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Simplification of Privacy Disclosures: An Experimental Test^{*}

Omri Ben-Shahar[†] & Adam Chilton[‡]

Abstract

Simplification of disclosures is widely regarded as an important goal and is increasingly mandated in a variety of areas. In the area of data privacy, lawmakers and interest groups developed “Best Practices” techniques to help consumers understand how firms collect and use personal information. Commentators have even advocated going a step further and using simpler disclosures—warning boxes that alert consumers to the least expected elements. But do these techniques succeed in better informing consumers or preventing unwise behavior? To answer this question, we engaged a leading market research firm to conduct a survey on risky sexual behaviors while randomizing the format of the privacy disclosures provided to the respondents. The results of the experiment suggest that best practices simplification techniques and warning boxes do not have the intended effects. We find little or no change in respondents’: (1) comprehension of the disclosure; (2) willingness to share personal information; and (3) expectations about their rights. Our results challenge the wisdom of focusing regulatory effort on simplifying disclosures.

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1. INTRODUCTION

Mandated disclosure is the most commonly used regulatory device in privacy protection. Disclosure seems like a sensible tool because transparency provides a simple and proportional solution to the underlying problem. If people unwisely surrender much of their personal information because they are unaware that it will be broadly used and widely shared, then the solution is to make them aware by requiring firms to disclose the information. With the knowledge that disclosures afford them, people can then make wiser information sharing choices. Based on this theory, laws regulating financial and medical services, for example, require privacy disclosures to be prominent and to provide specific information that is deemed relevant to consumer decisions.¹

But despite the allure and wide embrace of “transparency” as a guiding principle, it has proven hard to accomplish successfully. Firms, of course, usually comply with the letter of “shine the light” laws and post privacy notices with magnificent detail. But consumers remain largely ignorant of the specific details of the notices and continue to divulge loads of personal information. And even if consumers wanted to inform themselves, they could not feasibly make informed data sharing choices. According to one estimate, the average person encounters so many privacy disclosures every year, that it would take 76 days to read them, and the lost time would cost the economy \$781 billion (McDonald & Cranor 2008).

Privacy disclosures’ failure to meaningfully inform consumers poses a challenge: could the formats be reengineered to be more useful? If consumers care about privacy but don’t read the disclosures because they are poorly drafted and overloaded, the solution seems inevitable: simplification. If a disclosure is too long, shorten it. If it’s too technical, make it more user-friendly. If it’s poorly presented, improve the formatting.

Although it may sound obvious that complex privacy disclosures should be simplified, exactly how this should be done is not obvious. Privacy disclosures are complex because firms collect many types of personal data and use it in numerous ways. Should people be given less than full information, to help them focus better attention on the most essential ingredients? Or should people be given all the information, but in a

¹ See, e.g., The Gramm-Leach-Bliley Act, 12 C.F.R. § 1016.5; Health Insurance Portability and Accountability Act (HIPAA) § 164.520.

standardized format? In search for pragmatic ways to present privacy practices more effectively, several simplification strategies have risen to the fore.

One simplification strategy focuses on improving the formatting and organization of disclosures. In the privacy area, it is part of a protocol known as “Best Practices.” Proposed by lawmakers, advocacy groups and privacy experts, Best Practices are an informal “code of conduct” focusing on “enhanced transparency,” to help consumers to “meaningfully” compare and choose on the basis of, among other things, privacy considerations.² Although some of the Best Practices address the substance of privacy practices (for example, imploring firms not to collect unnecessary information), the bulk of the Best Practices deal with formal properties of disclosures (for example, telling firms how to present information clearly and succinctly).

A second simplification strategy is even more ambitious. It looks to the perceived (although debatable) success of disclosure tools like the Nutrition Data boxes on food packaging as a model for effective disclosure. The gist of this solution is to aggressively trim down the disclosure to only a few essential facts—those least expected by consumers—and present them in a standardized, non-technical, and easily comparable format (Kelley et al. 2009; Ayres and Schwartz 2014).

