LDRS 591

TWU Online

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Welcome

This is the course book for LDRS 591: Scholarly Inquiry. This book is divided into thematic units of study to help you engage with the materials. The course resources and learning activities are designed not only to help prepare you for the course assessments, but also to give you opportunities to practice various skills.

> Below you will find information about how to navigate this book. Please read the full course syllabus located on the Course Home page in Moodle. It includes key information about the course schedule, assignments, and policies.

Course Notes

Below is some key information on features you will see throughout the course.

> *Learning Activity*
> This box will prompt you to engage in course concepts, often by viewing resources and reflecting on your experience and/or learning. Most learning activities are ungraded and are designed to help prepare you for the assessment in this course.

> *Assessment*
> This box will signify an assignment or discussion post you will submit in Moodle. Note that these demonstrate your understanding of the course learning outcomes. Be sure to review the grading rubrics for each assignment.

> *Checking your Learning*
> This box is for checking your understanding, to make sure you are ready for what follows. Ways to check your learning might include self-check quizzes or questions for discussion. These activities are not graded but are critical for you to be able to begin to develop evaluative judgement in this domain of knowledge.

> *Note*

> This box signifies key notes. It may also warn you of possible problems or pitfalls you may encounter!

If you have any questions, do not hesitate to ask. We are here to help and be your guide on this journey.

1 Introduction to Scholarly Inquiry

Overview

Unit 1 will provide you with a general introduction to inquiry, familiarizing you with foundational concepts related to scholarly inquiry. In particular, this unit will focus on the philosophical foundations of research, the connection between leadership and scholarly inquiry, and what evidence-based leadership looks like. By the end of the unit, you will understand the importance of research and begin to evaluate the decision-making processes that you utilize in your professional life.

Topics

Unit 1 is divided into 4 topics:

1. What is Scholarly Inquiry?
2. Leadership and Scholarly Inquiry
3. Philosophical Foundations of Research
4. The Research Process
5. Asking a Research Question

Learning Outcomes

When you have completed this unit you should be able to:

1. Distinguish between informal research and scholarly inquiry.
2. Reflect on why evidence-based decision making is important for leadership.
3. Identify a research interest and develop a good research question.

Activity Checklist

Here is a checklist of learning activities you will benefit from in completing this unit. You may find it useful for planning your work.

> **Learning Activities**
>
> - Activity: Read Chapters 1 and 2 of the Rosch et al. (2023) text.
> - Activity:Read the Philosophical Foundations notes and answer questions in your reflective learning journal.
> - Activity: Read the Topic 3 notes and answer questions in your reflective learning journal.
> - Activity:Contribute to the course discussions.

Resources

Here are the resources you will need to complete the unit:

Text:

Rosch, D. M., Kniffin, L. E., & Guthrie, K. L. (2023). *Introduction to research in leadership.* Information Age Publishing.

E-Resources The articles below can be found through the TWU library

- Brown, M.E., Dueñas, A.N. (2020). A medical science educator's guide to selecting a research paradigm: Building a basis for better research. *Medical Science Educator, 30*, 545–553. https://doi.org/10.1007/s40670-019-00898-9
- Wallace, J. R. (2007). Servant leadership: A worldview perspective. *International Journal of Leadership Studies, 2*(2), 114-132. https://www.psychodramaaustralia.edu.au/sites/default/files/serveant_leadership_-_worldview.pdf

All other resources will be provided online.

1.1 What is Scholarly Inquiry?

Inquiry is "the process of developing skills to arrive at understandings of a problem, an issue, or a phenomenon, through the process of asking good questions, searching out good evidence, and arriving at well-reasoned conclusions" (Penner, 2017).

By now you are well aware of the applied nature of the MA in Leadership program. This feature may be an important part of what attracted you to the program! Why then study research methods? Why worry about scholarly inquiry? This course in scholarly inquiry will help you to develop systematic thinking skills applicable in all realms of leadership and everyday life. As Rosch, Kniffin, and Guthrie (2023) note, research focuses our professional knowledge, to inform your leader-centric, group-centric, and context-centric to guide the broader view of our leadership position and contributes to our ocverall leadership practice (p. 23). Moreover, our

leadership practice is ideally evidence-based; that is, based on evidence derived from systematic scholarly inquiry.

1.1.1 Learning Activity

According to Plano-Clark and Creswell (2015), "research is a process of steps used to collect and analyze information in order to increase our knowledge about a topic or an issue" (p.4) and it is different then informal research.

To begin this learning activity, watch the following video where Jane Hammons explains "Teaching Research as Inquiry".

https://www.youtube-nocookie.com/embed/GDZMM04Ycaw?si=1bgnaXwTUSNyFszY

Read Chapters 1 and 2 of the Rosch et al. (2023) text.

Start a Reflective Learning Journal. This journal is not submitted or graded, but is an opportunity for you to reflect on, and engage with, the course content. The questions posed will often help you prepare for your assignments and are designed to help you successfully achieve the learning outcomes for each unit.

Please complete the questions for this learning activity in your reflective learning journal.

- In your reflective learning journal, explain how you would define research.
- Describe what your experience is with "research". (Have you taken an undergraduate statistics course? Is this your first time learning about research? Have you published your own scientific paper?)

Note that your journal is not graded, but will help you in your assessment for this unit. See below for more information on keeping a Reflective Learning Journal.

1.2 Introduction to the Reflective Journal

A reflective journal is simply a record of your thoughts. There is no correct way to create this journal; rather, it is a reflection of the way you think and the manner in which you respond to your learning. Journals can consist of traditional note taking on paper, or in a word document, you can create mind maps, pictures, or just write stream-of-consciousness, you can record your thoughts in an audio file, write down important quotes, create sketches, or drawings: whatever you choose to include. Experiment and have fun.

The purpose of journaling is to make you an active participant in your learning experiences as you engage in the various activities throughout the course's readings, activities, and discussions with your instructor and your fellow students. Reflecting upon these learning events will help

you gain a deeper understanding of the course materials and help integrate your learning into applied practice in your everyday life and work.

Throughout the course, we will remind you to write in your journal, as we want to be sure you are actively learning the material. To assist you, we have provided you with questions you can ask yourself in order to get your creative energies flowing. Reflective journaling is an activity you can and should complete on a regular or daily basis, even outside of our scheduled course activities.

Common Questions Used for Reflective Journaling

- In your view, what were the most important points in the readings, videoclips, or discussions with your fellow students and tutors?
- What information did you already know?
- What new knowledge, ideas, or perspectives have you gained?
- What information was easy to remember or learn? Why?
- What concepts did you find more difficult? Why?
- How can you apply this knowledge to your work or current experience?
- How has this knowledge helped you to make sense of your current or previous experience?
- Has your understanding of a personal or work-related situation changed after studying these concepts?
- Did you agree or disagree with any of the material? If yes, how did you react and why?
- If you could have the opportunity to engage in further learning, what would it be?
- What further questions would like to ask the author of your readings?
- What other articles, books or discussions would be of interest?

  This journal is not submitted or graded, but is an opportunity for you to reflect on, and engage with, the course content. The questions posed will often help you prepare for your assignments and are designed to help you successfully achieve the learning outcomes for each unit.

1.3 Leadership and Scholarly Inquiry

On what basis are sound decisions made? What evidence do leaders rely upon for best outcomes? The need to evaluate 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. 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? Systematic inquiry (as represented by research) is one tool that leaders can use to inform best practices and their decision making process.

Systematic inquiry 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:

> Many have undertaken to draw up an account of the things that have been fulfilled among us, just as they were handed down to us by those who from the first were eyewitnesses and servants of the word. 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, so that you may know the certainty of the things you have been taught. (Luke 1:1-4, NIV)

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. The past two decades have produced remarkable growth in the area of foundations of research and research methodologies within natural, applied, and social sciences and humanities.

Boyer's Model of Scholarship

The Master of Arts in Leadership program is focused on applied scholarship. In defining this, Boyer's four-part Model of Scholarship (1997) is useful. Boyer's typology identifies four domains of scholarship: **discovery**, **integration**, **application**, and **teaching**. The model is discussed by Marta Nibert (2011) in her paper titled *Boyer's Model of Scholarship*. In the section titled **Application** she notes that the scholarship of

> . . . application, focuses on using research findings and innovations to remedy societal problems. Included in this category are service activities that are specifically tied to one's field of knowledge and professional activities. Beneficiaries of these activities include commercial entities, non-profit organizations, and professional associations. (para. 4)

Though Nibert's primary audience is the professoriate, this material is relevant for MA in Leadership learners. Application is highlighted because the Master of Arts in Leadership was designed to focus primarily on the scholarship of application, although work in the capstone will likely include one or more of the other domains.

Boyer's *Scholarship of Discovery* is the type of scholarship associated with traditional scholarly research. "Research is a systematic process of collecting, analyzing and interpreting information (data) in order to increase our understanding of a phenomenon abut which we are interested or concerned" (Leedy & Ormrod 2010, p. 2).

Boyer's Scholarship of Discovery is often referred to as *primary research.* Primary research is narrowly focused, and contributes to the body of knowledge by helping us to understand one isolated part of reality in detail in the hopes that this understanding can be generalized to some degree to a broader part of reality. The Scholarship of Discovery (in traditional research) falls into two distinct genres: quantitative research and qualitative research. Each of these genres manifest in numerous variations, including hybrid models involving both quantitative and qualitative elements, designed for and suited to differing research questions.

Boyer's *Scholarship of Integration* is "the attempt to arrange relevant bits of knowledge and insight from different disciplines into broader patterns that reflect the actual interconnectedness of the world" (Boyer cited in Jacobsen & Jacobsen, 2004, p. 51). Scholarship of Integration often demands interdisciplinary collaboration and requires that the critical analysis and review of knowledge be followed by the creative synthesis of views and insights in such a way that what is known speaks to specific topics or issues.

The *Scholarship of Application* is "the scholarship of engagement; seeking to close the gap between values in the academy and the needs of the larger world" (Boyer cited in Jacobsen & Jacobsen, 2004, p. 51). In the Scholarship of Application, knowledge is applied to the solution of societal needs and practice. In most cases, knowledge stemming from the Scholarship of Discovery and the Scholarship of Integration informs the solutions to particular problems. The Scholarships of Discovery and Integration are often associated with the context of formal education. The Scholarship of Application may happen within formal education contexts, it is most often associated with other settings (Bosher 2009, p. 6).

Finally, the *Scholarship of Teaching* is "the scholarship of sharing knowledge" (Boyer cited in Jacobsen & Jacobsen, 2004, p. 51). The Scholarship of Teaching involves the reflective analysis of the knowledge about teaching and learning. This knowledge base itself is the product of the Scholarships of Discovery, Integration and Application combining as "active ingredients of a dynamic and iterative teaching process" (Bosher, 2009, p. 5).

Boyer's typology originally identified as the Scholarship of Teaching has been expanded somewhat and is widely known today in the literature as the Scholarship of Teaching and Learning (Bosher, 2009). You have undoubtedly already noticed an ambiguity: If the entire model is called the Scholarship of Teaching, how is it that the last element depicted in the chart above is also called the Scholarship of Teaching? This ambiguity is evident, Bosher contends that Boyer's four domains were conceived holistically as elements that overlap and interact, not as

discrete elements, appearing in any predictable order, and are better viewed as an operating system than a list of discrete elements (2009, pp. 4-5).

1.3.1 Learning Activity

> Watch the following video where Dr. Patton introduces you to the concept of research as a scholar-practitioner.
> Next, answer the questions for this learning activity in your reflective learning journal.**
>
> - Describe at least one example of a decision you have made as a leader.
> - Consider the factors that went into that decision making process (e.g., values, research, policy, past experience, expert opinion).
> - What do you consider as "evidence" in your decision making?
> - In your own words, why is evidence-based decision-making important in leadership?
>
> *Note that your journal is not graded, but will help you in your assessment for this unit.*

1.4 Philosophical Foundations of Research

A professor of mine often observed that a fundamental attribute of being human is to ask questions. Humanity is especially 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. The philosophical category of 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. How we answer these questions reveals our perspective, or our worldview.

Every person bases his or her own thoughts, decisions, and actions on what is called a worldview. A worldview is "an interpretive framework through which one makes sense of themselves, other people, and the world around them" (Geisler & Watkins, 2003). It is like a pair of glasses that you wear when you are observing things about yourself, other people and the world in which you live. Here is a short video by the Impact 360 Institute (2014) that explains "What's your worldview?"

https://www.youtube-nocookie.com/embed/VXnSE0uvwzM?si=vMlxH0tv9If2BMvR

A discussion about worldview, or your perspective, is foundational to what we want to accomplish in this course. Throughout this course I will ask these questions: On what basis are sound decisions made? What evidence do leaders rely upon for best outcomes when they are making

decisions? Each of us has a preference for obtaining truth or a framework for understanding ourselves, others, and the world, and personal preferences abound. Researchers and consumers of research (i.e. us) approach knowledge and learning and life with a certain perspective and it is important to understand that perspective before you jump into the research journey and it is certainly something to consider in positions of leadership.

