Teaching with Original Sources

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Why use key studies in teaching? To us the answer is obvious, but we will make the case because we have often found colleagues do not understand why we should teach from primary research, and some who even oppose it vigorously.

We believe the main reasons for using primary research studies in teaching are:

- It shows students the quality of the basic evidence in psychology.
- It demystifies the subject and shows students they do not always need an interpreter (textbook) to read psychology.
- It presents firsthand accounts of methodology.
- It encourages critical thinking because students have real evidence to evaluate. When they read summaries of research in a text it is often difficult to evaluate the evidence because there is not enough detail. On the other hand, when they read the primary research, they are able to criticize the way it was conducted or the conclusions, and so on.
- It avoids the psychological myths that grow up around some prominent studies. A famous example is the Little Albert study by Watson and Rayner (1920) that is incorrectly reported in many texts.
- Students have to read research papers eventually, so why not start them off straight away in a learning context which helps develop the necessary skills?
- And finally (but perhaps most importantly for teachers) students enjoy them.

All these points make us believe that using primary research is the very best way (if not the only way) to teach introductory courses (defined as the first undergraduate course in a subdiscipline area such as social, developmental, or abnormal). What we don't understand is why some of our colleagues challenge the academic rigor of this approach. Still, we here in the United Kingdom are able to deal with them in the time-honored tradi- tions of British academia by nodding sagely, murmuring sweetly, stroking our chins, and then ignoring them completely. American teachers spending time over here should bear this technique in mind.

Choosing the Studies

Any psychologists choosing a number of studies for a course will come up with different lists. The issue is not which are the most important, but which studies will bring the most educational value to your course. When choosing a study we can consider a number of questions.

Does It Have *Star Quality*?

The study has to have that something extra, which we call *star quality*. Sometimes studies are referred to as sexy or are said to have charisma. Whatever you call it, the study has to have that indefinable extra

edge. Star quality is difficult to define and to predict in a research study. As a teacher, it is difficult to read the study with the eyes of a student and anticipate their response to it.

Some studies in psychology have obvious star quality including the classic studies of social psychology such as Milgram's obedience studies, Zimbardo's prison simulation (Haney, Banks, & Zimbardo, 1973) and Sherif's ethnocentrism studies (1956) with the boys' camps. We would also add, perhaps more controversially, the case studies of Freud. Our favorite is the study of Little Hans which is always engaging for students even though many will dismiss the conclusions out of hand. It is also very funny.

Does It Stimulate Students' Questions?

One of the aims of education is to interest and engage students so that they want to find out more. An example of a study that inevitably provokes questions is the multiple personality study of Thigpen and Cleckley (the Three Faces of Eve). You can't help but think about whether this woman really had a multiple personality, and what this means. What is a single personality? And, what is the difference between having different sides to your personality and having a multiple personality?

Many studies take a lot of time and effort to state the startlingly obvious. For example, some memory studies say it is easier to remember meaningful than meaningless material. If students find this kind of research interesting or provocative we suggest they need urgent medical help. For the majority it is important to choose studies that are provocative and do not produce a "So what?" response.

Does It Stimulate Ideas For Practical Work?

One of the basic features of a scientific subject is that the material generates research questions. Reading primary research can encourage students to design empirical work that addresses their own research questions or tests their own hypotheses. Of course, there are problems with encouraging this. Not the least of these is the controversial ethical nature of many of the most interesting studies in psychology. We are alarmed at the number of students who have acted out assaults or feigned heart attacks in public (after Piliavin, Rodin and Piliavin's subway study, for example), or humiliated people in group pressure studies (after Asch, for example), or offended shoppers with obscene words in perceptual defense studies, or shown their young nephews and nieces violent videos to observe their aggressive response (after Bandura, Ross, & Ross, for example). The list of horrors is endless.

Does It Raise Contemporary Issues?

There is a trend in psychology to quote the most up-to-date study as if this represents the most accurate description of a particular topic. An alternative view says recent studies have not yet been subjected to the same level of scrutiny, replication and verification. We tend to prefer studies that have stood the test of time and still have something to say to people today.

