

SUMMARY OF UNDERSTANDINGS

"Screenwriting". "Web design". When I was in my early twenties, I created those directories on my computer and used them to organize all of my related electronic journal entries and Internet articles. Over a decade later; I now, in addition to having read hundreds of scripts, possess the ability to effectively break stories down into plot, theme, character, and dialogue (and to author my own); I have navigated thousands of websites, and, if necessary, can expertly critique them based on layout, colour, typography, texture and imagery (and design and develop my own). Under a third directory titled, "Life", I have amassed a large collection of news articles -- which report on advancements in the area of social sciences -- and I have used them to inform my understanding of myself, of others, and the world around me. Prior to this course, however, I was a mere consumer of "research findings", and, as such, I was unacquainted with "research paradigms", "research methods", and associated research terminology. Now, after seven weeks of "Research Methods in Education" classes, I am ready to demonstrate my growth in these areas. In the three paragraphs that follow, I will summarize my understanding of research paradigms, research methods, and associated research terminology.

Research paradigms remind me of screenwriting and website genres (ie: "drama", "comedy", "dramady", and "portfolio", "corporate", "blog", etc.) for two reasons – 1) selecting a genre should be the first choice you make as you set out to write a story or design a website, and 2) knowing your genre will influence and inform all the decisions you make thereafter. Three popular "genres" in research are "positivistic", "naturalistic", and "critical", and they are each linked to either a quantitative, qualitative or mixed method approach (which, in turn, champions the use of a specific set of data collection tools). Positivistic researchers value objective observation, and "cause and effect" relationships. As (Hoepfl, 1997) noted, positivists' use, "experimental methods and quantitative measures to test hypothetical generalizations". Opposite to "positivistic" is the naturalistic paradigm, and it takes advantage of qualitative methods while striving to, "understand phenomena in context-specific settings". Furthermore, naturalistic researchers value subjective observations, which often lead to phenomena that cannot distinguish "causes" from "effects". A third paradigm, often referred to as, "Critical Theory", is known for its mixed methods (qualitative and quantitative) approach. A central focus of this paradigm is its intention to, "not merely give an account of society and behavior but to realize a society

that is based on equality and democracy for all its members” (Cohen et al, 2011). In other words, researchers’ conducting studies through a “critical theory” lens seek to not only understand situations and phenomena, but also, as (Cohen et al, 2011) wrote, to change them.

After selecting a research framework, a subsequent step in any research project is deciding on a quantitative, qualitative or mixed methods approach. While each of the paradigms outlined in the previous paragraph typically lean towards the use of one method over another, the chosen data type(s) should be the one(s) deemed most likely to inform the research problem central to the study. Under the quantitative approach, it is common to use surveys, questionnaires, experiments and tests to gather data. Researchers using these data collection tools, as (Winter, 2000) states, “attempt to fragment and delimit phenomena into measurable or common categories that can be applied to all of the subjects or wider and similar situations” (as cited in Golafshani, 2003, p. 598). On the other hand, qualitative methods favour case studies, interviews, observations, and document reviews. Qualitative researchers often outline their findings in papers using “thick description”, which means that it is “rich with detail and insights into participants’ experiences of the world” (Hoepfl, 1997). “Mixed methods” are seen as a more balanced approach, and address many of the potential shortcomings that exist when researchers’ rely solely on quantitative or qualitative data. (Cronbach, 2007) provides one such criticism of quantitative research when he claims that statistical research is not able to take full account of the many interaction effects that take place in social settings (as cited in Hoepfl, 1997, p. 48). A common criticism of qualitative data, as noted in class, is that it can be more difficult to remove researcher bias, which can call into question the credibility of the research.

Two associative terms important to any researcher are “validity” and “reliability”.

Interrogating research for proof of validity and reliability is important in order to determine credibility. Researchers’ use many techniques to ensure validity and reliability of their findings, but these techniques vary considerably between quantitative and qualitative data types. (Joppe, 2000) defines reliability in qualitative research, “as the extent to which results are consistent over time...” (as cited in Golafshani, 2003, p. 598). For validity in quantitative research, (Joppe, 2000) explains that it is important to determine, “whether the research truly measures that which it was intended to measure or how truthful the research

results are” (as cited in Golafshani, 2003, p. 598).

Unlike screenplays and websites, it is unlikely that I will ever complete a research project of my own. I will take solace, however, in my increased understanding of research paradigms, research methods, and associated research terminology, as demonstrated in the paragraphs above. The next time I open an article presenting the findings of a research study, I suspect that I may be tempted to search for the actual paper and – at the very least – read the abstract.

References

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