Figure 1.1: Image Source: https://link.springer.com/article/10.1007/s40670-019-00898-9

Research Paradigms
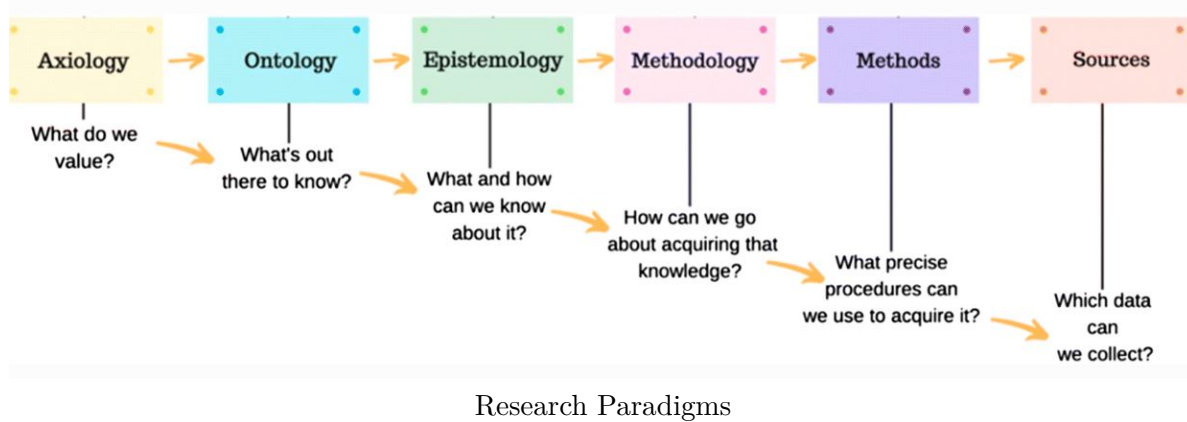
Here is a really helpful video by Laura Killam (2013) that explains Paradigms, Ontology and Epistemology.

https://www.youtube-nocookie.com/embed/hCOsY5rkRs8?si=fY6roMaT2toLH_Qz

It is important to be aware of your worldview before you enter into the research journey because it will inform the types of questions that you ask as well as the processes that you use to find the answers to your questions. As an example, let me explain a Christian worldview and explore how this worldview can be applied to the research journey.

A Christian worldview asserts that God has created the world and everything in it, and that truth is arrived at through a study of God's specific revelation (the Bible) and general revelation (creation). Christians believe not only in studying and understanding truth, but they also believe in a personal God that has revealed Himself through this created world.

The Christian worldview can be summarized in three words: Creation, Fall and Redemption. Let me unpack these terms. Initially, when God created the world, it was all good and whole and harmonious. God created man in His own image. Originally man was created healthy in body, soul and spirit (Genesis 1:26-27, 31). As people rebelled against God, causing the Fall, the presence of sin corrupted all aspects of God's good creation, and brought about much suffering. Where there was formerly harmony and wholeness, we now experience ourselves, our relationships and the world around us as fractured, broken and full of dis-ease (a literal discomfort with who we are) (Genesis 3).

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Despite the brokenness, Christians believe that God is actively working to bring about restoration and wholeness to His entire creation. Through Christ's redemptive work on the cross, people are reconciled to God and are challenged to make all things as they were created and meant to be – very good. Redemption means that all things are made new in Christ (Colossians 1:19-20).

The framework of Creation, Fall and Redemption is important because it allows us to enter into a discussion about research with confidence knowing that God's redemptive work touches this area. Christians believe that we are called to study creation with the desire to take the knowledge we gain and use it to help and bless others; to work toward the restoration and healing of God's creation. Christians are called to inquire, to investigate, to ask questions, always with a view to serve others.

It is beyond the purpose of this course to go deeper into this topic other than to make the point that our way of knowing and understanding the world around us (i.e., our worldview) influences how we approach all of life, including how we approach research and how we use research to inform our decision-making process.

1.5 The Research Process

Plano-Clark and Creswell (2015) define research as "a process of steps used to collect and analyze information in order to increase our knowledge about a topic or issue" (p. 4). Plano-Clark and Creswell (2015) identify eight steps in the research process which provide us with a useful framework that describes what researchers do when they conduct their studies. These steps help us understand the information that is included in their reports. Listed below are each of the eight steps in the research process.

1. The whole process begins with **identifying the research problem**. This step is vitally important. The statement of the research problem is the very foundation that subsequent research is built upon, and quite literally guides each and every step moving forward.
2. A **literature review** is a summary of the "state of knowledge" in a given area. This step is the primary focus of this course and involves locating relevant scholarly literature, and analyzing, synthesizing and summarizing what precedent literature has to say about a specific topic.
3. The **purpose of research** includes identifying the objective of a study (e.g., purpose statement). This information is typically expressed in a few research questions or hypotheses.
4. Next, it is important to **choose a research design.** This step involves describing an overall plan or approach of the study and also explains the methods used to carry out the plan.
5. **Selecting participants and collecting data** includes who will be the participants, how you will collect information from those participants, and what permission you need to obtain in order to collect the information.

6. **Analyzing data** involves systematic processes to make sense of the information that has been gathered. We call this process "results," which are then reported in forms appropriate to the research method (e.g., statistics or words).
7. **Drawing conclusions** means interpreting the results and explaining how the conclusions relate to the research questions/hypotheses, and/or similar studies. There is also a discussion of limitations of the study and often suggestions of implications for the intended audiences, for practice and for future research.
8. **Disseminating and evaluating the research.** Usually the term "disseminated" means "published." The most common way that research is disseminated is in journals dedicated to publishing primary research.

1.5.1 Learning Activity

Begin this learning activity by watching the following video where Gary Gramenz explain Philosophical Foundations for Research Methodology. https://www.youtube.com /watch?v=j758XBXD4r4

Next, read the following articles:

Wallace (2007). Servant leadership: A worldview perspective

Brown & Dueñas,(2020). A Medical Science Educator's Guide to Selecting a Research Paradigm: Building a Basis for Better Research.

Next, take a few minutes to think about your own worldview. **Then answer the questions for this learning activity in your reflective learning journal.**

- What motivates you? What are you driven by? (e.g. funding, social justice, the common good)
- Do you believe there is "one verifiable reality," or that "multiple socially constructed realities" exist?
- What do you think counts as knowledge within the world?
- How do you think knowledge acquired?
- Based on the Brown and Duenas article, what research paradigm resonates with you the most? (i.e., positivist, post-positivist, social constructivist, critical theory). Why does it resonate with you?

Note that your journal is not graded, but will help you in your assessment for this unit.

1.6 Asking Significant Questions

The most important part of the research process is beginning with a good research question. This is something that will be highly relevant to completing of most of your assignments in this course.

The research process often starts when you ask a question about something that you observe: How, What, When, Who, Which, Why, or Where? Questions can be based on what you observe in the real world, or on intuition or a "gut feeling".

The question that you select is the cornerstone of your work in this course. The assignments you will be working on will revolve around finding an answer to the question you are posing. It is important to select a question that is going to be interesting to work on for the length of this course and a question that is specific enough to allow you to find the answer.

The Higher Education Academy and Sheffield Hallam University (2005) have developed an excellent guide for Formulating the Research Question. According to the authors, good questions are:

Relevant: The question will be of interest to people in your field and arise from issues raised in the literature or in practice. You should be able to establish a clear purpose for your research in relation to the chosen field. For example, are you filling a gap in knowledge, analyzing professional practice, monitoring a development in practice, comparing different approaches?

Manageable: The question you ask must be within your ability to tackle. For example, are you able to *access* people, statistics, or documents from which to collect the data you need to address the question fully? Can this data be accessed within the limited *time* and *resources* you have available to you? Sometimes a research question appears feasible, but when you start your literature review, it proves otherwise.

Substantial and (within reason) original: The question should not simply copy questions asked in other papers. It shows your own imagination and your ability to construct and develop research issues. And it needs to give sufficient scope to develop into a research paper.

Clear and simple: Getting this clear and thought-through is one of the hardest parts of your work. If you create a clear and simple research question, you may find that it becomes more complex as you think about the situation you are studying and undertake the literature review.

Interesting: This is key! The question needs to be one that interests you and is likely to remain intriguing for the duration of the project. There are two traps to be avoided. Make sure that you have a real, grounded interest in your research question, and that you can explore this in an academic paper. It is your interest that will motivate you to keep working and to produce a good research paper.

1.6.1 Learning Activity

The Master of Arts in Leadership program values the application of best practices to your personal and professional practice. Before we get into some of the concrete realities of accessing scholarly literature, we would like you to take time to reflect on and articulate some of the salient **leadership interests** in your personal and professional life and practice. At the end of the MA Leadership program (in LDRS 697 & 698) you will get an opportunity to create a project based on a salient leadership problem/interest. It is good to start thinking about what the topic may be now so that you can use the assignments in this course to start preparing for your final project.

Begin this learning activity by watching the following video about asking significant questions:

Watch: Systematic Reviewing Workshop Part 2: Formulating a Research Question https://www.youtube-nocookie.com/embed/DRG8TYiciLs?si=WdU0yo7cnxOOZfQV

Take time to answer the questions for this learning activity in your reflective learning journal.

- Where do you see the greatest need for change in the field you want to work as a leader?
- What would you propose to change in your field and why?

Try using the following three statements to help you get some clarity about what exactly you want to investigate. If you can fill out these statements, then you most likely have a narrow enough topic with enough direction to perform some great research.

- I am researching _____ (What? Topic) because I want to find out _____ (So What? Issue/question) in order to _____ (Now What? Application/Purpose).

Note that your journal is not graded, but will help you in your assessment for this unit. (Source: The Research Problem/Question - Organizing Your Social Sciences Research Paper - Research Guides at University of Southern California)

1.7 Summary

In this unit you have learned about what scholarly inquiry is, what is a worldview and how it can shape the questions that we ask. You have also learned about the importance of scholarly inquiry for leadership, the implications of evidence-based decision making for leaders, and how to develop a good research question.

Checking Your Learning

Now that you have completed the learning activities and assignments for this unit, check the list below to see if you can do the following:

1. Can you distinguish between informal research and scholarly inquiry?
2. Can you discuss how scholarly inquiry applies to everyday decision making?
3. Reflect on why evidence-based decision making is important for leadership?

Feel free to review topics more in depth or continue on to the next unit.

2 Accessing and Evaluating Scholarly Literature

Overview

In Unit 2, we will focus on gaining familiarity with various genres of scholarly literature, getting a sense of how these genres contribute to your own scholarly endeavours. Through first-hand experience you will begin locating, organizing and evaluating relevant scholarly literature. Two of the major assignments in this course hinge on your ability to conduct a review of precedent literature. Although these assignments are not due until the later in this course, our work in Unit 2 is the foundation for those assignments.

Topics

Unit 2 is divided into 3 topics:

1. Accessing Scholarly Literature
2. Utilizing Scholarly Literature
3. Evaluating scholarly literature

Learning Outcomes

When you have completed this unit you should be able to:

1. Employ different search strategies to locate different sources of scholarly literature.
2. Evaluate the credibility and reliability of sources of scholarly literature.
3. Document and synthesize key sources connecting them with the research question and topic area.

Activity Checklist

Here is a checklist of learning activities you will benefit from in completing this unit. You may find it useful for planning your work.

> **Learning Activities**
>
> - **Activity:** Watch the video on accessing scholarly literature. Read Chapters 2 and 4 in the Frederikson & Phelps text. *Watch: Preparing Research Questions for a Database Search*
>   Follow the directions on searching for books through the TWU Library
> - **Activity:** Watch the videos on how to develop research skills avsilsblr through the following links Evaluating Journal Articles ; How to Evaluate Sources
> - **Assessment:** Contribute to the course discussions. See Assessment tab in Moodle for details.
> - **Assessment:** Complete Assignment #1: Clarifying Your Research Interest.

Resources

Here are the resources you will need to complete the unit:

- Video tutorials found at: http://libguides.twu.ca/library_research/home

2.1 Accessing Scholarly Literature

In this unit you will be exploring the topic "Accessing and Evaluating Scholarly Literature". This unit will help you gain familiarity with various genres of scholarly literature and help you get a sense of what scholarly sources of information are available, given your own research interests. In this unit you will also gain first-hand experience in locating and organizing and evaluating relevant scholarly literature.

The learning activities in this unit will walk you through some very practical readings and video tutorials on how to access and evaluate scholarly literature. Let's begin!

Accessing scholarly literature can be a frustrating process. The key is to start at the beginning with a good plan and keep yourself organized. Organizing tools are important both to streamline your literature search and to summarize and synthesize. As you begin your literature search (library books, online periodicals, internet search), organize your search into general topic areas and more specific keywords. It is very helpful to have some sense of the various fields that will potentially inform your research interests.

Part of your planning and organizing is to recognize various genres of scholarly literature and to be aware of the limitations inherent to each.

There are three different categories of documents where you can find research reports: summaries and books, journal articles and early stage materials such as conference presentations.

Many times you will see this sequence followed: A research project is completed, and the research is first published in a Mater's thesis or PhD dissertation, or as a paper in a symposium or conference. The research report then goes to a professional journal for publication and eventually it is incorporated into a book. By the time a dissertation is successfully defended, the actual research may have been conducted two to three years earlier. It could easily take another three years for a journal article to make it through the peer-review process and be published. Therefore, the research referenced in the journal article could be at least five years old. It could easily take another five years for high quality publishers to work through their review processes and publish something in a book. Obviously, what you lose in this process is cutting edge thought.

The chart below summarizes the relative advantages and disadvantages of each genre of scholarly literature. You can refer to Plano-Clark and Creswell (2015) pages 10-12 for more details.

Genre	Advantages	Disadvantages	Utility
Summaries (encyclopedias and handbooks)	Generally highest quality.	Tend to be dated.	Establish a general working knowledge of the field.
Books	Generally high quality.	Can be dated.	Establish mainstream thought. Most foundational literature is found in books.
Journal Articles	Generally high quality.* Provide a clear description of actual research. Generally more current than books or summaries.	Generally will not give a full development of application and implications.	Best available balance between quality and currency.
Early stage materials (conference papers, dissertations, newspapers, personal websites etc.)	Most current cutting edge ideas are found here.	Little review for quality (except for dissertations). Ideas are not usually well developed.	Valuable for establishing trends in current thought. Use cautiously.

Note: High quality journals are determined by the peer review process, the journals impact factor (IF) and by professional reputation. The impact factor is a measure of the

frequency with which the average article in a journal has been cited in a particular year. The IF is used to measure the importance or rank of a journal by calculating the times its articles are cited. The IF can be found on the home page of most online journals.

