

The Ethics of Research on Families and Children

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Study Questions

Like our counterparts in the natural sciences, social scientists believe that the key value underlying all scientific activity is that the chief goal of science is the discovery of new knowledge (Sjoberg & Nett, 1968). However, social scientists (unlike their counterparts in the natural sciences) recognize that the subjects of their research are sentient beings with lives of their own. As a result, sometimes social scientists are forced to choose between the value of scientific knowledge and the value of the welfare of their subjects. This creates an ethical dilemma for us. In this chapter, we center our discussion on two areas where ethical dilemmas rise: how we treat our participants and how we perform our science.

The Rights of Participants in Research on Families and Children

Although a physicist studying subatomic particles need not worry about harming a neutron and a microbiologist doesn't have to consider

a protozoan's feelings, the rights of human research participants should be of paramount concern to social scientists. In the United States, the issue of protection of rights of human research participants is administered by the Department of Health and Human Services (DHHS). The regulations are laid out in what is known as Title 45, Protection of Human Subjects (45 CFR Part 46). The National Institutes of Health's (NIH) Office for Human Research Protections has an extensive website listing recommendations and specific regulations at www.hhs.gov/ohrp; the site even has a series of videos to orient researchers to the special ethical and safety issues associated with research involving human subjects. The rights of participants in social research may be defined in five broad areas: minimization of risk or harm, informed consent, anonymity and confidentiality, right to knowledge of the findings, and right to remedial services.

Risk or Harm to Research Participants

One of the most important ethical cornerstones of scientific research is that no harm come to the research participants. Usually when we think of "harm" or "risk" we're thinking of physical harm, and it's true that most research on humans in general and children in particular is unlikely to pose a threat of physical harm to the participants. But there can be other kinds of harm, as well: providing false feedback about results from personality inventories, for example. One could imagine a study where children were told that their responses to a personality test indicated that they were pathological liars, or adolescents might be told that their sexual orientation didn't match that which they presented to the world. In such cases, there could be serious psychological harm done.

Informed Consent

The cornerstone of ethical research on human subjects lies in the principle of **informed consent**. In general, DHHS regulations prohibit research on human subjects without the legally effective, informed consent of the subject or the subject's legally authorized representative. The regulations require that each potential research participant be provided with the following:

- A list of possible risks or discomforts
- A description of possible benefits
- A statement concerning confidentiality
- Information about who to contact concerning the study

- A statement that participation is voluntary and that the individual will suffer no adverse consequences either for declining to participate or for withdrawing at any point during the study

Children and others who are deemed unable to fully comprehend the research process (such as someone diagnosed with dementia) cannot provide informed consent. Therefore, any study using children or someone with diminished mental capacity must receive informed consent from a legal guardian and then secure assent from the participant (the child or other individual to be studied).

Anonymity and Confidentiality

Compared to the potential for harmful effects on subjects of work by our colleagues in the biomedical fields, there is rarely the possibility of physical harm to our research participants. Threats to participants in social research tend to be those involving the release of personal information. By *anonymity*, we mean that no identifying information should be retained in the researcher's files following completion of data collection. *Anonymous* data are just that: There are no identifiers stored with the data, and any particular respondent in a research project cannot be directly identified. *Confidentiality*, on the other hand, suggests that the data are not anonymous—that is, individual respondents can be identified—but that the data will be held securely and not released to unauthorized personnel.

Even without explicit identifiers such as names or addresses, it may be possible to identify specific participants in the study based on other reported characteristics, especially if the data include geographical information. Consequently, to minimize possible harm or embarrassment to the participants, the researcher should make every effort to conceal the identities of the participants when reporting research findings. Although DHHS regulations do not require either anonymity or confidentiality, they do require that the informed-consent agreement describe the extent to which confidentiality will be maintained.

There have been a series of embarrassing releases of confidential information by biomedical and other researchers in recent years. If it is essential to maintain identifying information, then perhaps the most important thing researchers can do is to make sure that there are no identifiers (e.g., names, social security numbers) stored with the data—what the security people call “anonymization.” Instead, researchers can create a key that links the identifier to an arbitrary case number. The data themselves are stored with the arbitrary case number so that if the data

are lost or stolen, they are still just a series of numbers useless to anyone except the researcher; the key is stored securely and accessed only when absolutely necessary.

