Day 1B: Introduction to Research

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| Day 2 Specific Learning Outcomes |
| 1. **To appraise the contributions of scholarly inquiry as foundational for best-practices leadership.** |
| 1. **To examine characteristics and advantages of evidence-based leadership.** |
| 1. **To distinguish between various domains of scholarship (i.e., discovery, integration, application, and teaching).** |
| 1. **Appraise the philosophical bases for empirical inquiry, including the knowledge claims represented by various approaches to research.** |
| 1. **Situate a given research report in the broader research landscape.** |
| 1. **To consider implications of academic dishonesty.** |

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| Book/Article | Author | Pages |
| Understanding Scientifically Based Research: A Mandate or Decision Making Tool? | Trybus, M. (2007) | 5-8 |
| Scholarship for Best Leadership Practices | Kirkham (2004) | 1-16 |
| Evaluation, knowledge management, best practices and high quality lessons learned. | Patton, M. (2001) | 329-336 |
| Understanding Research | Plano-Clark & Creswell (2015) | 1-78 |

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| Class Announcement: Transition & New Focus |
| **We continue today with an introduction to this course, familiarizing you with foundational concepts related to scholarly inquiry. In particular, this lesson focuses on our thinking about what scholarship, research, and evidence-based “best practices” leadership look like.** |

Notes: Introduction to Research

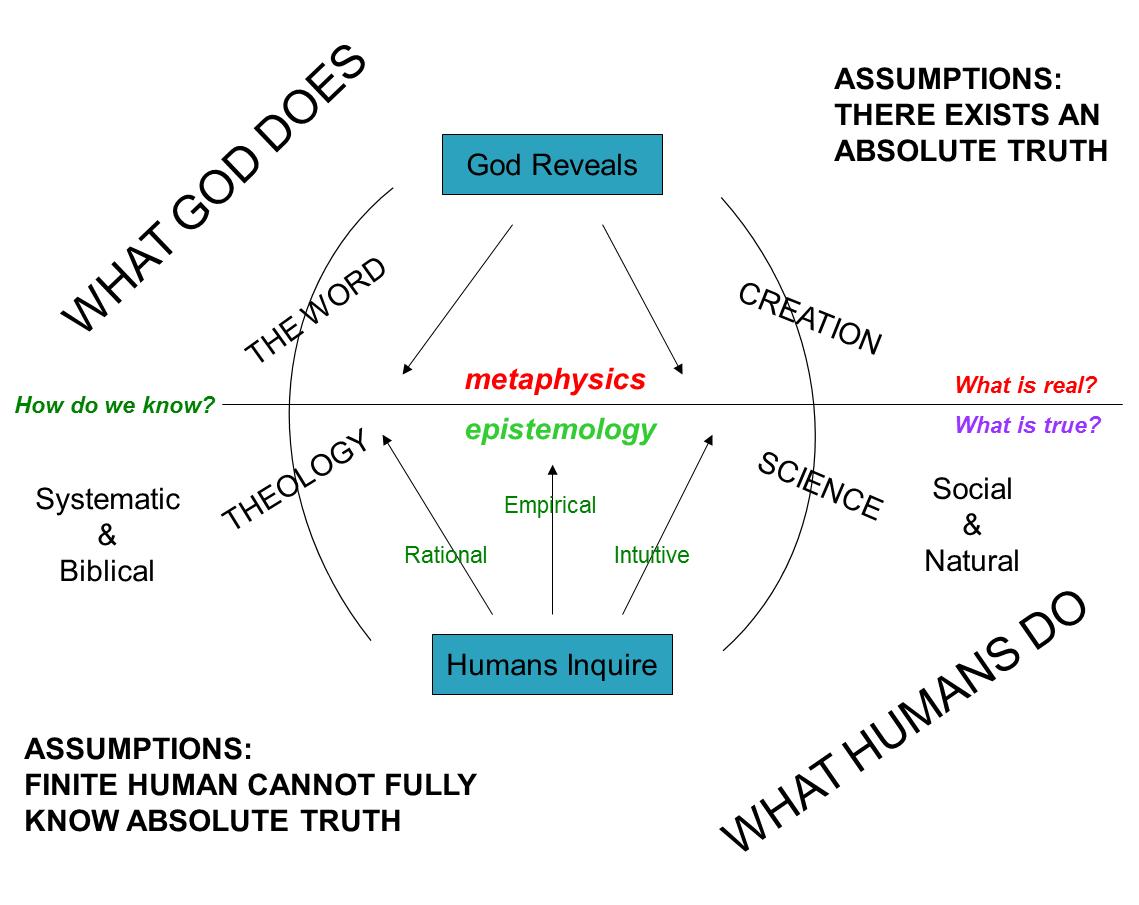
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| Theme, Theorists & Concepts |
| * Introduction to Research |
| * Leadership and Scholarly Inquiry (Evidence Based Leadership) |
| * Relevant Terminology |
| * Philosophical Foundations |
| * Recognition of Personal Bias |
| * Evidence Based Leadership |