Peer review is the process used by publishers and editors of academic/scholarly journals to ensure that the articles they publish meet the accepted standards of their discipline. Manuscripts being considered for publication are sent to independent experts in the same field (the author's scholarly or scientific peers). They evaluate the quality of the scholarship, reliability of findings, relevance to the field, appropriateness for the journal, etc.

Rosch, Kniffen, and Guthrie (2023) provide useful tip sregarding what sources of literature you should access. They suggest discovering your purpose through what you observe in daily life, identifying p[ractical issues, past and current research, and becoming aware of significant theories in the broader field of study (p. 41). As a general rule, articles published within the past 10 years should give you a good idea of what is current in your profession.

2.1.1 Learning Activity: Watch, Read, and Search for Journal Articles

Read chapters 13 and 14 in the Rosch, Kniffin & Guthrie (2023) text. These two chapters discuss 'Becoming a critical scholar' and 'A lifetime of learning in leadership.'
Watch the tutorial
https://vimeo.com/161998287/7661f12293
Click on the library link "How to search for articles." Begin by selecting one of video tutorials in the section on multi-disciplinary databases such as https://vimeo.com/160918763/913f61489b
https://vimeo.com/160918763/913f61489b
Watch the video tutorial to get an idea of how to search for a topic in a multi-disciplinary database.

Keeping in mind the topic and specific question(s) you identified in Assignment 1, use the Academic Search Ultimate database at the TWU library to locate a good example of a **journal article**. To do this you will need to:

1. Go to the TWU library home page.
2. In the first search window, click the databases tab and then click the articles and databases link which brings you to a different screen.
3. In the Database Guide screen you will need to select "A-B" from the A-Z list of databases at the bottom of this page.
4. The first database that appears on the next screen is "Academic Search Ultimate." Select this database.
5. You will be asked to sign in as a student with your pass ID and password to access

the online database.

6. Once you have signed in, then you will be able to type your topic or question in the search window of "Academic Search Ultimate."

Searching for Books

1. Go to TWU library homepage and click "How to search for books".
2. Begin by selecting one of video tutorials in the section "searching for e-books" such as "searching for e-books in the classic catalogue." Watch the video tutorial to get an idea of how to search for a topic found in an e-book.
3. Keeping in mind the topic and specific question(s) you identified in Assignment 1, use the library catalog to locate a good example of an **e-book.**

Answer the questions for this learning activity in your reflective learning journal.

- Briefly describe your experiences in the search for a journal and an e-book, what worked well, what did not, what key search terms did you use, what databases did you search?

Note that your journal is not graded, but will help you in your assessment for this unit.

2.2 Utilizing Scholarly Literature

After you have determined what sources you will be accessing, you need to conduct a search, and then keep track of your literature search strategy and results. The simplest way to do this is to use an online reference manager that will help you collect, organize, cite and share your references according to the referencing style you will be using. There are several free, online reference managers available such as Refworks, Zotero, and EndNote. TWU library has a research guide that describes how to use EndNote. This library guide will help you sign up for an EndNote account and also help you figure out how to use EndNote to download and store your citations in folders and then input citations into Word documents and create reference lists.

After you have retrieved the results from your database searches and organized them in folders in your reference manager, you need to select documents to review. Begin by reviewing the titles and abstracts. For those articles that you deem worthwhile, skim the article itself to determine if it is relevant to your topic. Read the introduction and literature review and examine the reference list.

As you collect relevant literature you can either enter it into a summary chart or just collect the abstracts. There is no single correct way to do this—but you will need to develop some sort of system that works for you. An example of a summary chart is provided below:

Category	Description
Reference	Cite full reference in APA (6th edition) format for a reference list.
Research Problem	Describe the research problem and relevant background information. Include page references for both your summaries and direct quotations.
Purpose, Research question or Hypothesis	Describe the purpose, research question and hypothesis. Include page references for summaries and quotations.
Data Collection/Procedure	Describe how the researcher collected data. What participants did they use? What measures did they use? What method was used?
Results/Findings	Describe the results or findings.

The research process is not always linear. You may have a great research question or research topic in mind, but as you begin your initial database and library searches you may find yourself changing or refining your topic. Sometimes you will not find any information on the topic you have chosen because the topic is so new and no one has done any research on the topic yet. Sometimes you will not find any information on the topic you have chosen because you are not using the right search terms or keywords.

If you are having difficulty finding research articles and books on your topic then try to re-examine the keywords you are using for your search. Look up synonyms for your keywords and try to find the terms that are used in the research literature. Another helpful tip is to look at the reference list of any articles or books that seem closest to your topic. This can help you to see what sources other authors have used and can be a helpful strategy to track down articles and books on your topic.

2.2.1 Learning Activity: Read, Watch and Reflect

Begin this learning activity by reading Chapter 6 of the Fredericksen and Phelps (n.d.) text.

Next, go to the TWU library homepage and click "How to develop research skills." Begin by watching all of the video tutorials under the section "upgrading your research skills." There are several short videos in this section on Boolean searches, search history, and other search techniques.

Answer the questions for this learning activity in your reflective learning journal.

- Briefly describe your experiences with upgrading your research skills.
- What did you find worked well, what did not?
- What boolean searches did you use, what inclusion or exclusion criteria did you select?

Note that your journal is not graded, but will help you in your assessment for this unit.

2.3 Evaluating Scholarly Literature

After you have found several articles and books related to your research topic and skimmed them for relevance, the next step is to evaluate your information sources. Unfortunately, not all information that you will come across is going to be credible and reliable. Just because you find articles and books at the library does not mean that the information will be accurate or of high quality.

As an MA Leadership student, and as a professional, it is imperative that you are able to critically evaluate information you are reading in order to conduct quality research yourself, inform policies and improve your professional practice. To evaluate a source for quality and credibility you need to consider the following:

- **Authority:** Who is the author? What are the author's credentials (educational background, past writing experience, expertise on the topic)? Is the author's name cited in other sources or reference lists? A simple google search will help you explore these questions.
- **Currency:** When was the source published? Is the source current or out of date for your topic? Remember the general rule is to use sources that have been published within the past 10 years.
- **Purpose:** What is the author's intention? Is the information the author's opinion or is the author communicating evidence-based results? Who is the author's intended audience? Is it the academic community or consumers? Is the author's point of view objective and impartial? Is the language in the article or book free of emotion or bias?
- **Content:** What kind of information is provided in the article or book? Is it a research article, popular book or opinion piece on a blog? Is the information provided backed up with references or sources? What is the length of the reference list?
- **Publication type/process:** Who published the source? Was the source peer-reviewed? Is the publisher a university press or a large reputable publisher? Is it from a government agency? Is the source self-published?
- **Bias and special interests:** According to Panucci and Williams (2010) bias can occur during all phases of research from design, implementation, and analysis to publication. Therefore, careful attention to the interpretation of research results and study design will help identify bias. Driscoll and Brizee (2017) suggest that when it comes to publishing research reports, "most major publishers are out to make a profit and will either not cater to special interest groups or will clearly indicate when they are catering to special interest groups".

Additional Sources for Finding Scholarly Literature:

I also wanted to mention two other sources of information that you can use to gather information on your research topic. The first is viewing the TED talk videos. These videos are a great resource to help you become familiar with a researcher and their work on a specific topic. You can search almost any topic on the TED website, the videos are usually under 20 minutes, and are very good. You can find TED site here: https://www.ted.com.

The second resource is using the reference lists at the back of a book or of a journal article on your topic. These are both great places to find additional sources of information on your topic and also help you become familiar with who is publishing information in your area of interest.

2.3.1 Learning Activity: Watch, Read, and Reflect

Begin this learning activity by watching the following video that explains how to evaluate your sources.
Watch: How to Evaluate Sources
https://www.youtube-nocookie.com/embed/bZ122WakNDY?si=hVcC8n-whXyO4RNT
Next, read chapter 6: Evaluating Sources in the Fredericksen and Phelps (n.d.) text.
Next, watch the following videos:
Watch: Assessing Online Resources
https://vimeo.com/162602381/1b0d684fb6
and
Watch: Evaluating a journal article
https://www.youtube-nocookie.com/embed/z6dOGkpI6H4?si=hTq2llkPncVEK5Jo
Answer the questions for this learning activity in your reflective learning journal at the bottom of this page.

- Briefly describe how you found your online sources and whether or not you think they will be helpful resources for your topic.
- What sources of information will you use the most to conduct research on your topic?
- How will you evaluate these sources to make sure they are credible and reliable sources of information?

Note that your journal is not graded, but will help you in your assessment for this unit.

2.4 Summary

In this unit you have learned about the research process and what is involved in asking good research questions. You have learned how to identify different scholarly sources, how to access those sources through the TWU library, and how to keep track of your literature search strategies and results. In addition, you have learned how to critically evaluate scholarly sources. The activities in this unit are directly related to your third, fourth and final assignments in this course. Coming up next week in Unit 3 you will be discovering how to develop your professional scholarly voice, particularly through your scholarly writing.

Checking Your Learning

Now that you have completed the learning activities and assignments for this unit, check the list below to see if you can do the following:

1. Can you identify a research interest and develop a good research question?
2. Can you employ different search strategies to locate different sources of scholarly literature?
3. Can you evaluate the credibility and reliability of sources of scholarly literature?

Feel free to review topics more in depth or continue on to the next unit.

3 Developing Your Scholarly Voice

Overview

An essential attribute of scholarly work is that of writing well. Writing well involves several components. Some are conceptual—reasoning and developing a logical argument. Others reflect the mechanics of good written communication—organization of a manuscript, style and language use, grammar, spelling, and punctuation. APA formatting also falls within this category of the mechanics of writing well. The MA Leadership program uses the APA Manual (7th edition) as the model for formatting written work formally submitted. Unit 3 is devoted to helping you become familiar with some of the more common elements of scholarly writing and APA style.

Topics

Unit 3 is divided into 4 topics:

1. Developing Your Professional Voice
2. What is Scholarly Writing?
3. How to Write a Scholarly Paper
4. APA Citations and References

Learning Outcomes

When you have completed this unit you should be able to:

1. Describe the importance of scholarly writing for leadership.
2. Apply the basic rules of APA style which includes the structure and content of a paper, writing clearly and concisely, the mechanics of style, citing sources and formatting references.
3. Create an APA style paper.

Activity Checklist

> **Learning Activities**
>
> - **Activity:** Watch a video and reflect in your learning journal.
> - **Activity:** Read chapter 2 of the APA (2019) manual, watch a video, and practice your skills in your learning journal. Alternately you can access The Purdue Owl site to reference Chapter 2 of the APA (2019) Manual using the following link - General Format -Purdue OWL® - Purdue University
> - **Activity:** Read chapter 4 of the APA (2019) manual, watch a video tutorial, and reflect in your learning journal. Alternately you can access The Purdue Owl site to reference Chapter 2 of the APA (2019) Manual using the following link - General Format -Purdue OWL® - Purdue University
> - **Activity:** Read chapter 8 of the APA (2019) manual, watch a video, take a quiz, and practice your skills in your learning journal. General Format - Purdue OWL® - Purdue University
> - **Activity:** Read chapter 9 of the APA (2019) manual, watch a video, and practice your skills in your learning journal. General Format - Purdue OWL® - Purdue University
> - **Activity:** Read an article and answer questions in your journal.
> - **Assessment:** Contribute to the course discussions. See Assessment tab in Moodle for details.
> - **Assessment:** Complete Assignment #2: Literature Search.

Resources

Here are the resources you will need to complete the unit:

- American Psychological Association (2019). *Publication manual of the American Psychological Association* (7th ed.). Washington, DC: American Psychological Association.
- APA Formatting and Style Guide (7th Edition). APA Formatting and Style Guide (7th Edition) - Purdue OWL® - Purdue University
- Onwuegbuzie, A. J., Combs, J. P., Slate, J. R., & Frels, R. K. (2010). Evidence-Based Guidelines for Avoiding the Most Common APA Errors in Journal Article Submissions. *Research in the Schools, 16*(2), ix-xxxvi.
- Peterson, J. (2017). The Power of Writing [video file]. Retrieved from https://youtu.be/bfDOoADCfkg

3.1 Developing Your Scholarly Voice

In Unit 3 you will be discovering how to develop your professional scholarly voice, specifically through your scholarly writing. This means that you will be reading content that will help you understand that there are different writing styles that are used in the world of academia and how important it is to use APA style in the MA Lead program.

Your learning activities this week are focused on applying the APA standards for general aspects of writing, mechanics of writing and citing sources. You will also have a chance to apply these skills in literature search, scholarly article critique, and formal literature review. Let's get started!

When you are asked to write a scholarly paper in graduate school, what you are really being asked to do is to develop your professional voice (McDonald, 2011). A professional voice can be described as utilizing formal language, good vocabulary and appropriate tone in your written and oral communication (Walden University Writing Center, 2017). Characteristics of a strong professional voice are writing concisely, with clarity and precision, and appropriately citing your sources (McDonald, 2011).

Developing your professional voice is important because some students will turn their papers into professional manuscripts that will be submitted to a journal or a book. Some students may be asked to present their work at a professional conference. McDonald suggests that "for most students, writing papers in graduate school is an exercise in presenting important information in an easy to understand and concise way" (p.125).

A well developed professional voice can also benefit you in your professional context. For example, at work you may be asked to write a briefing document for your school or hospital board, or you may be asked to share your ideas with other professionals at a conference, or you may be asked to write a grant to fund your organization's new project. These are just three examples of professional situations where it is important to have a well-developed professional voice so that you can communicate in a clear and concise way.

