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July 17, 2014

Edith Ramirez
Chairwoman, Federal Trade Commission
600 Pennsylvania Avenue, NW
Washington, DC 20580

Dear Chairwoman Ramirez:

We encourage you to investigate whether Facebook has engaged in unfair and deceptive trade practices by conducting unethical research on its users. By its own acknowledgment, Facebook “manipulated the extent to which people ... were exposed to emotional expressions in their News Feed” for a week in January 2012, successfully changing the emotional content of users’ own posts.¹ This letter explains why the Facebook study was legally and ethically problematic and how the Federal Trade Commission can respond. The issue is not primarily that Facebook misused consumer information, a practice that is already the subject of a separate FTC consent order.² Rather, the emotional manipulation study was human subjects research conducted without informed consent or institutional oversight.

Background

The vast majority of experiments on people are legally and ethically regulated to protect the health and safety of participants and to allow them to make fully informed decisions about whether to take part. The leading guidance in the United States on the ethical principles appropriate to human subjects research is the 1979 report of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, better known as the Belmont Report.³ One of its central principles is informed consent: “Respect for persons requires that subjects, to the degree that they are capable, be

¹ Adam D.I. Kramer, Jamie E. Guillory, and Jeffrey T. Hancock, *Experimental Evidence of Massive-Scale Emotional Contagion Through Social Networks*, 111 PROC. NAT’L ACAD. SCI. USA 8788, 8788 (2014), <http://www.pnas.org/content/111/24/8788.full.html>.

² *In the Matter of Facebook, Inc.*, FTC Dkt. No. C-4365 (2012) (Decision and Order), <http://www.ftc.gov/os/caselist/0923184/120810facebookdo.pdf>

³ NATIONAL COMMISSION FOR THE PROTECTION OF HUMAN SUBJECTS OF BIOMEDICAL AND BEHAVIORAL RESEARCH, ETHICAL PRINCIPLES AND GUIDELINES FOR THE PROTECTION OF HUMAN SUBJECTS OF RESEARCH (1979).

given the opportunity to choose what shall or shall not happen to them.”⁴ Informed consent under the Belmont Report standard generally requires that subjects be given sufficient information about the research, that they comprehend the information they are given, and that their agreement to participate be free of undue influence.⁵ Another central principle of the Belmont Report is assessment of risks and benefits, involving “a careful arrayal of relevant data” and “a responsibility to gather systematic and comprehensive information about proposed research” as “a method for determining whether the risks that will be presented to subjects are justified.”⁶

The Belmont Report’s principles have been implemented in United States law by the Federal Policy for the Protection of Human Research Subjects, better known as the Common Rule because it has been adopted by fifteen federal agencies.⁷ Institutions receiving federal research funding are required to enter into a Federalwide Work Agreement (FWA) in which they commit to Common Rule compliance.⁸ The Common Rule implements the Belmont Report’s informed consent principle by specifying in detail the information that must be provided to research subjects⁹ and how it must be provided to them.¹⁰ It implements the Belmont Report’s assessment of risks and benefits principle by requiring each institution to have an Institutional Review Board that ensures covered research is conducted ethically; the IRB’s composition, powers, duties, procedures, and

⁴ *Id.* pt. C.1.

⁵ *Id.*

⁶ *Id.* pt. C.2.

⁷ *See, e.g.*, 45 C.F.R. pt. 46 (Health and Human Services adoption of the Common Rule).

⁸ The scope of the commitment can vary; institutions can commit either to apply the Common Rule to all federally funded research or to all research at the institution.

⁹ *See id.* § 46.116. Standard requirements include “an explanation of the purposes of the research and ... a description of the procedures to be followed,” *id.* § 46.116.(a)(1), “[a] description of any reasonably foreseeable risks or discomforts to the subject,” *id.* § 46.116(a)(2), “[a]n explanation of whom to contact for answers to pertinent questions about the research,” *id.* § 46.116(a)(7), and “[a] statement that participation is voluntary,” *id.* § 46.116(a)(8). Other subsections specify additional elements that may be required in addition, *see id.* § 46.116(b), and procedures for waiving or altering informed consent when “[t]he research involves no more than minimal risk” and “[t]he research could not practicably be carried out without the waiver or alteration,” *id.* § 46.116(d)(1), (3).

