Developing Your Research Question

'I know the general area ... but I'm not quite sure of my research question.'

Chapter Preview

- The Importance of Good Questions
- Defining Your Topic
- From Interesting Topics to Researchable Questions
- Characteristics of Good Questions

THE IMPORTANCE OF GOOD QUESTIONS

Perhaps the first major hurdle in any research project is developing the research question; and this is generally easier said than done. Some students aren't sure of their topic, while others know their topic, but aren't sure of the aspects they want to explore. Others come in with their ideas pretty much narrowed down. Very few, however, can articulate their ideas into well-formed research questions.

But this is crucial, because it is the research question that gives focus, sets boundaries, and provides direction. Knowing what you want to know, and being able to articulate it as a well-formed question allows you to assess whether the question is appropriate for research. If it passes this test, the research question can then be used as the project's blueprint.

Now this may sound like research questions are reductionist devices that take all exploration, creativity, and fluidity out of the research process. Not at all. Research questions themselves can be designed so that they are open and exploratory. As well, research questions can, and often do, change, shift, and evolve during the early stages of a project. Not only is this fine, it is appropriate as your engagement in the literature evolves both your knowledge and thinking. Yes, research questions define an investigation and provide direction, but it is up to the researcher to define and redefine questions so that they can most appropriately accomplish these tasks.

Defining the investigation

A well-articulated research question can provide you (and your eventual audience) with a tremendous amount of information about your project. A well-defined research question will:

- *Define the topic* whether your focus is on youth suicide, environmental degradation, secularization, etc.
- *Define the nature of the research endeavour* whether your aim is to discover, explore, explain, describe, or compare.
- *Define the questions you are interested in* whether you are interested in what, where, how, when, why.
- Indicate whether you foresee a relationship between concepts you are exploring whether you are looking for impacts, increases, decreases, relationships, correlations, causes etc.

Boundaries

In investigating a topic, you are likely to find yourself facing interesting tangents, and a well-defined question can help you set boundaries on your research. When faced with an interesting tangent, ask yourself: 'What does this have to do with my question?'

I'd suggest that there are three potential answers:

- 1. 'Actually nothing ... I will have to leave it. I suppose I can always pick this up in my next project.'
- 2. 'Actually it is quite relevant ... if you think about it, it really does relate to my...' (this can be very exciting and add new dimensions to your work).
- **3.** 'Well nothing really, but I actually think this is at the heart of what I want to know. Perhaps I need to rethink my question.'

Providing direction

As well as defining the investigation and setting boundaries, research questions act as a blueprint for the project. They point to the theory you need to explore; the literature you need to review; the data you need to gather; and in particular, the methods you need to call on.

In fact, I would say that it is nearly impossible to define a clear methodology for an ill-defined research question. Now I know that sounds like common sense, but it has to be one of the most common research *faux pas* I see from students. Students often ask me to have a look at their methods to see if they are on the right track. When I say, 'Sure, what are you researching?', some waffle on for 20 minutes, yet bring me no closer to the heart of their research. And this is because they are yet to articulate their question in their own heads, let alone share it with someone else. If you do not know what you want to know, you will not be in a position to know how to find it out.

DEFINING YOUR TOPIC

All this talk about the importance of research questions is fine, but what if you're not even sure of your topic area and you have no idea what interests to pursue? Well, you're probably not alone. Yes, there are plenty of students who are quite clear about what they want to research, but there are also a lot who really struggle

with the idea of generating a research topic. In fact, many feel that coming up with something worthy of research is beyond them.

So how do you decide on a topic that can lead to a potential research question? Well, you work on generating ideas by honing in on your curiosity, using your creativity, and exploring your options with an eye towards practicalities.

The importance of curiosity

'Discovery consists in seeing what everyone else has seen, and thinking what no one else has thought.'

-Albert Szent-Gvorgi

When asked 'What do you plan to research?' students often struggle for an answer. But if you chat with them about the types of things they tend to think about or what raises their curiosity, they generally have no problem running off a list of potential 'research' ideas.

Ideas for research are generated any time curiosity or passion is aroused. Everyday we are surrounded by events, situations, and interactions that make us wonder, stop and think, or bring emotions of joy, frustration, relief, or anger bubbling to the surface. This is the rich and fertile ground from which research ideas are born. Think about what stirs you up, what you argue about with your friends, family, and peers, and what issues are topical in the world, at home, or in your workplace. You will soon find that research topics abound. If you can learn to catch yourself thinking, 'Gee I wonder...', you will have an unending supply of ideas.