In order to communicate well, you need to have a system to organize your thoughts so that the information you are writing is presented in an organized and clear manner. There are a wide variety of publication styles that are employed today in universities and in scholarly publications. A few that you may be familiar with are Chicago style, MLA style, Turbian style and APA style. The American Psychological Association (APA) has developed a writing style that is used to establish a standard of written communication. This standard includes: the organization of content, writing style or writing mechanics, citing references, and how to prepare a manuscript for publication in certain disciplines (APA, 2010). The MA Leadership program uses the APA Manual (7th edition) as the model for formatting written work formally submitted.

Aside from simplifying the work of your instructors by having everyone use the same format for a given paper, using APA style makes it easier for readers to understand a text by providing

a familiar structure they can follow. Abiding by APA's standards as a writer will allow you to:

1. Provide readers with cues they can use to follow your ideas more efficiently.
2. Provide readers with dates of publications to help them locate current information that may be of interest to them.
3. Allow readers to focus more on your ideas by not distracting them with unfamiliar formatting.
4. Establish your credibility in the field by demonstrating an awareness of your audience and their needs as fellow researchers.

3.1.1 Learning Activity: Watch and Reflect

In this learning activity you will begin by watching the following video "The Power of Writing" by Dr. Jordan Peterson. In the video, Dr. Peterson explains the importance of writing.
* Watch: Jordan Peterson on the Power of Writing*
https://www.youtube-nocookie.com/embed/bfDOoADCfkg?si=OnTklFKibdLaWiAL
Answer the questions for this learning activity in your reflective learning journal.

- What is your previous experience with APA style?
- Discuss why you think scholarly writing could be important in your leadership context.

Note that your journal is not graded, but will help you in your assessment for this unit.

3.2 What is Scholarly Writing?

According to Heady (2013), graduate-level (or scholarly) writing is "clear, correct and concise, but it adds the elements of originality and discipline specific expertise" (p. 2). Heady suggests that graduate-level writing explores a topic or a research question in an original way, demonstrates extensive research done on the topic, has a strong organizational structure, and is written for a professional audience. The scholarly writer writes in a way that is skillful, engaging and organized well so that the paper moves from point to point allowing the reader to follow in a logical progression. Heady also states that "a good paper has a clear and obvious structure: you can enter it through a clear, well-composed introduction, you move from section to section, and you exit where you know you have been and what you have seen" (p. 73).

Critical Thinking

One of the distinguishing features of scholarly writing is the practice of critical thinking. Critical thinking is "that mode of thinking — about any subject, content, or problem — in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing and reconstructing it" (Foundation for Critical Thinking, 2015). In addition, critical thinking also involves creating new and original information, conclusions and ideas (Heady, 2013). Scholarly writing, should reflect higher levels of learning. According to Bloom's (1956) taxonomy there are six levels of learning: knowledge, comprehension, application, analysis, synthesis and evaluation. When you are writing a scholarly paper, the focus should not be on just identifying, comprehending material and applying it, your writing should also reflect analysis, synthesis and evaluation. What this means is that your writing (and your thinking) should be able to: * Break down ideas into parts and see how those parts relate and are organized to demonstrate analysis. * Re-arrange ideas into a new whole to demonstrate synthesis. Make judgments based on internal evidence or external criteria to demonstrate evaluation.

Structure and Organization

Writing a scholarly paper often follows a very distinct organizational structure and includes: a title page, an introduction, methods and results, a discussion and a list of references. Let's take a closer look at what should be included in each of these sections of a scholarly paper.

Title Page: This is the first page of your paper and it should include a title that summarizes the main topic you will be discussing. It should also include your name (the author), and the institution you are affiliated with (Trinity Western University). It is also helpful if you include the date that you are submitting the assignment.

Abstract: This the second page of your paper. The purpose of the abstract is for the author to convey the sentiment of the study in a concise yet informative manner. The abstract is used to determine if the reader is interested in the article and wants to retrieve the article for further information. In 250 words, the abstract explicitly states the overall problem and research question, a brief description of the method, a summary of the findings and important conclusions.

Introduction: The purpose of an introduction is to inform the reader of the rationale for your research topic. It should provide a brief overview of the "problem" that you are addressing by providing a broad context, any relevant statistics and describing the importance of your topic. The introduction is also the place where you can define any important terms that may be unfamiliar to the reader and ends with establishing what the key purpose for the paper is. The purpose can be stated as your research question.

Methods: The methods section outlines specifically what procedures the author chose to do. In a research report this section will include the sampling methods, sample size, measures, research design, and interventions used. The methods section of a research report looks very

different than a methods section of a literature review. In a literature review, the methods section will emphasize how you chose the articles and how you evaluated the articles you reviewed. This will include describing any inclusion or exclusion criteria, the databases that were searched, what key search terms were used, how many records were obtained and how many articles were included in the review. You can refer to the APA (2019) manual for a more detailed explanation of the methods section.

Results: The results section reports the findings of the data analysis of a research report or the critical analysis of a literature review. Please refer to the APA manual (2019) for extensive detail about the results of different empirical research reports.

Discussion: In the discussion section, the authors describe their own interpretations of the results and link these interpretations back to the literature that was reviewed. In this section the author may discuss the strengths and limitations of the literature, draw conclusions, and make recommendations for future research on the topic.

Reference List: The reference list provides a precise list of all of the sources you cited within your paper.

An example of an APA style paper can be found at the following link:

APA Sample Paper - Purdue OWL® - Purdue University

3.2.1 Learning Activity: Watch, Read and Practice!

> Read chapter 2 of the APA (2019) manual which discusses the structure and content of an APA style manuscript or paper.
> Next, watch the following video on formatting a student paper. This video shows you how to set up your title page and other pages in APA style in a word document.
> Practice your skills by creating a title page and second page in an APA formatted word document.
> *Note, these elements will be evaluated in Assignment 2, 3, and 4.*

3.3 How to Write a Scholarly Paper

To begin writing a scholarly paper you need to have a research topic in mind. Then you need to do a review of scholarly literature to obtain a good working knowledge of your topic and then critically evaluate and synthesize the literature you have read. Finally, you need to have an organizational system for presenting what you know about the research topic. The APA (2019) manual provides a clear organizational structure for presenting scholarly information.

When you begin writing, it is important to remember that you are communicating ideas about a topic to a specific audience. In order to convey your ideas well, you need to write clearly and concisely with set of specific guidelines. This is important for two reasons: to keep your reader's attention and to make sure your meaning is clear. If your writing is long-winded, you will either lose the interest of your reader or confuse your reader. When your writing is more concise and clear, this will motivate your reader to pay attention to what you have to say.

There are also times when you are writing with a specific purpose in mind. For example, to prepare an assignment or a board briefing document. Writing clearly and concisely helps a writer communicate what needs to be said in an efficient and effective way. It is also easy to understand and helps the writer connect with the audience. Here is an excellent resource by the Purdue Owl Writing Center on "Tips for Writing in North American Colleges"(owl.purdue.edu › owl › tips_for_writing_in_north_american_colleges). This website is full of helpful resources to help you improve your scholarly writing.

3.3.1 Learning Activity: Read, Watch and Reflect!

In this learning activity you will begin by reading chapter 4 of the APA (2019) manual which discusses writing style and grammar.

Next, watch the following video on key elements for scholarly writing.

Watch video

Answer the questions for this learning activity in your reflective learning journal.

- Make note of the elements of APA style writing that you struggle with and need to improve on for your next assignment.
- What resources could you use to improve your scholarly writing?

Note that your journal is not graded, but will help you in your assessment for this unit.

3.4 Citing the Ideas of Others

Within each section of a scholarly paper, each paragraph utilizes a combination three types of content: claims, evidence and transitions. Heady states that "claims are the points you want to prove, interpretations you want to offer, and assertions you want to make, whereas, evidence is the material you use to back up your claims" (pp. 74-75). Some examples of types of evidence that may be used to support claims include: "quotes from a book, citations from an article, data from a study, personal experience, historical facts, statistics, etc. Transitions are one or two words that help you move from one claim to another" (pp. 74-75).

An example of the three types of content (claims, evidence and transitions) included in a paragraph of scholarly writing is provided below from the article "A Systematic Literature

Review of Servant Leadership Theory in Organizational Contexts" by Parris and Peachy (2013, pp. 377-378):

> Over the years, some leadership scholars have called attention to the implicit connection between ethics and leadership. A burgeoning new research area and leadership theory that has been linked to ethics, virtues and morality is servant leadership (Graham 1991; Lancot and Irving 2010; Parolini et al. 2009; Russell 2001; Whetstone, 2002). Despite servant leadership being coined by Robert K. Greenleaf over three decades ago in 1970, it remains understudied yet prominently practiced in boardrooms and organizations (Bass and Bass 2008; Spears 2005).

From the example above, you can see that a topic is introduced in the first sentence. A claim with supporting evidence is provided in the second sentence (with references) and the transition begins in the third sentence with the word "despite". The third sentence also includes a claim with supporting evidence (references). This paragraph structure is typical of what you would find in scholarly writing. Scholarly writing involves putting your own thoughts and ideas (claims) in context by ensuring that you are citing the ideas of those who have influenced you (APA, 2010, p.169).

Heady (2013) suggests five general rules you should always follow when you are organizing your paper (p. 80):

1. You must provide enough background information to give your reader a good working knowledge of your topic.
2. Your background information must lead logically to your research question.
3. All claims/ideas/facts must be backed up by evidence.
4. All evidence must be related to a claim/idea/fact.
5. If evidence does not back up a claim, you need to explain why and/or account for it.

3.4.1 Learning Activity: Read, Watch and Practice!

In this learning activity you will begin by reading chapter 8 of the APA manual (7th edition).

Next, watch the following video tutorial "In-text Citations, Quotations and Plagarism" by Dr. Forlenza. In the video Dr. Forlenza discusses the importance of properly citing sources in APA format.

Next, practice your skills by taking the following quiz. Then, you can check your answers to the quiz here.

Then, in your learning journal you can practice citations in APA format for the following:

1. A direct quote less than 40 words with proper in-text citation.
2. A direct quote more than 40 words with proper in-text citation.
3. A sentence that refers to an idea from the article (paraphrased), and provide a

proper in-text citation.

Note that these elements will be assessed in assignments 2, 3 and 4.

3.5 Reference Lists

The reference list provides a precise list of all of the sources you cited within your paper. APA (7th edition) has many rules to follow for correct formatting of references (see chapters 6 and 7). In general, the APA manual states "when in doubt, provide more information rather than less. Because one purpose of listing references is to enable readers to retrieve and use the sources…" (p.193).

3.5.1 Learning Activity: Read, Watch and Practice!

In this learning activity, you will begin by reading chapter 9 of the APA manual (7th edition).

Next, watch the following video tutorial "Reference Lists" by Dr. Forlenza. In the video Dr. Forlenza discusses the different elements required for, and examples of, references in APA style.

Finally, practice your skills by taking this online quiz. Then, you can create a reference list in APA format for the following sources:

1. A journal article
2. A book or book chapter
3. A blog post
4. A doctoral dissertation or master's thesis
5. An online newspaper or news magazine article
6. A government report

Note that these elements will be assessed in assignments 2, 3 and 4.

Additional APA Resources

- "The APA Style Blog is the official companion to the Publication Manual of the American Psychological Association, Sixth Edition. It's run by a group of experts who work with APA Style every day. We publish weekly posts to talk about what we love—writing, publishing, and APA Style. We explore what APA Style is and how it works in a variety of areas, including reference citations of every sort, grammar and usage, the publication

process, and social media. Occasionally we feature guest bloggers who write about more technical issues." (APA Style Blog, 2017)

- "The Purdue OWL: Online Writing Lab resources will help you learn how to use the American Psychological Association (APA) citation and format style. This section contains resources on in-text citation and the References page, as well as APA sample papers, slide presentations, and the APA classroom poster." (Purdue OWL, 2017)*

3.5.2 Learning Activity: Read and Reflect!

I just want to encourage you because you have worked through a lot of very technical material in this unit. I want you to know that I expect students to make many APA mistakes in this course. I don't expect everyone to read the APA manual, watch the tutorial videos, and be able to apply every detail automatically. What I do expect is that you try to begin applying what you have learned about APA every time you write something. You will find with every assignment that you will make APA mistakes, and that is ok. I actually find the best way to learn APA is to make mistakes, correct them, and then learn what to do right the next time. I still make mistakes and I have been working with APA style for many years.

In this learning activity you will begin by reading the following article Evidence-Based Guidelines for Avoiding the Most Common APA Errors in Journal Article Submissions
Answer the questions for this learning activity in your reflective learning journal.

- Discuss the elements of APA style or scholarly writing that you struggle with and how you plan to improve on these elements before you submit your next assignment.

Note that your journal is not graded, but will help you in your assessment for this unit.

3.6 Summary

In this unit, you have learned how important it is to use APA style in graduate level writing. You have also learned how to apply the APA standards for general aspects of writing and citing sources.

Checking Your Learning

Now that you have completed the learning activities and assignments for this unit, check the list below to see if you can do the following:

1. Can you describe the importance of scholarly writing for leadership?
2. Can you apply the basic rules of APA style which includes the structure and content of a paper, writing clearly and concisely, citing sources and formatting references?
3. Can you confidently create an APA style paper?

Feel free to review topics more in depth or continue on to the next unit.

4 Introduction to Research Reports

Overview

In unit 4 we are going to find out more information about research reports. To start, we will focus on understanding the common elements found in the introduction of research reports. We will be engaging with the research problem, the review of precedent literature, and the research purpose. Although the terms "research problem" and "research purpose" sound similar, we will see that although related, they are quite different.

Topics

Unit 4 is divided into 4 topics:

1. What is Servant Leadership?
2. What is a Research Problem?
3. What is a Literature Review?
4. What is the Research Purpose?