¹⁰ *See id.* § 46.117. The standard requirement is that “informed consent shall be documented by the use of a written consent form approved by the IRB and signed by the subject.” *id.* § 46.117(a).

record-keeping are all strictly regulated.¹¹ The Common Rule is widely accepted and adherence to it is considered a precondition of publication at many academic journals.¹²

The Emotional Manipulation Study

Although Facebook has not entered into an FWA and the Common Rule is not directly binding on it, the broad acceptance of the Common Rule's tenets as defining a floor for ethically acceptable research practices provides a standard against which to measure Facebook's conduct. Judged against that standard, Facebook fell severely short. There is no serious question that the Facebook Study was "research involving human subjects" as defined in the Common Rule.¹³ There is also no serious question that the Facebook Study was conducted without the "informed consent" of participants as defined in the Common Rule.¹⁴ Although the article based on the study claims it "was consistent with Facebook's Data Use Policy, to which all users agree prior to creating an account on Facebook, constituting informed consent for this research," both halves of the claim are false. First, the study was inconsistent with the Data Use Policy. The version of its Data Use Policy in force at the time of the emotional manipulation study did not even use the

¹¹ See *id.* §§ 46.107 (requiring IRB to comprise at least five members of specified backgrounds, competencies, and affiliations), .108 (requiring written procedures and operation by quorum at convened meetings), .109 (detailing substance of IRB duties and authority), .110 (allowing expedited review of certain types of cases), .111 (listing requirements that IRB "shall determine ... are satisfied" by any approved project), .112 (limiting scope of institutional review of IRB decisions), .113 (requiring IRB to have authority to terminate non-compliant research), .114 (describing IRB responsibilities in cases involving multiple institutions), .115 (describing required IRB record-keeping).

¹² For example, the *Proceedings of the National Academy of Sciences* requires that published articles be "approved by the author's institutional review board" and that "informed consent was obtained from all participants." See *Editorial Policies - Journal Policies*, PROC. NAT'L ACAD. SCI. USA, <http://www.pnas.org/site/authors/journal.xhtml>. The article derived from the emotional manipulation study was published in violation of those policies, as we detail in our separate letter to *PNAS*, and has already been the subject of an "Editorial Expression of Concern." Inder M. Verma, *Editorial Expression of Concern*, PROC. NAT'L ACAD. SCI. USA (July 3, 2014) <http://www.pnas.org/cgi/doi/10.1073/pnas.1412469111>.

¹³ 45 C.F.R. § 46.101(a).

¹⁴ See *id.* §§ 46.116, .117.

word “research.”¹⁵ The current Data Use Policy says that Facebook will use user information “for internal operations, including troubleshooting, data analysis, testing, research and service improvement,”¹⁶ but published academic research is hardly “internal operations.” Second, neither Data Use Policy remotely approaches the Common Rule standard of informed consent. Neither policy provides Facebook users with descriptions of the research,¹⁷ discussions of the risks involved,¹⁸ a point of contact for questions,¹⁹ or an opportunity to decline participation.²⁰ Indeed, the Data Use Policies refer only to how Facebook uses the data it observes about users; they are completely silent on Facebook’s manipulation of users’ experience for research purposes.