Right to Knowledge of the Findings

The researcher has an ethical obligation to share the nature of the research findings with the research participants. In some studies, findings developed during the course of the research may affect the participants' willingness to continue in the project; DHHS regulations require that such findings be provided to the participants in a timely fashion. Most social scientific findings are shared with the public through published work such as journal articles, technically fulfilling the expectation to share the results with participants (although it remains to be seen that participants are aware of how to access the knowledge produced from their participation).

Right to Remedial Services

Applied studies may study the effects of various treatments or programs designed to improve some existing disadvantage or social problem. For experimental designs in which some participants are assigned to a control condition that does not receive treatment benefits, it can be argued that the researcher has the ethical obligation to supply the beneficial treatment or program to members of the control group in a remedial fashion whenever possible.

What Is the Role of the Institutional Review Board?

At the institutional level—say, within a college or university—decisions concerning whether these ethical guidelines have been met for a particular research project are made by what is known as an institutional review board (IRB). To qualify for federal funds, all research institutions must maintain an IRB in accordance with DHHS guidelines. The IRB must consist of at least five members, one of whom is not a scientist. At least one member must be from outside the institution. In general, all research involving human subjects must be evaluated by the IRB for compliance with the DHHS guidelines. Universities generally require that all research—whether conducted by a faculty member or student—be approved by the IRB before commencing data collection. Thus, IRBs can provide a framework within

which we can reduce ethical dilemmas in both how we treat our participants and how we perform our science.

Certain types of research are exempt from the DHHS guidelines. In general, projects involving interviews or observations of public behavior are exempt as long as individuals cannot be identified in the data or if the data are already in the public domain. When in doubt, it's a good policy to submit the appropriate paperwork for review by your local IRB.

Ultimately, the IRB has to weigh the possible benefits accruing from a proposed project against the likely or plausible risks it poses for its participants. These benefits include those of an immediate nature to the research participants as well as the importance of the knowledge that may reasonably be expected to result from the research. The fair, ethical, and compassionate treatment of participants should be paramount in the evaluation of research by the IRB.

Sometimes, however, the IRB fails in its duties. Consider the case of Mani Pavuluri, a child psychiatrist at the University of Illinois at Chicago. Her research studied adolescents with bipolar function using lithium treatments (J. S. Cohen, 2018). A review by National Institute of Mental Health (NIMH; Claycamp, 2017) found four primary violations: enrolling children younger than the approved ages of 13 to 16, including children who had previously used psychotropic medications, which should have made them ineligible for the study; serving as a physician for some of the children in her study; and failing to give some girls pregnancy tests after telling the parents that they would be tested (lithium has been associated with a higher risk of birth defects).

The NIMH review also found “Insufficient initial review by the IRB (e.g., no research protocol was provided at the time of review)” and failure of the IRB to take note of “multiple inconsistencies between and within the research protocol, informed consent documents, parental permissions and assents, initial review application, grant and other documents” (Claycamp, 2017).

A university spokesperson said that “internal safeguards did not fail” but Pavuluri’s research was terminated in 2013 and about \$800,000 in unspent research funds were returned to NIMH. However, the university named Pavuluri a university scholar later in 2013, an award that included a cash prize of \$30,000. She maintains her position as faculty chair and her base salary of almost \$200,000, even though the university’s chancellor said that “her conduct reflected a ‘pattern of placing research priorities above patient welfare’” (J. S. Cohen, 2018).

We’re not suggesting here that the institutional review system doesn’t work or that IRBs are incompetent; nearly all do their jobs extremely well and flag many inappropriate research protocols before the research can begin. But like all things in this text, we want you to be a *critical consumer*

of social research. That means questioning not only the research designs of published studies that you read, it also means paying attention to the processes by which research gets approved and funded.

Fraud in Research on Families and Children

IRBs will work to assure the ethical treatment of participants in research projects and can also weigh in on the extent to which research itself is performed in an ethical manner. However, they are not charged with verifying that data have been collected in the manner described in a research proposal, nor that there is honesty or transparency in the overall performance of the scientific project. Although it is extremely rare, sometimes social researchers report fraudulent data or even entire fraudulent studies. Unless the researcher makes the raw data available to other scholars—something that a few scholarly journals now require—it can be nearly impossible to determine if a particular study is genuine. Sometimes skepticism comes from the inability to replicate a particular study. Other times there are inconsistencies in the research that lead outsiders to question the results. And fraud might be detected when a researcher “can’t find” or refuses to provide the data from the study, suggesting that the data never existed.