Learning Outcomes

When you have completed this unit you should be able to:

1. Compare and contrast the common elements of a quantitative research question and a qualitative research question.
2. Evaluate the quality of the research problem, literature review, and purpose statement of a research report on servant leadership.
3. Reflect on the importance of understanding the introduction section of a research report for a critical consumer of research.

Activity Checklist

> **Learning Activities**
>
> - **Activity:** Watch a video, read the article by Sendjaya and Sarros (2002), "Servant leadership: Its origin, development, and application in organizations," and reflect in your journal.
> - **Activity:** Read Chapters 1 through 4 of the Rosch et al. (2023) text. Evaluate the statement of the problem and the purpose statement in an article on servant leadership
> - **Assessment:** Contribute to the course discussions. See Assessment tab in Moodle for details.
> - **Assessment:** Complete Literature Review Search (Assignment #2)

Resources

Here are the resources you will need to complete the unit:

- Rosch, D. M., Kniffin, L. E., & Guthrie, K. L. (2023). *Introduction to research in leadership.* Information Age Publishing.
- *E-Resources:* The articles in this unit can be found through the TWU library.

4.1 What is Servant Leadership?

To begin this unit, I want to provide you with a very brief overview of servant leadership because the research articles that I have selected for you to focus on for units 4, 5, 6, 7, and 9 are all focused on the topic of servant leadership. I have included articles on servant leadership from the field of education, business, non-profit and health care. Servant leadership, as a concept, has its origins tracing back to the earliest records we have in history. It is not a religious concept, however, it is a concept that you will find is supported by most of the world's major religions. For Christians, Jesus Christ is considered the epitome of a servant-leader. In fact servant leadership is fully aligned with the teachings of Christianity. For example, read the following passage from Mark 10:35-45 which states "But among you it will be different. Whoever wants to be a leader among you must be your servant." Mark 10:43 Consider the following reflection on this passage by Mark Roberts (2014). In 1970, Robert Greenleaf began writing about servant leadership in our modern day context in his seminal essay "The Servant as Leader". He stated that "servant leadership begins with the natural feeling that one wants to serve others first. Then conscious choice brings one to aspire to lead. That person is sharply different from one who is leader first…"(p.6). Several years later Larry Spears (2010) went on to write an essay that describes the ten characteristics of a servant leader. They are:

- Listening
- Empathy
- Healing
- Awareness
- Persuasion
- Conceptualization
- Foresight
- Stewardship
- Commitment to the Growth of People
- Building Community

According to Sendjaya and Sarros (2002) "There has been a strong tendency among leadership scholars and journalists to treat leaders as isolated heroes controlling and commanding others from within their ivory tower. In the organizational context, the word 'leader' has been mostly ascribed to people who hold management positions and are capable of giving orders to other members of the organization (Senge, 1990)". The authors suggest that servant leadership may offer a better alternative.

4.1.1 Learning Actiivty: Watch, Read and Reflect

> Read the article by Eva et al., (2019) Servant leadership: A systematic review and call for future research to familiarize yourself with the current state of research on servant leadership.
> After reading the article, complete the questions for this learning activity in your reflective learning journal.
>
> - What is already known and not known about servant leadership?
> - Why do you think servant leadership should be of interest researchers in the leadership field?
>
> *Note that your journal is not graded, but will help you in your assessment for this unit.*

4.1.2 What is a Research Problem?

All good research begins with a good research problem. Plano-Clark and Creswell (2015) suggest that research problems "are the issues, controversies or concerns that demand study" (p. 80). They assert that these are often real problems that must be addressed. Gall, Gall and Borg (2007) suggest that in identifying the research problem, the researcher should consider personal interest, the potential benefits to the researcher's professional growth, and potential contribution of the research study to research knowledge. They suggest that all three criteria should be considered, with emphasis on the first and third. Somewhat reflexively, a thorough

review of literature on a topic that interests you informs the identification of a good research problem. Gall, Gall and Borg (2007, p. 43) suggest that through the process of the literature review, researchers ask themselves the following kinds of questions.

- Has research on this problem been done before?
- What has been learned?
- What more can I contribute?
- How do my methods compare to those employed by other researchers?
- Are there more compelling research problems to be addressed?

All of these contribute to answering the ultimate question for any research: "So what?" As a consumer of research, these sorts of questions can help you identify a good research problem to focus your personal research interest. This narrowing of research interest, or research problem, is a process that is refined as you read over a variety of different sources of literature.

4.1.3 Learning Activity: Watch, Read, and Reflect!

> To begin this learning activity, watch the following three videos.
>
> 1. *Watch: Starting a Systematic Review*
> 2. *Watch: An Introduction to Writing a Systematic Review - Laurie Theeke – Sept 2017*
> 3. *Watch: Finding Studies for Systematic Reviews*
>
> Re-read chapter 2, "Beginning the process of research in leadership," in the Rosch, Kniffin, and Guthrie (2023) text to help you understand what the statement of the problem is and what to look for in a high-quality article.
> In your reflective learning journal, practice evaluating the quality of a study's statement of the problem of the Eva et al., article.
>
> - In your learning journal, identify what your overall quality rating is of this section and list three pieces of evidence to support your rating.
>
> *Note that your journal is not graded, but will help you in your assessment for this unit.*

4.2 What is a Literature Review?

The research problem establishes why a particular research study is worth doing. The review of the literature supports this by establishing what is already known about the problem and summarizes what scholarship has already established regarding the research problem. This has many facets that go beyond merely establishing the research purpose. As we will see,

a literature review affects every aspect of a research study and its final report. For that reason, one of the most important preliminary steps in the process of scholarly inquiry is doing a thorough review of the precedent academic literature on a given topic. A precedent literature review is the process of locating, obtaining, reading and evaluating the research and theoretical literature in your area of interest. Bordens and Abbott (2005) outline several important reasons for a researcher to conduct a precedent literature review:

1. **To avoid needless duplication of effort.** By becoming familiar with an area of study through a review of the literature, the researcher can avoid "re-inventing the wheel." The researcher's specific question or topic may already have been thoroughly addressed and answered. In the case of research designed for application, a review of literature provides a rich resource of information upon which to draw and apply to the chosen context.
2. **To clarify the design of research.** Designing a study involves decisions regarding which concepts or variables are most germane and how to define, measure, or describe them. The published literature provides the researcher with a rich resource of information about each of these dimensions. The researcher may also find established procedures or existing materials (e.g., a survey tool) that would inform their research.
3. **To update the researcher on the current state of knowledge in a particular field**. Researchers must be up to date on current empirical or theoretical advances and controversies in a particular area.

Gall, Gall & Borg (2007, pp. 96-97) provide a similar but expanded list of reasons for the researcher to conduct a thorough review of precedent literature:

1. **Delimiting the research problem.** Generally, it is advantageous to the researcher to investigate a limited problem in depth as opposed to doing a superficial study over a broad area. Review of precedent research will give you insight into how other researchers have focused their inquiry within a broad field.
2. **Seeking new lines of inquiry.** A thorough review of precedent literature will not only reveal what has been done in a given area of interest, but will also, perhaps more importantly, reveal what has been overlooked. This is valuable information for a potential researcher and is a major driver of new research.
3. **Avoiding fruitless approaches.** The cause of scholarship is not advanced by the multiplication of research studies based on the same methodological paradigm that continues to report no significant effect, and the researcher who adds to such a litany clearly demonstrates that he or she has not done an adequate review of precedent literature. As a wise and discerning consumer of research, you want to avoid wasting your time with fruitless approaches.
4. **Gaining methodological insights.** Researchers can find important ideas as to how they can design their research to be more fruitful. As a wise consumer of research, you may consider looking for reports using a variety of research methods.
5. **Identifying recommendations for further research.** For both the researcher and the discerning consumer of research, the section of research reports that makes recommendations for further research can be a gold mine.

A precedent literature review that is useful and instructive exhibits the following features:

- the writer's clarity of purpose and focus of the research question
- the thoroughness of the writer's search
- the quality and reliability of the writer's sources
- the degree to which the writer provides synthesis (i.e., relates research studies to one another and to the paper's thesis and purpose in meaningful ways)
- the objectivity of the writer in selecting, interpreting, organizing and summarizing the research he or she has reviewed.

4.2.1 Learning Activity: Watch, Read, and Reflect!

In this learning activity, begin by watching the following videos:

1. *Watch: Conducting a Systematic Literature Review*

https://www.youtube-nocookie.com/embed/bWJpRUN6iSM?si=NwqM7AUqoix_IAit

1. *Watch: What are Systematic Reviews and Literature Reviews*

https://www.youtube-nocookie.com/embed/a2TDymxmLW4?si=VXOMrbgVboZdm8Ad

Next, read chapter 4 "Conducting a literature review" in the Rosch, Kniffin, and Guthrie (2023) text.

Practice evaluating the quality of a study's literature review, using the Eva et al., article. Use the quality criteria discussed in the Rosch, Kniffin, and Guthrie (2023) text to evaluate the quality of the literature review.

Finally, in your reflective learning journal, identify what your overall quality rating is of this section and list three pieces of evidence to support your rating. Make some notes about what you would look for in a high quality "Literature Review".

Note that your journal is not graded, but will help you in your assessment for this unit.

4.3 What is the Research Purpose?

The research problem establishes why a particular research study is worth doing or why it matters, the review of precedent literature establishes what is already known about the problem, and the research purpose establishes what the research specifically intends to do. Typically, the research purpose is further refined into a limited number of research questions or predictions (hypotheses) that the researcher will address. Taken together, these three common elements in introductions to research reports combine in such a way as to "pose significant

questions that can be answered empirically" (Gall, Gall & Borg, 2007, p. 35). As a consumer of research, you are vitally interested in the answers research reports offer to your significant questions. Identification of the research problem and review of precedent literature leads directly to specifying the purpose of the study. The purpose will then provide direction for selection of the research design, data collection, analysis of data in determining findings or results and finally in the interpretation and evaluation of the research.

4.3.1 Learning Activity: Watch, Read and Reflect!

> Practice evaluating the quality of a study's purpose statement/research question, using the Eva et al., article. Use the criteria discussed in the Rosch, Kniffin, and Guthrie (2023) text to evaluate the quality of the research question/purpose statement.
> Finally, in your reflective learning journal, identify what your overall quality rating is of this section and list three pieces of evidence to support your rating. Make some notes about what you would look for in a high quality "Purpose Statement and/or Research Question".
> *Note that your journal is not graded, but will help you in your assessment for this unit.*

4.4 Summary

In this unit you have learned about the origin and development of servant leadership and the common elements found in the introduction of research reports. You have learned about the research problem, the review of precedent literature, and the research purpose and the similarities and differences among qualitative and quantitative research reports. Although theses terms are similar, they are quite different and serve different functions in the introduction of a research report.

Checking Your Learning

> Now that you have completed the learning activities and assignments for this unit, check the list below to see if you can do the following:
>
> 1. Can you evaluate the quality of the research problem, literature review, and purpose statement of a research report on servant leadership.
> 2. Can you discuss the importance of understanding the introduction section of a research report for critical research.
>
> *Feel free to review topics more in depth or continue on to the next unit.*

5 Understanding Quantitative Research Reports

Overview

In unit 5 we will examine the next major section of a research report: the methods and results. In this unit, we will see that the methods section indicates the overall plan for how the research was conducted, how the data was collected, and what the analysis of the data tells us. These may be termed research design, method, and analysis and results, respectively. Because of significant differences in quantitative and qualitative methods, we will break this discussion into two units. This unit will focus on the methods and results of quantitative research reports.

Topics

Unit 5 is divided into 4 topics:

1. Introduction to Quantitative and Qualitative Research Design
2. Quantitative Research Designs
3. Quantitative Data Collection
4. Quantitative Data Analysis and Results

Learning Outcomes

When you have completed this unit you should be able to:

1. Describe the differences between a quantitative and qualitative research report
2. Evaluate the research design, participants, data collection, analysis and results of a quantitative research report on servant leadership.
3. Reflect on the importance of understanding the methods and results section of a quantitative research report for the critical consumer of research.

Activity Checklist

<div style="border: 1px solid #2aa876; border-left: 4px solid #2aa876; border-radius: 6px; padding: 1em;">

Learning Activities

- **Activity:** Watch a video on Qualitative & Quantitative Research - An Introduction.
- **Activity:** Read chapter 6 and 7 in your text. Evaluate the research design in the servant leadership article you chose.
- **Activity:** Read chapter 8 and 9 in your text. Evaluate the participants and data collection in the servant leadership article you chose.
- **Activity:** Read two articles and chapter 12 in your text. Evaluate the data analysis and results in the servant leadership article you chose.
- **Assessment:** Contribute to the course discussions. See Assessment tab in Moodle for details.
- **Assessment:** Complete Article Critique Part 2 (Assignment #3)

</div>

Resources

Here are the resources you will need to complete the unit:

- Rosch, D. M., Kniffin, L. E., & Guthrie, K. L. (2023). *Introduction to research in leadership.* Information Age Publishing.
- *E-Resources:* The articles in this unit can be found through the TWU library.

5.1 Introduction to Quantitative and Qualitative Research Design

In this unit we will explore the next major section of a research report: The methods and results section. We will see that the methods section indicates the **overall plan** for how the research was conducted, how the data was collected, and what the analysis of the data tells us. These may be termed research design, method, and analysis and results, respectively. In unit 5 we will be looking at the methods and results sections of **quantitative research reports**. Once again we start with the reminder that we are *reviewing* these materials in order to become an *informed consumer of research*, rather than research experts. Before we get into the specifics of the methods and results of quantitative research reports, it would be helpful to take a step back and remind ourselves of some of the features of the broader research landscape.