The studies of Milgram (on obedience) and Zimbardo (on the prison simulation) tell us something about our behavior today even though they were conducted a generation ago. We also believe that the work of British psychologist Frederick Bartlett on remembering offers insights that are relevant today and act as a useful balance to the mechanistic mayhem of the information processing approach that still dominates discussions of memory in introductory texts. The famous Bobo doll study by Bandura, Ross, and Ross is

still heavily cited and contributes to our discussions of the effects of television on young people. All of these examples are at least 30 years old but still contribute to contemporary debates.

Do The Studies Illustrate A Range Of Psychological Methods?

As well as considering the features of individual studies, we need to look at the whole program to achieve a certain balance. It is important to show students just how wide our sources of evidence are, and also to allow them to weigh the relative merits of one method over another. In memory research, for example, methodologies include people sitting in front of tachistoscopes and computer screens, case studies, and use of neuropsychology techniques. Psychologists use survey methods, physiological measures, observations, field experiments, simulations, detailed textual analysis, and so on. In fact students may come to the conclusion that one of the strengths of psychology lies in the diversity of its methods.

The Banyard & Grayson Top Ten Teaching Studies

- Milgram, S. (1963). Behavioral study of obedience. *Journal of Abnormal and Social Psychology, 67*, 371-378. Simply the best! Though it is also worth encouraging students to search out Milgram's accounts of his other innovative research techniques.
- Thigpen, C., & Cleckley, H. (1954). A case of multiple personality. *Journal of Abnormal and Social Psychology, 49*, 135-151. Very readable and direct account of a therapist's encounter with a rare phenomena.
- Bandura, A., Ross, D., & Ross, S. (1961). Transmission of aggression through imitation of aggressive models. *Journal of Abnormal and Social Psychology, 63*, 375-382. Walk your students through the study as if they are the subjects.
- Gardner, R., & Gardner, B. (1969). Teaching sign language to a chimpanzee. *Science, 165*, 664-672. Everyone wants Washoe as a friend, but did she ever acquire language?
- Rosenhan, D. (1973). On being sane in insane places. *Science, 179*, 250- 258. Very readable and provocative account of how people can be depersonalized by giving them a label.
- Bartlett, F. C. (1932). Experiments on remembering: The method of serial reproduction. II picture material. In F. C. Bartlett (Ed.), *Remembering: A study in experimental and social psychology* (pp. 177-185). Cambridge: Cambridge University Press. Work on real life remembering rather than the recall induced by simple laboratory tasks.
- Freud, S. (1909). *Analysis of a phobia in a five-year-old boy*, The Pelican Freud Library. (1977). (Vol. 8, pp. 169-306). Harmondsworth: Penguin. Many would argue that this should be number one in the list, but just as many would argue that it has no place here at all. A fascinating read and bound to raise a chuckle.
- Skinner, B. F. (1960). Pigeons in a pelican. *American Psychologist, 15*, 28-37. An excellent account of Skinner's attempt to interest the Pentagon in missiles flown by pigeons.
- Haney, C., Banks, C., & Zimbardo, P. (1973). A study of prisoners and guards in a simulated prison. *Naval Research Reviews, 30*, 4-17. Perhaps we should all turn our psychology departments into prisons.
- Sperry, R. (1968). Hemisphere deconnection and unity in conscious awareness. *American Psychologist, 23*, 723-733. Raises questions about what we mean by *mind* and what will happen to it if we split our brain in two.

Do The Studies Illustrate A Range Of Psychological Ideas?

The obvious way of thinking about this issue is to carve up psychology into its subdisciplines. An introductory general psychology course might cover social, developmental, cognitive and biological psychology, for example. Take a few studies from each of these areas to ensure that students get a feel for the diversity of the discipline. A most effective technique is to choose pairs of studies that deal with a particular psychological idea in radically different ways. This gives students the opportunity to develop grounded arguments concerning the strengths and weaknesses of the competing approaches, and illustrates to them the analytic power of the compare and contrast process. Pairs of studies that we have found especially productive are:

- Bartlett, (1932) and Ebbinghaus, (1885) on memory. The former looks at the constructive nature of remembering and the latter describes some of the earliest controlled experiments into recall and recognition.
- Koff, (1983) and Bem, (1974). The Koff study uses projective techniques to look at the changes in a young woman's identity as she experiences menarche, and the Bem study takes a psychometric approach to the issue of gender.
- Thigpen and Cleckley, (1954) and Sperry, (1968). Thigpen and Cleckley describe the multiple personality study mentioned earlier, and Sperry describes a number of case studies where people had their cerebral cortex surgically cut into two.
- Asch (1955) and Sheriff (1956). The Asch study is a controlled laboratory investigation of social compliance and the Sheriff study is a field experiment.