The Strange Case of Michael LaCour

In 2014, Michael J. LaCour, a Ph.D. student in political science at UCLA, published a paper (LaCour & Green, 2014) titled “When contact changes minds: An experiment on transmission of support for gay equality” in the prestigious journal *Science*. LaCour had conducted a field experiment to see if it was possible to change people’s views on gay marriage through a brief discussion about marriage equality (for more detail about the research and its subsequent debunking, see Konnikova, 2015; Singal, 2015). Although persuasive communication studies like these usually produce modest (if any) changes in attitudes, the article reported that there were large, statistically significant effects on the respondents’ attitudes as a result of this brief interaction. The story was picked up nationally and was reported in the *New York Times*, the *Washington Post*, *Wall Street Journal*, and other outlets.

Impressed by LaCour’s findings, Berkeley political science Ph.D. student David Broockman attempted to replicate the study. He quickly learned that it would cost approximately *one million dollars* to reimburse the respondents in such a study. It seemed inconceivable that LaCour had

received that level of funding, which would be impressive for a tenured professor, let alone a graduate student. Broockman's suspicions led him to publish a report (Broockman, Kalla, & Aronow, 2015) detailing what he called "irregularities" in the LaCour and Green (2014) paper. Apparently, LaCour had used an existing dataset, added the fraudulent measures of attitude change, and presented it as the responses from his field experiment. The *Science* article was later retracted.

Apparently this wasn't an isolated incident of fraud by LaCour. He reported nearly \$800,000 in grants on his resumé and several awards that either he didn't receive or simply didn't exist. Shortly after the *Science* article appeared, he was offered a faculty position at Princeton; that offer was later rescinded. He now seems to be out of academia completely.

The Lying Dutchman

Diederik Stapel was professor of psychology at Tilburg University in the Netherlands. Most of what follows comes either from a final report on the case (Levelt, Drenth, & Noort, 2012) or an article reporting an interview with Stapel (Bhattacharjee, 2013). Stapel had an unusual habit of conducting all of his studies himself, even those that were intended for his students' dissertation research, even though graduate students typically conduct their own research. One of his studies with colleague Ad Vingerhoets was intended to examine whether exposure to someone crying elicits empathy or prosocial behavior. The study involved giving school children a coloring task. Half of the children were told to color a cartoon character that was crying; the others were to color a picture of the same character that was not showing emotion. Afterward, the children were asked if they would share candy with other children (an indication of prosocial behavior).

Stapel said he collected the data from a local school and a few weeks later reported to Vingerhoets that they had observed a statistically significant effect on prosocial behavior: the children who had colored the crying character were more likely to share the candy. As he began writing up the article from the study, Vingerhoets wondered if there were gender differences in the effect. Stapel said the data hadn't been entered into the computer yet—but he had earlier shown Vingerhoets statistical calculations which usually require computer analysis. Vingerhoets was suspicious but decided not to press the issue.

Then a graduate student found inconsistencies in three experiments that Stapel had conducted. Confronted with these issues, Stapel claimed that the original data could not be found. Later, another graduate student found anomalies in several of Stapel's datasets, the final straw being where it appeared that Stapel had simply copied data from one row of data to another row.

Eventually two graduate students reported their concerns to the department head. Tilburg, Gronigen, and Amsterdam universities produced a joint report in November 2012 (Levelt et al., 2012) finding fraud in at least 55 of Stapel's published papers and 10 of his students' Ph.D. dissertations (as well as in his own dissertation). The report suggested that the fraud went undetected due to a "a general culture of careless, selective and uncritical handling of research and data" (p. 47). The report also identified what they called "sloppy science," or "a failure to meet normal standards of methodology" (p. 5) including the misuse of statistics. Stapel was dismissed from Tilburg University in 2011.

Power Posing

Amy Cuddy is a lecturer in the Harvard Business School. In 2010, she published a paper (Carney, Cuddy, & Yap, 2010) that claimed that "a person can, by assuming two simple 1-min poses, embody power and instantly become more powerful" (p. 1363). This notion of "power posing"—for example, sitting back in a chair with your arms behind your head—led to Cuddy doing a TED Talk (Cuddy, 2012) that by 2018 had more than 40 million views and a best-selling book, *Presence: Bringing Your Boldest Self to Your Biggest Challenges* (Cuddy, 2015). The power posing apparently not only led people to report that they felt more powerful; there were hormonal changes as well—decreases in cortisol and increases in testosterone, which are linked to power and dominance in humans and other animals.

