS approach to questioning. Similar to Brain Based Coaching (Caine & Caine, 1990; Rock, 2006), we use three elements: Questioning, Clarifying and Placement.

Element One: Questions. According to the German philosopher Martin Heidegger, every question is guided beforehand by what is sought (Heidegger, 1962). That is, one has to know something of what constitutes an answer before one can ask the question. We would add that good questions beget good answers because the quality of the answer is directly proportional to the quality of the question being asked.

The questions in SFRS aim to make clear what is already known, not known, assumed, or taken for granted by the student and by the supervisor. They also aim to clarify purpose, identify strengths, seek possibilities, and generate actions. Some examples of SFRS questions that might be directed towards ensuring the student and supervisor(s) are all satisfied with the research question, as well as progress of the research and written thesis at different points in the journey, might include the following:

- If we were in the future and your thesis on [research topic] was finished what would you now know that you didn't know when you started?
- What is the purpose this chapter serves in your thesis?
- On a scale of one to 10, how well does this literature review or methodology chapter(s) serve this purpose?

As can be seen in these examples, SFRS questions tend to be open ended and curious. Specific examples of SFRS questions will be given later in the paper.

Element Two: Clarifying. Clarifying in SFRS is the process of asking questions to clarify the student's response to problems, situations, and events associated with the research and exploring their thinking. This allows the supervisor and student to be clear about answers, to explore topics further, and to clarify thinking. The assumptions, rationales, prejudgements and biases we have often go unexplored. Clarifying is

Table 1
Stages to Ensuring the Development of a Research Question

Stage	Title
1	Listening to the narrative
2	Posing the 'miracle' question
3	Tapping the Passion
4	Developing the Research Question(s)
5	Exploring Methodology and Methods
6	Exploring Feasibility

the process by which students can become more aware of their thinking and more self-reliant.

Examples of clarifying questions are:

- "What you appear to be saying isis that right?"
- "It seems that you are assuming these two issues are linked...is that right? Can you tell me more about that?"
- "That's interesting Tell me how you reached that conclusion?"

Element Three: Placement. Placement is the process whereby the supervisor marks points in the journey of the supervision session and of the thesis. This placement allows the supervisor to be explicit as to where the student and supervisor are in the process and where it is heading. It also helps the student contextualize the questions. Examples of placement statements include:

- If these are the research questions, we can now explore who or what has the answers.
- We are at the stage of exploring methodological issues, so let's discuss what the questions you have identified seek to do: explain, test, describe, etc.
- I think the next step might be to identify what is already known about this topic. What do you think?

This process of questioning, clarifying, and placement is cyclical as further questions and points of clarification are generated.

Having identified what SFRS is and the three core elements associated with questioning, the next section focuses on the processes aligned to devising robust research questions and aims.

Solution-Focused Research Supervision: Six Stages to Developing Quality Research Questions and Research Approaches

For the purposes of this section we assume that the supervisor has had the "Why do you want to do a PhD/Prof Doc?" conversation. Unless the student is to be part of an already identified study, the next conversation usually revolves around the question, "What do you want to do and why?" This question is perhaps the most important in the doctoral journey in that everything else flows from it. It is therefore worth exploring fully. Development of the research question is an activity that should be undertaken collaboratively and consciously with skill and insight.

We have found the following techniques useful in developing the "preliminary" research question. We use the term "preliminary" to reflect the fact that as the student learns more about the subject area and methodologies (discussed below), the research question tends to change and is refined. Within the SFRS approach there are six stages to ensuring that the development of a research question is undertaken effectively. These six steps take time to work through and, depending on whether the student is studying full-time or part-time, may take weeks or months. Our experience has been that spending the time to carefully and fully develop the research questions, aims, methodology and methods is time well spent.

Table 1 lists the six stages required to develop an effective research question within a SFRS context. These are then explored in more detail.

Stage 1: Listening to the Narrative

Listening carefully to the student's oral narrative about how they came to this topic area and why it is of interest to them can help the supervisor identify the student's passion for the topic, the purpose they wish it to serve, and the significance it may have to their

Table 2 Example of the Use of the "Miracle Question"

"I had done a fair bit of reading around my topic prior to the meeting and my head was full of jumbled up thoughts, ideas, and concepts. The thought that I would ever be able to put them on paper in coherent order was difficult to contemplate. I felt overwhelmed by the enormity of the task ahead and firmly believed it would be a miracle if I ever finished my thesis! So when my supervisors introduced the idea of asking the 'miracle question' of a thesis that was still only a kernel of an idea, it was a suggestion that resonated.