By now you should be familiar with the terms quantitative research and qualitative research. Plano-Clark and Creswell (2015) assert that these research approaches are suited to different kinds of research questions: a quantitative research approach is indicated when the research

problem requires ***explanation***, while a qualitative research approach is indicated when the research problem requires ***exploration*** (p. 85). Expanding on that somewhat, Leedy and Ormrod assert that quantitative research has three purposes: to explain and predict, to confirm and validate, and to test theory. In contrast, qualitative research has three distinct purposes: to describe and explain, to explore and interpret, and to build theory (Leedy & Ormrod, 2010, p. 96). These differing research purposes find expression in differing research processes, the kinds of data gathered, the approaches to data analysis, and finally in the ways findings are communicated.

In this unit we will be looking at the methods and results sections of *quantitative research reports,* and in unit 6 we will do the same for qualitative research reports. We will see that there are a variety of different research designs under both of these general approaches. For example, Gill and Johnson (2002) have developed a helpful continuum (see the figure below) that describes the relative emphasis of various research designs on selected characteristics. They argue that quantitative designs (including survey research) tend towards deduction while qualitative designs are inductive in nature.

Figure 5.1: Gill and Johnson's continuum of research design emphases

<<--->>

Experiments, quasi-experiments, surveys, action research, ethnography, phenomenology

1.	Deduction	vs.	Induction
2.	Explanation via analysis of causal relationships and explanation by laws	vs.	Explanation of subjective meaning systems and explanation by understanding
3.	Generation and use of quantitative data	vs.	Generation of qualitative data
4.	Use of various controls, physical or statistical, so as hypothesis	vs.	Commitment to research in everyday settings, to allow access to, subjects of research
5.	Highly structured research Methodology to ensure replicability of 1, 2, 3, and 4	vs.	Minimum structure to ensure 2, 3, and 4.

Adapted from Gill & Johnson (2002)

According to Leedy and Ormrod, the nature of quantitative and qualitative research designs differ (2010, p. 96). Quantitative designs tend to be more closely focused on a problem that has known variables that can be controlled or at least accounted for. The investigation is conducted following established guidelines utilizing largely predetermined methods while the researcher seeks to maintain a detached view. In contrast, qualitative designs tend to be more holistic,

investigating unknown variables following flexible guidelines utilizing emergent methods in a highly context-bound, personal approach. Qualitative designs may be characterized as evolving and flexible, sometimes guided by a general hunch as to how to proceed (Bogdan & Biklen, 2007, p. 45).

These differing designs lead to marked differences in what data are collected, how data are collected, and how data are analyzed. Quantitative research seeks to collect numeric data from as large a sample as possible so to enhance claims to being representative, using standardized data collection instruments. Qualitative research gathers textual or image-based data from typically small, informative samples using loosely structured or non-standardized interviews or observations (Leedy & Ormrod, 2010, p. 96).

The differing designs of quantitative and qualitative research also lead to marked differences in how data are analyzed. Quantitative data is approached primarily through deductive reasoning, employing statistical analyses applied to numerical data, with stress on objectivity. Qualitative data is approached primarily through inductive reasoning with the goal being to uncover themes and categories, with acknowledgement of potential researcher bias and subjectivity. Typically, quantitative research findings are reported in a formal, scientific style with full display of numbers and statistics, while qualitative research findings are typically reported in a narrative form (Leedy & Ormrod, 2010, p. 96). In the following sections, we will explore this somewhat for quantitative research.

5.1.1 Learning Activity: Watch and Reflect

To begin this learning activity, watch the following video Qualitative & Quantitative Research - An Introduction.
Watch: Qualitative & Quantitative Research - An Introduction
https://www.youtube-nocookie.com/embed/RYmLE8UqCXU?si=aYIljkensbVL4FtO
After reading the chapters assigned, complete the questions for this learning activity in your reflective learning journal.

- Discuss the differences between qualitative and quantitative research reports.
- What did you learn that you did not already know about servant leadership?
- What are the potential challenges for studying servant leadership using a quantitative research approach?

Note that your journal is not graded, but will help you in your assessment for this unit.

5.2 Quantitative Research Designs

Quantitative research designs typically rely on the researcher beginning with a theoretical (or conceptual) framework that will determine what concepts the researcher chooses to investigate, the research questions, and the framing of research findings (Corbin & Strauss, 2008, p. 39). These frameworks lead to a structured, predetermined, formal, and specifically detailed plan of operation (Bogdan & Biklen, 2007, p. 45).

In Chapter 6 and 7, Rosch, Kniffen and Guthrie (2023) discuss five quantitative research designs. Experiments—particularly randomized control trials (RCTs)—are often held up as the "gold standard" of research, meeting the criteria of randomization, control, and manipulation of variables (i.e., experimental procedures, treatments, or interventions). In the domain of knowledge transfer and evidence-based practice, RCTs are considered as the highest level or most reliable form of evidence. For further understanding see the following video by David Schwartz "Not All Scientific Studies are Created Equal".

https://www.youtube-nocookie.com/embed/GUpd2HJHUt8?si=KVHjsGzOM2mfcYFu

By way of caution, Gill and Johnson (2002) observe that management and leadership research seldom employs true experimentation. Having said this, there is relevance for us because the logic underpinning experimental research applies to other types of deductive research that are more common in management and leadership research. When not all of the rigorous standards required of experiments can be applied to a study, researchers approximate some of the logic of the experiment with quasi-experimental designs.

In true experimental and quasi-experimental designs, the researcher intentionally introduces an intervention, and then seeks to measure the response to that intervention. The main difference between experimental and quasi-experimental designs lies in the way sampling is done. In non-experimental quantitative research designs, the researcher seeks to understand the behavior or attributes of the study sample without any researcher intervention. The terms descriptive and correlational are often applied to these types of quantitative research designs.

As a consumer of research reports, you can usually find an indication of what research methodology is employed in the abstract of a research study. This is important information for you to identify, as you will quickly develop a sense of what to expect as you continue to read. This sense is important as you critique the research report, and make value judgments as to its worth.

A Note About Survey Research

At this point we want to focus on survey research for a few moments because of its wide use in leadership and management settings. While the survey is a method of data collection that may be used in qualitative research (Gall, Gall & Borg, 2007, p. 227), it is extensively employed in quantitative research (Rosch, Kniffen and Guthrie, 2023). Be aware of ambiguities in how the

term survey is used (see "Here's a Tip!" on page 207). Often the term is used as a general label to denote the use of questionnaires or interviews in research. Because of the differences in intentions for generalizability between quantitative and qualitative research, this ambiguity is not helpful.

Survey research is a popular research method used to generalize from a sample to a population in order that inferences can be made about some characteristic, attitude, or behavior of the larger population (Creswell, 2003). Survey research may be conducted through use of either questionnaires or interviews. These methods allow the researcher to collect data about observable phenomena as well as phenomena that would be difficult to otherwise assess (i.e., opinions, values, feelings, etc.). Questionnaires present the same questions in some form of print to all study participants uniformly, and responses are received in like manner. In interviews, the researcher presents the same questions orally to study participants, usually one at a time, but increasingly in groups, and the responses are received orally. The main difference in the two approaches lies in the fact that with questionnaires the research participant is largely in control of the response situation, whereas in the interview the researcher is largely in control. Each approach has relative advantages and disadvantages, but share in common the desire to collect data in standardized ways. For this reason, closed ended questions are typically used.

As a consumer of survey research reports, be vigilant for potential issues of validity and reliability. Validity is a term that forces us to question the likelihood of whether the instrument or study measure actually measures what the researcher says it does. Reliability issues concern the consistency or repeatability of the instrument. Be aware that survey research is commonly criticized on these grounds.

5.2.1 Learning Activity: Watch, Read, and Reflect

> Begin this learning activity by watching the following video
> *Watch:QUANTITATIVE Research Design: Everything You Need To Know (With Examples)*
> https://www.youtube-nocookie.com/embed/VQbkw-SI8c4?si=04s_aFXXSaCqe6tj
> Next, read chapter 6 and 7, in Rosch, Kniffen and Guthrie (2023).
> Practice evaluating the quality of a study's research design, using the quality criteria discussed in TRosch, Kniffen and Guthrie (2023) to evaluate the quality of the research design.
> Finally, in your learning journal, identify what your overall quality rating is of this section and list three pieces of evidence to support your rating. Make some notes about what you would look for in a high quality "Research Design" for a quantitative research report.
> *Note that your journal is not graded, but will help you in your assessment for this unit.*

5.3 Quantitative Data Collection

When researchers are collecting data for a quantitative research study, they need to address two important questions: who is the data being collected from, and how are they collecting it? In answering the first question, the terms *population* and *sample* are salient. Population is the large category that encompasses all of the individuals who possess or exhibit certain characteristics of interest. Quantitative data is usually collected from large samples, selected ideally through random selection.

Sample refers to the individuals from the population that you actually gather data from. The goal in sampling is to find a representative sample that accurately represents that population. In quantitative research, a primary interest of researchers is in *generalizability*: which is to what degree can the results of our research study be generalized back to the population? This generalization is called external validity and requires an inferential leap from the sample back to the population.

In quantitative research, samples are drawn from the population through processes of *probability sampling* and *non-probability sampling techniques.* A number of sampling techniques are discussed by Plano-Clark and Creswell (2015) in Chapter 7. The gold standard is a true random sample of the population. This is where everyone gets an equal opportunity to be selected as a representative sample, and this is known as probability sampling.

The second major consideration in qualitative data collection is how the data is collected. In quantitative research, data collection instruments and tools are used most often to capture variables of interest. This may include using inventories, questionnaires, indexes, scales and test scores (Bogdan & Biklen, 2007, p. 46). As a consumer of research, when judging the quality of tests used in research consider the criteria of fairness, generalizability, cognitive complexity, content quality, meaningfulness, content coverage and cost and efficiency (p. 217).

A variable is anything that can vary, i.e. changed or be changed, such as eating behaviour or time taken to perform a task. There are three types of variables that are usually found in experimental investigations: the dependent variable (or outcome), the independent variable (treatment/predictor) and counfounding variable (extraneous factors that could affect the results) .

In an experiment, the researcher is looking for the possible effect on the dependent variable that might be caused by changing the independent variable, while controlling for extraneous variables (Bogdan & Biklen, 2007, p. 45). These are all variables, which are not the independent variable, but could affect the results of the experiment.

What Is Research Ethics?

According to Walton (n.d.), "research that involves human participants raises unique and complex ethical, legal, social and political issues. There are three objectives in research ethics.

The first and broadest objective is to protect human participants. The second objective is to ensure that research is conducted in a way that serves interests of individuals, groups and/or society as a whole. Finally, the third objective is to examine specific research activities and projects for their ethical soundness, looking at issues such as the management of risk, protection of confidentiality and the process of informed consent".

Before a researcher can start collecting information from participants, the research proposal must undergoe ethical review. In Canada, all academic institutions and health authorities have a Research Ethics Board (REB) and in the U.S. the same institutions have Institutional Review Boards (IRB) that conduct the reviews. The purpose of the ethical review process is to "ensure that research is planned and conducted in accordance with laws and regulatory standards. In protecting the rights and welfare of participants, REBs must weigh possible harms to individuals against the plausible societal benefits of the research. They must ensure fair participant selection and, where applicable, confirm that appropriate provisions are in place for obtaining participant consent" (Page & Nyeboer, 2017, para. 2).

What Is Informed Consent? by usc Oprs

Informed Consent is a voluntary agreement to participate in research. It is not merely a form that is signed but is a process, in which the participant has an understanding of the research and its risks. Informed consent is essential before enrolling a participant and ongoing once enrolled. Informed Consent must be obtained for all types of human research including; diagnostic, therapeutic, interventional, social and behavioral studies, and for research conducted domestically or abroad. Obtaining consent involves informing the participant about his or her rights, the purpose of the study, the procedures to be undergone, and the potential risks and benefits of participation. Participants in the study must participate willingly. Vulnerable populations (i.e. prisoners, children, pregnant women, etc.) must receive extra protections. The goal of the informed consent process is to provide sufficient information so that a participant can make an informed decision about whether or not to enroll in a study or to continue participation.

5.3.1 Learning Activity: Watch, Read, and Reflect

Begin this learning activity by watching the following video: *Watch:Quantitative Data Collection Techniques*
https://www.youtube-nocookie.com/embed/y9qtot92N9Q?si=Kmwe2tRBsdDKT2F1
Next, read chapter 7, in Rosch, Kniffen and Guthrie (2023).
Practice evaluating the quality of a quantitative study's participants and data collection. Use the quality criteria discussed in Rosch, Kniffen and Guthrie (2023) to evaluate the quality of the participants and data collection.

Finally, in your learning journal, identify what your overall quality rating is of this section and list three pieces of evidence to support your rating. Make some notes about what you would look for in a high quality "Participants and Data Collection" section of a quantitative research report.

Note that your journal is not graded, but will help you in your assessment for this unit.

5.4 Quantitative Data Analysis and Results

Quantitative research data analysis is generally deductive, occurs at the conclusion of data collection and is statistical (Bogdan and Biklen, 2007, p. 46). An in-depth understanding or even an overview of statistical analysis is outside the parameters of this course. However, even if you do not have a background in statistics, you must find your way through what can initially appear to be a daunting discussion.

The methods section of a quantitative research report typically presents a brief description of various statistical analysis of data. The statistical analysis chosen depends on the kind of questions asked in the research. Descriptive statistics include various measures of central tendency (including mean, median, mode, skewness, and categorical data such as frequency distribution), measures of variability (including standard deviation, the normal curve, variance and range) and correlational statistics (including bivariate and multivariate correlational methods). Inferential statistics are applied to data in an effort to answer comparison and relationship sorts of questions.

As a consumer of qualitative research reports, you will want to know that the statistics employed are appropriate, and to be cautious about accepting research findings if you detect any inconsistencies.

5.4.0.1 Additional Resources

I wanted to provide you with a few extra resources to help you understand Quantitative Analysis and Results.