The role of creativity

Is there a role for creativity in the development of research ideas? In a word, yes. Creative inspiration has surely been responsible for as many advances in science as the tendency to follow the rules. If you are stuck for ideas you can try creating a concept map, playing with metaphor, or drawing inspiration from poetry and song.

Concept mapping

We often fall into the trap of thinking in a linear fashion, particularly when it comes to research. One creative, 'right-brain' skill you can call on in the development of your research question is concept mapping. Mapping allows you the freedom to think laterally as well as linearly. It uses free association to allow the mind to jump from one idea to another, thereby enhancing creative processes. Concept mapping can facilitate brainstorming, drawing out connections, and building themes; and can also be successful in overcoming writer's block. Figure 3.1 shows a simple concept map used to draw out potential research topics.

Metaphor

The use of metaphor can allow us to think and express with creativity. For example, how do you describe the research process? Is doing research similar to choreographing a dance, completing a puzzle, navigating the sea, following a path, or

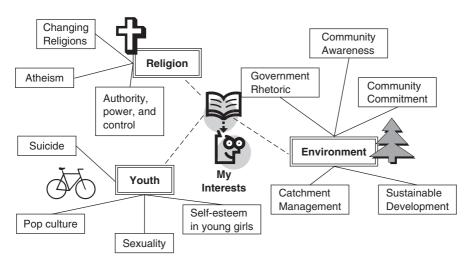


FIGURE 3.1 CONCEPT MAP OF POTENTIAL RESEARCH TOPICS

embarking on a journey? Each metaphor suggests a somewhat different orientation to the task. In developing topics for research, metaphors have the ability to capture and articulate ideas in ways that go beyond the potential of conventional language.

One metaphor for God that stuck in my mind came from a student who argued that God was simply Santa for adults. They both know when you've been naughty or nice, they both have wondrous powers, and, for both, existence relies on 'faith'. The main difference is that Santa's wrath is a lump of coal and God's is eternal damnation!

Poetry and song

I cannot think of any aspect of the human condition that has not been profoundly captured in poetry and song. The desire to understand our world is as much the fodder of the arts, as it is research. While many research ideas will come from academic literature, do not discount the creative arts. As highlighted in Box 3.1, thinking about the poems and songs that have had meaning for you, or exploring the themes in your own creative writing, can be a fountain of research inspiration.

Box 3.1 Coming up with Ideas – Dennis' Story

If you ask most people how they came up with their topics, they talk about intense personal experiences, things related to their work, or issues connected to theory. Sometimes I feel a bit foolish saying my research was inspired by a song. I have been a Billy Joel fan for as long as I can remember, and I love the song 'James'. I find the lyrics profound. Billy Joel's 'hypothesis', so to speak, is that it is hard to find internal contentment if you are 'carrying the weight of family pride'.

For my thesis, I decided to research the same. Using a sample of 200 full-time white-collar employees aged 25–45, I am exploring relationships between 'the weight of family pride', success, and internal contentment.

Practicalities

As limiting as it may seem, curiosity, creativity, and even passion need to be checked by practicalities. Sometimes open choice of topic is restricted. Research students are well advised to consider, discuss, and negotiate:

- Appropriateness there are many students who come up with ideas that are not relevant to the degree they are undertaking. I once had an Industrial Design student undertake a research project in extraterrestrial abduction (which I think was based on rich personal experience...). As a topic, maybe there was some potential, but the requirements of the subject clearly stated that research needed to be related to developing professional practice, and I'm not sure what the career options are in AA (alien abduction, of course). Now granted this may be an extreme example, but there are plenty of research students who, after a period of time, feel that they are not in the right department. Fitting in and finding a cohort you can relate to can be crucial to success.
- ☑ Supervision not many students manage to readily negotiate a major research project without a great deal of supervisory support. Finding out whether appropriate supervision for your topic is available before you lock yourself into a project is well advised.
- ☑ Funding body/employer requirements if a funding body or employer has sponsored you to conduct research in a particular area, you may not be able to shift topics. Even within a defined project, however, there can be scope to concentrate on particular aspects or bring a fresh perspective to an issue. Open negotiation and even a 'sales pitch' covering the relevance and potential benefits of your proposed research can give you more creative potential.