**Clarifying Your Research Interest[[1]](#footnote-1)**

We need to clarify something that will be highly relevant to your successful completion of Assignments 3 and 4 in this course. When it comes to research, everything flows from the question.

On pages 13 and 14 of Plano-Clark and Creswell (2015) you see a description of the phases that a thorough research follows. I want to key in on where it all begins: “Step 1—Identifying a Research Problem” (p. 9).

I want to look briefly to the chart that maps out my personal cosmology and focus briefly on the bottom and right of the chart.



The words “Human Inquire” are carefully chosen and are central to not only what we are doing in this course, but indeed, to life itself. Simply stated, we human beings ask questions about the world around us. We ask questions expecting to find answers. As we will see tomorrow, scholarship and particularly research begins by asking good questions, and those questions serve as a guide to keep our inquiries and investigations on track.

As you know by now, the Master of Arts in Leadership program values the application of best practices to your personal professional practice. Before we get into some of the concrete realities of accessing scholarly literature, we need to pause and give time for you to reflect on and articulate some issues that are salient in your personal professional life and practice. The following questions will begin to guide the process.

* **Significant Question:** What are the “significant questions that can be answered empirically” (Gall, Gall & Borg 2007, p. 35) relevant to you in your professional life? State a research problem in complete, grammatical sentences. In stating your research problem, consider the following:

• Is my statement sufficiently broad? Is it clear how the general area of study will be limited or focused?

• Does the problem have the potential for providing important and useful answers and information?

* **Research Approach:** Based on your reading of Plano-Clark & Creswell, do you think your problem statement lends itself more to qualitative or quantitative research (for data-based approaches) or to more conceptual research reports? Defend your position.
* **Literature Review:** What broad fields of social science do you anticipate might inform your problem statement? What key words would you begin to with as you conduct a literature search?
* **Purpose for Research:** Working with Plano-Clark & Creswell’s definition of research purpose, suggest some focused questions that will serve to guide your upcoming review of precedent literature.

## Introduction to Research

It seems that a fundamental attribute of being human is to ask questions. We ask questions constantly for a variety of reasons. Consider the kinds of questions raised by the characters in this short fable.

THE OWL WHO WAS GOD

By James Thurber

Once upon a starless midnight there was an owl who sat on the branch of an oak tree. Two ground moles tried to slip quietly by, unnoticed. "You!" said the owl. "Who?" they quavered in fear and astonishment, for they could not believe it was possible for anyone to see them in that thick darkness. “You two!” said the owl. The moles hurried away and told the other creatures of the field and forest that the owl was the greatest and wisest of all animals because he could see in the dark and because he could answer any question. "I'll see about that” said a secretary bird, and he called on the owl one night when it was again very dark. "How many claws am I holding up?” said the secretary bird. "Two." said the owl, and that was right. “Can you give me another expression for ‘that is to say or namely?’” asked the secretary bird. "To wit." said the owl. “Why does a lover call on his love?" asked the secretary bird. "To woo, said the owl.

The secretary bird hastened back to the other creatures and reported that the owl was indeed the greatest and wisest animal in the world because he could see in the dark and because he could answer any question. "Can he see in the daytime, too?" asked a red fox. "Yes," echoed a dormouse and a French poodle. "Can he see in the daytime, too?" All the other creatures laughed loudly at this silly question, and they set upon the red fox and his friends and drove them out of the region. Then they sent a messenger to the owl and asked him to be their leader.