Do The Studies Illuminate the Lives of a Wide Range of People?

A good starting point here is George Miller's argument about giving psychology away made in his 1969 APA Presidential Address. If we are to convince students that psychology is worth giving away then it must demonstrably speak to them as individuals. Everyone who studies psychology should be able to find something in this rich, fascinating and diverse discipline that excites them, intrigues them, and leads to an "I wonder what if…?" kind of response. We choose our key studies to explore issues of human diversity and so deal with the ongoing problem of ethnocentrism in the subject.

Finding Good Original Sources

The most obvious way of finding good sources is to look through books of readings, talk to your colleagues, and ask students what interests them. Strangely enough, we can't seem to remember doing any of this so it is our belief that some studies have just become magically more visible to us in the relief map of psychology. They have touched us in such a way that we felt we had to go to the library to get a copy. Maybe that is the way to select studies, and this approach would fit with our belief that the enthusiasm and interest of the teacher is an important ingredient of any successful lesson.

Tips For Teaching With Original Sources

Introduce Them and Put Them in a Context

In one of our typical *key studies teaching sessions*, we look at two related papers which bear on a

particular theme or topic. Before we look at the papers themselves we give a brief introduction that puts the work into an appropriate context. For example, we might contextualize Milgram within the questions raised about human behavior following the horrors of the Second World War. Other studies have a more obviously scientific context that develops out of previous research.

Explore the Relevant Research Questions

Discussion of the papers typically begins with some work on the relevant research questions: what are they and where did they come from?

Decide What You Want Students To Attend To and Learn

Think about what it is you want your students to learn by reading each original source. For us, the class is constructed around the following set of questions for each research paper:

- How was the research question examined?
- What methods were used and why?
- What were the measurement tools?
- What participants were used?
- What data were collected?
- What interpretations were made of the findings?
- How did the researchers deal with quality control issues (ethics, validity, reliability and so forth)?
- What efforts have been made to replicate the study and to what effect?
- Where has this line of research gone since this study was conducted?
- How do the interpretations fit into the theoretical background summarized at the outset of the class?

We have found it useful to devote a significant proportion of the time available to discussion of the data from the studies. This normally involves producing an overhead transparency with copies of original tables, and perhaps setting the students to work in small groups on questions that require studying the data fairly closely. In our experience students are not always good at looking at, thinking about, and reasoning with data, so this activity provides them a chance to practice and develop some important skills.

One crucial part of the whole process is that students be required, as much as is possible, to read the original papers. For some sessions it makes sense for the students to have read the papers beforehand, for others it is more appropriate to assign the papers afterwards. For example, you may want to draw out the students' expectations before they read an original source. Milgram's obedience study is a good example. It is best read after you have discussed how we expect people to behave under pressure. On the other hand, if the teacher wants to concentrate on a study's methodological aspects, it is probably more helpful if the students have read it beforehand.

Knowing that Students Are Reading and Learning From Original

Sources

Our goal is that students develop critical reading skills. These skills include analysis of the key issues in an original source, evaluation of the evidence, and the development of opinions. To ensure that students are reading original sources, we use examinations that require them to comment on a selection of the studies.

Conclusion

In the end there always seem to be too many studies that cry out to be included in our courses. It is important, though, to be ruthless and restrict their number so that students can consider them in some detail. It is our opinion that one of the most common teaching mistakes is to give students too much information, and in so doing inhibit their understanding and evaluation of any of it. The key studies approach hopefully avoids this problem, and with a careful choice of studies it can excite and motivate your students. Box I presents our Top Ten Teaching Studies, though we are sure readers will have their own favorites. The reader may want to try Banyard and Grayson, 1996, which provides readable summaries of 60 key papers in psychology, emphasizing what was done and concluded. It is designed to enable students to tackle the articles in their original form.