"The miracle question was, 'Imagine a miracle has happened and your thesis is finished. What would you know now that you didn't know before?' I left the meeting equipped with this single question, this one task to complete before the next meeting in two weeks. In my mind, I was already at the printers collecting the final copy of my thesis to submit for examination. What had I found out?

"When I started to think about all the things I would know, it was quite straightforward to write a list. I would know:

- what shortcuts, workarounds and violations in perioperative practice looked like,
- how often they occurred'
- the context within which they occurred,
- the characteristics of the culture within which such behaviours took place,
- what influenced non-adherence,
- whether perioperative nurses were conscious of breaking the rules, and
- what the implications were for patient safety.

"The miracle question had provided clarity of purpose, a focus on the end point that helped considerably to 'unjumble' the myriad of thoughts and ideas and provide some structure and order within which to place them. This process also highlighted the aspects of the topic that were of particular interest for me, the parts that I was passionate about exploring further and finding answers to. These were the concepts of shortcuts, workarounds, violations, rule breaking, and deviance, and this discovery in turn led me to undertake a more focused review of the literature."

discipline. We say "oral narrative" here because the oral narrative releases the student from the confines of academic writing and allows for freer expression necessary to more fully explore their initial thinking.

Most higher degree research students come with some thoughts about a research question or topic and what may constitute an answer. Indeed, some may believe they know the answer already and merely want to confirm it, or at least know what they want the answer to be. As the oral narrative exposes the student's thinking, it is important that the supervisor listens not only to the content of the narrative, but also to how this may have emerged from their thought processes; the links, the logic, and their assumptions.

Sometimes the student's initial idea for a research topic or question is in fact a solution to an issue that they have not fully explored or thought through. For example, a perioperative nurse was interested in the question, "How can we get staff to stop using shortcuts (for standard processes) in operating theatres?" In this case stopping shortcuts is a solution to a problem that has not been fully articulated but is probably about improving patient safety in operating theatres. There may also be some underlying assumptions about

"shortcuts" being bad or unsafe. There may also be some unspoken assumptions about the types of nurses who take "shortcuts." Exploring how the student came to this topic and the issue of patient safety more broadly may help both the student and the supervisor understand more fully the student's interest in, or passion for, this topic.

In our experience, passion for a topic is a double-edged sword: it is necessary to sustain the student over the long journey of the PhD but it can also constrain the student's thinking around the issue. This is especially true if the topic is a preconceived solution to a poorly articulated problem. The SFRS approach to questioning (questioning, clarifying and placement) can act as a mirror to assist the student to become aware of their thinking processes, biases and preconceptions.

Stage 2: Posing "The Miracle Question"

Once the supervisor and the student have explored the narrative around the topic area, it can then be useful to ask, what is known in solution focused approaches as "the miracle question." In solution-focused brief therapy the miracle question is a creative way to devise goals. It helps the client imagine a desired future state. In SFRS it is a creative way to focus, capture, or distill goals, and also to assist in articulating the research aims more clearly as a precursor to scoping the literature and eventually finalizing the research question. Over the course of supervision, variations of the miracle question will be used many times.

The miracle question usually takes the form of: "Imagine a miracle has occurred and your thesis on the topic of ... is now finished. The examiners praised it and praised its findings. Having finished your thesis, what do you now know that you didn't know when you started?" The student is then encouraged to phrase their answers in the form of, "I now know..."

For example, the student who was interested in short-cuts in the operating theatre describes the use of the miracle question in Table 2.

As mentioned in this example, the miracle question can be used to assist the student to find a focus for a more realistic scoping of the literature. By scoping the literature, we do not at this stage mean a full literature review. This stage of the SFRS process is more aligned to focusing the topic and forming initial research questions. This is an iterative process and involves using the answers to the miracle question as a starting point to interrogate the literature. A useful question at this stage might be: 'What are the questions I need the literature to help me answer?' The answers to the questions that this question poses (such as, "What is already known about this topic?") can then be used to further inform the next iteration of the miracle question (see stage four) and eventually the full literature review.

Stage 3: Tapping the Passion

In the example in Table 2 above, the student mentions her passion for the topic. Passion for a topic is, in our experience, linked to a wish to make a difference. Another way of putting this is, the student wants the research to be significant or pass the "so what" test. Here the answers to the various iterations of the miracle question can be used to assist the student to explore the significance of their emerging research topic and research questions. A follow-up question to assist in discussing significance might be: "If your thesis was finished, what difference would the knowledge make to patients, staff, the organization or the community (the question can be varied to suit the context)?"