FROM INTERESTING TOPICS TO RESEARCHABLE QUESTIONS

If a topic defines the general area you are examining, then the research question defines what aspects of that topic you plan to investigate. Going from a topic of interest to a well-defined research question, however, is no easy task. As shown in Figure 3.2, you need to move from a topic to an issue, narrow it all down to a manageable scope, and finally generate researchable questions.

Finding an angle

Moving from broad topical interests to questions that can be answered through the research process often involves finding an 'angle'. In looking for an angle you may want to consider:

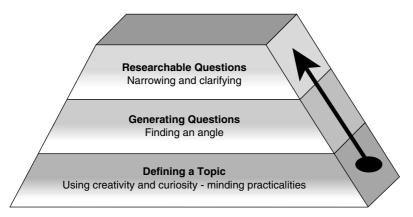


FIGURE 3.2 FROM TOPICS TO RESEARCHABLE QUESTIONS

- Personal experiences sometimes our own experiences of a particular phenomenon, event, or cultural group can give 'insights' worth exploring. For example, you may have an interest in the topic of racial discrimination because, as an Asian student in a primarily white school, you felt that those who verbally attacked you did not appreciate the pain, fear, and anger that resulted from such abuse. A question you now want to explore is: 'How is the practice of racial slurs defended in the school yard?'
- Theory theoretical inspiration is most likely to happen when you find yourself relating theory to a real-world situation; the theory resonates and you think 'aha' maybe that's why a particular situation is the way it is, or perhaps that is why they do what they do. A student of mine had such a moment when he read a work by Althusser that highlights the role of institutions such as the family, schools, and the Church, in embedding Government ideology into individual consciousness. The student began to view the role of the Church in a new light and decided to investigate if and how the Irish Catholic Church operates as an arm of the Government in the socialization of its citizens.
- An observation it can be quite hard to see what surrounds us everyday, so viewing the world through fresh eyes can provide powerful research insights. This happened to a student of mine who was on his 'daily' train, when he suddenly became fascinated by the unwritten rules of personal space. He found himself intrigued by the rules that governed who sat where, how close they sat, who moved away from whom, and under what circumstances. He watched with fascination as people jockeyed for seats as the number of carriage occupants changed with each stop, and decided that he wanted to study the rules that govern such behaviour.
- Contemporary/timely issues sometimes an old topic can take on fresh life. A
 topic might suddenly become an agenda at the workplace, or may even
 become the focus of global attention. The Western world's interest, fascination,
 and judgement of Islamic faith is a case in point. 'Angles' become easy to find

- and questions such as: How is the media covering the topic?; What is the policy, practice, and rhetoric of government?; What impact is this having on school yard racism? become quite easy to generate.
- Gaps in the literature the importance of reading for research (covered in Chapter 6) cannot be overemphasized. When you are conversant with topical literature, it can be quite easy to find an angle. You can explore whether an important aspect of an issue has been ignored; whether there are assumptions underpinning a body of work that need to be re-examined; or whether further questions have been posed by researchers at the end of their papers. If you can identify the gaps and holes in the literature, you can quite readily generate relevant questions.

Narrowing and clarifying

Having an angle is not the end of the task. Once you have an angle, you need to work on narrowing and clarifying in order to generate that 'researchable' question. Now expansive questions can be the focus of good research, but ambiguity can often arise when questions are broad and unwieldy. Being bounded and precise makes the research task easier to accomplish. If you are worried about being too limited, keep in mind that each question can be likened to a window that can be used to explore rich theory and depth in understanding. 'Focused' is not a synonym for 'superficial'.

The concept map revisited

Just as a concept map can be used to brainstorm research topics, it can also be used for question clarification. The map shown in Figure 3.3 explores 'why young girls have a poor self image'. The student has mapped out some major influences – peers, parents, and the media – and has begun to think about causes of the 'problem'. This leads to some interesting ideas that may all be researchable. The student then takes this further by asking two things: (1) what aspects am I most interested in; and (2) do I have any insights that I might be able to add. From this, the student has two 'aha' moments and research questions begin to come into focus. The first looks at the role of media as a whole and asks: 'What do young girls consider normal in terms of body image?' The second comes from an interesting reflection on the compliments parents give to daughters, and how often they relate to how 'pretty they are'. The student begins to wonder whether parents are subconsciously teaching their daughters that worth is determined by external beauty.