When the owl appeared among the animals it was high noon and the sun was shining brightly. He walked very slowly, which gave him an appearance of great dignity, and he peered about him with large, staring eyes, which gave him an air of tremendous importance. "He's God!" screamed a Plymouth Rock hen. And the others took up the cry "He's God!" So they followed him wherever he went and when he began to bump into things they began to bump into things, too. Finally he came to a concrete highway and he started up the middle of it and all the other creatures followed him. Presently a hawk, who was acting as outrider, observed a truck coming toward them at fifty miles an hour, and he reported to the secretary bird and the secretary bird reported to the owl. "There's danger ahead," said the secretary bird. "To wit?" said the owl. The secretary bird told him. "Aren't you afraid?" he asked. "Who?" said the owl calmly, for he could not see the truck. "He's God!" cried all the creatures again, and they were still crying "He's God!" when the truck hit them and ran them down. Some of the animals were merely injured, but most of them, including the owl, were killed.

Moral: You can fool too many of the people too much of the time. (Thurber, 1996, p. 470)

***What does this little story have to do with research?***

***What is my experience with “research”?***

**DQ 1.1. Associations:** What associations or thoughts do the words “scholarship” and “research” bring to mind for you? What is your experience with “research”? How does scholarly inquiry relate to your leadership practice?

***How does scholarly inquiry relate to my leadership practice?***

**DQ 1.2. Decision-making knowledge sources:** Discuss at least one example of decisions you have made as a leader based on various sources or types of knowledge (e.g., empirical or research-based; past experience; expert opinion).

**B. Leadership and Scholarly Inquiry**

On what basis are sound decisions made? What evidence do leaders rely upon for best outcomes? The need to evaluate the bases or *evidence* for best practices in leadership decision-making is widely acknowledged. Patton (2001) observes that “the emphasis on knowledge generation disseminated in the form of best practices has swept like wildfire through all sectors of society” (p. 329).

We often refer to the vision of ***Best Practices in Leadership*** within the MA in Leadership program (see Kirkham 2004). What do we mean by this? Put simply, “best practices” refers to those practices and initiatives that result in the best possible outcomes. How do we know what best practice is? The process of identifying best practices begins with an understanding of common sources of evidence available to leaders.

Take a moment to think about a recent decision you made as a leader. On what did you base this decision? Previous experience? Values? Company policy? Empirical evidence (e.g., data derived from research)? Expert opinion?

Following is a sampling of articles that speak to the importance of evidence-based leadership with exemplars from the fields of education, health, and policy-making. **Review them selectively now with the following questions in mind:**

* + *How is evidence-based leadership conceptualized in the article?*
  + *Why is evidence-based decision-making important?*
  + *What is considered as evidence? How is evidence ranked?*

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| Trybus, M*.* (2007). Understanding Scientifically **Based** Research: A Mandate or Decision Making Tool? *Delta Kappa Gamma Bulletin*, 73(4), 5-8. Available at https://ezproxy.student.twu.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=27106722&site=ehost-live  McGinnis, P. (2004). The strong case for evidence-based policy making. *Leadership Review,* Winter. Available at: <http://www.leadershipreview.org/2004winter/article2_winter_2004.asp>  Patton, M. (2001). Evaluation, knowledge management, best practices and high quality lessons learned. *American Journal of Evaluation, 22*(3), 329-336. Available at https://ezproxy.student.twu.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=6365089&site=ehost-live |

Each of these articles makes a strong case for evidence-based leadership. LDRS 591 builds on the idea of evidence-based leadership by equipping you to access, evaluate, and apply the latest empirically-based evidence and contribute to the scholarship base in the area of leadership studies. My hope is that this course will convince you of the importance of basing leadership on the best evidence available in a given context. In some circumstances this will be research-based, in other situations where research is not available it will be more practice-based.

**Follow-up Discussion:**

**DQ 2.1 Evidence-based decision-making:** How did the authors of the articles conceptualize evidence-based leadership? In their view, why is evidence-based decision-making important? What is considered as evidence?

**Relevant Terminology**

By now you may have noticed what seemed like differences in usage among the terms “research,” “scholarship,” and “scholarly inquiry.” In this course we will use these terms as follows:

Scholarship: The application of systematic approaches to the acquisition of knowledge through intellectual inquiry (used interchangeably with “scholarly inquiry”).

Scholarly: 1) concerned with academic study, especially research,

2) exhibiting the methods and attitudes of a scholar, and

3) having the manner and appearance of a scholar.

