

# All Life Is an Experiment. (Sometimes It Is a Controlled Experiment.)

Jane R. Bambauer\*

INTRODUCTION .....	487
I. THE STUDY .....	489
II. PRIVACY .....	491
III. MANIPULATION .....	494
A. <i>Intervention Defined</i> .....	495
B. <i>Does a Research Purpose Cause a Conflict of Interest?</i> .....	496
C. <i>Does a Research Purpose Increase the Risk of Harm?</i> .....	498
D. <i>Is a Research Purpose an Affront to Autonomy?</i> .....	502
E. <i>To Intervene Is Human</i> .....	506
IV. TECHNICAL VIOLATIONS WITH IRB LAW.....	509
V. CORRECTING OUR ANTI-RESEARCH RESEARCH LAW .....	511
CONCLUSIONS .....	513

## INTRODUCTION

Last year, Facebook found a new way to irritate its users. Facebook, in collaboration with researchers at Cornell University, published the now-famous “Emotion Contagion” study, which examined whether users’ own status updates were influenced by the emotional valence of the messages in their News Feeds.<sup>1</sup> To do so, Facebook altered the News Feed algorithm for a large, randomly selected sample of

---

\* Associate Professor of Law, University of Arizona James E. Rogers College of Law; B.S., Yale College; J.D., Yale Law School. The author is exceedingly grateful for the feedback on early drafts by Derek Bambauer and Chris Robertson. Gratitude is also owed to Alexander Tsesis and the *Loyola University Chicago Law Journal* for the support and opportunity to present this research.

1. Adam D.I. Kramer et al., *Experimental Evidence of Massive-Scale Emotional Contagion Through Social Networks*, 111 Proc. Nat’l Acad. Sci. 8788, 8788 (2014).

Facebook users.

When news broke about Facebook's surreptitious study, scholars came out in droves to denounce the practices. James Grimmelman was the most outspoken critic, insisting that the Facebook study was not only immoral but also illegal.<sup>2</sup> Other legal scholars have questioned the practices followed by the Emotion Contagion study authors, too, and most proposed extending the legal requirements for Institutional Review Boards ("IRBs") to private corporations.<sup>3</sup>

This Essay comes to a starkly different conclusion. Although the strong reactions to Facebook's research are perfectly natural, they are not particularly thoughtful. And they steer us toward policies that are downright anti-intellectual. The Facebook Emotion Contagion study reveals that our unexamined intuitions about social science lead to bizarre legal and ethical rules. Our reactions are harshest when the research is the most legitimate; the most criticized studies are the ones performed by academics, that use the most methodologically sound form of investigation, and that distribute their costs and burdens evenhandedly across society. Worse still, the social stigma and legal sanctions apply only when researchers share their findings with the general public. The moral outrage surrounding the Facebook Emotion Contagion study encapsulates all of these perverse qualities.

This Essay begins with a short description of the Facebook study and the hostile reaction it received from the public and from legal scholars. Parts II and III critique the criticism, finding that the moral indignation

---

2. James Grimmelman, *Illegal, Immoral, and Mood-Altering: How Facebook and OkCupid Broke the Law When They Experimented on Users*, MEDIUM (Sept. 23, 2014), <https://medium.com/@JamesGrimmelmman/illegal-unethical-and-mood-altering-8b93af772688>.

3. Ryan Calo, *Consumer Subject Review Boards: A Thought Experiment*, 66 STAN. L. REV. ONLINE 97 (2013) (recommending something more dynamic and less demanding than full "Common Rule" IRB review for corporate research); Jules Polonetsky & Omer Tene, *Enter the Philosophers: Ethical Review Boards for Innovative Data Use by Corporations*, 13 COLO. TECH. L.J. 333 (2015) (fleshing out Calo's proposal and providing valuable background on the live debate about corporate social science research); Frank Pasquale, *Social Science in an Era of Corporate Big Data*, CONCURRING OPINIONS (July 4, 2014), <http://concurringopinions.com/archives/2014/07/social-science-in-an-era-of-corporate-big-data.html>; Daniel Solove, *Facebook's Psych Experiment: Consent, Privacy, and Manipulation*, HUFFINGTON POST, [http://www.huffingtonpost.com/daniel-j-solove/facebook-psych-experiment\\_b\\_5545372.html](http://www.huffingtonpost.com/daniel-j-solove/facebook-psych-experiment_b_5545372.html) (last updated Aug. 30, 2014, 5:59 AM). Outside the legal discipline, there is a little more diversity of opinion. See, e.g., Michele Meyer, *Two Cheers for Corporate Experimentation: The A/B Illusion and the Virtues of Data-Driven Innovation*, 13 COLO. TECH. L.J. 273 (2015) (defending the Emotion Contagion study from critiques); Tal Yarkoni, *In Defense of Facebook*, TAL YARKONI (July 1, 2015), <http://www.talyarkoni.org/blog/2014/06/28/in-defense-of-facebook/> (defending the Emotion Contagion study from some critiques).

is misplaced, and that the anticipated problems are best addressed through direct regulations of risky conduct and special relationships. Part IV shows that the law regulating research is overbroad. It obstructs research that poses little risk to its subjects or society. Part V briefly sketches a proposal to reform research policy so that it can simultaneously support the production of knowledge while protecting research subjects from harm.

### I. THE STUDY

One of the more peculiar aspects of the Facebook research controversy is its relatively innocuous origin.

Facebook worked with researchers at Cornell University to investigate whether our mood is affected by the mood of our friends as expressed by the Facebook status updates that appear in the News Feed.<sup>4</sup> The researchers took a sample of roughly 700,000 randomly selected Facebook users and divided them into two related randomized control trials.<sup>5</sup> The control groups for both experiments saw the usual News Feed on their home pages—exactly the same News Feed they would see if they were not in the experiment at all.<sup>6</sup> The experimental groups saw News Feeds for which either positive or negative emotional expressions by their friends were reduced by 10%.<sup>7</sup>

The researchers found that sure enough, people who saw fewer negative postings were less likely—slightly less likely—to post a negative status update.<sup>8</sup> Likewise, people who saw fewer positive postings were less likely to post a positive update and more likely to post a negative one.<sup>9</sup> It is not clear that this is evidence of an *actual* change in mood rather than an effect on expression,<sup>10</sup> and the effect is small in absolute terms. But it is an interesting and statistically significant effect all the same.

The Emotion Contagion study was just one of several experiments that Facebook has facilitated, and it is not all that obvious why this particular one attracted the ire that it did.<sup>11</sup> Other studies have had

---

4. Kramer et al., *supra* note 1, at 8788.

5. *Id.*

6. *Id.*

7. *Id.*

8. *Id.*

9. *Id.*

10. George Lawton, *Why Is It Ethical Not to Test for Emotional Impact?*, TORQUE (Sept. 8, 2014), <http://torquemag.io/ethical-test-emotional-impact/> [hereinafter Lawton].

11. Others have wondered the same thing. Danah Boyd, *What Does the Facebook Experiment*

much more consequential findings. For example, a study published in the prestigious journal *Nature* demonstrated the potential power that social networks could wield in democratic elections.<sup>12</sup> The “Poked to Vote” study<sup>13</sup> compared a control group of Facebook users who saw a generic, informational “Get Out the Vote” message to an experimental group who saw a social stimulus—the same “Get Out the Vote” message placed next to pictures of six friends who had reported that they voted. The experimental group was very slightly more likely to vote than the control group.<sup>14</sup>

In terms of substance, the Poked to Vote study probably has more potential for use and abuse than the Emotion Contagion study, but for whatever reason, it was the Emotion Contagion study that captured the imaginations and fears of the public.

Most of the commentary criticizing the Facebook Emotion Contagion study raised objections about the ethics of the research process—specifically that the study authors did not provide effective notice and choice to the study participants.<sup>15</sup> The lack of informed consent has both privacy and research ethics implications.