Stage 4: Developing the Research Question(s)

At this point we would like to stress again that the techniques described above are not necessarily linear; the process is cyclical. After several cycles of steps 1-3 aimed at posing the miracle question to identify aims or goals, interrogating the literature, and discussing its

significance, the student is usually able to move towards devising/developing or "landing" a more definitive version of the research question(s) and then exploring methodology and methods.

Some questions we have found useful in putting together stages 1-4 include:

- Imagine a miracle has happened and your thesis is finished. What would you know now that you didn't know before? (outcomes of the research) (see example Table 2)
- If these are the answers (to the miracle questions), what are the questions to which they are the answers? (turning the outcomes into research questions)
- If we knew the answers to these questions what difference would it make to the patients, staff, organization, or community? (significance and impact of the research)
- What is already known about this topic? What is unknown about this topic? How well do your research questions relate to these unknowns (e.g., interrogating the literature, contextualizing the research in the wider literature)?

For example, in the study of operating room nurses' practices and safety shortcuts (described in Table 2), we used several iterations of the SFRS questioning approach in developing the research question. The research question initially had a more "closed" or limited view of practices – indeed it had a "problem focus" with a concentration on blame and negative or deficit practices. Through the SFRS approach, there was a clear shift to the formulation of broader, more inclusive research questions (see below). These questions allowed an inherent openness to possibility, thus de-limiting the research. The student then formulated the following research questions.

The overarching question was, "What are the different ways of working in perioperative nursing, and what are the implications for practice and patient safety?"

Supporting questions included the following:

- 1. What are the different ways of working in daily perioperative practice?
- 2. What are the conditions that underlie the different ways of working?
- 3. What influences the nurse engaging in different ways of working?
- 4. Are perioperative nurses "mindful" of working in different ways?
- 5. What are the implications for practice and patient safety?

Stage 5: Exploring Methodology and Methods

This next step is about exploring how to answer the questions associated with methodology and method(s). It begins with the premise that the best methodology is the one best suited to answering the research question.

We usually begin this discussion by asking the question: "What do these tentative research questions seek to do?" The answers usually include words like "test," "interpret," "describe," "explain," "understand," or a combination of these. The follow-on question from this is usually: "What are the methodological options for meeting this intent?" For example, if the answer to the intent question is to "test," then a methodological option might be an experimental design, possibly a Randomized Controlled Trial (RCT). If the answer to the intent question is to "interpret," then the methodological options might include, phenomenology, ethnography, discourse analysis etc. In the example above about perioperative nurses, the student stated that the intent of the research question was to explore or describe, "What is going on with the ways perioperative nurses work in regard to patient safety?" The methodological approach she eventually decided was best suited to this intent was Constructivist Grounded Theory (Charmaz, 2014).

How this step in the process is worked through will often depend on individual supervisors and their expertise and experience. In our practice, we commonly spend a good deal of time asking students to read and discuss various methodological approaches. We ask the students to compare the intent of their research questions with the intent of the various methodologies. This often begins with exploring "off the peg" methodologies such as those named above, but it also includes discussion of bespoke or mixed methods approaches which may be better suited to answering the research questions posed. We have noted a tendency in health and nursing research that when a good, wellcrafted research question does not fit an "off the peg" methodology, it is usually the research question that is altered, not the methodology or method (Walsh, 2012). The consequence of this is that the research question is no longer that which fired the student's passion. This in turn has consequences for both the significance of the research and the student's ability to stay the course and maintain their interest. Of course, not all good questions are researchable, and a pragmatic balance needs to be struck (this will be discussed in the next section).

Follow-up questions we have found useful in exploring methodologies and methods include:

 What approach or approaches might be suited to meet the intent of your questions? (methodological fit)

- If these are the questions, who or what has the answers? (sources of data)
- What are the options for getting the answers? (recruitment/methods of data collection)
- How well suited are each of these options for getting these answers? (methodological 'fit')
- What other possible options might there be?
- What are the possible strengths and limitations of these options?

In this aspect of SFRS it is also important to encourage the supervisor(s) and student to think through the limitations associated with both the research and the experience/expertise of the supervisory team. We have noted that some supervisors are not well versed in a variety of research approaches or are experienced in only one. They may be reluctant to acknowledge this and find support within the supervisory team to mitigate against the deficit. They may therefore encourage the use of approaches they have used and are comfortable with, rather than the approach which best matches the research question. This is exacerbated by the fact that many doctoral preparation programs do not cover research methodologies and methods, and thus the students have to "pick it up along the way." If the latter is the case, we would suggest that the supervisor's role is to work out a way to remedy a major gap in the research student's knowledge base. We are not suggesting that supervisors have to have an in-depth knowledge of all research approaches, but rather recognize their strengths and deficits in this area and openly discuss ways of managing this.