Here is a link to a really helpful website created by Dr. Andy Field. Dr. Field goes into much more detail about everything you need to know about statistics than the course textbook. Here is the website: https://www.discoveringstatistics.com/ If there is something you don't understand when you are reading through the results section of a quantitative research study, search Dr. Field's website.

5.4.1 Learning Activity: Read, Evaluate and Reflect

> Begin this learning activity by watching the following video
> Quantitative Data Analysis 101 Tutorial: Descriptive vs Inferential Statistics (With Examples) - Watch video
> Next, read chapter 7, "Analyzing Data Quantitatively" in Rosch, Kniffen and Guthrie (2023).
> Practice evaluating the quality of a quantitative study's analysis and results, using the quality criteria discussed in Rosch, Kniffen and Guthrie (2023) to evaluate the quality of the data analysis and results.
> In your learning journal, identify what your overall quality rating is of this section and list three pieces of evidence to support your rating. Make some notes about what you would look for in a high quality "Analysis and Results" section of a quantitative research report.
> *Note that your journal is not graded, but will help you in your assessment for this unit.*

5.5 Summary

In Unit 5 we have explored quantitative research methods. We have learned that the methods section indicates the **overall plan** for how the research was conducted, how the data was collected, and what the analysis of the data tells us. These sections of a research report are called the research design, method, and analysis and results, respectively. Coming up in unit 6 we will be looking at the methods and results sections of qualitative research reports.

Checking Your Learning

> Now that you have completed the learning activities and assignments for this unit, check the list below to see if you can do the following:
>
> 1. Can you describe the differences between a quantitative and qualitative research report?
> 2. Can you evaluate the research design, participants, data collection, analysis and results of a quantitative research report?
> 3. Can you discuss the importance of understanding the methods and results section of a quantitative research report?
>
> *Feel free to review topics more in depth or continue on to the next unit.*

6 Understanding Qualitative Research Reports

Overview

In unit 6 we continue our overview of the most common research methods used in leadership research. Remember that the purpose of these overviews is that you will be a more informed consumer of research and a practitioner of evidence-based leadership practices. Specifically, this unit will focus on the research design, method, and analysis and findings of qualitative research reports.

Topics

Unit 6 is divided into 3 topics:

1. Qualitative Research Design
2. Qualitative Data Collection
3. Qualitative Data Analysis and Findings

Learning Outcomes

When you have completed this unit you should be able to:

1. Evaluate the quality of the methods and findings section of a qualitative research report on servant leadership.
2. Reflect on the importance of understanding the methods and findings section of a qualitative research report.
3. Apply what you have learned about qualitative research methods to your own leadership context.

Activity Checklist

Learning Activities

- **Activity:** Read Chapter 8 and 9 in your text. Evaluate the research design in the servant leadership article you chose.
- **Assessment:** Contribute to the course discussions. See Assessment tab in Moodle for details.
- **Assessment:** Complete Scoping Review (Assignment #3)

Resources

Here are the resources you will need to complete the unit:

- Rosch, D. M., Kniffin, L. E., & Guthrie, K. L. (2023). *Introduction to research in leadership.* Information Age Publishing.
- *E-Resources:* The articles in this unit can be found through the TWU library.

6.1 Qualitative Research Design

This week in Unit 6 you will be exploring a different approach to research: ***qualitative research methods***. Rosch, Kniffen and Guthrie define qualitative research as procedures for collecting, analyzing, and reporting text and image by exploring participant views.

Qualitative research has three distinct purposes: ***to describe, to explore, and to build theory***. Quantitative research and qualitative research designs differ significantly in what data are collected, how data are collected, how data are analyzed and how findings are reported.

As someone who was trained as a quantitative researcher, I would sometimes hear people in my discipline discredit the qualitative approach to research. However, as qualitative research has become more mainstream over the last 20 years, now I would say the most widely held opinion is that there is no best method. "It all depends on what you are studying and what you want to find out" (Bogdan & Biklen, 2007, p. 43). I can certainly appreciate understanding a problem or a phenomenon from both a quantitative and qualitative perspective. For example, in order to understand the complexity and "messiness" of real-life organizations, it is important for leaders to not just rely only on statistics, but to also examine what employees, consumers, and leaders have to say from a qualitative perspective.

It is really important that you read through the textbook chapters on quantitative (chapters 6, 7) and qualitative research (8, 9) so you understand the distinct differences in the two approaches.

Qualitative research was "mainstreamed" in recent years, though understanding the complexity and "messiness" of real-life organizations, leadership investigation is turning increasingly to qualitative research.

Qualitative research designs typically are less structured than in quantitative designs, and are far more flexible. In contrast to quantitative research design's resting solidly on theoretical frameworks, in qualitative research design the use of theoretical frameworks is not nearly so clear. While some qualitative researchers do employ theoretical frameworks, at least to some degree, others, such as Corbin and Strauss "prefer not to begin our research with a predefined theoretical framework or set of concepts" (Corbin & Strauss, 2008, p. 39). Consequently, qualitative research design has been characterized as an "evolving, flexible, general hunch as to how you might proceed" (Bogdan & Biklen, 2007, p. 45). Theoretical frameworks are employed in qualitative research design to suggest alternate explanations, to help the researcher determine appropriate methodology, and to provide the basis for building and extending theory. The primary consideration for the qualitative researcher is that they remain "open" to new ideas and concepts that might not fit the concepts of the adopted theoretical framework (Corbin & Strauss, 2008, p. 40).

6.1.1 Learning Activity: Watch, Read, and Reflect

Begin this learning activity by watching the following video: *Watch: QUALITATIVE Research Design: Everything You Need To Know (With Examples) https://www.youtube-nocookie.com/embed/CgrmjGPvFvQ?si=DqKnnyggDl0uiFL7

Next, read chapter 9, "Structure and Design of Qualitative Research" in Rosch, Kniffen and Guthrie (2023).

Then, read the article by Ragnarsson, Kristjánsdóttir, & Gunnarsdóttir (2018). To Be Accountable While Showing Care: The Lived Experience of People in a Servant Leadership Organization prepare yourself for the group activity in this unit.

After reading the article, reflect on the following questions in your learning journal:

- What did you learn from this article that you did not already know about servant leadership?
- What are the potential challenges for studying servant leadership using a qualitative research approach?
- Make some notes about what you would look for in "Structure and Design of Qualitative Research".

Note that your journal is not graded, but will help you in your assessment for this unit.

6.2 Qualitative Data Collection

Qualitative research data collection is typically based on one or more of the following methods: observation (including participant observation), open-ended interviewing, first person accounts, and the review of various documents. Data collected is descriptive, and may consist of personal documents, field notes, various records of people's own words (including video and voice recordings and written transcripts), photographs, official documents, and other artifacts. Data is collected from small, non-representative samples selected through various sampling strategies including theoretical, purposeful, and snow ball sampling (Bogdan & Biklen, 2007, p. 45).

A dominant word encountered in qualitative research is triangulation. Triangulation is a term borrowed from navigation and surveying, and conveys the notion that multiple sources of information will help establish a fact (Bogdan & Biklen, 2007, p. 115). Multiple sources of data are seen to lead to a fuller, more complete, and more defensible understanding of the phenomena observed. Consequently, multiple methods of data collection are frequently employed within the same qualitative research study. These commonly consist of the researcher's field notes, interviews, researcher observations, and analysis of various documents.

In qualitative research, data is usually collected until saturation is achieved. Saturation is a term employed that simply means that no new information relevant to the development of categories, properties, dimensions and variances is forthcoming from continued data gathering (Corbin & Strauss, 2008, p. 143). In effect, findings begin to replicate, and not add anything substantially new (Gall, Gall & Borg, 2007, p. 278). Qualitative researchers oft

6.2.1 Learning Activity: Read, Evaluate and Reflect

> Begin this learning activity by visiting the following link:, How To Organize Your Qualitative Data Collection
> Next, read chapter 9, "Structure and Design of Qualitative Research" in Rosch, Kniffen and Guthrie (2023).
> Practice evaluating the participants and data collection of the Ragnarsoson et al., article. Use the quality criteria discussed in Rosch, Kniffen and Guthrie (2023) to evaluate the quality of the participants and data collection.
> Finally, in your learning journal, identify what your overall quality rating is of this section and list three pieces of evidence to support your rating. Make some notes about what you would look for in a high quality qualitative research report.
> *Note that your journal is not graded, but will help you in your assessment for this unit.*

6.3 Qualitative Data Analysis and Findings

Qualitative research data analysis typically employs analytic induction, is ongoing throughout the research, and seeks to identify themes and concepts emergent in the data (Bogdan & Biklen, 2007, p. 46). This is a dynamic process in which the researcher breaks data apart into its various components in order to identify their properties and dimensions (Corbin & Strauss, 2008, p. 46). Because data might suggest more than one story, analysis is an interpretive act that often begins, as in Glaser and Strauss' constant comparison, from the very onset of data collection (Gall, Gall & Borg, 2007, p. 469).

Data analysis involves "working with the data, organizing them, breaking them into manageable units, coding them, synthesizing them, and searching for patterns" (Bogdan & Biklen, 2007, p. 159). Analysis involves data interpretation where ideas about the findings are related to broader concerns and concepts. Levels of analysis can range from the superficial description to theoretical interpretation (Corbin & Strauss, 2008, p. 80). The task is monumental. Software such as HyperRESEARCH© is of great assistance in helping the researcher assign codes to text data, which assists in the identification of concepts and themes. Qualitative research findings or results are usually presented in a narrative form. This can take many forms, and be organized in a variety of ways including the use of tables and figures when appropriate. Chapter 11 of the course text provides a concise discussion of this topic.

Because qualitative research can involve the investigation of as few as one research participant (as in a case study), great caution is exercised in making sweeping generalizations. In fact, because the term generalizability itself is strongly associated with quantitative research with much larger samples, Gall, Gall and Borg suggest the term applicability is more appropriate to the different processes and types of evidence associated with qualitative research (2008, p. 477).

6.3.1 Learning Activity: Watch, Read, and Reflect

Begin this learning activity, by watching the following videos:

1. Qualitative Data Analysis 101 Tutorial: 6 Analysis Methods + Examples - Watch video

https://www.youtube-nocookie.com/embed/j9A3ceOBihM?si=2lvJPrT33dfVdx3b

2. Qualitative Coding Tutorial: How To Code Qualitative Data For Analysis (4 Steps + Examples) - Watch video

https://www.youtube-nocookie.com/embed/8MHkVtE_sVw?si=MAo-IgVuKjS8wA10

3. *Watch: Qualitative Content Analysis 101: The What, Why & How (With Examples)*

https://www.youtube-nocookie.com/embed/i_5Isz9t8Hc?si=oNsgCs8pQr1auUa-

4. *Watch: Thematic Analysis in Qualitative Research: Simple Explanation with Examples (+ Free Template)*

https://www.youtube-nocookie.com/embed/NLelCELbwCY?si=AhUgnyXhJtwHuEAt

5. *Watch: Thematic Analysis In Qualitative Research: 6 Time-Saving Tips (+ Examples)*

https://www.youtube-nocookie.com/embed/bsLfsym1jew?si=tvA-J-YgEHAGXCdU

Next, read chapter 9, "Structure and Design of Qualitative Research" in Rosch, Kniffen, and Guthrie (2023).

Practice evaluating the data analysis and findings of the Ragnarsoson et al., article. Use the quality criteria discussed in Rosch, Kniffen, and Guthrie (2023) to evaluate the quality of the data analysis and findings.

Finally, in your learning journal, identify what your overall quality rating is of this section and list three pieces of evidence to support your rating. Make some notes about what you would look for in the results section of a high quality qualitative research report. *Note that your journal is not graded, but will help you in your assessment for this unit.*

6.4 Summary

In this unit you have learned that qualitative research has three distinct purposes: ***to describe, to explore, and to build theory***. Qualitative research designs typically are less structured than in quantitative designs, and are far more flexible. The data are usually collected from a few cases or individuals so findings cannot be generalized to a larger population, but issues can be examined in great detail. Findings can however be transferable to another setting.

Checking Your Learning

Now that you have completed the learning activities and assignments for this unit, check the list below to see if you can do the following:

1. Can you evaluate the quality of the methods and findings section of a qualitative research report on servant leadership?
2. Can you discuss the importance of understanding the methods and findings section of a qualitative research report?
3. Can you apply what you have learned about qualitative research to your own lead-

ership context?

Feel free to review topics more in depth or continue on to the next unit.

7 Understanding Mixed Methods Research Reports

Overview

Plano-Clark and Creswell assert that the decision to engage in qualitative or quantitative research is driven by whether the research problem calls for an explanation or an exploration (2015, p. 63). A third genre—mixed methods—has developed. Mixed methods is the conscious inclusion of both qualitative and quantitative methods and so doing, seeks to mitigate some of the inherent tensions and weaknesses in both. Unit 7 investigates mixed methods research design.

Topics

Unit 7 is divided into 3 topics:

1. Introduction to Mixed-Methods Research
2. Mixed-Methods Research Designs
3. Using Mixed-Methods to Understand Leadership.

Learning Outcomes

When you have completed this unit you should be able to:

1. Discuss how a mixed-methods approach can advance research.
2. Evaluate the quality of mixed methods research report on servant leadership.
3. Apply a mixed-methods approach to the study of servant leadership.

Activity Checklist

> **Learning Activities**
>
> - **Activity:** Read chapter 12 of your text. Watch a video.
> - **Activity:** Evaluate the use of the mixed methods approach in a servant leadership article.
> - **Activity:** Read an article and reflect in your learning journal.
> - **Assessment:** Contribute to the course discussions. See Assessment tab in Moodle for details.

Resources

Here are the resources you will need to complete the unit:

- Rosch, D. M., Kniffin, L. E., & Guthrie, K. L. (2023). *Introduction to research in leadership.* Information Age Publishing.
- *E-Resources:* The articles in this unit can be found through the TWU library.