Both academics and policy makers have suggested that these strategies would improve consumers’ comprehension and behavior. For example, a study solicited by government found, based largely on interviews, that “good design techniques, combined with the simplified content, helped consumers better understand the information.”³ Similarly, Ayres and Schwartz (2014, p. 605) believe that the warning box method “might efficiently correct the most serious forms of consumer optimism.” But despite these claims about the benefits of simplification strategies, it is not known whether these simplifications actually change behavior.

In this paper, we present the results of a survey experiment that we designed to help answer this question. The experiment focuses on privacy disclosures, but its design is generic enough to at least suggest a more general lesson about the simplification paradigm. We engaged a leading market research firm to field the experiment and told

² See, e.g., *Short Form Notice Code of Conduct to Promote Transparency in Mobile App Practices* (NTISA Redline Draft, 2013), p. 1.

³ *Evolution of a Prototype Financial Privacy Notice* xi (Kleimann Communication Group, 2006)

the respondents (deceptively) that they were participating in a survey on risky sexual practices that would be used to help develop a commercial mobile application that improves the utility of existing dating services. During the survey, the respondents were asked a host of questions about their sexual behavior and to provide several key pieces of identifying information (topics that are both known to elicit privacy concerns).

The experimental treatment was the privacy disclosure that the respondents received at the beginning of the survey. Before the respondents were asked any questions, they were presented with a data privacy disclosure that listed all the ways that their personal information would be collected and shared. The disclosures were intended to arouse discomfort among the respondent, and they covered exactly the same topics and adopted exactly the same substantive policies. For example, all of the disclosures said that we share the information about their sexual behavior with commercial parties and that we do not monitor how those parties secure the data. Our experiment was thus not about the substance of the privacy disclosures, but instead about the impact of the disclosures' formal properties. Specifically, we randomly presented the respondents disclosures that employed different set of the Best Practices that are most commonly found in guides for developing model disclosures.

After exposing respondents to one of these disclosures, our survey proceeded to ask questions designed to test whether the formal properties of the disclosure influenced behavior in three ways. First, we measured respondents' comprehension of the disclosure by counting the amount of time they spent on the disclosure screen and by asking a series of comprehension questions. Second, we measured respondents' willingness to disclose sensitive personal information by asking questions about risky sexual practices and by requesting identifying information. Third, we measured respondents' expectations about their privacy rights by asking whether they believed they had legal recourses if we violated our privacy policy and whether they were satisfied about the steps taken to protect their privacy. In each of these three tests our results were consistent: altering the formal properties of the privacy disclosures had essentially no effect on respondents' comprehension of our disclosure, willingness to disclose information, or expectations about their privacy rights.

Additionally, we conducted a test to examine the effect of a more radical simplification technique proposed by Ayres and Schwartz (2014) and others. To do so, we conducted a separate survey that asked respondents to rank the gravity of our privacy practices. We then used a treatment that was simply a “Warning Label” that only specified the five worst, or least expected, privacy practices. Here, too, we found no meaningful effects. Perhaps struck by the novel format of a warning label, respondents spent more time eyeballing it (although hardly enough to digest it), but they then proceeded to behave in a way indistinguishable from their conduct under any of the more cluttered disclosures.

Our findings contrast sharply with the more optimistic tone suggested by prior experimental exercises. For example, Kelley et al. (2010) presented people with simplified and full-text versions of privacy disclosures and concluded that a standardized short table formats “significantly outperform” the full-text formats. Similar findings were documented in testing of simplified mortgage forms.⁴ But these results should be taken with caution. They show that if people are sufficiently focused on the cognitive task of reading and learning about a specific issue, going back and forth to reread the text, their understanding increases by good presentation of the materials. By contrast, our findings suggest that when people are engaged in a real world task that focuses their attention elsewhere, the incidental presentation of simplified disclosures does not affect their behavior.