Research: “At a general level, research consists of three steps:

1. Posing a question.
2. Collecting data to answer the question.
3. Presenting an answer to the question (Plano-Clark & Creswell, 2010, p.4).” Research generates “new” knowledge.

Scholarship once was defined narrowly in terms of empirical or scientific research. More recently the academic community has moved toward a broader conceptualization of scholarship more in keeping with knowledge acquisition and application through a variety of avenues. Along with the larger academic community at TWU, the MA in Leadership program has engaged in a visioning process regarding scholarship. Read the discussion paper available on the MA in Leadership website at: <http://www.twu.ca/academics/graduate/leadership/resources/faculty-writings/scholarship-for-best-leadership-practices-jan-05.pdf>.

You may also be wondering: *How does the research process differ from managerial activities such as decision-making and problem solving*? Research shares with decision-making and problem-solving the systematic and disciplined procedure of identifying an issue/problem, deciding on an approach, formulating a plan, collecting and analyzing data, drawing conclusions and implementing decisions based on this rigorous process. What distinguishes research from generic or everyday problem solving is its commitment to advance or generate knowledge that typically will be communicated to the larger academic or scientific community.

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| **Clarifying terminology**  Students often talk about “researching a term paper;” leaders may speak of “researching a problem.” How do we understand the term “research”? In this course we use the term research in a particular (arguably in a “purist”) way to refer to empirical inquiry (what Boyer refers to the “scholarship of discovery”). This distinction will be revisited throughout the course, emphasizing that while we are learning *about* research methods, your aim in LDRS 697/698 is **not** to generate new knowledge (i.e., to conduct research), but rather to **demonstrate your application** of leadership theory to a particular practice situation. |

**Philosophical Foundations of Research**

**Three Foundational Questions**

A professor of mine often observed that humanity is vitally interested in three fundamental questions: *What is real? What is true? What is good?* The philosophical category of metaphysics is concerned with what is real, and what is the nature of reality. The philosophical category of epistemology is concerned with what is true, and what is the nature and process of knowing, and axiology is concerned with what is good, and how we can determine the nature of goodness. Much of history is a chronicle of the different ways people have answered these three fundamental questions.

This discussion is foundational to what we want to accomplish in this course. Earlier on when we touched on best practices I asked these questions: On what basis are sound decisions made? What evidence do leaders rely upon for best outcomes? The notion of “best” takes us directly into making value judgments—the domain of axiology.

I want to land briefly on epistemology, as the questions asked in epistemology are vital to our thinking in this course. Epistemology is focused on how human beings can know anything at all, and when we have established that, when our knowing corresponds to reality we say we have found truth.

So, how do we know? While this list is not exhaustive, we see around us three common approaches to knowing—the rational approach (focused on logical thought), the empirical approach (focused on external evidence) and the intuitive approach (focused on insight and inner knowledge). Rational knowing (what we will call “cognitive constructivist” below) is the process of taking the bits and pieces of our experience of life and we put it together logically. Empirical knowing rests on senses and information gathered by our senses. Intuitive knowing consists of insight that cannot be rationally explained, but is none-the-less real. Each of us has an epistemological preference, and manifestations of these preferences abound. I want to suggest that each of the three preferences are legitimate, despite our personal preferences.

Whichever epistemological preference one has, we are all faced with a similar problem. It is easy to say, “This I know!” when, if we are really honest, we really don’t know. I want to suggest four processes that we must constantly keep wading through as we self-test our own knowledge:

* Consistency—it has to make logical sense.
* Coherency—it has to make sense as a whole. That is not to say that mystery is disallowed.
* Comprehensive—it has to relate to the whole world as I know it.
* Congruent (with reality)—it has to match what *is.*

As we get into looking at different research methodologies, we will see that great pains are taken to attend to these four. Just to give a preview, the terms *reliability* and the various nuances of *validity* speak directly to issues of consistency and congruency.

**Realism Versus Constructivism**

We see different approaches to the philosophical categories manifest in the realism that characterized modernism and the constructivism that characterizes post-modernism. As realism exists in a number of variants, so does constructivism. Irzik (2001) offers some help when he asserts that constructivism is concerned with three primary questions: “Who does the constructing? What is constructed? Out of what and how?” (p. 158). Based on these three foundational questions, he goes on to distinguish between cognitive, epistemic, semantic and metaphysical constructivism (p. 159; 165; 167).