The need to define and redefine

Students often think that once they have developed their research question, the job is done. The question is clear, the terms are well defined and unambiguous; and the student feels ready to get going. Now while, yes, developing a clear question is essential for direction setting, it is important to remember that the research journey is rarely linear. Research is a process that generates as many questions as it answers. It takes you in unexpected directions and is determined to undermine your best laid plans. The best advice – set a course, but be ready for the detours.

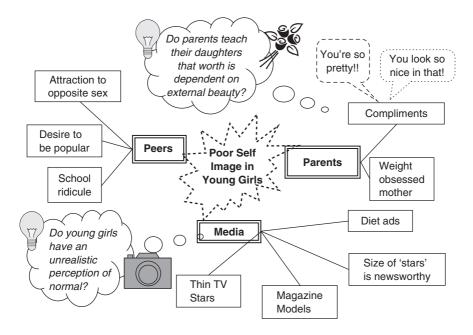


FIGURE 3.3 MAPPING YOUR QUESTIONS

Fixed or fluid?

In order to do research you need to do the following:

- 1. Define your research question so that you can identify the body of literature you need to become conversant with and eventually review.
- **2.** Extensively read and review a body of literature so that you are in a position to form appropriate, researchable questions.

What comes first, the chicken or the egg? In the case of reading and question setting, one need not precede the other; rather, they should be intertwined. Research generally starts with an idea – the idea may come from life experience, or it may come from reading. The idea should then lead to more reading, this reading should lead to the development of a potentially researchable question, the potential question should lead to more specific reading, and the specific reading should modify the question. As shown in Figure 3.4, forming a question is an iterative process, one that needs to be informed by reading at all stages.

A similar situation can occur when you begin to explore your methodology. Delving into 'how' your research might unfold can peak your interest in aspects of your topic not reflected in your currently defined question. Yet without that defined question, you might not have gone as far in exploring potential methods.

In fact, as you get going with your research, you may come across any number of factors that can lead you to: query your aims and objectives; see you modify your

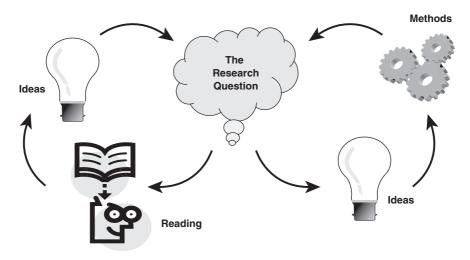


FIGURE 3.4 CYCLES OF RESEARCH QUESTION DEVELOPMENT

question; add questions; or even find new questions. The trick is figuring out what are 'tangents' you should let go, and what are evolutionary developments and necessary refinements that should be endemic to the process. Discussing the issues with your supervisor can provide you invaluable support in making such determinations.

Do I need a hypothesis?

This must be one of the most common questions asked by students, and there seems to be two clearly defined paradigmatic schools of thought driving the answers. Positivists (see Chapter 1) believe that the hypothesis is the cornerstone of scientific method and that it is an absolutely necessary component of the research process. Post-positivists, however, often view the hypothesis as a reductionist device designed to constrain social research and take all life force from it.

Unfortunately, this tendency for dichotomization offers little assistance to students struggling to figure out if a hypothesis should drive their research. To answer this question, students need to know two things: (1) how 'hypothesis' is defined and; (2) whether what they want to know is appropriate to the task.

Hypothesis defined

Hypothesis: Logical conjecture (hunch or educated guess) about the nature of relationships between two or more variables expressed in the form of a testable statement.

In other words, a hypothesis takes your research question a step further by offering a clear and concise statement of what you think you will find in relation to

your variables, and what you are going to test. It is a tentative proposition that is subject to verification through subsequent investigation.

For example, let's say you're interested in research on divorce. Your research question is 'what factors contribute to a couple's decision to divorce?' Your hunch is that it has a lot to do with money – financial problems lead to divorce. Here you have all the factors needed for a hypothesis: logical conjecture (your hunch); variables (divorce and financial problems); and a relationship that can be tested (leads to). It is therefore a perfect question for a hypothesis – maybe something like 'financial problems increase the likelihood of divorce'.

