Course textbook:

Goodwin, C. J. (2010). *Research in Psychology*: Methods and Designs

I have uploaded this book and you can reach at:

<http://www.keepandshare.com/doc/5402659/research-in-psychology-pdf-4-3-meg>

Required reading for Week 1:

Chapter 1: Scientific Thinking

Chapter 2: Ethics and Appendix B: Ethics

Chapter 3: Developing Ideas for Research and Appendix A: Communicating Results

Chapter 4: Measurement & Analysis

Please reply/comment/agree/disagree to the following discussions with 100 words each. Use references when necessary.

**Topic 1: Scientific Thinking**

Define the concepts of empiricism and falsifiability as they apply to theorization and hypotheses testing. Explain why an empirical theory must be falsifiable in order to be considered scientific. Briefly describe an empirical research question that could be used to evaluate the relationship between two variables (e.g., exercise and depression; prayer and health).

Discussion:

Hypotheses are predictions about a study’s outcomes which often develop from theories, which are sets of statements that summarize phenomena and propose explanations for them (Goodwin & Goodwin, 2013). Each of these processes includes empiricism and falsifiability. Empiricism is the process of learning through direct observation or experience while falsifiability is a concept that suggests well constructed theories should be precise enough to be able to be subject to being disproven. An empirical theory must be falsifiable in order to be considered scientific because it furthers understanding by either strengthening or weakening the theory/hypothesis. Furthermore, according to Charles Pierce, science is the most reliable way to develop a belief; therefore, to be reliable, an idea must be able to be thoroughly tested to be seen as “true”.

If a hypothesis or theory is not able to be subjected to falsification, it is most likely a vague idea which may have many loopholes to explain its outcomes. For example, many pseudosciences, such as graphology, are not easily subjected to falsifiability because the graphologist can look for other aspects which support their initial claims (i.e. if a person writes a passage which suggests that he has money issues, yet has cramped handwriting which suggests stringent money management, the graphologist can look for looping g’s to support the initial “hypothesis” of loose spending) (Goodwin & Goodwin, 2013). However, a person may be influenced by social cognition biases despite empirical evidence against or supporting theories and hypotheses. One example of a social cognition bias is a confirmation bias which is the tendency to pay attention only to information which supports a belief while ignoring evidence against it . An example of an empirical research question involving two variables such as intimate relationships and health is “does having an intimate relationship influence stress levels among chronic pain patients”. To measure this, a person could develop a research design which measures cortisol levels as well follow up with self-reports or daily diaries among those with partners and those without. However, the researcher would have to control for relationship quality, duration, and other socioeconomic factors to be considered valid.

References

Goodwin, C.J. & Goodwin, K.A. (2013). Research in Psychology: Methods and Designs (7th ed.). John Wiley & Sons.

Reply:

**Topic 2: Ethics in Research**

Discuss the concept of informed consent as it relates to a controversial research study discussed in the text (e.g., Milgram's study on Obedience; Tuskegee syphilis study; MK-Ultra). Describe whether or not deception is ever justified in psychological research.

Discussion:

Research studies in psychology are extremely important and without volunteers and public involvement, new ideas and information could not be discovered. The lingering question is “How does one obtain the services of volunteers for these studies, especially if deception is employed in order to make the study more feasible?” This is what is referred to as informed consent. The American Psychological Association has codes of conduct which all researchers must follow when conducting research, including a consent form that informs the volunteer of the procedures and purpose of the study so the volunteer can make an “informed consent” (Goodwin & Goodwin, 2013). Regardless of how mild any procedure is in terms of pain, volunteers must be made aware of it so they can opt out of the study if deemed necessary. However, some studies are very difficult to conduct if the client is aware of the procedures and/or purpose of the study so deception is used to make certain the responses are legitimate and that the data collected is accurate (Goodwin & Goodwin, 2013).

One extreme example of deception with volunteers is Milgram’s study on obedience (Goodwin & Goodwin, 2013). Keep in mind that this experiment was completed well before informed consent was mandatory, although it still incorporates moral and ethical issues, regardless the period of time in which it was conducted. Milgram’s theory was that people will blindly obey those in authority, regardless of the consequences. Volunteers were used to provide electric shocks to learners that did not answer questions correctly. They obeyed orders even when the voltage level was extremely high. Deception was employed in terms of the purpose of the study so that volunteers were not aware that they were being tested on their willingness to obey commands. If they had known the real purpose of the study, they likely would not have complied and the study would not be accurate. Although there are many that believe deception should not play a role in any psychological research study as it diminishes the professionalism of the experimenter, in many cases it is the only possible way to receive accurate and complete data on particular empirical theories. Deception must be utilized in specific instances for the progress of science and psychology while at the same time keeping the safety and well-being of the volunteers at the forefront. The question comes down to where do you draw the line? How far do you go for science? Is mild to moderate pain reasonable, physically or psychologically? Neither? It is definitely going to be an ongoing debate.

References

Goodwin, C. J. & Goodwin, K. A. (2013). Research in Psychology: Methods and Designs (7th ed.). John Wiley & Sons.

Reply:

**Topic 3: Types of Research Methodology**

Define and describe the basic differences between quantitative and qualitative research methods, including strengths and weaknesses. Create a brief research scenario utilizing one of these methodologies. Explain whether your research is basic or applied and decide whether or not it would be best to carry out in the laboratory or in the field. Defend the appropriateness of your choices.

Discussion:

Two very different approaches to collect data for research purposes are quantitative and qualitative methods. Quantitative research involves the data being presented in numerical form (Goodwin & Goodwin, 2013) which provide statistical summaries about the information gathered. Qualitative research provides verbal or narrative summaries which can be classified into several categories. While quantitative studies are often revered as more valid, reliable, and able to discover statistically significant trends, qualitative measures are more adaptable for counselling and cost effective as they usually require fewer subjects and equipment (Hood & Johnson, 2007). Furthermore, qualitative studies can provide more in-depth information and can generate more specific hypothesis for future research but they may also be subject to participant variables and biases compared to quantitative methods (i.e. retrospective bias or changing moods) (Holtzman, 2010).

A brief quantitative research scenario is: how does spirituality affect coping in cancer patients. This scenario would be considered applied research as it would have a direct effect or relevance to a current issue (i.e. cancer) unlike basic research which focuses on the fundamentals of behaviour and mental processes (Goodwin & Goodwin, 2013). This research design would be best carried out in the field (i.e. interview cancer patients in the hospital, for example, to survey how spirituality affected their coping since being diagnosed with cancer) to produce more realistic results. The laboratory would not be ideal as an experimenter cannot inflict spirituality upon a person and this design would be too controlled to produce realistic results. Ideally I would like to use both qualitative and quantitative measures to produce a more thorough and powerful study in which case the scenario would be something like: is quality of life among cancer patients positively influenced by spirituality.

References

Goodwin, C.J. & Goodwin, K.A. (2013). Research in Psychology: Methods and Designs (7th ed.). John Wiley & Sons.

Holtzman, S. (2010). Research methods [PowerPoint slides]. Retrieved from https://www.elearning.ubc.ca

Hood, A. B., & Johnson, R. W. (2007). Assessment in counseling: A guide to the use of psychological assessment procedures. (4th ed.). Alexandria, VA: American Counseling Association.

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