First, proceeding without informed consent violated the privacy principle of “respect for context.” This foundational principle of privacy policy urges data collectors to use data only for the purpose for which it was collected.<sup>16</sup> The Facebook Emotion Contagion study arguably violated this principle when it repurposed status updates for something other than Facebook’s existing or anticipated services.

Second, proceeding without informed consent also violated autonomy principles that undergird modern research ethics. Facebook secretly imposed an intervention in the experimental subjects’ lives, and consequently the subjects had less knowledge and control over their domains than they had assumed.

---

*Teach Us: Growing Anxiety About Data Manipulation*, MEDUM (July 1, 2014), <https://medium.com/message/what-does-the-facebook-experiment-teach-us-c858c08e287f>.

12. Robert M. Bond et al., *A 61-Million-Person Experiment in Social Influence and Political Mobilization*, 489 NATURE 295 (2012).

13. Sinan Aral, *Poked to Vote*, 489 NATURE 212 (2012) (introducing the study under the title “Poked to Vote”).

14. Bond et al., *supra* note 12.

15. Solove, *supra* note 3.

16. WILLIS H. WARE ET AL., U.S. DEP’T OF HEALTH, EDUC. & WELFARE, RECORDS, COMPUTERS, AND THE RIGHTS OF CITIZENS: REPORT OF THE SECRETARY’S ADVISORY COMMITTEE ON AUTOMATED PERSONAL DATA SYSTEMS, at XX (1973) [hereinafter HEW REPORT] (“There must be a way for an individual to prevent information about him obtained for one purpose from being used or made available for other purposes without his consent.”).

Because both the privacy and autonomy critiques run into problems in the context of potentially valuable social science and public health research—problems that I will elaborate in the next two Parts—the discourse on Facebook’s Emotion Contagion study eventually turned to and settled on alleged violations of federal law that regulates IRB review.<sup>17</sup>

The next three Parts will examine the validity of the process-related complaints directed at Facebook and its collaborators. The actual findings in the Facebook study were rarely challenged, perhaps because the effects are small and unsurprising. But I will also comment on what law can do if we become concerned about how the findings of a study can be misused.

## II. PRIVACY

Most privacy laws and policy guidance documents embrace the Fair Information Practice Principles (“FIPPs”) developed several decades ago in a report written by the U.S. Department of Health, Education, and Welfare.<sup>18</sup> One of the principles embraced in the code of FIPPs restricts data producers from repurposing data that was originally collected for some other purpose, unless the data subject has provided consent.<sup>19</sup> This principle of purpose limitation or respect for context was incorporated into President Obama’s proposed Consumer Privacy Bill of Rights<sup>20</sup> and is regularly embraced in the Federal Trade Commission’s privacy guidance documents.<sup>21</sup> The Facebook study presumably violated the respect for context principle. Research like Facebook’s takes data that was legitimately collected for one purpose and uses it for some other unexpected inquiry. Strict adherence to the FIPPs would therefore require Facebook to give effective notice and choice before studying the data it collected about its users for anything other than basic service improvements.

---

17. Grimmelmann, *supra* note 2.

18. HEW REPORT, *supra* note 16, at xx; *see also* ROBERT GELLMAN, FAIR INFORMATION PRACTICES: A BASIC HISTORY (Feb. 11, 2015), <http://bobgellman.com/rg-docs/rg-FIPShistory.pdf> (providing a history of FIPPs).

19. HEW REPORT, *supra* note 16, at xx (“There must be a way for an individual to prevent information about him obtained for one purpose from being used or made available for other purposes without his consent.”).

20. WHITE HOUSE, ADMINISTRATION DISCUSSION DRAFT: CONSUMER PRIVACY BILL OF RIGHTS ACT OF 2015, at 8 (2015).

21. FED. TRADE COMM’N, PROTECTING CONSUMER PRIVACY IN AN ERA OF RAPID CHANGE: RECOMMENDATIONS FOR BUSINESS AND POLICYMAKERS 38–39 (2012).

In the context of public health and social science research, the respect for context principle presents two insurmountable problems. The first is practical. The original context or purpose of data collection is usually ambiguous, as the Facebook Emotion Contagion study itself demonstrates. If the test for original purpose is determined by the users' actual understanding, then the public surprise and objection to the Emotion Contagion study is good evidence that analysis of Facebook users' moods did not serve a proper business purpose. But if the test is an objective one—what a Facebook user *should* understand, the original purpose could sweep much broader. After all, most people who have thought at all about Facebook's News Feed algorithm understand that Facebook curates the status updates that appear in the News Feed all the time.<sup>22</sup> Perhaps consumers should anticipate that Facebook would redesign its News Feed algorithm from time to time based on our reactions and responsive behaviors to the current feed. If so, we could expect Facebook to use our data to assess the effects of the current algorithm and optimize the program for some goal.

Second, and more importantly, societies like ours that have come to demand efficient and evidence-based services cannot comply with the respect for context principle. Good research has to be disrespectful of context. Academic research frequently looks for ways to repurpose data to make novel insights. For example, a recent study published in the journal *JAMA Internal Medicine* used hospital discharge data to examine what happens when a large portion of the most highly skilled cardiologists in the country leave their posts for a few days to attend a national conference.<sup>23</sup> The results were unexpected.<sup>24</sup> But so was the research itself for the patients whose data was included in the study. Those patients would not have anticipated at the time of their hospitalization that they were part of a natural experiment. They likely were not even aware that their admitting hospital's staffing had been affected by an annual conference.

Companies routinely repurpose data for research, not only to optimize their own business, but also for the pursuit of generalizable knowledge. For example, Google has used search terms to identify

---

22. Victor Luckerson, *Here's How Facebook's News Feed Actually Works*, TIME (July 9, 2015), <http://time.com/3950525/facebook-news-feed-algorithm/>.

23. Ashutosh B. Jena et al., *Mortality and Treatment Patterns Among Patients Hospitalized with Acute Cardiovascular Conditions During Dates of National Cardiology Meetings*, 175 JAMA INTERNAL MED. 237 (2015).

24. *Id.* (finding that mortality was greatly *reduced* for the most severe heart problems).

previously unknown side effects of prescription drugs.<sup>25</sup> OkCupid has used the data from its dating website to reveal all sorts of interesting things about human behavior.<sup>26</sup>

Nearly all of the most important social science has relied on repurposed data. A sudden enforcement of the respect for context privacy principle would grind research, as we know it, to a halt. Given the social costs at stake, it is not surprising that just about every privacy law using FIPPs for its backbone has also incorporated a research exception.<sup>27</sup>

Nevertheless, the respect for context critique will continue to fester in the privacy literature as long as data is collected and studied without a subject's consent. The objection to repurposing data will not go away, no matter how impractical, because the privacy impulse is deeply imbedded in human nature. We simply do not like to be studied. Humans have natural aversion and distrust to the accumulation of knowledge by others who may use it to our disadvantage. Our aversion to study is as old as the Old Testament. God punished King David with a plague on his people, not because of King David's conquests, violence, and adultery, but because he had the hubris to take a census.<sup>28</sup> That kind of social information apparently belonged to God alone. We mortals were meant to live in mutual ignorance about one another.

I raise all this not to push any strong agenda against privacy in all of its forms, but simply to acknowledge that conversations about research ethics exist against the backdrop of instinctive distrust. Our natural aversion to involuntary study consistently drifts through the commentary on research-related privacy without much reflection, but the instinct may not be logical, and may not serve us well. In our cooperative and interdependent society, data repurposing for social

---

25. John Markoff, *Unreported Side Effects of Drugs Are Found Using Internet Search Data, Study Finds*, N.Y. TIMES (Mar. 6, 2013), [http://www.nytimes.com/2013/03/07/science/unreported-side-effects-of-drugs-found-using-internet-data-study-finds.html?\\_r=0](http://www.nytimes.com/2013/03/07/science/unreported-side-effects-of-drugs-found-using-internet-data-study-finds.html?_r=0).