The finding that such a simple intervention could produce such profound changes captivated journalists around the world. Cuddy became an instant media hit, featured in the *New York Times*, the *Wall Street Journal*, CNN, BBC, and most of the morning TV shows. The power posing results also were viewed rather skeptically by a number of researchers, including Eva Ranehill, a University of Zurich psychologist. In 2015, Ranehill and her co-authors (2015) concluded that their attempt to replicate Carney, Cuddy, and Yap (2010) "failed to confirm an effect of power posing on testosterone, cortisol, and financial risk taking" (p. 656). Two other researchers concluded that "the behavioral and physiological effects of expansive versus contractive postures ought to be treated as hypotheses currently lacking in empirical support . . . the existing evidence is too weak to justify a search for moderators or to advocate for people to engage in power posing to better their lives" (Simmons & Simonsohn, 2017, pp. 690–691). In response, Cuddy wrote "I respectfully disagree with the interpretations and conclusions of Simonsohn et al., but I'm considering these issues very carefully and look forward to further progress on this important topic" (Simmons & Simonsohn, 2015).

Then a most unusual thing happened. Dana Carney, now a professor at Berkeley and the lead author on the 2010 power pose article, posted on her web page that “since early 2015 the evidence has been mounting suggesting there is unlikely any embodied effect of nonverbal expansiveness (vs. contractiveness)—i.e., ‘power poses’—on internal or psychological outcomes. As evidence has come in over these past 2+ years, my views have updated to reflect the evidence. As such, I do not believe that ‘power pose’ effects are real” (Carney, 2015).

In a recent paper (Cuddy, Schultz, & Fosse, 2018), Cuddy and colleagues attempted to rebut her critics. In a review of 55 studies, they concluded that

findings from the present set of studies provide convincing evidence that postural manipulations affected subjects’ specific emotions, affect, mood recovery, retrieval and recall of positive versus negative memories, and self-evaluations, demonstrating that the effects of postural feedback on affective variables clearly extend beyond causing people to feel more powerful. (pp. 662–663)

Where does this leave us in terms of judging the validity of the power posing hypothesis? First, it’s important to note that perhaps the most interesting findings from the original experiment—the hormonal effects and effects on behavior—were not replicated. Second, it’s apparent that there’s no clear-cut response to the question—reasonable scientists seem to disagree on the matter.

Ethical Issues in Analysis and in the Journal Review Process

Mark Regnerus is a professor at the University of Texas. In 2011, he fielded the “New Family Structure Study” with funding from the Witherspoon Institute and the Bradley Foundation. The project surveyed about 3,000 Americans ages 18 to 39 years “with particular attention paid to reaching ample numbers of respondents who were raised by parents that had a same-sex relationship” (Regnerus, 2012, p. 755). Regnerus compared what he claimed were individuals raised by “lesbian mothers” and “gay fathers” and concluded that, by young adulthood, these children did substantially less well on a number of indicators of well-being, including being more likely to have been arrested, to have pled guilty to non-minor offenses, and having more sex partners. He also concluded that

the NFSS also clearly reveals that children appear most apt to succeed well as adults—on multiple counts and across a variety of domains—when they spend their entire childhood with their

married mother and father, and especially when the parents remain married to the present day. (p. 764)

In other words, the gist of the paper was that children are better off being raised by their biological (heterosexual) parents.

Not surprisingly, conservative organizations seized on these findings as ammunition in court battles over same-sex parenting rights—in fact, “the day after publication of the Regnerus study it was cited in an *amicus curiae* brief by a conservative Christian political organization to justify denying marriage rights to same sex couples” (Sherkat, 2012, p. 1349). However, there were a number of issues in the Regnerus paper that raised the concern of other social scientists. There was so much concern, in fact, that when Regnerus came up for post-tenure review at the University of Texas his dean commissioned a detailed report of the issues (Musick, 2014). Some of these issues were purely methodological, dealing with how Regnerus chose to analyze the data; others were ethical and had to do with the funding and publication of the study.