Take another example from the concept map in Figure 3.3, which asks 'Do young girls have an unnatural perception of normal (body image)?' If your answer is 'yes – I think so', and you think you can give a reason, then you can write a hypothesis. In this case, you may think that young girls have an unnatural perception of normal body size because of the propensity of the media to use models, actors etc. who have a body-mass index well below average. Your hypothesis might be: 'A proliferation of thin female models and actors in the media gives young girls an unrealistic perception of normal body size.' Perception (variable) depends (relationship) on the size of models/actors in media (variable).

If you have a clearly defined research question – and you've got variables to explore – and you have a hunch about the relationship between those variables that can be tested, then a hypothesis is quite easy to formulate.

Appropriateness

Not all research questions can be easily 'converted' into a hypothesis, nor should they. The definition of a hypothesis limits its applicability for many types of research, and many research questions.

A hypothesis may *not* be appropriate if:

- You do not have a hunch or educated guess about a particular situation For example, you may want to study alcoholism in the South Pacific, but you do not feel you are in a position to hypothesize because you are without an appropriate cultural context for educated guessing.
- You do not have a set of defined variables Your research may be explorative in a bid to name the contributing factors to a particular situation. In the case of alcoholism in the Pacific Islands, your research aim may be to identify the factors or variables involved.
- Your question centres on phenomenological description (see Chapter 9) For example, you may be interested in the question, 'What is the experience of drinking like for Pacific Islanders?' A relationship between variables does not really come into play.
- Your question centres on an ethnographic study of a cultural group (see Chapter 9) For example, you might want to ask, 'What is the cultural response to a defined problem of alcoholism in a South Pacific village?' In this situation, force fitting a hypothesis can limit the potential for rich description.
- Your aim is to engage in, and research, the process of collaborative change (see Chapter 10) In 'action research', methodology is both collaborative and emergent, making predetermined hypotheses impractical to use.

Whether a hypothesis is appropriate for your question depends on the nature of your inquiry. Again, the hypothesis is designed to express 'relationships between variables'. If your question boils down to this, a hypothesis can clarify your study to an extent even beyond a well-defined research question. If your question, however, does not explore 'relationships between variables', generating a hypothesis is likely to be an exercise in confusion.

CHARACTERISTICS OF GOOD QUESTIONS

Once you come up with a research question, you will want to know if it is worthy of research. Try running through the questions discussed below and summarized in Box 3.2. If you find yourself struggling to answer yes, it may indicate a need to rethink your questions.

✓ Is the question right for you?

They say you need to set a realistic research plan that includes assessing your level of commitment and the hours you will need to dedicate to the task ... then double it. Research often goes that way. You need to consider whether your question has the potential to hold your interest for the duration. As discussed in Chapter 2, it's very easy to lose motivation, and you are likely to need a genuine interest to stay on track.

There is, however, a flip side. Questions that can truly sustain your interest are usually the ones that best bring out your biases and subjectivities. As discussed in Chapter 4, these subjectivities and biases need to be carefully explored and managed in ways that will ensure the integrity of the research process. You may want to give careful consideration to:

- Researching questions where you know you have an axe to grind. Deep-seated prejudices do not generally lend themselves to credible research.
- Researching issues that are too close to home, i.e. domestic violence or sexual abuse. While researching such issues can be healing and cathartic, mixing personal and professional motivations in an intense fashion can be potentially detrimental to both agendas.

✓ Is the question right for the field?

The role of research is to do one or more of the following: advance knowledge in a particular area/field; improve professional practice; impact policy; or aid individuals. Research questions need to be significant – not only to you, but to a wider academic or professional audience as well.

Imagine that you want to undertake a particular project and you are applying for competitive funds to cover the cost of your research. Before you can convince a funding body that you are competent to do the research and that your approach is likely to give meaningful and credible results, you need to convince them that the topic itself is worthy of funding. You need to be able to articulate:

- Why the knowledge is important.
- What is the societal significance.
- How the findings will lead to societal advances.
- What improvements to professional practice and or policy may come from your research.

An early task in the research process is to be able to clearly articulate a rationale for your study that outlines the significance of the project. Your question needs to be informed by the literature and be important to your 'audience'.

✓ Is the question well articulated?

Research questions not only indicate the theory and literature you will need to explore and review, they also point to the data you will need to gather, and the methods you will use to collect and analyze this data. This makes clear articulation of research questions particularly important. Terms need to be unambiguous and clearly defined.