26. Christian Rudder, *Race and Attraction, 2009-2014*, OKTRENDS (Sept. 10, 2014), <http://blog.okcupid.com/index.php/race-attraction-2009-2014/>. OkCupid researchers have shown that implicit racial bias affects the earliest stages of courtship. *Id.* They have also published less depressing findings, like evidence that people still care about grammar. *Id.* Initial messages are much less likely to receive a response when they use the letter "U" instead of "you," for example. *Id.* Public health data is collected and disseminated for a wide variety of research, and the researchers sometimes use the data for novel purposes. *Id.*

27. *See, e.g.*, 45 C.F.R. § 164.514(e) (2015) (federal regulation permitting the release of data without consent for research purposes).

28. 2 *Samuel* 24:10 (David immediately felt guilt for "numbering the people").

science is overwhelmingly beneficial.<sup>29</sup>

The study of historical data—that is, data that was already collected for some other reason and examined for research purposes after the fact—raises fewer legal and ethical problems than designed, premeditated experiments. The next Part will explore the concerns raised about Facebook’s deliberate, surreptitious intervention.

### III. MANIPULATION

The Facebook Emotion Contagion study posed an intervention. They changed the News Feed algorithm for the Facebook users who were unwittingly selected into the experimental groups. Is the intervention a source of legitimate criticism for this style of research?

Some commenters and reporters have pointed out that corporate experimentation is not at all unusual.<sup>30</sup> Controlled studies of changes to the way a firm conducts its business are an entirely normal part of our metrics-driven economy. Google regularly experiments with the placement, phrasing, and design of its web pages.<sup>31</sup> One graphic designer tendered a noisy resignation when he got tired of the testing Google did to figure out which of forty-one shades of blue had the most effective click-through rate.<sup>32</sup> And, of course, Google is in a state of perpetual testing with its flagship search algorithm such that the results are endlessly tweaked and refined based on the responses of its users. Consumer experimentation was hardly invented by Internet firms. Well before Google, retail spaces meticulously studied purchase data and foot traffic information to test various layouts for their stores and shelves.<sup>33</sup> Surreptitious experimentation is prolific.

Still, the fact that a practice is frequently done is not an adequate justification if the practice strikes many people as insulting or harmful. A normative defense of secret experimentation requires more.

On closer inspection, research ethics do not seem to be particularly

---

29. Jane Yakowitz (Bambauer), *Tragedy of the Data Commons*, 25 HARV. J.L. & TECH. 1 (2012) (discussing the benefits of repurposing data for the creation of public research databases).

30. Jules Polonetsky & Omer Tene, *The Facebook Experiment: Gambling? In This Casino?*, RE/CODE (July 2, 2014), <http://recode.net/2014/07/02/the-facebook-experiment-is-there-gambling-in-this-casino/>.

31. Lawton, *supra* note 10.

32. Douglas Bowman, *Goodbye, Google*, STOPDESIGN (Mar. 20, 2009), <http://stopdesign.com/archive/2009/03/20/goodbye-google.html>.

33. See generally VILMA BARR & CHARLES E. BROUDY, *DESIGNING TO SELL* (1986) (providing guidelines for designing retail space layouts based in part on purchase data and foot traffic information).



well designed to enhance public welfare. This Part will show first that research ethics cause identical conduct to be treated differently—and with more suspicion—when the actor intends to learn while engaging in the conduct. This distinction is obviously in tension with any society committed to scientific discovery and evidence-based decision making. Nevertheless, research may motivate conduct that has a propensity to cause harm, so subsequent Sections consider the potential harms from conducting secret research. I ultimately conclude that surreptitious research does not deserve the overwhelming skepticism and resentment it gets.

### *A. Intervention Defined*

Research ethicists and federal law define a research intervention (or manipulation) as “manipulations of the subject or the subject’s environment that are performed for research purposes.”<sup>34</sup> It is a purpose-driven test; *anything* done in order to produce generalizable knowledge will trigger ethical obligations in today’s culture of responsible research.

Consequently, the scope of research is vast, and covers scenarios with vastly different consequences. A deranged doctor who prescribes a dangerous drug to a perfectly healthy patient just to see whether healthy patients experience the same side effects as sick patients is engaged in research. But so is the elementary school teacher who tries two different in-class activities on two sections of students in order to see which activity produces better learning and test outcomes.

Given this great heterogeneity in the conduct that can constitute research, the law and ethical recommendations have naturally adapted to require more process for some types of research than for others. But everything that falls in this definition of “intervention” technically counts as surreptitious research if it is done without advance notice and an opportunity to withdraw. So the simple rule that the critics of the Facebook study propose—the “no secret research” rule—must address some negative qualities that *all* research interventions share. And the only thing that all research shares is an intention to produce generalizable knowledge.

The next three Sections will consider the types of adverse consequences the intent to perform research might have. Section B will consider conflicts of interest, Section C considers concrete risks of

---

34. 45 C.F.R. § 46.102 (2015) (defining “intervention”).

physical or financial harm to research subjects, and Section D considers the harms to autonomy and dignity interests of the research subjects. These are the potential harms that motivate the current customs in research ethics; they are all captured to some degree by the concept of beneficence—the duty for researchers to protect the autonomy and wellbeing of their research subjects.<sup>35</sup>

Some of the risks considered below are serious risks some of the time, but none of them are risks all of the time. Among the sort of studies that are most commonly conducted by Facebook and other social media companies, the serious harms that research occasionally causes are exceedingly unlikely. Thus, serious research risks can and should be managed through laws focused on the preexisting relationship between the researcher and subject or focused on the foreseeability of harm to others (regardless of the relationship). When regulation is triggered instead by merely entertaining a research purpose, it is wildly over-inclusive, needlessly impeding useful research.

### *B. Does a Research Purpose Cause a Conflict of Interest?*

Research ethics is often conceived as a species of conflict of interest law. If a researcher is changing the subject's environment or intervening in some other way for the purpose of learning about the subject's reaction, then the researcher may not be conforming his conduct in accordance to the subject's best interest. Even if the researcher hopes to conduct his practices in a way that puts his subjects' interests first and the research interests second, testing only the effects of various interventions that seem *ex ante* to be in the subjects' best interest, the secondary research purpose can corrupt the primary goal of serving the subject. A researcher's judgment can be biased by the research goals. For these reasons, an external and independent reviewer is recommended to ensure that the subject's interests are kept in mind.<sup>36</sup>

This logic is deeply imbedded in the law and culture of American research, but it is not well thought out. It presupposes a fiduciary responsibility that all researchers owe to their subjects not only to not harm them (after all, we all have *that* legal and moral responsibility<sup>37</sup>),

---

35. DEP'T OF HEALTH, EDUC., & WELFARE, ETHICAL PRINCIPLES AND GUIDELINES FOR THE PROTECTION OF HUMAN SUBJECTS OF RESEARCH 23194 (1979) [hereinafter THE BELMONT REPORT].

36. *Id.* at 23195–96.

37. This is the core concept of negligence law, which assigns liability to any actor whose conduct exposes others, even strangers, to unnecessary or unjustified risk of harm. RESTATEMENT (THIRD) OF TORTS § 6 (2013).

but to positively serve them and maximize their wellbeing. This goes well beyond the responsibilities, both moral and legal, that people ordinarily owe to one another while interacting. And yet, there is no sound reason that an actor should have to become a fiduciary—a guardian over another’s best interests—when the actor has a desire to engage in scientific discovery if he could avoid that responsibility by performing the exact same conduct with a different purpose—a purpose to profit, for example, or to serve his own interests in some other way. In fact, the imposition of a fiduciary responsibility on the scientist and not the profiteer is counterproductive, since the scientist is more likely to contribute to the public interest than the profiteer.