7.1 Introduction to Mixed-Methods Research

This week, in Unit 7, I have prepared an audio message to introduce you to mixed methods research. You can listen to my audio message below.

Listen: Welcome to Unit 7

hstrong · Welcome to Unit 7 (2)

7.1.1 Activity: Watch, Read, and Reflect

> Begin this learning activity by watching the following video where John Creswell explains what mixed methods research is. In this video Dr. Creswell explains how the use of both qualitative and quantitative research methods can provide a more complete picture.
> *Watch: What is Mixed Methods Research?*
> https://www.youtube-nocookie.com/embed/II_OoioL0-E?si=Oi1b_bZFjQujeYca
> Next, read chapter 12, "Mixed Methods Research," in Rosch, Kniffen, and Guthrie (2023).
> Finally, in your reflective learning journal, discuss the following question:
>
> 1. What are some of the strengths and challenges of using a mixed-methods approach?

2. What would you would look for in a high quality mixed-methods research report?

Note that your journal is not graded, but will help you in your assessment for this unit.

7.2 Mixed-Methods Research Designs

A wide variety of mixed methods research designs have been used by researchers. It is common in mixed methods designs to see the researchers count (quantify) certain kinds of qualitative data. As well, you will encounter quantitative researchers reporting how their research participants perceived or were emotionally impacted (i.e. qualitative data) by the experimental treatment (Leedy & Ormrod, 2013, p. 97). As you look at mixed methods designs, notice how the following considerations help to differentiate the four variations of mixed methods that Plano-Clark and Creswell (2015) distinguish:

- What is the purpose of needing qualitative and quantitative data?
- What is the sequence of qualitative and quantitative data collection?
- What is the priority of the qualitative and quantitative data?
- How do the two data sets inform each other?

For example in a **convergent parallel design,** only one data collection phase is used, during which quantitative and qualitative data collection and analysis are conducted separately yet concurrently. This design is used to develop a more complete understanding of a topic or phenomenon. In an **embedded (concurrent nested) design,** only one data collection phase is used, during which a predominant method (quantitative or qualitative) nests or embeds the other less priority method (qualitative or quantitative, respectively). This design is used o gain broader and in-depth perspectives on a topic. The **sequential explanatory design** involves the collection and analysis of quantitative data followed by the collection and analysis of qualitative data. This design is used to help explain, interpret or contextualize quantitative findings. The **sequential exploratory design** involves the collection and analysis of qualitative data followed by quantitative data collection and analysis. This designed is used to explore a phenomenon and to expand on qualitative findings.

7.2.1 Activity: Watch, Read, and Reflect

Begin this learning activity by watching the following video on Mixed-Methods research designs.
Watch: Types of Mixed Methods Research Designs ~GM Lectures
https://www.youtube-nocookie.com/embed/q4OFHOg3Azc?si=ZMnSvWj4uAuB8I7N
Next, read the article by Beck (2014). Antecedents of servant leadership: A mixed

methods study to prepare yourself for the group activity in this unit.

After reading the article, reflect on the following questions in your learning journal:

1. What type of mixed-methods design was used in the article?
2. Do you think mixed-methods research can provide a more complete picture for research on servant leadership?
3. Why or why not?

Note that your journal is not graded, but will help you in your assessment for this unit.

7.3 Using Mixed-Methods to Understand Leadership

Mixed methods studies have the potential to provide strengths that offset the weaknesses of both quantitative and qualitative research and provide a more complete and comprehensive understanding of the research problem than either quantitative or qualitative approaches alone. Molina-Azorín and Cameron (2015) have highlighted four ways that mixed methods research can benefit business research and this can be applied to leadership studies. For example mixed methods can be beneficial for leadership studies because:

1. Collecting qualitative data can provide a deeper understanding of the leadership context.
2. Attention to both process and outcome through the use of mixed methods can aid in building theory. For example qualitative findings can provide insight into what mechanisms contribute to a measured outcome.
3. Complex organizations with different leadership roles would benefit from analyses that are integrated across micro and macro levels.
4. The use of mixed methods can help bridge the academic-practitioner divide through enhancing the interpretation of results. For example, mixed methods can helps to explain findings or describe how causal processes work.

7.3.1 Activity: Reflect

Begin this learning activity by writing a response to the following questions in your reflective learning journal:

1. Do you think mixed-methods is the best approach for research on leadership? Why or why not?
2. How would you use a mixed methods approach to study servant leadership?

Note that these questions relate to the assignment questions for this unit. See Assessment for more details.

7.4 Summary

In general researchers conduct mixed methods studies when both quantitative and qualitative data together provide a better understanding of the research problem. The use of mixed method research provides a number of advantages, namely:

- Provides strengths that offset the weaknesses of both quantitative and qualitative research.
- Provides a more complete and comprehensive understanding of the research problem than either quantitative or qualitative approaches alone.
- Provides an approach for developing better, more context specific instruments.
- Helps to explain findings or how causal processes work.

Checking Your Learning

Now that you have completed the learning activities and assignments for this unit, check the list below to see if you can do the following:

1. Can you discuss how mixed-methods research can help advance leadership research?
2. Can you evaluate the quality of mixed methods research report on servant leadership?
3. Can you discuss how a mixed-methods approach can be applied to the study of servant leadership?

Feel free to review topics more in depth or continue on to the next unit.

8 Bringing It All Together

Overview

> "So I turned my mind to understand, to investigate and to search out wisdom…"
> (Ecclesiastes 7:25).

Scholarly research reports can have profound impact on society. In this course, we have been making the case that best practices are informed by the wise and judicious application of research findings to particular situations. Don't miss the importance of adverbs "wise" and "judicious."

Plano-Clark and Creswell tell us that we should "read research to learn new knowledge about topics, to become informed on policy debates, and to find suggestions for improving your practice" (2010, p. 15).

Now, as we end this course, we will be bringing things to a close through several experiential learning activities.

Topics

This unit is divided into 2 topics:

1. Issues of Credibility
2. Leadership Decisions Revisited

Learning Outcomes

When you have completed this unit you should be able to:

1. Evaluate the safeguards that are in place to uphold the integrity of the research process.
2. Critically reflect on the importance of evidence-based decision making for transformational servant leadership.
3. Create a formal literature review.

Activity Checklist

Resources

Here are the resources you will need to complete the unit:

- Goldcare, B. (2011, July). *Battling bad science.* (Video file). Retrieved from Ben Goldacre: Battling bad science | TED Talk

8.1 Issues of Credibility

Congratulations! You have made it to the final week of LDRS 591: Scholarly Inquiry! This week you will be revisiting a question about making informed decisions, discussing why evidence-based decision making is important for the Transformational Servant Leader, and reflecting on what your expectations are now for a high quality research report. You will also be introduced to the MA Lead: Leadership Integration Project (LDRS 697/698).

Before we finish this course, I want to take some time to address a fundamental question that underlies our decision-making processes: Simply stated, the question is "how can I know I can trust what I am reading?" At the heart of this issue are three interrelated concerns: Is the research work performed competently? Is it reported honestly? Are the findings presented consistent with what other researchers would conclude (Locke, et al., 2010, p. 12)? By now you are aware that the reason behind much of the tedious detail provided in research reports is aimed at addressing the question "is the research performed competently?" Great efforts are expended in the publication process to further address research competence, honesty, and consistency. As we will see, the final concern introduces an element that can be distressing.

Competence and Honesty

You will recall that earlier in the course it was suggested that you always check the "Peer-Reviewed or Scholarly" box when doing an online search of the literature. Your first line of establishing trust in the quality of a research article is the review process followed in the formal presentation and publishing of research.

Typically, the first opportunity a researcher has to disseminate their work is when their PhD dissertation is defended and subsequently published. The process involved in the successful defense of a dissertation is lengthy and strenuous, to say the very least. In effect, all three questions are addressed by the dissertation committee, which functions, at that stage, as a committee of peers. Beyond that, another first opportunity is to present papers at conferences. Such papers are typically presented beforehand to a jury of peers who critique the paper with the above three criteria in mind. Journal publication extends the processes of peer review even beyond that of conferences. Typically, articles submitted for publication are reviewed by peers who are experts in the field, often blind (the author does not know who the reviewers are or the reviewer does not know who the author is) or double-blind (neither the author nor reviewer are known to each other). This process results in juried or refereed or peer-reviewed articles that are subsequently published. The peer-reviewing process is intended to eliminate work which is flawed in fundamental ways. However, this process is not infallible. Consider this honest statement:

> We must caution you, however, that it is not safe to believe that peer review operates with flawless precision as an absolute guarantor of quality in published research. The effectiveness of the peer review system can be no better than the quality of function produced by each part, and, despite the best efforts of editors and reviewers, judgments fail and mistakes do occur. Taken across journals, editors, and reviewers, there is enough residual variability to give all readers cause to be wary and to exercise one final step in quality control—by forming their own judgment about the adequacy of what they read. (Locke, et al., 2010, p. 35).

Be aware that all journals are not equally selective. Every discipline has front-line journals that have the highest standards of selectivity, and equally, every discipline has journals that are remarkable for their lack of selectivity. You can get some insight into what you are dealing with if you check the requirements for document submission that are embedded somewhere in every journal. Often, you can gain insight by looking at who the editors and reviewers are, and finally, the reputation of the journal is important.

The reputation of the author of the article is also very important. Academic credentials, academic honors, holding positions of influence, association with major discoveries and longevity in the field are important factors in establishing authorial reputation. These are major considerations in deciding whether a particular author's work is foundational in a given field.

Another positive indicator of research quality is if the research is funded from a prestigious funding source. Ford, Carnegie, and Pew Foundations meet those criteria, as do studies funded by the Canadian Institute of Health Research (CIHR), National Institute of Health (NIH), the National Science Foundation and the Natural Sciences and Engineering Council of Canada (NSERC) . The criteria for funding from prestigious funding sources meet or exceed those for prestigious journals. Related, scholarly organizations often provide funds, or at least endorse research studies. In the field of education, the Association for Supervision and Curriculum

Development (ASCD) is but one such organization. In the social sciences, the Social Sciences and Humanities Research Council (SSHRC) is another.

As you read research, there are some potential "deal-breakers" to be aware of. First, although no study will be technically perfect, beware of studies with obvious technical problems. The evaluation matrices, particularly for the introduction, methods and results sections, provided by Plano-Clark and Creswell (2015) are great places to begin. Studies with numerous technical problems make trust difficult to sustain.

Sampling: Sampling is one of the technical aspects of research that deserves separate mention. Sampling lies at the very heart of a given research study. Two primary issues are at stake here: Does the sample truly represent the population? Does the sample allow for the generalizing of results?

Replication: One of the strengths of the development of scholarly literature is the reinforcement of the veracity of findings through replication studies. A number of years ago the world was shaken by the announcement by Pons and Fleischmann of the achievement of a cold-fusion nuclear reaction. The problem was, not a single researcher was able to replicate this, and eventually the researcher's methods were exposed as flawed.

Researcher Bias: Clearly, obvious conflicts of interest with the researcher contribute to the breaking of trust. Foundational to the integrity of the research process is that the researcher be an independent, free agent. While it is normal for researchers to find results that are consistent for what was hoped for, trust is violated when the researcher has a personal vested interest in a particular favorable outcome. Locke, et al. correctly observe, "It is when the benefits become tangible rather than just intellectual that there is reason for special caution" (2010, p. 47). For that reason, it is always wise to be cautious about studies released by organizations rather than the study author. Finally, more subtle conflicts of interest emerge when personal biases of the investigator remain unacknowledged and unaccounted for. Included might be issues of theoretical commitments, beliefs and ideological dispositions that influence the research process such that the research itself becomes a tool for advancing the researcher's personal agenda. Included in this is the accusation that the researcher "found what he/she was looking for."

Finally, obvious errors either due to carelessness or poor researcher decisions contribute to the erosion of trust. Poor scholarship is evident when such errors are sufficient to call into question whether the researcher has even a basic understanding of the field.

8.1.1 Learning Activity: Watch and Reflect

> We have spent a great deal of time wrestling with the specifics of research reports, and in so doing, you have developed set of expectations regarding the quality of research reports and you have increased your ability to sense potential problems. In this learning activity you are asked to do the following:
>
> Watch the TED talk video Battling Bad Science.
>
> In your reflective learning journal, consider the following questions: 1. How can I know that I can trust what I am reading?
>
> 1. How do I know the research has been performed competently?
> 2. How do I know the research is reported honestly?
> 3. How do I know the findings presented are consistent with what other researchers would conclude?
>
> *Note that your journal is not graded, but will help you in your assessment for this unit.*

8.2 Leadership Decisions Revisited

In unit 1 you were asked to discuss a recent decision you made as a leader. You were then asked to think through how you made that decision. For example, did you base the decision on previous experience, values, company policy, empirical evidence or expert opinion? This course has emphasized 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 your leadership decisions on the best evidence available.

8.2.1 Learning Activity: Reflect

> As a final entry in your learning journal, reflect on the following questions:
>
> 1. In light of what you have learned in this course, prepare a response explaining why you think evidence-based decision making is important for the Transformational Servant leader.
> 2. How will you use scholarly evidence in your leadership practice moving forward?
>
> *Note that your journal is not graded, but will help you in your assessment for this unit.*

8.3 Summary

We have come to the conclusion of our course together. In this unit, you had the opportunity to revisit a question about making informed decisions, discuss why evidence-based decision making is important for the servant leader, and reflect on your own expectations for a high quality research report.

Checking Your Learning

Now that you have completed the learning activities and assignments for this unit, check the list below to see if you can do the following:

1. Can you evaluate the safeguards that are in place to uphold the integrity of the research process?
2. Can you critically reflect on the importance of evidence-based decision making for transformational servant leadership?
3. Can you create a critical literature review?

Feel free to review topics more in depth or continue on to your final assignment submission.