Before proceeding, it is important to note a procedure we followed to enhance the credibility of our study. Both of us entered this project skeptical about the value of disclosure, even when simplified. We were concerned that if the results would turn out consistent with our priors, as indeed they did, our readers would view them with (justified) suspicion. After all, how often do scholars publish empirical results that conflict with their own previously published predictions and conjectures? Thus, as a form of pre-commitment, we circulated a draft with the design of our experiment prior to actually conducting the survey and thus before we knew the results. Subsequently, based on comments by participants in a conference to whom we presented the results, we reran

⁴ See, e.g., *Know Before You Owe: Evolution of the TILA-RESPA Disclosures* (Report Presented to the Consumer Financial Protection Bureau, July 9, 2012), available at http://files.consumerfinance.gov/f/201207_cfpb_report_tila-respa-testing.pdf.

another round of the experiment, tweaked to further induce subjects to act in caution and to notice the disclosures. The results of both rounds of the experiment were very similar, and for brevity we present here only the final round.⁵

Our paper proceeds as follows. We begin by providing a brief survey of disclosure simplification techniques and then explain the survey experiment we designed to test whether these techniques influence behavior. We then present the primary results of our experiment. After doing so, we present results of a “warning label” style privacy disclosure. Finally, we conclude by briefly discussing the implications of our results for future research and policy.

2. RESEARCH DESIGN

2.1. Best Practices

There is a widespread consensus among privacy experts, lawmakers, and advocates that an important component of a firm’s data privacy practices is providing a clear disclosure of their policies. This consensus is reflected in the *Consumer Privacy Bill of Rights* released by the White House that declared “Consumers have a right to easily understandable and accessible information about privacy and security practices.”⁶ The Federal Trade Commission (FTC) has deemed accessible transparency to be a “baseline principle,” and instructed firms “to present choices to consumers in a prominent, relevant, and easily accessible place . . . and undertake consumer education efforts to improve consumers’ understanding of how companies collect, use, and share their data.”⁷ In its widely accepted *Fair Information Practice Principles*, the FTC requires privacy disclosures to be “clear and conspicuous,” which it defines as “a disclosure be readily understandable, likely will communicate effectively the information needed by

⁵ The results of our pilot survey are presented in this paper’s Supplemental Materials. The unpublished first round of the experiment is posted online as ‘Best Practices’ in the Design of Privacy Disclosures: An Experimental Test, at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2670115.

⁶ *Consumer Data Privacy in a Networked World: A Framework for Protecting Privacy and Promoting Innovation in the Global Digital Economy* 1 (February 2012).

⁷ *Protecting Consumer Privacy in an Era of Rapid Change* 60 (Federal Trade Commission Report, March 2012).

consumers to make an informed choice about the privacy of their information, including whether to transact business with a financial institution.”⁸

In order to provide guidance on exactly how to achieve these goals, a number of Best Practice protocols have been developed.⁹ Some of these protocols are mandated by law, others are voluntary codes of conduct drafted by lawmakers, and some are complied by private groups. We reviewed the recommendations of several of these guides, and while there is no universal list of Best Practices, we found six recommendations to be the most common.

1. **Titles** – use clear titles and headers for the specific provisions.
2. **Layered Information** – provide a short-form summary for each provision, followed by the more comprehensive information. The long-form should appear in smaller font and may even be posted elsewhere, but in such case a clear reference or link to it must accompany the short-form summary.
3. **Font** – use easily readable type, in a legible size and in a distinct color that contrasts distinctly with the background.
4. **Literary Style** – use active, not passive, language; short sentences with plain, straightforward language.
5. **Examples** – when listing categories of personal information that is being collected or shared, give concrete examples, rather than ambiguous statements, of the type of information in each category.
6. **Names** – if the notice refers to partner and affiliated companies, provide their names.

Other Best Practices recommendations are also often made, but they do not directly deal with the presentation format. We thus decided to focus on these six common recommendations when designing our experimental test of the effectiveness of the formal properties of disclosure.