Stage 6: Exploring Feasibility

It is our common experience as supervisors that students will often scope a project that is far too large. Indeed, as supervisors we have sometimes used the somewhat hackneyed phrase, "It's a doctorate, not a Nobel Prize." We have found the acronym FAME (borrowed from the evidence based practice movement (Pearson, 2010), to be useful in framing a conversation around feasibility. As applied by the Joanna Briggs Institute to their hierarchy of evidence model, FAME stands for Feasible, Appropriate, Meaningful, and Effective. Below are the definitions of each of these elements of FAME, followed by how we have adapted these to SFRS processes:

F: Feasibility – the extent to which an activity is practical:

 What are the characteristics of feasible research, e.g., time, cost, resources, expertise, etc.?

- On a scale of 1-10, how feasible is your research?
- What is it about your research which makes it feasible?
- You have scored the feasibility of your research as 7. What feasibility aspects of this research make it a 7?
- What would you need to do to make it 10?

A: Appropriateness – the extent to which an activity fits with a particular situation or context:

- What are the characteristics of appropriate research, e.g., ethically or culturally acceptable, transferable or generalizable, etc.?
- On a scale of 1-10, how appropriate is your research?
- What is it about your research which makes it appropriate?
- You have scored the appropriateness of your research as 6: what aspects of this research make it a 6?
- What would you need to do to make it 10?

M: Meaningfulness – (the extent to which an activity is positively experienced)

• To what extent will the findings make a difference to staff, patients, healthcare organizations, and your practice area/setting?

E: Effectiveness – (the extent to which an activity achieves the intended effect or outcome)

• To what extent will the research answer the questions you were passionate about?

These questions are examples that we have found useful and there are many other questions that could be used. Whatever questions are posed, the questions should be challenging and encourage student thinking. However, they should not be so challenging that they trigger a threat response in the student. Threat responses inhibit cognitive and psychological engagement and inhibit learning (Rock, 2008).

Having identified the principles and processes of SFRS it is important to discuss the possible implications of this approach for doctoral supervisory practices in the future.

Discussion

From our shared experiences, the solution focused approach is more than just technique. Both Gatfield (2006) and Lee (2008) report on the importance of

providing pastoral support to students as they navigate the pathway through their doctoral degree. In fact, Lee (2008) places the relationship between the supervisor and student at the center of the framework. The SFRS approach is no different. We acknowledge the importance of recognizing, acknowledging, and empathizing with emotion and the relational elements of the supervisor/supervisee relationship. We know from solution focused brief therapy that when these things are not acknowledged, the solution focused therapy becomes a technical exercise that does not work (Lipchik, 2002). Our experience of adapting the principles of solution focused approaches to supervision and openly using the processes detailed in this paper has been that students seem to be more confident in developing their research questions and approaches.

The solution focused approach to research supervision depicted in Figure 1 offers a new and alternative framework for support and supervision for doctoral students and supervisor(s).

The SFRS approach is predicated on a sound relationship between the supervisory team and the doctoral candidate incorporating effective communication and the opportunity for both challenge and support. From our experience, working with and building on strengths, as well as building competent autonomy through sound questioning which focuses on what works and strengths, are sound ways of developing clear researchable research questions linked with appropriate methodologies and methods. In this way, doctoral students are enabled to undertake a significant and original piece of research resulting in a successful thesis.

Conclusion

In this paper, we have set out to illustrate how solution-focused principles have enabled us to develop the SFRS approach. As supervisors and doctoral candidates, we have found these techniques to be useful in developing the research questions and deciding on appropriate methodologies and methods to answer them. We have also used the SFRS approach and techniques to assist in crafting chapters, developing the thesis overall, as well as managing "stuckness" and procrastination.

We do not put SFRS techniques forward as a simple recipe-based approach. Asking the right questions and other techniques will not, in and of themselves, lead to good supervision or progress by a student. The supervisor also needs an appreciation of the importance of developing an honest, open, transparent, trusting, and respectful working alliance and the role that emotions and situatedness (or life context) play. In addition, the supervisor and the student need a shared understanding of the ethical and moral boundaries of the professional supervisory relationship.

Two way

between the student and

supervisor (s)

process

Figure 1 Solution focused research supervision

Principles:

Help people identify specific goals and preferred outcomes and find ways to achieve them.

Assume that many of the skills and strengths necessary to bring about a preferred future already rest within the individual.