Take the question: 'Is pornography a problem?' As a question for general debate, it is probably fine. As a research question, however, it needs a fair bit of clarification. How are you defining pornography? What boundaries are you putting on the term? How are you defining problem? Social, moral, religious, economic, legal, all of the above? And who are you speaking for? A problem for whom? The more clarity in the question, the more work the question can do, making the direction of the study that much more defined.

Another point to consider is whether your question rests on unfounded assumptions. Take the question: 'How can women in Fijian villages overthrow the patriarchal structures that oppress them?' There are a few assumptions here that need to be checked:

- 1. That there are patriarchal structures. This information might exist and be found in literature. Assuming this is true...
- 2. That these patriarchal structures are indeed oppressive to the women concerned.
- **3.** That there is a desire on the part of Fijian women to change these patriarchal structures.
- **4.** That 'overthrowing' is the only option mentioned for change. It is a loaded term that alludes to strong personal subjectivities.

☑ Is the question doable?

Perhaps the main criterion of any good research question is that you will be able to undertake the research necessary to answer the question. Now that may sound incredibly obvious, but there are many questions that cannot be answered through the research process. Take for example the question: 'Does a difficult labour impact on a newborn's ability to love its mother?' Not researchable. For one, how do you define love? And even if you could define it, you would need to find a way to measure a newborn's ability to love. And even if you could do that, you are left

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with the dilemma of correlating that ability to love to a difficult labour. Interesting question, but not researchable.

Other questions might be researchable in theory, but not in practice. Student research projects are often constrained by:

- a lack of time
- a lack of funds
- a lack of expertise
- a lack of access and
- a lack of ethical clearance

Making sure your question is feasible and that it can lead to a completed project is worth doing early. Nothing is worse than realizing your project is not 'doable' after investing a large amount of time and energy.

☑ Does the question get the tick of approval from those in the know?

When it comes to articulating the final question it makes a tremendous amount of sense to ask the advice of those who know and do research. Most supervisors have a wealth of research and supervisory experience, and generally know what questions are 'researchable' and what questions will leave you with a massive headache. Run your question past lecturers in the field, your supervisor, and any 'experts' you may know.

Box 3.2 The Good Question Checklist

IS THE QUESTION RIGHT FOR ME?

- Will the question hold my interest?
- · Can I manage any potential biases/subjectivities I may have?

IS THE OUESTION RIGHT FOR THE FIELD?

- Will the findings be considered significant?
- Will it make a contribution?

IS THE QUESTION WELL ARTICULATED?

- Are the terms well defined?
- Are there any unchecked assumptions?

IS THE OUESTION DOABLE?

- Can information be collected in an attempt to answer the question?
- Do I have the skills and expertise necessary to access this information? If not, can the skills be developed?

- Will I be able to get it all done within my time constraints?
- Are costs likely to exceed my budget?
- Are their any potential ethics problems?

DOES THE QUESTION GET THE TICK OF APPROVAL FROM THOSE IN THE KNOW?

- Does my supervisor think I am on the right track?
- Do 'experts' in the field think my question is relevant/important/doable?

CHAPTER SUMMARY

- Developing a well-articulated research question is an important part of the process because it defines the project, sets boundaries, and gives direction.
- The ability to generate topics for research can be a real challenge. If you can learn
 to hone in on your passions, use your curiosity, look for inspiration from the
 creative arts, and develop 'right-brained' skills like concept mapping, your ability to
 generate ideas will undoubtedly grow.
- Research directions are not always at the full discretion of the researcher.
 Practicalities include: appropriateness of the topic; your ability to get supervisory support; and funding opportunities and commitments.
- Moving from ideas to researchable question can be daunting. Using insights derived from personal experience, theory, observations, contemporary issues, and engagement with the literature can give you an 'angle' for your research.
- Narrowing, clarifying, and even redefining your questions is essential to the research process. Forming the right 'questions' should be seen as an iterative process that is informed by reading and doing at all stages.
- Hypotheses are designed to express relationships between variables. If this is the
 nature of your question, a hypothesis can add to your research. If your question is
 more descriptive or explorative, generating a hypothesis may not be appropriate.
- Good research questions need to be: right for you; right for the field; well articulated; doable; and get the tick of approval from those in the know.