Leaning on Grandy, Irzik defines *cognitive constructivism* as “the view that ‘individual cognitive agents understand the world and make their way around in it by using mental representations that they have constructed’” (2001, p. 159). Realists and cognitive constructivists alike contend that truth is found in the mind’s correspondence to reality, and that what we believe is only an approximation of reality, and every new observation has the potential of bringing us closer to understanding reality (Blackburn, 2005, p. 188). The caption of René Magritte’s[[2]](#footnote-2) celebrated painting of a pipe entitled *The Treachery of Images* expressed it well: “Ceci n'est pas une pipe.” As Magritte observed, you could not stuff the painting as you would his pipe. His point was that he painting is a representation of a real object, and not the real object itself.

The controversy begins when “it is claimed that not only mental representations but also knowledge (including scientific knowledge) is constructed” (Irzik 2001, p. 159). Metaphysical constructivism is set in contrast to metaphysical realism. Metaphysical realism asserts that reality exists independently of our minds and thoughts, whereas metaphysical constructivism asserts that reality is constructed within our minds and thoughts. Karl Popper stands as an example of a realist, while Ernst von Glaserfeld stands as a proponent of radical constructivism. These two perspectives necessarily impact epistemology.

*Epistemic constructivism* is firmly grounded in a relativist epistemology which denies the possibility of anything being true in any absolute sense. A wide range of positions are espoused regarding the definitions of knowledge, of truth, and the knowledge of truth. We will here focus on two extremes—one which asserts essentially that no one can ever claim true knowledge and one which asserts that true knowledge is whatever people agree it to be. The first extreme, von Glaserfeld’s “radical constructivism,” is so termed by von Glaserfeld expressly to distinguish his approach from forms of constructivism that do “not imply anything about epistemology” (Joldersma 2011, p. 278). Essentially, von Glaserfeld’s epistemology (answering the question “What is true?”) rests on a denial of a reality beyond the individual’s construction (Joldersma, 2011, p. 280). Because in von Glaserfeld’s conception you could never expect two people to build the same cognitive construct, one finds themself on the verge of a “pernicious relativism” (Joldersma, 2011, 281) in which we can never say that we know anything for sure. Put another way, Irzik writes,

The definition of knowledge, according to the standard account, involves a conception of truth as representation or belief which corresponds to an observer-independent reality; but since we have no access to (i.e., no way of knowing) such a reality independently of our representations, we cannot tell (i.e. know) whether our representations do really correspond and are therefore true; but is so, we can never know anything. Such a conception makes knowledge impossible, or so von Glaserfeld contends. (Irzik 2001, p. 160).

The second extreme, represented by the Strong Programme, espouses an epistemology that unsatisfyingly reduces knowledge to “what is collectively endorsed”, or “whatever people take to be knowledge” (Irzik, 2001, p. 163). In this extreme, true knowledge is whatever people agree it to be.

Irzik’s *semantical constructivism* represents the view that “concepts and meanings of concepts and statements are not readily found in nature or society, but are constructed out of perceptual material by individuals” (2001, p. 165). The meaning of “rose” is constructed by the abstraction of rose-experiences, and because experience is private and subjective, your rose-experiences contributing to your abstracted meaning of rose are not the same as mine, the best we can hope for is compatibility between our meanings. We could never attain a truly shared meaning. Pushed to its logical end, this would mean that since a reader of a text could never expect to know what an author meant, and since truly shared meaning is impossible, the reader is free to assign their own meaning to the text irrespective of authorial intent.

*Metaphysical constructivism* is set in contrast to metaphysical realism. Metaphysical realism asserts that reality exists independently of our minds and thoughts, whereas metaphysical constructivism asserts that reality is constructed within our minds and thoughts. Metaphysical constructivists can be further sub-divided into two camps; the individualistic is focused on “individual constructions of individual worlds, and the social, which postulates social constructions of shared worlds” (Irzik, 2001, 167).

It is beyond our purpose do go much more deeply into this other than to make the point that our basic philosophical bases influence our approach to all of life, including how we approach research. While correlation does not imply causality, it is interesting that qualitative research methodologies have gained credibility only in recent times, corresponding to the rise of constructivism.