The impulse to saddle researchers with special duties to protect and serve their research subjects makes more sense when the origins of research ethics are taken into account. When the U.S. Department of Health, Education, and Welfare wrote its famous “Belmont Report” setting out the best practices for research, it was writing for a predominantly medical audience.<sup>38</sup> Indeed, the first part of the report, titled “Boundaries Between Practice and Research,” distinguishes research from therapeutic treatments and other services offered to “clients,” particularly medical patients.<sup>39</sup> So, our contemporary research ethics come from the medical discipline. Doctors *do* have special relationships with patients. Any person engaged in the practice of medicine owes a wide range of legal duties to their patients whether they are engaged in research or not.<sup>40</sup> So for doctor-researchers, their desire to produce generalizable knowledge can conflict with their independent and preexisting duties to advise and treat in the best interests of their patients.<sup>41</sup>

Research conducted by companies, strangers, or other people who have no independent fiduciary duty should not trigger extra legal responsibilities, unless the person’s intent to study is likely to cause some harm to the interests or dignity of the research subjects.

---

38. THE BELMONT REPORT, *supra* note 35, at 23193.

39. *Id.*

40. RESTATEMENT (SECOND) OF TORTS § 315 (1965).

41. Even within the class of researchers who do have pre-existing legal duties to serve the best interest of their patients, we may want to proceed with caution before imposing burdens or limitations on research when that research merely compares the effectiveness of equally appropriate treatments. For a fascinating debate on the ethics of such “comparative effectiveness research studies,” see John D. Lantos & Chris Feudtner, *SUPPORT and the Ethics of Study Implementation*, HASTINGS CTR. REP. Jan.–Feb. 2015, at 30.

C. *Does a Research Purpose Increase the Risk of Harm?*

Every person, whether they have a research motive or not, has the responsibility to refrain from conduct that imposes unjustified risks on others. Identifying research risks in advance is no trivial task, since researchers often aim to explore the unknown.<sup>42</sup> On the other hand, tort law has had centuries to develop practical legal solutions for the problem of unanticipated risks that can (and presumably do) shift liability to researchers who engage in unreasonably risky conduct.<sup>43</sup> But the risks and the harms addressed by tort law are limited to physical harms and a limited set of emotional and economic harms. “Harms” in the discussion of research ethics generally, and the Facebook study in particular, are not so constrained.

For example, some ethicists consider communications or conduct that force subjects to confront the “inadequacy of current medical knowledge” to be a harm caused by research.<sup>44</sup> If a person can be “harmed” by having greater awareness about the current state of knowledge, virtually anything can be characterized as a harm. This can put researchers in a state of paralysis as they consider an ocean of potential consequences.

The commentary on the Facebook study illustrates how ambiguous and limited the concept of harm can be if we are not limited to the sorts of harms that are legally cognizable. For example, James Grimmelman argues that Facebook knowingly exposed its users to harm for no legitimate reason.<sup>45</sup> According to Grimmelman, Facebook’s attitude about its research goals could be summed up as: “We wanted to see if we could make you feel bad without you noticing.

---

42. Even when a researcher goes in with a sensible hypothesis about the direction and scale of effects that one expects to see, the research may wind up showing that the risks are not what they seem. *See, e.g.,* Jena et al., *supra* note 23 (finding surprisingly positive effects when the best cardiologists in the country leave their post to attend a conference).

43. Unusually dangerous or “ultrahazardous” activities are regulated using a strict liability rule. RESTATEMENT (SECOND) OF TORTS § 519. For most other conduct, courts use the negligence rule. RESTATEMENT (SECOND) OF TORTS §§ 281–282 (1965). A researcher will be held liable if a reasonable person, equipped with the background knowledge and experience that a person in his position should know, would conclude that the risks of the conduct outweigh its utility. RESTATEMENT (THIRD) OF TORTS § 7 (2013).

44. Marilyn Morris & Robert Nelson, *Randomized, Controlled Trials as Minimal Risk: An Ethical Analysis*, 35 CRITICAL CARE MED. 940, 943 (2007).

45. Robinson Meyer, *Everything We Know About Facebook’s Secret Mood Manipulation Experiment*, ATLANTIC (June 28, 2014), <http://www.theatlantic.com/technology/archive/2014/06/everything-we-know-about-facebooks-secret-mood-manipulation-experiment/373648/> (quoting James Grimmelman).

We succeeded.”<sup>46</sup>

But Grimmelmann’s summary is misleading. First, it isn’t clear Facebook should have known whether screening out positive content would make its users feel bad, as there is conflicting literature on the effects of emotional stimuli.<sup>47</sup> Even assuming that they should have anticipated the small effect that they recorded, there are significant conceptual problems with identifying its conduct as harmful. If Facebook “made” the group randomly assigned to the negative treatment “feel bad,” then Facebook also “made” the group randomly assigned to the positive treatment feel good. It is intuitively appealing to say that the first experimental group was “harmed” while the second was made better off, but this quickly runs into the problem of baselines. If the positive treatment was “beneficial,” then the control group in the experiment was “harmed” by comparison. That is, the News Feed as it existed at the time of the experiment—the one that almost every Facebook user saw—was causing more negative emotions than were technically necessary. If Facebook has a general responsibility to use whatever means it has to prevent its users from feeling negative emotions, it would have to alter its News Feed to screen out more negative content. If such a responsibility were to exist (and of course it does not), Facebook could not know how to optimize its algorithm to meet that responsibility without, well, research.

Grimmelmann focused on the subsample of Facebook users whose results could bolster his argument that what Facebook did was wrong.<sup>48</sup> Grimmelmann’s conclusions, like those of most of the Facebook study critics, are dependent on treating the status quo as a good, or good enough, state of the world, and treating all changes as potentially abusive. This puts undue emphasis on the difference between sins of omission and commission.

Thus, while some research subjects experienced something other than what they would have under the control conditions, a rigorous account could not treat this as harm unless we are prepared to saddle Facebook with many more obligations (legal or moral) than it currently has. Facebook does not have a duty to keep us from feeling unpleasant emotions, and many people would find its attempt to do so

---

46. *Id.*

47. Indeed, it isn’t even clear that the group that had positive messages screened out of their News Feeds actually experienced negative emotions at all. Michele Meyer et al., *Misjudgments Will Drive Social Trials Underground*, 511 NATURE 265 (2014).

48. *Id.*

objectionable and intrusive.

Instead of scrutinizing the intent of an actor for a desire to perform research, ethicists should demand responsible *conduct* from researchers given the current state of knowledge. This shift would reduce the regulation and oversight of researchers. But it would strengthen the protection of consumers from harm, whether the harm is caused by a researcher or by an actor with a different purpose.

To illustrate, consider the “July effect.” Every July, the emergency rooms in American teaching hospitals lose their most senior medical school residents and gain a slew of brand new first-year residents. For years, many speculated that care is negatively affected by this abrupt shift from more-experienced to less-experienced residents. Sure enough, a series of recent studies have documented that mortality, morbidity, and efficiency suffer during the academic year changeover.<sup>49</sup> Despite the consistent findings, teaching hospitals have done nothing to stagger start and end dates or to otherwise alleviate the July effect, and yet, their lack of action has not generated any lawsuits or appeals to regulators.

But now imagine an alternate universe in which rotation into and out of teaching hospitals is already staggered. Suppose a research team, curious to learn whether a more concentrated group of inexperienced residents would meaningfully change patient outcomes, randomly assigned half the country’s teaching hospitals to switch to the system we have today, forcing all new residents to start on the same day. This experiment and its tragic, predictable results would be a scandal of epic proportions. And yet, this is the unconsented experiment to which we all belong today. Although our hospitals operate without a research purpose, the effects of their operations have the same grizzly effects that they would if the July turnover was an elaborate study. If the research would be scandalous, current practices ought to scandalize us as well.