The report began by noting that the Regnerus paper “is probably one of the most, if not the most, scrutinized sociological articles in recent history” (Musick, 2014, p. 1). Regnerus began by classifying the adult respondents as being raised by “lesbian mothers,” “gay fathers,” or in an intact biological family (and several other categories not relevant here). One problem with this categorization, as Regnerus admitted (Regnerus, 2012, p. 758), was that the categories were not mutually exclusive. To maximize the sample size of children raised by “lesbian mothers” or “gay fathers,” Regnerus chose to allow those characteristics to override the other possibilities. While this may sound like an arcane methodological decision, it is actually quite important because it eventually confounds the sexual history of the parents with their marital histories.

In fact, one could reasonably argue that the respondents who were classified into the “lesbian mothers” or “gay fathers” categories weren’t raised by same-sex parents at all. To be classified into the “lesbian mothers” group, for example, all that was required was that the respondent report that the mother had at least one same-sex relationship *at some point in their lives*. The result of this seemingly trivial coding decision is that very few of the respondents classified in the “lesbian mothers” or “gay fathers” categories were actually raised by same-sex parents. Nevertheless, many (if not most) non-social scientists reading this paper will come away with the impression that it is about the effects on children raised in same-sex couple households when it clearly is not.

Another curious fact about the Regnerus paper is the strange route it took to publication in a peer-reviewed journal. The paper was actually submitted for publication 3 weeks before data collection was completed,

and the total time from submission to acceptance for publication was only about six weeks. This is a substantially shorter time to publication than is usual in social science journals. More interestingly, at least two of the three reviewers of the article had what could charitably be called conflicts of interest, having been paid consultants on the study itself (Sherkat, 2012).

Our take on the Regnerus paper is that it was funded, designed, conducted, analyzed, and presented to make a specific political point. At every step of the process, from formulating the survey to submitting for publication, every decision seemed to be in service of the political goal of opposing same-sex marriage and parenting. As Cohen (2012b) wrote, “I think it’s a bad-quality piece of research that should not have been published; and that Regnerus cynically manipulated promotion by the conservative press and anti-equality advocates eager to declare, ‘this new research tends to affirm that the ideal for a child is a married mom and dad.’”

The Value of Ethically Sound Research

Research that falls short of ethical standards, either of how to treat participants or of how the science is performed, undermines the ability of other researchers to do their work. Unfortunately, we remember the stories of researchers accused of behaving badly, for example, Milgram’s shock studies (Milgram, 1974) and the Stanford prison experiment (Zimbardo, 2007). Most research methods textbooks use the same examples of problematic research for precisely that reason: focusing on the bad behavior will teach others what not to do. Ethically sound research is the standard, although we rarely hear about the precautions used to protect research participants when we hear about the findings of recently published work. However, ethically sound research is the backbone of scientific understanding. If we are to build a body of knowledge about any subject, but particularly the study of human development and families, we need to trust that the study was performed with the utmost care to participants’ rights, their ability to participate voluntarily and provide consent (and assent where needed), minimal deception (with debriefing as needed), and confidentiality. Studies that are rigged with predetermined outcomes or are based on inappropriately acquired data undermine our ability to understand the social world and ultimately can do substantial harm through the spread of inaccurate information. The now-infamous study using fabricated data that linked vaccines with autism is the ultimate example of this last problem.

Therefore, it’s important to remember that cases of fraud or unethical behavior in social research are the exceptions rather than the rule. The best way for us to detect such cases is to use our methodological skills to

critically examine the research we read and not blindly accept the validity of a study simply because it has been published in a reputable journal. One goal of this book is to show you how to evaluate research studies. This chapter has focused on the importance of understanding the structure of the study itself, the protections provided for the research participants, as well as the honesty and transparency attached to the reporting of the scientific process and study outcomes. The rest of the book will expose you to other tools you can use to critically evaluate research, beginning in Chapter 3 with issues of causality.

STUDY QUESTIONS

1. Find a report of family-related research in a daily newspaper or weekly newsmagazine. What information that you think is necessary for your evaluation of the research is not presented?
2. Find a research project using human participants in any of the major journals that publish family-related research. Evaluate the study in terms of the five major ethical concerns in this chapter. How well did the authors of the study adhere to each of these guidelines?
3. Why do you think that people like LaCour, Stapel, and others report fraudulent research? How might family studies and human development scholars combat such research?