Structure and approach:

A solution focused questioning technique(s) such as scaling questions and the miracle question

Processes:

A) The solution focused research supervision approach to questioning:

Element ONE: QuestioningElement TWO: ClarifyingElement THREE: Placement

B) Identifying the Research Question and Aim:

• Stage 1 Listening to the narrative

• Stage 2 Posing the "miracle" question

• Stage 3 Tapping the Passion

Stage 4 Landing the Research Question(s)
 Stage 5 Exploring Methodology and Methods

Stage 6 Exploring Feasibility

Outcome:

A+/-B=C Effective research supervision and successful doctoral completion

questioning around what and how I would know what I need to know in order to move forward.

Whilst my ... supervisors provided initial examples of the SFRS approach, it has become an unconscious part of all of our ongoing interactions, and sustains an air of positivity around the supervision sessions. In fact it has been almost impossible to contain the solution focused approach to my research space alone. I now find myself speaking to and providing example of solution focused discourses around change with positive effect in my clinical and managerial workplace.

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We are not advocating SFRS as the only approach to ensuring quality supervision but another possible way of enhancing supervisor(s) and student(s) learning experience. Finally, we would like to close the paper by offering the reflections of one of our co-authors (a PhD candidate) on her experience of SFRS:

As a novice researcher and PhD candidate, facilitation of my research using SFRS has allowed me the space and time to more broadly explore my research topic ...and [the] implications of my research for ongoing clinical practice. SFRS has ensured that I have remained focussed on the issues, questions and solutions that ultimately matter.

I am well aware that ... my initial drafts of written work, could have been better. My SFRS supervisors didn't chastise me but engaged me in solution focused

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KENNETH WALSH is Professor of Translational Research in Nursing and Midwifery with the University of Tasmania and the Tasmanian Health Service based in Hobart, Australia. He is also a Fellow of the Joanna Briggs Institute. His research interests include the human relational elements of translating evidence into practice, health service redesign and development, and psychodynamic influences on practice change. Kenneth teaches research methods and the philosophy of science and is an experienced Higher Degrees Research supervisor.

PATRICK CROOKES earned his PhD at the University of Hull (UK). He is a Professor of Nursing and the National Head of Nursing, Paramedicine and Midwifery at the Australian Catholic University. He was seconded to the Australian Office for Learning and Teaching (2014/2015) to undertake a project to enhance reward and recognition for teaching in the higher education sector. Patrick is an experienced Higher Degrees Research supervisor, having supervised students from a range of health professional backgrounds.

KAREN FORD is Assistant Director of Nursing for Research and Practice Development with the Tasmanian Health Service. Dr Ford supervises several higher degree candidates who are undertaking research in health and social care. Dr Ford's own research is largely qualitative and there is an emphasis on using participatory and collaborative methods and growing research capacity for beginning researchers.

KATHLEEN DOHERTY graduated from the Australian National University with a PhD in Medical Sciences in 2000. Throughout her career she has worked in a variety of universities, health service organisations and in commercial research in Australia and overseas. She has always had a strong interest in developing research skills in novice researchers and building organisational research capacity. She is currently a Senior Research Fellow with the Wicking Dementia Research and Education Centre at the University of Tasmania, Hobart where she is engaged in translational health services research.

LORETTA ANDERSEN is a senior physiotherapist of almost 30 years' experience and has worked both in New South Wales, Australia and in the United Kingdom. She is currently Physiotherapy Manager at Bowral and District Hospital of the South West Sydney Local Health District New South Wales, Australia. Her expertise is largely around musculoskeletal and orthopaedic chronic disease management. Loretta is a current PhD candidate in the School of Health Sciences at the University of Tasmania in the area of health communication.

SHARON BINGHAM is a final year PhD candidate at the University of Tasmania undertaking qualitative research in the area of perioperative nursing and patient safety. Sharon was previously a Director of Nursing and CEO with the Calvary Group in Launceston Tasmania and Adelaide South Australia and Board Director at Primary Health Tasmania.

ROBERT McSHERRY is Professor of Nursing and Practice Development at Teesside University, UK. Robert is passionate about nursing and after almost thirty years in the profession he continues to support and facilitate teams in the quest for excellence in nursing practice. In December 2010 Rob was awarded a Fellowship to the Faculty of Nursing and Midwifery from the Royal College of Surgeons in Dublin, Ireland (FFNMRCSI) for his significant contributions to nursing. He was also awarded a Higher Education Academy National Teaching Fellowship (NTF) 2011 in recognition of his excellence in learning and teaching. Rob is Adjunct Professor at the University of Tasmania and visiting Professor Tehran University of Medical Sciences.