A conduct-centered rule would mobilize ethicists and consumer protection organizations to focus on the risks produced by the researcher’s conduct rather than the vague impropriety of his intent. For the purposes of identifying harm, ethicists should ignore the research purpose, and treat the researcher as if he was acting with a business purpose, or for no particular purpose at all. If the researcher exposes its subjects to legally cognizable harm, this exposure would

---

49. John Q. Young et al., “July Effect”: *Impact of the Academic Year-End Changeover on Patient Outcomes: A Systematic Review*, 155 ANNALS INTERNAL MED. 309 (2011).

raise a rebuttable presumption that the research conduct was unethical and illegal.<sup>50</sup> Conversely, if an actor could engage in identical conduct without exposing others to legally cognizable harm, the ethical considerations should not change if the act is done in the quest for generalizable knowledge. The baseline for assessing whether research poses risks to its research subjects therefore has to be external to the experiment, based on a minimum level of respect and care that people owe to each other.

To be clear, a rule that alters research ethics and law to analyze conduct alone, and that imposes no heightened standard for researchers, does come with its own risks. By unbridling social science researchers from heightened responsibility to their subjects, social welfare could potentially suffer. The change could induce a wave of research that has a decent chance of causing harm, but falls just short of illegality. I have my doubts that increased research will cause a net detriment; it seems that the far greater influence on overall public welfare will be the just-shy-of-illegal conduct that businesses undertake for direct profit-motivated purposes. But even if a conduct-driven rule induces too much science at the margins of legality, it is the marginal cases that should be scrutinized, and perhaps punished, based on the risks of concrete, legally cognizable harm that the researchers should have anticipated.

Applying the conduct-centered rule to the Facebook study would work as so: Suppose Facebook changed its News Feed algorithm to screen out 10% of the positive content that users currently see for some economic, non-research purpose, without notifying its users. Would the tweak be cause for legal action against Facebook? Today, almost certainly not.<sup>51</sup> If Facebook can make tweaks to its News Feed

---

50. I suggest later in this Article that the researcher should be able to rebut this presumption if he reasonably expects the value of the research to outweigh its risks, if he had his research protocol reviewed and approved by an IRB, and if he followed all consent protocols required by the IRB. This frame restructures IRBs to be safe harbors from liability risks.

51. Algorithm tweaks are well within the range of conduct expected by Internet firms, and are unlikely to cause serious emotional distress, especially since Facebook does not remove any content. Thus, a claim for the intentional infliction of emotional distress, the closest source of redress a user might seek, would fail the “outrageous conduct” element at the very least. RESTATEMENT (SECOND) OF TORTS § 46 (1965). Changes to algorithms may in the future be the subject of antitrust law, but so far the Federal Trade Commission has declined to treat similar algorithms (like those that produce Google’s search results) as a target for antitrust regulation. Craig Timberg, *FTC: Google Did Not Break Antitrust Law with Search Results*, WASH. POST (Jan. 3, 2013), [http://www.washingtonpost.com/business/technology/ftc-to-announce-google-settlement-today/2013/01/03/ecb599f0-55c6-11e2-bf3e-76c0a789346f\\_story.html](http://www.washingtonpost.com/business/technology/ftc-to-announce-google-settlement-today/2013/01/03/ecb599f0-55c6-11e2-bf3e-76c0a789346f_story.html).

algorithm without causing any legal harm, then it should also be able to test the tweaks, learn from the tests, and share the results with the general public.

#### D. *Is a Research Purpose an Affront to Autonomy?*

The previous two Sections have shown that potential conflicts of interest and potential harms can and should be managed through legal regimes designed specifically for those problems—fiduciary duties and conduct-based liability rules, respectively. These problems can arise in the course of research, but they are orthogonal to the one key feature that all research has in common—the purpose to produce generalizable knowledge.

The one putative concern left to consider, and the only concern linked directly to the definition of research, is the autonomy interests of research subjects. The Belmont Report places a premium on the responsibility for researchers to respect the autonomy of research subjects, and that responsibility is closely tied to the obligation for researchers to provide notice and consent before engaging in an intervention.<sup>52</sup>

To show lack of respect for an autonomous agent is to repudiate that person's considered judgments, to deny an individual the freedom to act on those considered judgments, or to withhold information necessary to make a considered judgment, when there are no compelling reasons to do so.<sup>53</sup>

The idea is vibrantly captured by the many commentaries that criticized Facebook for turning its users into “guinea pigs,” “lab rats,” and other vermin.<sup>54</sup> The strong implication from the commentary, if not from the Belmont Report itself, is that a research subject's right to autonomy is nearly absolute, making way for research interests only if there are “compelling reasons to do so.”<sup>55</sup> As intuitively appealing as

---

52. THE BELMONT REPORT, *supra* note 35, at 23193, 23195.

53. *Id.*

54. Editorial, *Facebook's 'Research' Turns Users Into Guinea Pigs*, BOS. GLOBE (July 7, 2014), <https://www.bostonglobe.com/opinion/editorials/2014/07/06/facebook-research-turns-user-s-into-guinea-pigs/88PW0au3owuJwI9iO6oYAI/story.html>; Dino Grandoni, *You May Have Been a Lab Rat in a Huge Facebook Experiment*, HUFFINGTON POST (June 29, 2014), [http://www.huffingtonpost.com/2014/06/29/facebook-experiment-psychological\\_n\\_5540018.html](http://www.huffingtonpost.com/2014/06/29/facebook-experiment-psychological_n_5540018.html); Darlene Storm, *Was Facebook & OKCupid's Research Treating Users Like Guinea Pigs Illegal?*, COMPUTERWORLD (Sept. 24, 2014, 11:09 AM), <http://www.computerworld.com/article/2687383/was-facebook-and-okcupid-s-research-treating-users-like-guinea-pigs-illegal.html>.

55. THE BELMONT REPORT, *supra* note 35, at 23193 (describing the obligation to respect research subject autonomy).



this autonomy interest may be, it would impose great costs to a cooperative society. All Americans live longer, healthier, and happier lives because of the research that has come before, so an enforceable demand to refuse to contribute to future research would invite breaches to the implicit social contract. Moreover, it has never been clear how the strong version of autonomy elucidated in the Belmont Report and adopted by most research ethicists can be balanced with other important commitments, such as the right to scientific advancement in the U.N.'s Universal Declaration of Human Rights.<sup>56</sup>

Now that social science research can be done faster, cheaper, and more rigorously than ever, it is high time to reconsider the strong form of autonomy that currently guides research policy. Outside of the contexts considered in the last two Sections (special relationships and heightened risks of legally cognizable harm), the law does not impose a general duty to ensure that others are fully informed about the environment and circumstances in which they operate. That is, there is no legal obligation to refrain from manipulating each other. Indeed, attempts to even define what separates a bad “manipulation” from a proper and ordinary human interaction often fail. Where formal definitions are offered, they often rely on abstract concepts that are difficult to apply to real-world problems.

Consider the definition of harmful manipulation that Cass Sunstein recently proposed in an article with the unfortunate title “Fifty Shades of Manipulation.”<sup>57</sup> Sunstein argues that the telltale signs of harmful manipulation are (1) the manipulator is motivated by self-interest; and (2) the manipulation is designed to avoid cognitive reasoning.<sup>58</sup> Greater degrees of these factors should give ethicists and regulators more cause for alarm, because if a manipulator wishes to interact with a target in a way that serves his (the manipulator's) interests, the fact that the manipulator avoids the target's awareness and autonomous choice may be a sign that the interaction is not mutually beneficial.<sup>59</sup>

Putting aside plausible objections to the fuzziness of each of the test's prongs, Sunstein's model can be faulted for sweeping too broadly. Because time and attention are important resources, some interactions that strongly meet both of Sunstein's factors may nevertheless leave the

---

56. G.A. Res. 217 (III) A, Universal Declaration of Human Rights, at 76 (Dec. 10, 1948).

57. Cass R. Sunstein, *Fifty Shades of Manipulation*, J. BEHAV. MARKETING (forthcoming 2015).

58. *Id.* (manuscript at 9).

