

## **Chapter 14: Research Analysis and Critique**

### **Sample Research Critique #2**

#### **Contents**

The Assignment

    Research Analysis

    Research Critique

Sample Research Analysis & Critique

    Citation

#### **The Assignment:**

The purpose of this optional assignment is to help you synthesize course concepts and apply them to research in your particular field of interest (that is, your specific program, be it Rehabilitation Counseling, Gifted and Talented, Secondary Ed, Special Ed, Adult Ed, Early Childhood, Rehabilitation of the Blind, Instructional Resources, Elementary Ed, or some other program). (If you are without a program, simply focus on any field or topic that would benefit you.) I'm certain you are in a position now to connect what you've learned in this course to published research in your area of interest. This can be accomplished by answering some questions and then writing a short review or critique of published research.

#### Research Selection

Your task is to locate a published research report that we haven't worked with in this course. You can locate it anywhere, on the Web or in the printed journals in a library. It must be empirical, that is, contain data used to answer a research question or test a research hypothesis. The inclusion of data and its analysis (quantitative or qualitative) is a requirement, so that excludes mere reviews of research or opinions from consideration.

Don't worry about working with an article that won't count. If it includes data, it'll count.

I hope that you find a data-based research report that might help you in your other classes. Many of you know the leading journals in your field better than I do. The "best" journals are probably print-only (at least for now), so you may want to make that trek to the library. But again, you don't have to—any research report in a journal off the Web is fine. (Recall from a previous assignment that there are good sites which direct you to full-text online research reports available on the Web.)

This assignment involves careful reading of Chapter 14.

### Research Analysis

1. State the complete reference for the research (including the author, title, journal, pages, and URL, if applicable).
2. Write a paragraph describing the researchers' constructs (if any), their operational definitions, their different types of variables (as relevant, including independent, dependent, attribute, and key extraneous ones), and the research hypothesis (or research question).
3. Write a paragraph describing the type of research, the sample, and the instrumentation (measures).

4. Write a paragraph describing how the researchers addressed the issue of bias and control, the type of research design they used, and (very briefly) how they analyzed their data (the type of statistical tests, qualitative approaches, etc.).

5. Write a brief paragraph describing the researchers' results and conclusions.

### Research Critique

Now that you've fully dissected (analyzed) this research report and understand it well, you are in a good position to write a brief critique or critical review, focusing on its purpose, your overall reaction, salient methodological issues, noteworthy weaknesses and strengths, and an overall recommendation (like whether anyone should pay attention to it or whether it should have even been published). Think of this task in the same way you would a book review (except it's a research review): You tell the reader what the research is all about and then you make some judgments based on reasonable criteria. Book reviews help people decide whether they want to read the book. Similarly, research reviews help people decide whether they should attend to the research and possibly change their thinking or practice as a result. It seems like this critique or review could be done in about 3 to 5 pages.

Let me also add that reviews are not easy. You are not expected to spend 50 hours, but you know for sure how plodding it is to read research. And you know how slow technical writing is. This assignment will clearly take more than an hour, but not 30 hours, I'm sure, depending on how comfortable you are with all the terms and being able to "think

like a researcher.” Because you can choose a research report in your field of interest, it should be a bit easier to analyze and critique than the articles referenced in the text or, for sure, Russell and Haney. That’s because you’ll have greater familiarity with the jargon and related literature since you’ve been exposed to it in your program classes.

### **Sample Research Analysis & Critique #2 (used with permission):**

Research Analysis and Critique of Karren Cresap, a graduate student at the University of Arkansas at Little Rock

#### 1. Citation

Ryan, J. P., & Yang, H. (2005). Family contact and recidivism: A longitudinal study of adjudicated delinquents in residential care. *Social Work Research, 29*(1), 31-39.

2. The research questions addressed by this study were: What types of contacts constitute family involvement and which types of family contact are associated with a reduced risk of recidivism? The independent variable in this study was family contact and the dependent variable was rate of recidivism. Rate of recidivism is a construct operationally defined in this study as arrested and plead or was found guilty of a crime. Attribute variables of this study were a “break down” of the independent variable: different types of family contact. Extraneous variables were not addressed and posed limitations to this study. Demographic variables considered as potential covariates used to answer the question which types of family contact are associated with reduced risk of recidivism

were: race, age at discharge from the program, length of stay in residential care, prior out of home placements, and prior adjudications.

3. This study was non-experimental research. The sample consisted of 90 randomly selected males who were released from residential care between January 1, 1998 and December 31, 1999. The SPSS random sampling procedure was used to select the sample from a population of 270. However the sample was limited to only those at least 18 years old at the time of data collection. Forty-seven percent of the sample was African-American, 43% were white and 10% were bi- or multiracial. Seventy percent of the sample successfully completed the residential program with this variable being dichotomous (0 = no, 1 = yes). Average length of stay was 14 months. The measurements used in this study were contact logs from the residential facility and arrest data provided by the Michigan Department of State Police to measure family contact and recidivism. Arrest report data was collected on September 1, 2001.

4. The research design used in this study was a longitudinal descriptive design. Issues of bias did not appear to be addressed. Statistical control measurements used were SPSS Cox regression and the Kaplan-Meier. A quantitative approach was used to analyze the data received from the contact logs. Data on type and duration of each contact, who initiated the contact and the location of each contact was aggregated to the individual youth level and individual contact level for analyze of the relationship between types of contacts and the probability of recidivism. Arrest reports from the state police were the only data obtained on recidivism.