Facebook’s oversight of the research process also fell far short short of the Common Rule’s standards. Ethically, no institution at Facebook engaged in a systematic assessment of risks and benefits from the research. One former member of the Facebook Data Science group told a reporter that “there was no internal review board overseeing the studies” at Facebook at the relevant time and that “members of the data science team could run almost any test they wanted, so long as it didn't annoy users.”²¹ And legally, there is no suggestion that Facebook has an IRB meeting the stringent requirements of the Common

¹⁵ See *Facebook Data Use Policy*, FACEBOOK (revised Sept. 23, 2011), available at <http://thecoudrain.com/files/documents/Facebook-Data-Use-Policy.pdf>. The only remotely relevant portion of the Data Use Policy read:

How we use the information we receive

We use the information we receive about you in connection with the services and features we provide to you and other users like your friends, the advertisers that purchase ads on the site, and the developers that build the games, applications, and websites you use. For example, we may use the information we receive about you:

- as part of our efforts to keep Facebook safe and secure;
- to provide you with location features and services, like telling you and your friends when something is going on nearby;
- to measure or understand the effectiveness of ads you and others see;
- to make suggestions to you and other users on Facebook, such as: suggesting that your friend use our contact importer because you found friends using it, suggesting that another user add you as a friend because the user imported the same email address as you did, or suggesting that your friend tag you in a picture they have uploaded with you in it.

Granting us this permission not only allows us to provide Facebook as it exists today, but it also allows us to provide you with innovative features and services we develop in the future that use the information we receive about you in new ways.

¹⁶ See *Facebook Data Use Policy*, FACEBOOK (revised Nov. 15, 2013), https://www.facebook.com/full_data_use_policy.

¹⁷ See *id.* § 46.116(a)(1).

¹⁸ See *id.* § 46.116(a)(2).

¹⁹ See *id.* § 46.116(a)(7).

²⁰ See *id.* § 46.116(a)(8).

²¹ See Reed Albergotti and Elizabeth Dwoskin, *Facebook Study Sparks Soul-Searching and Ethical Questions*, WALL ST. J., June 30, 2014, <http://online.wsj.com/articles/facebook-study-sparks-ethical-questions-1404172292>.

Rule, let alone one that approved the study. The same former Facebook employee said in a blog post:

While I was at Facebook, there was no institutional review board that scrutinized the decision to run an experiment for internal purposes. Once someone had a result that they decided they wanted to submit for publication to a journal, there definitely was a back and forth with PR and legal over what could be published.²²

Moreover, it appears that this study was just the tip of the iceberg; Facebook routinely engages in similar experiments²³—indeed, so many that it created its own programming language for running randomized experiments on Facebook users.²⁴ In one study, Facebook made 75 million links effectively unshareable: users could post them to Facebook, but their friends would not see the links.²⁵ In another, Facebook encouraged some of its users to vote, but not others.²⁶ Facebook has done research to see which of its users are lonely,²⁷ whether ads work better when accompanied by algorithmically generated “endorsements” from Facebook friends,²⁸ and what causes users to start typing a post and then delete it.²⁹ The former Facebook employee wrote, “Experiments are run on every user at some point in their tenure on the site,” and “The fundamental purpose of most people at Facebook working on data is to influence and alter people's moods and behaviour.”³⁰ At one point, Facebook was running so many experiments that “some data

²² Andrew Ledvina, *10 Ways Facebook Is Actually the Devil*, ROKOB (July 4, 2014), <http://andrewledvina.com/code/2014/07/04/10-ways-facebook-is-the-devil.html>

²³ See generally Kashmir Hill, *10 Other Facebook Experiments On Users, Rated On A Highly-Scientific WTF Scale*, FORBES (July 10, 2014), <http://www.forbes.com/sites/kashmirhill/2014/07/10/facebook-experiments-on-users/>.

²⁴ See Eytan Bakshy, Dean Eckles, and Michael S. Bernstein, *Designing and Deploying Online Field Experiments*, WWW: INT’L WORLD WIDE WEB CONF. 2014, available at <http://hci.stanford.edu/publications/2014/planout/planout-www2014.pdf>.

²⁵ Eytan Bakshy, *The Role of Social Networks in Information Diffusion*, WWW: INT’L WORLD WIDE WEB CONF. 2012, available at http://cameronmarlow.com/media/bakshy-the_role-2012b.pdf.