59. *Id.* (manuscript at 8).

manipulated and the general public better off. But even using this over-inclusive definition of harmful manipulation, the Facebook study (which Sunstein cites as an edge case<sup>60</sup>) ought to fail the test.

Sunstein's test relies on an implicit assumption that the manipulator can anticipate that his target will act or react in a certain way, and aims to exploit this propensity. Research has exactly the opposite implicit assumption. Even if a researcher can use background knowledge or pilot studies to anticipate a possible range of effects, the motivation for bona fide research is to explore and document the aspects of a phenomenon that are unknown at the time of the intervention (the scale or robustness of an effect, for example), not to produce a particular outcome.

This clash in underlying assumptions has critical consequences to both parts of Sunstein's test. First, the definition of "self-interest" would have to be capacious if it were to include research.<sup>61</sup> While research may eventually inure to Facebook's benefit, those benefits would be indirect and delayed. Facebook's stated intent for performing the research was to improve its users' emotional health—a goal that more directly helps Facebook's users than Facebook itself.<sup>62</sup> But even if Facebook had a less helpful, more profit-oriented goal—if the research had been undertaken to increase advertising click-through rates, for example<sup>63</sup>—the research was a gamble. The tested intervention could have had a negative impact on click-through rates, and may have proven to interfere with Facebook's interests as compared to the control setting.

Facebook's production of publicly available research made its research endeavors even less compatible with the "self-interest" prong of Sunstein's test. Facebook could have treated its research as a proprietary trade secret so that it could exploit the results without the scrutiny of its competitors and the general public. Instead, Facebook shared its findings with the larger research community and the general public.

The second prong fares no better. It may seem that Facebook avoided its users' cognitive reasoning by failing to notify the users in the

---

60. *Id.* (manuscript at 17).

61. And if it is sufficiently capacious, every human interaction would qualify outside the small set of genuine, wholly altruistic actions.

62. Adam D. I. Kramer, FACEBOOK (June 29, 2014), <https://www.facebook.com/akramer/posts/10152987150867796>.

63. Thereby allowing Facebook to command a higher price from advertisers.

experimental groups that their News Feeds looked different from other users' News Feeds. However, good policy cannot demand notice for every single change to the status quo, especially where, as here, the effects of the change are unknown. Sunstein recognizes that human behavior and choices are frequently the product of factors that do not involve any "reflective deliberation" on the part of the subject.<sup>64</sup> So, he limits his definition of manipulation to changes in some variable that are *likely to induce a particular behavior* without the subject having a "fair chance" to deliberate on the variable.<sup>65</sup>

Some research is likely to induce particular behavior. If the researcher has access to enough background knowledge and information, he may be able to predict the likely effect for at least some subjects.<sup>66</sup> Even in this subset of cases, it isn't clear that research conducted in a good faith effort to learn (rather than done for the purpose of inducing the behavior) could meet this second element.

In the case of the Facebook Emotion Contagion study, Facebook and its collaborators probably did not have sufficient prior knowledge to know how users would react. As Michelle Meyer has pointed out, academic studies have come to inconsistent conclusions about the effects of hearing positive (or negative) news from our friends.<sup>67</sup> Some studies have found that exposure to positive posts makes people *less* happy<sup>68</sup>—an effect that seems to run in the opposite direction of the Facebook study.<sup>69</sup> Thus, however obvious the results of Facebook's study may seem in retrospect, Facebook was as ignorant as the rest of us about whether the changes it made to the News Feed algorithm would play any role in human behavior. Contrary to the accusations, Facebook did not "change their News Feed *in order* to manipulate their [users']

---

64. Sunstein, *supra* note 57 (manuscript at 6).

65. *Id.*

66. Even for this research, though, if it is unlikely to cause legally cognizable harm and is undertaken in a good faith effort to produce general knowledge, the first prong should fail.

67. Meyer et al., *supra* note 47.

68. Hui-Tzu Grace Chou & Nicholas Edge, "They Are Happier and Having Better Lives than I am": The Impact of Using Facebook on Perceptions of Others' Lives, 15 CYBERPSYCHOLOGY, BEHAV. & SOC. NETWORKING 117 (2012); Nina Haferkamp & Nicole C. Kramer, *Social Comparison 2.0: Examining the Effects of Online Profiles on Social-Networking Sites*, 14 CYBERPSYCHOLOGY, BEHAV. & SOC. NETWORKING 309 (2010); Ethan Kross et al., *Facebook Use Predicts Declines in Subjective Well-Being in Young Adults*, 8 PLOS ONE e69841 (2013).

69. The studies can be reconciled with the Emotion Contagion study if Facebook users tend to feel worse when learning about the successes of their friends while simultaneously posting more positive posts. This outcome would be quite consistent with the social comparison theories explored in the earlier research.

emotional state”<sup>70</sup> because it could not have known, at the time, whether they would need to include more or fewer positive posts in the News Feed to induce the desired effect.

To be clear, Facebook’s downstream *use* of research findings may fit Sunstein’s definition of harmful manipulation very well. If Facebook decides to exploit what it has learned in a way that surreptitiously serves its interests and puts its users at some disadvantage, the ethical and legal questions will be ripe. If Facebook, armed with its research findings, changes its algorithm in order to reach some particular distasteful end—to depress people into shopping more or to change voting behavior in a local election, for example—then the public and the regulators will have important choices to make about whether these types of nudges should be banned. But while eventual use and advantage motivates corporate research, the research itself is an investment—a cost undertaken with little expected benefits until the research is complete. These initial steps to test unproven theories and discover new insights are prerequisites to all evidence-based practices, good and evil, mutually beneficial and not.

For this reason, I have taken some care to use the term “intervention” in this Essay rather than the term “manipulation”—a word frequently used in the press coverage of the Facebook Emotion Contagion study.<sup>71</sup> To the extent the word “manipulation” is meant to carry a suggestion of exploitation, the term is inapt. Exploitation will depend on what Facebook does next, now that it knows the results of its studies.

### E. *To Intervene Is Human*

There is another problem with the definition of “intervention” used by research ethicists and by the Department of Health and Human Services.<sup>72</sup> We all experiment every day in an intervention sort of way,

---

70. Meyer et al., *supra* note 47.

71. Kashmir Hill, *Facebook Manipulated 689,003 Users’ Emotions for Science*, FORBES (June 28, 2014, 2:00 PM), <http://www.forbes.com/sites/kashmirhill/2014/06/28/facebook-manipulated-689003-users-emotions-for-science/>; Michael Hiltzik, *Facebook’s User Manipulation Study: Why You Should Be Very Afraid*, L.A. TIMES (June 30, 2014, 2:02 PM), <http://www.latimes.com/business/hiltzik/la-fi-mh-facebooks-user-20140630-column.html>; Jaron Lanier, *Should Facebook Manipulate Users?*, N.Y. TIMES (June 30, 2014), [http://www.nytimes.com/2014/07/01/opinion/jaron-lanier-on-lack-of-transparency-in-facebook-study.html?\\_r=0](http://www.nytimes.com/2014/07/01/opinion/jaron-lanier-on-lack-of-transparency-in-facebook-study.html?_r=0); Natasha Lennard, *OkCupid and Facebook Aren’t the Only Ones Manipulating You, but That’s No Excuse*, VICE (July 29, 2014, 3:25 PM), <https://news.vice.com/article/okcupid-and-facebook-arent-the-only-ones-manipulating-you-but-thats-no-excuse>.

72. The Department of Health and Human Services defines “interventions” to mean “manipulations of the subject or the subject’s environment that are *performed for research purposes*.” 45 C.F.R. § 46.102 (2015) (emphasis added).

and it typically flies well under the radar of formal categorization as an experimental intervention. People, being exceptionally socially intelligent animals, often change how they tell stories or make requests based on the poor performance of past attempts. When they make changes to their stories and their pleas to try out another style, they do so without obtaining informed consent from their audiences.