5. The researchers used the data from the contact logs to address their question of what activities constitute family involvement. They discovered that there were a total of 11,431 contacts which they broke down into type, initiator, and location. The average range of contacts was 118; however the range was very large, from 28 to 475 contacts. The compiled contact data was analyzed to address their question of what type of family contacts reduce the risk of recidivism. Cox regression analyses suggested that only three types of family contacts were associated with reduced risk of recidivism: campus visits initiated by the family, counseling in the family home, in-home contacts initiated by the family service worker. They also indicated that two demographic variables were associated with an increased risk of recidivism: age of youth at termination from the program and race, African-American verses white.

6.

### Family Contact and Recidivism: A Longitudinal Study of Adjudicated Delinquents in Residential Care

#### Summary

This study addressed two distinct research questions, which were, what activities constitute family involvement and which types of family contacts are associated with a reduced risk of recidivism? The independent variable in this study was family contact and the dependent variable was rate of recidivism. Rate of recidivism is a construct operationally defined in this study as arrested and plead or was found guilty of a crime. Attribute variables of this study were a “break down” of the independent variable:

different types of family contact. Extraneous variables were not addressed and posed limitations to this study. Demographic variables considered as potential covariates used to answer the question which types of family contact are associated with reduced risk of recidivism were: race, age at discharge from the program, length of stay in residential care, prior out of home placements, and prior adjudications (p. 34).

This study was theory-based non-experimental traditional research. Social Control, the theory that drove this study, argues “that greater levels of parental attachment are associated with greater levels of control and thus a reduced likelihood of delinquency” (p. 32). The sample consisted of 90 randomly selected males who were released from residential care between January 1, 1998 and December 31, 1999. The SPSS random sampling procedure was used to select the sample from a population of 270. This was a small scale evaluation group study where sample size was determined by using priori power analysis set for a medium effect. However the sample was limited to only those at least 18 years old at the time of data collection. Forty-seven percent of the sample was African-American, 43% were white and 10% were bi- or multiracial. Seventy percent of the sample successfully completed the residential program with this variable being dichotomous (0 = no, 1 = yes). Average length of stay was 14 months. The measurements used in this study were contact logs from the residential facility and arrest data provided by the Michigan Department of State Police to measure family contact and recidivism. Arrest report data was collected on September 1, 2001 (p. 33).

The research design used in this study was a longitudinal descriptive design that also made inferences to the general population. An issue of selection bias was mentioned by the researchers as a possibility, as they were not able to determine if the subjects were

comparable before entering the residential care facility. Statistical control measurements used were SPSS Cox regression and the Kaplan-Meier. A quantitative approach was used to analyze the data received from the contact logs. Data on type and duration of each contact, who initiated the contact and the location of each contact were aggregated to the individual youth level and individual contact level for analysis of the relationship between types of contacts and the probability of recidivism. Arrest reports from the state police were the only data obtained on recidivism.

The researchers used the data from the contact logs to address their question of what activities constitute family involvement. They discovered that there were a total of 11,431 contacts which were broken down into type, initiator, and location. The average range of contacts was 118; however the range was very large, from 28 to 475 contacts (p. 34). The compiled contact data was analyzed to address their question of what type of family contacts reduce the risk of recidivism. Cox regression analyses suggested that only three types of family contacts were associated with reduced risk of recidivism: campus visits initiated by the family, counseling in the family home, in-home contacts initiated by the family service worker (p. 36). They also indicated that two demographic variables were associated with an increased risk of recidivism: age of youth at termination from the program and race, African-American verses white. The researchers state this study “provides empirical evidence that specific types of family contact reduce the risk of recidivism” (p. 38) and “that their findings have implications for practice” (p. 37).

#### Reviewer Reaction

This study has several limitations. The internal and external validity of this study is in question. The researchers acknowledge that because the study was not truly

experimental selection bias may exist. They also concede that the family contact logs from the residential care facility may have been incomplete. However, extraneous variables such as family socioeconomic status, single or dual parent homes, and subject's community were not addressed. Prior living arrangements of the subjects such as inner city dwelling with a high crime rate verses the suburbs where the crime rate may be lower was not addressed by the researchers. The study was also only limited to males from one specific residential facility in only one state. Studying females as well as subjects from other residential facilities could have lent more credence to the results. Also, it was not mentioned if the subjects knew they were being studied. Was informed consent obtained? Did debriefing occur? The lack of this information leads to questions of ethical conduct by the researchers. Obtaining informed consent and providing debriefing would have allowed the researchers to gain valuable information through in-depth interviews. The issue of subject morality too was a possible limitation that the researchers did not address. As the subjects of the study were all at least 18 years old and the only information gained on recidivism was state police reports it is possible that some of the original sample had moved out of state. Extraneous events such as peer relationships, drug or alcohol use, mental disabilities, and self-esteem problems could also explain the rate of recidivism among the subjects. Essentially, the instrumentation used by the researchers was very weak. However, the purpose of this study was meaningful in that discovering the relationship between family contact and recidivism could be explored further and yield possible implications for practice.

#### Reviewer Recommendation

While this study used statistical analysis in an attempt to control for contaminating influences, it lacks the external validity to generalize beyond the sample. The correlational aspect of this study's design does support that a relationship exists between family contact and recidivism, but it does not substantiate a cause-and-effect affiliation. It is recommended that this study be repeated using tighter control methods and a more representative sample, with more attention given to the pre-existing qualities of the subjects, as well as information on their post-residential care living arrangements.