²⁶ Robert M. Bond et al., *A 61-Million-Person Experiment in Social Influence and Political Mobilization*, 489 NATURE 295 (2012), available at http://cameronmarlow.com/media/massive_turnout.pdf

²⁷ Moira Burke, Cameron Marlow, and Thomas Lento, *Social Network Activity and Social Well-Being*, ACM CHI CONF. ON HUMAN FACTORS IN COMPUTING SYSTEMS 2012, available at <http://cameronmarlow.com/media/burke-2010-social-well-being.pdf>.

²⁸ Eytan Bakshi et al., *Social Influence in Social Advertising: Evidence from Field Experiments*, PROC. OF THE 13TH ACM CONF. ON ELECTRONIC COMMERCE (2012), available at <http://arxiv.org/pdf/1206.4327v1.pdf>.

²⁹ Sauvik Das and Adam Kramer, *Self-Censorship on Facebook*, PROC. OF THE SEVENTH INT’L AAAI CONFERENCE ON WEBLOGS AND SOCIAL MEDIA (2013), available at <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM13/paper/viewFile/6093/6350>.

³⁰ Ledvina, *supra* note 22.

scientists worried that the same users, who were anonymous, might be used in more than one experiment, tainting the results.”³¹

Facebook also circumvented the legal restrictions on human subjects research that apply to the non-Facebook researchers responsible for the emotional manipulation study. The study was carried out by a Facebook employee, Adam Kramer, and by two Cornell affiliates, Jamie Guillory and Jeffrey Hancock.³² Cornell has an FWA in which it promises that it will apply the Common Rule “to all of its human subjects research regardless of the source of support.”³³ But the Cornell IRB characterized the emotional manipulation study as “research ... conducted independently by Facebook” and therefore declined to review the study’s ethics on the merits.³⁴ The reasoning of the decision was badly mistaken: it rests on the untenable assertion that the Cornell investigators, despite having designed the study and then delegated the actual manipulations to Facebook, were not “engaged” in human subjects research. If this reasoning were broadly accepted, it would render the Common Rule’s protections meaningless in a wide range of cases, because human subjects research could be outsourced to nominally “independent” researchers operating, like Facebook, with no ethical oversight. The infamous Stanford Prison Experiment, for example, if “conducted independently” at the Facebook headquarters in nearby Menlo Park rather than on the Stanford campus, would pass muster under the reasoning given here.³⁵

The Federal Trade Commission’s Role

The Federal Trade Commission is uniquely positioned to safeguard consumers when they are subjected to experimental research by Facebook and other companies. The FTC has already studied the information that companies collect on consumers retrospectively and taken action to prevent misuse of that information.³⁶ Here, it can protect consumers prospectively, by ensuring that they give genuinely informed consent when they take part

³¹ Albergotti and Dwoskin, *supra* note 21.

³² Kramer, *supra* note 1, at 8788.

³³ Cornell University, *Federalwide Assurance (FWA) for the Protection of Human Subjects for Institutions Within the United States*, <http://www.irb.cornell.edu/regulations/fwa.htm>.

³⁴ *Media Statement on Cornell University’s Role in Facebook ‘Emotional Contagion’ Research*, CORNELL UNIV. MEDIA RELATIONS OFFICE (June 30, 2014), <http://mediarelations.cornell.edu/2014/06/30/media-statement-on-cornell-universitys-role-in-facebook-emotional-contagion-research/>.

³⁵ *Cf.* David Auerbach, *Here Are All the Other Experiments Facebook Plans to Run on You*, SLATE (June 30, 2014), http://www.slate.com/articles/technology/technology/2014/06/facebook_experiments_on_users_they_ve_got_more_in_store.html.