Consider a less frivolous example. When a doctor chooses a treatment for a patient with a certain set of symptoms and health factors, he will naturally be very interested to know what happens to the patient so that he can learn and adjust his practice for other patients with similar characteristics. This is a small, low-quality, ad hoc experiment. If he changes his practice and chooses a different, equally reasonable treatment option, one would not only permit, but also expect, the doctor to compare the experiences of his patients, and adjust his practice accordingly. Yet if this same doctor has ten patients with similar conditions and backgrounds, and if the doctor consciously prescribes his default treatment to half and a different, equally reasonable treatment to the other half, he would be engaged in illegal and unethical research.

This example shows the line differentiating a research “intervention” (for which notice and consent is often required) and ordinary life is more obscure, and even less principled, than it first seems.<sup>73</sup> Harboring a research interest does not do enough to separate acceptable treatment practices from unethical secret research. Every doctor, and every person, has an interest and a habit of observing the consequences of their actions and generalizing from what they observe.

A careful reading of the Belmont Report, the federal research regulations, and the criticism of the Facebook study reveals that a distrusted research intervention is not just an investigatory intervention, but a “systematic” one.<sup>74</sup> The less formal and sound an experiment is—the less fair, deliberate, or evenhanded its implementation—the greater its moral and legal acceptance.

A doctor who delivers care and advice to his patients based on random assignment into control and treatment groups without explicit research-related consent would be engaged in unethical and potentially

---

73. Anna Laakmann has described how the uncertain distinction between research and medical care has led to more conservative care, possibly to the detriment of medical progress. Anna Laakmann, *When Should Physicians Be Liable for Innovation?*, 36 *CARDOZO L. REV.* 913, 934–38 (2015).

74. 45 C.F.R. § 46.102 (definition of “research”).

illegal behavior.<sup>75</sup> And yet, where both treatment options are equally legal, effective, and safe based on the best evidence we have, there is little reason to punish the doctor who formalizes his experimentation into a sounder and more socially valuable exercise. Indeed, the formalizing of the experimentation should be a *more* ethical response to the inescapable problem of incomplete knowledge, since it will more quickly reveal if one treatment is more efficacious or dangerous than the other. One may legitimately wonder, as a few ethicists have, whether the dominant theory of research ethics has the framing backwards; perhaps we should wonder whether it is ethical to *not* engage in research where gaps in knowledge have produced a range of options in clinical equipoise.<sup>76</sup>

The Facebook Emotion Contagion study sits in the same posture. Facebook's continued use of the original, default News Feed algorithm would have been acceptable even though neither Facebook nor its users knew much about how its current algorithm affected mood. Facebook also could have chosen to change the algorithm to screen out more positive or more negative messages. Doing any of these things for a business reason or for no particular reason would have been perfectly ethical under the conventional wisdom. But doing these things in a more designed way to quickly and efficiently learn from them caused the conduct to be categorized as inappropriate research. The difference cannot be the effects; changing the algorithm (or failing to do so) will cause their effects all the same.<sup>77</sup> The difference cannot be the intent to change the algorithm; Facebook's alterations to its algorithm would be deliberate in either case. The difference must be Facebook's intent to *learn*.

Unfortunately, the misguided instinct to restrict systematic and rigorous research is baked into the American law of IRBs. As the next Part will explain, the strongest legal objections to the Facebook Emotion Contagion study are based on Facebook's collaborators at

---

75. And sometimes, even when consent is received, random assignment will nevertheless be treated as per se unethical conduct. See Lantos & Feudtner, *supra* note 41 (describing controversy of a medical study where consent was obtained during a time of high stress).

76. Michele Meyer calls the resistance to randomized controlled trials "the A/B Illusion," urging ethicists to reconsider research rules that overprotect "subjects" while underprotecting "users." Meyer, *supra* note 3, at 321–22. This problem is also what George Lawton meant by his title "Why Is it Ethical Not to Test for Emotional Impact?" Lawton, *supra* note 10.

77. Danah Boyd's thoughtful commentary has also criticized the distinction between research and ordinary business practices. Boyd, *supra* note 11. She concludes that the outrage is better directed at general practices in Big Data rather than the research-related manipulations. *Id.*

Cornell using a regulatory loophole in the IRB requirements. These objections do a better job showing the absurdities in our laws than they do in illuminating the dangers of Facebook's research.

#### IV. TECHNICAL VIOLATIONS WITH IRB LAW

While Facebook took a few lumps in the popular press following the publication of the Emotion Contagion study, the academic researchers at Cornell actually bared the most serious legal and reputational risks. Outrage about the study, which first prompted a muddle of objections, eventually found its attack surface in the dull formalities of IRBs. Federal research regulations (known as the "Common Rule") require institutions engaged in research to set up IRBs to review and approve research plans before they are carried out. Facebook is under no legal obligation to comply with the Common Rule, though, because the scope of the regulation covers only entities that receive federal grants.<sup>78</sup> But the Cornell researchers were subjected to unprecedented scrutiny of their compliance with the federal regulations and with Cornell's internal rules.

The Cornell authors structured the research in a strategic way that some have dubbed "IRB laundering".<sup>79</sup> The academic researchers gave some input to Facebook before the experiment was conducted, but left it to Facebook to actually implement the study. The Cornell researchers then collected the data after the experiment was complete. This allowed the researchers to characterize their research as an analysis of existing data, which is either "not human subjects research" at all or is research exempt from the federal Common Rule.<sup>80</sup> There is no general consensus about whether this type of research structure complies with

---

78. 45 C.F.R § 46.101(a) (2009).

79. Meeting Notes, Council for Big Data, Ethics & Society, <http://bdes.datasociety.net/wp-content/uploads/2015/02/minutes-2014-11-14.pdf> (calling the Facebook Emotion Contagion study a "research scandal"); James Grimmelman, *The Law and Ethics of Experiments on Social Media Users*, 13 COLO. TECH. L. J. 219 (2015) (calling it "IRB laundering"); Polonetsky & Tene, *supra* note 30 (using the same "IRB laundering" language).

80. Even if the analysis of data is considered human subjects research, it is exempt from formal IRB review as long as the data is de-identified. 45 C.F.R. § 46.101(b)(4). Note that there is great confusion about whether analysis of already-collected data is not "research" at all or is research, but is exempt because the definition of the (b)(4) exemption would not even qualify as human subjects research using the Department of Health and Human Services's definition and guidance for human subjects research. See *Human Subjects Regulations Decision Charts*, U.S. DEP'T HEALTH & HUM. SERVS. (Sept. 24, 2004), <http://www.hhs.gov/ohrp/policy/checklists/decisioncharts.html> (charts 1 and 5).

the Common Rule;<sup>81</sup> but Cornell's IRB ultimately confirmed that the researchers' decision to characterize their analyses of Facebook data as not human subjects research was appropriate.<sup>82</sup>

Nevertheless, the excessive focus on IRB protocols drew a striking irony: the most legally exposed people involved in the Emotion Contagion study were the academic researchers, not Facebook employees. Even *PNAS*, the journal that published the study, distanced itself from the Cornell authors by formally noting its concern for the ethics and propriety of the researchers' choice to proceed without informed consent.<sup>83</sup> The Cornell authors were forced to play the role of ceremonial whipping boys to address the collective anger.

The debate about whether the Cornell researchers did or did not exploit a regulatory loophole is a distraction. It is mostly irrelevant to the larger question of research ethics, because, even if the researchers *had* submitted an application for IRB review in advance of the experiment, the low risk and low stakes of the study would have qualified the study for either exempt status or expedited review anyways,<sup>84</sup> and they almost certainly would have been permitted to proceed without informed consent.<sup>85</sup> This is sensible, because specific consent would have tainted the study by alerting the Facebook users about the emotional valence of the posts displayed in their News Feeds.<sup>86</sup>

---

81. Michelle Meyer, *How an IRB Could Have Legitimately Approved the Facebook Experiment—and Why That May Be a Good Thing*, FAC. LOUNGE (June 29, 2014, 11:05 PM), <http://www.thefacultylounge.org/2014/06/how-an-irb-could-have-legitimately-approved-the-facebook-experimentand-why-that-may-be-a-good-thing.html>; Duncan J. Watts, *Lessons Learned from the Facebook Study*, CHRON. HIGHER EDUC. (July 9, 2014), <http://chronicle.com/blogs/conversation/2014/07/09/lessons-learned-from-the-facebook-study/>.