**Quantitative and Qualitative Research Methodologies**

Systematic inquiry (as represented by research) is hardly new – in first century writings we see in the Bible evidence of systematic, logical, and empirical inquiry. Consider the following passage from Luke, a physician trained in empirical methods of his day:

1Many have undertaken to draw up an account of the things that have been fulfilled[a] among us, 2 just as they were handed down to us by those who from the first were eyewitnesses and servants of the word. 3 With this in mind, since I myself have carefully investigated everything from the beginning, I too decided to write an orderly account for you, most excellent Theophilus, 4 so that you may know the certainty of the things you have been taught. (Luke 1:1-4, NIV)

The past two decades have seen remarkable growth within natural and applied sciences and humanities of the articulation of the foundations of research with a corresponding expansion of research methodologies.

Chapter 2 on Plano-Clark and Creswell (2015) provides an excellent discussion of the distinguishing features of quantitative and qualitative research methodologies. I wish here only to underscore these salient points: quantitative research is indicated by “a problem that calls for an explanation” and responds to narrow, focused questions by collecting quantifiable data which through statistical analysis, yields unbiased, objective results (Plano-Clark & Creswell, 2015, p. 54). Qualitative research is indicated by “a problem that calls for an exploration,” and responds to broad, general questions by collecting non-quantifiable data which is described and analyzed “in a subjective and reflexive manner” (p. 54).

Contrary to Plano-Clark and Creswell, I want to suggest that the term “unbiased” as a descriptor of both qualitative and quantitative research. As we get into this more deeply, you will see why I do that. Bias exists in both quantitative and qualitative research—it comes in differently, and both approaches take great pains to eliminate it. This takes us to our next section: recognizing our own personal biases.

**Recognition of Personal Bias**

As we will see, researcher bias is a significant issue that recurs throughout the entire research process. Scholars have observed that methodological choices are determined not only by the nature of the topic or problem being investigated and the resources available, but also by the particular training and socialization processes to which a researcher has been exposed. This includes all of us, whether we are actually conductors of research or are consumers of research. Gill and Johnson, in their book Research Methods for Managers (2002), offer a diagnostic exercise regarding one’s predispositions toward particular research approaches.

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| **Exercise: Self-diagnose your research approach**  Say whether you agree or disagree with the following statements by placing a **tick (agree)** or a **cross (disagree)** in the box opposite each statement. | **Agree or Disagree** |
| 1. Quantitative data are more objective and scientific than qualitative data. |  |
| 2. It is always necessary to define precisely the research topic before data collection. |  |
| 3. Of all methods the questionnaire is probably the best by which to collect objective data. |  |
| 4. Field studies (ethnography, observation) effectively determine cause and effect relationships |  |
| 5. A good knowledge of statistics is essential for competence in all approaches to research. |  |
| 6. A case study is an inappropriate way to undertake research as it cannot be generalized. |  |
| 7. Anthropological methods are fine as a means of studying exotic tribes but have little utility in leadership research. |  |
| 8. Laboratory experiments, such as studies of decision-making in groups, should be used more widely in leadership research as they can be closely controlled by the researcher. |  |
| 9. Research into leadership issues is best achieved through the accumulation of quantitative data. |  |
| 10. As a leadership research method participant observation is too prone to researcher bias to be valid. |  |

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| **Method of scoring the self-diagnostic exercise**  Count each tick as a plus and each cross as a minus. Subtract ticks from crosses. The greater your minus score, the more you are disposed toward inductive research approaches and, conversely, the greater your plus score the more you are disposed toward deductive approaches. The nearer your score is to zero, the more flexible you are likely to be when making methodological choices. |

Note: Adapted from Gill, J., & Johnson, P. (2002). *Research methods for managers* (3rd ed). Thousand Oaks, CA: Sage.

**Follow-up Discussion:**

**DQ 1.2. Influences on perspectives:** Do you agree with the proposition made by authors such as Gill & Johnson that one’s training and socialization influence where one positions oneself in the quantitative – qualitative continuum of research approaches? As you reflect, what factors shape your “affinity” to various research approaches?

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1. © David Williaume 2016 [↑](#footnote-ref-1)
2. See <http://en.wikipedia.org/wiki/The_Treachery_of_Images> for a brief discussion. [↑](#footnote-ref-2)