³⁶ *See, e.g.*, FED. TRADE COMM’N, *DATA BROKERS: A CALL FOR TRANSPARENCY AND ACCOUNTABILITY* (2014); FED. TRADE COMM’N, *PROTECTING CONSUMER PRIVACY IN AN ERA OF RAPID CHANGE: RECOMMENDATIONS FOR BUSINESSES AND POLICYMAKERS* (2012); *In the Matter of Facebook*, *supra* note 2; *In the Matter of Google, Inc.*, FTC Dkt. No. NO. C-4336 (2011) (Decision and Order), <http://ftc.gov/os/caselist/1023136/111024googlebuzzdo.pdf>; *In the Matter of Twitter, Inc.*, FTC Dkt. No. C-4316 (2011) (Decision and Order), <http://www.ftc.gov/os/caselist/0923093/110311twitterdo.pdf>.

in human subjects research, and that Facebook and other companies conduct that research with appropriate legal and ethical accountability. Taking action here will advance the FTC's core mission of preventing "unfair or deceptive acts or practices" harming consumers.³⁷

Performing human subjects research on users without informing them of the fact can be a deceptive trade practice.³⁸ The failure to disclose research is an omission that a reasonable consumer would consider material in deciding whether or not to use a service. A recent survey found that 57% of respondents who were aware of the emotional contagion study answered "no" when asked, "If someone you cared about were a candidate participant for this experiment, would you want that person to be included as a participant?"³⁹ Facebook does not disclose in its 9,000-word Data Use Policy the numerous studies it conducts on users, even in the most general of terms. In this respect, human subjects research may also implicate the Facebook consent order. While the emotional manipulation study itself took place before the consent order entered into force, Facebook appears to have conducted other research projects after that date.

Given the broad ethical and regulatory consensus that human subjects research requires informed consent and oversight, it may also sometimes be an unfair trade practice to engage in such research without informed consent and oversight.⁴⁰ Facebook's refusal to disclose research projects or to offer consumers the ability to opt out of them makes the research not reasonably avoidable by consumers themselves. Pure research projects like the emotional manipulation study offer no benefits either to consumers or competition. While "Emotional impact ... will not ordinarily make a practice unfair,"⁴¹ unfairness does encompass "unwarranted health and safety risks"⁴²—precisely the kinds of risks that Belmont Report and the Common Rule guard against. Moreover, Facebook has acknowledged that the study may have included minors.⁴³

The FTC should open an investigation into Facebook's human subjects research and seek answers to the following questions:

³⁷ 15 U.S.C. § 45(a).

³⁸ See generally Fed. Trade Comm'n, *FTC Policy Statement on Deception* (1983), <http://www.ftc.gov/public-statements/1983/10/ftc-policy-statement-deception>.

³⁹ Stuart Schechter and Cristian Bravo-Lillo, *Using Ethical-Response Surveys to Identify Sources of Disapproval and Concern with Facebook's Emotional Contagion Experiment and Other Controversial Studies* 7 (working paper, July 15, 2014), <http://research.microsoft.com/pubs/220718/CURRENT%20DRAFT%20-%20Ethical-Response%20Survey.pdf>.

⁴⁰ See generally Fed. Trade Comm'n, *FTC Policy Statement on Unfairness* (1980), <http://www.ftc.gov/public-statements/1980/12/ftc-policy-statement-unfairness>.

⁴¹ *Id.*

⁴² *Id.*

⁴³ See Reed Albergotti and Elizabeth Dwoskin, *Facebook Study Sparks Soul-Searching and Ethical Questions*, WALL ST. J., June 30, 2014, <http://online.wsj.com/articles/facebook-study-sparks-ethical-questions-1404172292>.

- What other studies has Facebook conducted on consumers?
- When were those studies carried out?
- What information, if any, did Facebook provide about the studies to consumers?
- What form, if any, of informed consent did Facebook obtain from consumers?
- What risks of harm or discomfort to consumers were reasonably foreseeable to Facebook?
- What harms or benefits did participants realize as a result of the studies?
- What processes did Facebook follow to review the ethics of proposed studies?
- What information did Facebook obtain about consumers as part of these studies?
- What records does Facebook keep about completed experiments?
- What consumer-derived data does Facebook make available to other researchers seeking to replicate its results?
- Did Facebook take any steps to screen minors or other vulnerable populations from its studies?