82. John Carberry, *Media Statement on Cornell University's Role in Facebook 'Emotion Contagion' Research*, CORNELL U. MEDIA REL. OFF. (June 30, 2014), <http://mediarelations.cornell.edu/2014/06/30/media-statement-on-cornell-universitys-role-in-facebook-emotional-contagion-research>.

83. Inder M. Verma, *Editorial Expression of Concern and Correction*, 111 PROC. NAT'L ACAD. SCI. 10779 (2014).

84. 45 C.F.R. § 46.110; 63 Fed. Reg. 63,60364 (Nov. 9, 1998) (describing research eligible for expedited review).

85. For example, an earlier intervention-based research on 14 million Facebook users was permitted to proceed without informed consent by a University of North Carolina researcher. See Dan Diamond, *The Outrage Over Facebook's 'Creepy' Experiment Is Out-of-Bounds—And This Study Proves It*, FORBES (July 1, 2014, 2:34 PM), <http://www.forbes.com/sites/dandiamond/2014/07/01/the-outrage-over-facebooks-creepy-experiment-is-out-of-bounds-and-this-study-proves-it/> (describing IRB approval).

86. Clifford Lampe, *Facebook Is Good for Science*, CHRON. HIGHER EDUC. (July 8, 2014), <http://chronicle.com/blogs/conversation/2014/07/08/facebook-is-good-for-science/>. Specific



The federal Common Rule and IRBs have a role to play in high-risk research. They were, after all, inspired by research initiatives like the Tuskegee syphilis study<sup>87</sup> (in which the researchers deliberately withheld standard syphilis treatment to a community of African Americans). Moreover, some modern forms of aggressive research need a process for independent review to ensure that the researchers are not blinded by ambition or conflicts of interest when imposing risky experiments on their subjects. Clinical trials, for example, will frequently expose their research subjects to substantial risks to run down a hope that a new drug will be effective.<sup>88</sup> But these archetype examples are serious interventions. Importantly, if a doctor engaged in these behaviors *without* an interest in scientific discovery, the behavior would still put the doctor at risk of legal liability and professional sanction.<sup>89</sup>

Facebook does not conduct aggressive research. Facebook could have changed its News Feed algorithm at any time for a range of reasons. The controversy stemmed from, and solely from, the company's interest in learning from the changes, and sharing the results with the public. When IRB rules interfere with non-risky conduct (as opposed to reviewing conduct that is risky but may be worth the risks), the rules hinder research for no principled reason.

## V. CORRECTING OUR ANTI-RESEARCH RESEARCH LAW

In the end, the Facebook controversy illustrated three regrettable truths about the current state of research policy. First, a company is at a disadvantage if it works with researchers at an academic institution, because the project may run into legal or public perception problems related to IRBs. Second, a company is more likely to provoke public criticism and increased regulator scrutiny if it formalizes and carefully tests its theories about consumer behavior rather than operating on the basis of assumption, conventional wisdom, or hunch. And third, a company is much better off hoarding its findings rather than sharing

---

consent is likely to cause selection bias and priming effects.

87. *The Tuskegee Timeline*, CTRS. FOR DISEASE CONTROL & PREVENTION (Sept. 24, 2013), <http://www.cdc.gov/tuskegee/timeline.htm>.

88. *FAQ: ClinicalTrials.gov—Benefits and Risks of Clinical Trials*, NAT'L INST. HEALTH, (Oct. 11 2006), <http://www.nlm.nih.gov/services/ctbenefits.html>.

89. Laakmann, *supra* note 73; Mark Geistfeld, *Does Tort Law Stifle Innovative Medical Treatments?*, TORTS JOTWELL (June 2, 2015), <http://torts.jotwell.com/does-tort-law-stifle-innovative-medical-treatments/> (describing how current law permits some, but not all, deviations from customary practice).

them with the general public.

Many of these problems fall in the domain of public norms. Those norms are unlikely to shift as long as the social science community itself fails to defend researchers like the Cornell group who become ensnared in controversy.<sup>90</sup> As long as social scientists continue to accept the customary set of research ethics uncritically, there is little reason to think that the general public will feel differently. However, adjustments in the law could start to influence the norms.

The federal Common Rule should be reformed to realign researcher incentives with sensible research practices. Today, even social science research that is exempt from IRB review must go through a process (sometimes an elaborate one) to establish that the research is exempt.<sup>91</sup> Consequently, the federal rules and their implementation consistently nudge researchers away from performing new work, even when that work poses no danger. Instead, the Common Rule should function as a safe harbor—a mechanism that can allow researchers to engage in conduct that would normally put them at some risk of legal sanction, employment termination, or grant defunding.<sup>92</sup> Naturally, researchers would seek to be protected by the safe harbor when their research may create some risks of harm to the research subject. Thus, the spirit of the Common Rule would remain largely intact. Researchers would seek to protect their own interests from the fallout of any experimentation that

---

90. I join a small but growing chorus of scholars urging regulators and ethicists to reconsider the dominant philosophies. ZACHARY M. SCHRAG, *ETHICAL IMPERIALISM: INSTITUTIONAL REVIEW BOARDS AND THE SOCIAL SCIENCES, 1965-2009* (2010); Philip Hamburger, *The New Censorship: Institutional Review Boards*, 6 SUP. CT. REV. 271 (2006); Meyer et al., *supra* note 47 (signed by twenty-eight ethicists, at <http://www.michellenmeyer.com/co-authors-and-signatories-of-statement-on-facebook-experiment-published-in-nature.html>); David Orentlicher, *Making Research a Requirement of Treatment: Why We Should Sometimes Let Doctors Pressure Patients to Participate in Research*, HASTINGS CTR. REP., Sept.–Oct. 2005, at 20; Michael Bernstein, *The Destructive Silence of Social Computing Researchers*, MEDIUM (July 7, 2014), <https://medium.com/@msbernst/the-destructive-silence-of-social-computing-researchers-9155cdff659>; Philip Hamburger, *The Censorship You've Never Heard Of*, COMMENTARY MAG. (July 1, 2013), <https://www.commentarymagazine.com/articles/the-censorship-youve-never-heard-of/>.

91. See, e.g., *Levels of Review*, U. CAL. IRVINE OFF. RES., <http://www.research.uci.edu/compliance/human-research-protections/researchers/levels-of-review.html> (last visited Nov. 20, 2015) (requiring review of “exempt” research).

92. The self-regulated corporate IRBs described by Calo, Tene, and Polonetsky could function as self-imposed requirements for research divisions within a company, and employees could be terminated for cause if they violate the internal rules. See Calo, *supra* note 3 (describing model for self-regulated corporate IRBs); Polonetsky & Tene, *supra* note 30 (describing model for self-regulated corporate IRBs). This system would work outside public law except in the sense that states that have not adopted at-will employment may formally recognize violations of corporate IRBs as cause for termination.

exposes its subjects to even a remote chance of harm.

#### CONCLUSIONS

I hope to explore in future work how IRB policies can better resolve the tension between the public's interest in promoting research and promoting subject safety and autonomy. It is no doubt obvious from this short Essay that I disagree with the legal scholarship that has used the controversial Facebook Emotion Contagion study to promote the expansion of the Common Rule and IRB review. Contemporary research ethics cannot provide any coherent account for our profound distrust in systematized research. Unless those theoretical flaws are resolved, restrictive regulations of research should be modest.