⁸ Federal Trade Commission, *Privacy of Consumer Financial Information; Final Rule*, 16 CFR Part 313.3 (65 Fed. Reg. 101 33649, May 24, 2000) (definition of “clear and conspicuous”).

⁹ See, e.g., California Office of Privacy Protection, *Recommended Practices on California Information-Sharing Disclosures and Privacy Policy Statements* 5 (2008); U.S. Department of Commerce, National Telecommunications and Information Administration, *Short Form Notice Code of Conduct to Promote Transparency in Mobile App Practices* (July 25, 2013).

2.2. Experimental Design

To test the impact of the formal properties of privacy disclosures on respondents' behavior, we needed to set the experiment in a context that met three criteria. First, it had to involve questions of sensitive nature, where respondents may be apprehensive about sharing personal information, and where we could build on rich prior research in wording sensitive questions. Second, it had to allow us to present the subjects with a plausible explanation why a corporation would be interested in their personal information. Third, it had to be a topic where we could credibly tell respondents that the stakes of the research were non-trivial, and as a consequence, that failure to respond truthfully would be harmful.

Ultimately, we elected to frame our survey as consumer research on risky sexual behavior. More specifically, we told the respondents that our survey was a study being conducted by a for-profit company that is examining risky sexual behavior in order to improve matches and reduce sexual harassment in online dating services. This topic satisfies the three criteria: sexual practices are a sensitive topic with rich prior research on survey design (e.g. Kays, Gathercoat, & Burhow 2012, John, Acquisti, & Loewenstein 2011); it is reasonable to think that a company developing dating applications would be interested in the sexual practices of respondents; and the goal of reducing sexual harassment has high stakes.

The survey started by providing all respondents with the same prompt telling them the purpose of the research. Specifically, on the first screen respondents were told:

“This survey is being conducted by a for-profit company in Chicago developing a new commercial application (App) for smartphones that provides users novel search tools across all available listings in dating sites. The results of this survey will be used to design tools that improve relevance of match results and reduce sexual harassment. It is important that you answer all questions honestly.”

After reading this prompt, the respondents were asked to click “Next” to start the survey.

We included this initial prompt for both substantive and practical reasons. The substantive reason is to provide a framing for our survey that would accomplish the goals we just discussed while also distracting respondents from the fact that we are studying the

formal properties of privacy disclosures. The practical reason is to allow us to measure the time respondents spent reading the privacy policy disclosures that we presented on the following screen because we were able to use when respondents finished the initial screen as a start time.

After the initial prompt, respondents were directed to a screen presenting a privacy disclosure. This was the key experimental treatment. Respondents were either randomly presented with one of five different privacy disclosures or, as a quasi control condition, a blank screen. The privacy disclosures were designed to be realist and were based on dozens of actual disclosures used by major businesses and on multiple Best Practice guides. The privacy disclosures were also designed to share four attributes.

First, all of the privacy disclosures began with a prominent title “Your Privacy Rights.” This is the primary way users are alerted to the subject matter of privacy policies on websites and mobile apps.

Second, all of the privacy disclosures began by informing the respondents the purpose of the disclosure and what it includes, in the following manner:

We value your privacy. In this page, we explain our data privacy practices. We explain how we collect, use, disclose, and store the information about you that you reveal in the survey. These disclosures of your data and personal information may be done without requesting additional consent from you. Additional disclosures of your information to government agencies will be made to the extent permitted or required by law. Continuing past this page means that you grant us permission to engage in these practices, including the permission to share the information with others as explained below.¹⁰

Third, all of the privacy disclosures covered the same four standard topics: (1) “The Information We Collect”; (2) “How We Use the Information”; (3) “Disclosure of Data to Third Parties”; (4) “Protection of Personal Information.”