Fortunately, Facebook and the FTC are in a good position to set an industry standard for responsible social media research. Facebook now claims that it has a more rigorous ethical review process in which “research beyond routine product testing is reviewed by a panel drawn from a group of 50 internal experts in fields such as privacy and data security.”⁴⁴ While this vague promise is insufficient by itself, the FTC should take action to turn it into an enforceable guarantee of appropriate research ethics. The FTC should require:

- That Facebook obtain genuinely informed consent from consumers before performing human subjects research on them. Where the Common Rule would allow a waiver or alteration of informed consent (e.g. because disclosing the study would irretrievably bias the results), Facebook should be allowed a waiver or alteration to the same extent and with the same conditions (e.g. debriefing following the study).
- That Facebook have in place an institutional review process for ensuring informed consent and protecting human subjects. This process need not be identical in all respects to a Common Rule IRB, but it should carry some of the essential characteristics:
 - A reviewing group should typically review *all* research projects *before* they are carried out.
 - The reviewing group should be charged with analyzing research projects to protect consumers from harm, to ensure proper informed consent, and to guard

⁴⁴ Albergotti and Dwoskin, *supra* note 21. The Common Rule generally requires that in research involving minors “adequate provisions are made for soliciting the assent of the children *and* the permission of their parents or guardians.” 45 C.F.R. § 46.404 (emphasis added). *See also id.* § 46.402(b) (“Mere failure to object should not, absent affirmative agreement, be construed as assent.”).

against biases against individuals or groups that might be created by, reflected by, or exacerbated by research projects.

- The reviewing group should have membership with diverse expertise, including experts in privacy, security, ethics, and law, and representation of the Facebook user community.
- The reviewing process should be independent of Facebook management: members can reject a research project without adverse consequences, and when they reject a research project, that decision cannot be reversed by Facebook.
- That Facebook draw a clear line distinguishing routine minimal-risk product testing from more significant human-subjects research requiring ethical review. Projects that involve psychological manipulation, vulnerable populations, marginalized groups, risks of significant harms or discomforts, deception, civic issues such as voting, or “systematic investigation ... designed to develop or contribute to generalizable knowledge”⁴⁵ should always be subject to review.
- That Facebook’s human subjects research compliance be regularly assessed in the same manner as its comprehensive privacy program is regularly assessed under the existing consent order.⁴⁶ This will require written record-keeping of all human subjects research projects and their ethical review, which must be made available to the independent third-party auditors and to the FTC.

Beyond Facebook itself, the FTC should use this occasion to study and promote ethical research practices by Internet companies. A report under § 6(b) would provide a good framework for healthy conversations about corporate human subjects research.⁴⁷ The FTC could use its investigatory powers to gather information about how companies conduct human subjects research, their informed consent practices, and their institutional review structures, while appropriately respecting trade secret protections. One or more workshops would present an opportunity for experts in data science, research ethics, and privacy law to articulate best practices for human subjects research in the marketplace. In addition to providing an evidence-based foundation for regulation, an FTC report on the subject could go a long way toward establishing a healthy standard for ethical research that respects participants’ dignity and autonomy.⁴⁸

We thank you for your interest in this matter.

⁴⁵ 45 C.F.R. § 46.102(d).

⁴⁶ See Matter of Facebook, *supra* note 2 pt. V.

⁴⁷ See 15 U.S.C. § 46(b).

⁴⁸ See generally Ryan Calo, *Consumer Subject Review Boards: A Thought Experiment*, 66 STAN. L. REV. ONLINE 97 (2013), <http://www.stanfordlawreview.org/online/privacy-and-big-data/consumer-subject-review-boards>.

Sincerely,

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Encl:

Letter to Office for Human Research Protections

Letter to *Proceedings of the National Academy of Sciences of the U.S.A.*

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