

Chapter 5: Writing the Literature
Research Methods in Athletic Training (Arnold et. al.)

- I. 4 main components of the Literature Review
 - a. Introduction
 - i. Approximately 1 paragraph
 - ii. Outlines general purpose of the review
 - iii. Outlines content and order of the body
 - iv. Discuss *Display 5-1 (p. 58)* – Example of an Introduction
 1. What is the general purpose of the review?
 - a. Distinguish between chronic and functional ankle instability
 - b. Discuss roles of strength, mechanical instability and neuromuscular response
 2. What do you expect the order of the body to be?
 - a. Defining chronic and functional ankle instability
 - i. Supported by epidemiological studies
 - b. Discuss role of strength, or lack thereof, in chronic and functional ankle injuries
 - i. Supported by research
 - c. Discuss role of mechanical instability in chronic and functional ankle injuries
 - i. Supported by research
 - d. Discuss role of neuromuscular response, or lack thereof, in chronic and functional ankle injuries
 - i. Supported by research

Homework: Write a 1-paragraph introduction for next class

- b. Body
 - i. Foundation of your study
 1. length varies by topic
 - ii. Should discuss all fundamental topics related to your research
 1. use your outline to establish a logical progression for the review
 - iii. Goal = establish scientific consensus (theoretical model)
 1. accomplished by comparing and contrasting studies
 2. present research that agrees and disagrees with consensus (theoretical model)
 3. address relevant design issues (i.e., reliability, validity) and limitations
 - iv. Suggestion: begin with epidemiological studies when available
 1. these studies are the best way to establish a need for your study
 2. Epidemiological = study frequencies and distributions of health and disease among various populations

- v. EXAMPLE: Case Study / Biomechanics
 - 1. Epidemiological studies
 - 2. Etiological and Pathological information
 - 3. Biomechanical or Physiological rationale
- vi. EXAMPLE: Education
 - 1. Theory to be examined
 - a. Operational definitions
 - 2. Descriptive Research (Recall from Ch. 1)
 - a. Observational = participants observed in natural setting (i.e., classroom, play ground); observations coded and report frequency and duration
 - b. Developmental = study interaction between learning or performance with maturation
 - c. Correctional = examine relationship between performance variables; attempt to predict performance
 - 3. Experimental Research (Recall from Ch. 1)
 - a. manipulation of treatments in attempt to establish cause-and-effect relationships; researcher attempts to control all factors except treatment variable
 - 4. Rationale for study
 - a. Why does your study need to be conducted?
 - i. Lack of research on given population?
 - ii. Lack of valid and reliable measurements?
 - b. Support gained by looking at recommendations for future research in published studies
- c. Summary
 - i. Approximately 1-2 paragraphs
 - ii. Synthesize most important elements of the literature review
- d. References
 - i. AMA

In class activity: Exchange introduction paragraphs and have the students identify the following:

- the general purpose of the review
- the order of the body

- II. Preparing to Write
 - a. Convert topical outline to a sentence outline
 - i. Discuss *Display 5-2 (p. 61)*
 - ii. Sentence outline is more detailed and helps in avoiding awkward transitions
 - b. Writing Style
 - i. Use active voice
 - 1. “Participants performed a maximum quadriceps muscle contraction.”
 - 2. Passive voice: “A maximum quadriceps contraction was performed by the participants”
 - ii. Use first person
 - 1. “We instructed participants to...”
 - 2. Third person: “The researchers instructed participants to...”
 - c. Keys to Good Writing
 - i. Outline in detail
 - ii. Work on one section at a time
 - iii. Talk it out (verbalize)