Fourth, all of the privacy disclosures adopted the same substantive policy for each of the four topics. These policies were designed to mirror common privacy practices of commercial firms, while still pushing the envelope. For example, respondents were told that the firm would share information with commercial health insurance companies, that it would link their information to other public and private data sources, and that it would

¹⁰ The wording was changed slightly for the disclosures that do not use a clear literary style.

retain their information indefinitely. Table 1 reports the substantive policies that the privacy disclosures adopted.

Table 1: Substantive Policies in the Privacy Disclosures

The Information We Collect
<ul style="list-style-type: none"> • We collect information on your sexual practices based on your responses to questions in this survey. • We collect personal information that can identify you through this online interaction with your computer. • We collect and link additional information about you from other public and private data sources.
How We Use the Information
<ul style="list-style-type: none"> • We use the information for commercial development of a dating application for smartphones. • We use the information to develop advertising and marketing tools within the application. • We use the information to follow up with you on future communications.
Disclosure of Data to Third Parties
<ul style="list-style-type: none"> • We share the information with commercial partners to improve the commercial utility of the application. • We share the data with advertisers and ad-placement companies that help us design the profit opportunities from the mobile application. • We share the data with commercial health insurance companies that partner with us in developing the data-driven application.
Protection of Personal Information
<ul style="list-style-type: none"> • We retain the information indefinitely. • We save your personal information on cloud server with limited access. • We encourage our partners to take high security measures in storing your data, but we are unable to verify their security practices.

In short, each of the privacy disclosures had the same title, presented the same introduction, covered the same topics, and adopted the same substantive policies. This allowed us to vary the treatment only in style, not in substance.

As we previously noted, our preliminary research revealed that there are six Best Practices that are most commonly advocated: (1) titles; (2) layered information; (3) clear font; (4) easy literary style; (5) examples; and (6) specific names. To test their effect, we

developed five versions of a privacy disclosure for our treatment conditions, in addition to a sixth, quasi-control, blank treatment:¹¹

1. **Best Practice Treatment.** All six Best Practices were used.
2. **Organization Treatment.** The Best Practice treatment is altered by removing the two Best Practices that are related to document organization: titles and layered information.
3. **Presentation Treatment.** The Best Practice treatment is altered by removing the two Best Practices related to ease of read: clear font and easy literary style.
4. **Specification Treatment.** The Best Practice treatment is altered by removing the two Best Practices related to the concreteness of the information: using examples and providing specific names for other entities and organizations.
5. **Worst Practice Treatment.** None of the six Best Practices were followed.
6. **Blank Treatment.** This version simply displayed a blank page on the screen that contained a privacy disclosure for the other five treatment groups.

After being presented with one of these six treatments, the respondents were asked to click “Next” at the bottom of the disclosure page to continue the survey. The remainder of our survey was designed to test the effects of the privacy disclosures on the behavior of the respondents. We will discuss how our survey did so as we discuss our results.¹²

2.3. The Use of Deception

It is important to acknowledge that our experiment directly deceived the respondents. Our decision to use deception, however, is hardly unique. For example, one study found that in the years from 1986 to 1997, between 31% and 47% of papers in a top social psychology journal used deception in their research design (Hertwig & Ortmann 2001). The pervasiveness of deception in experimental research is based on the belief that

¹¹ Exact wording of the privacy disclosures is presented in Part 1 of the Supplementary Materials.

¹² Exact wording of the survey questions is presented in Part 2 of the Supplementary Materials.

it is acceptable when it is essential to the research design and the risks are minimal (*see generally* Morton & Williams 2010, at 500-521).

Distracting respondents from the fact that we were studying privacy disclosures is the only way to ensure that they would react to those disclosures in a normal way. We took three steps to minimize the risks to respondents. First, the sensitive questions they were asked were based on prior survey research on privacy and thus within accepted research standards. Second, all respondents were provided with a debriefing statement after the conclusion of the experiment that informed them about the true purpose of our research. Third, we followed a data security plan to minimize the risk that any sensitive information would be stored or compromised.

3. PRIMARY RESULTS

The experiment was administered online to a nationally representative sample recruited by Survey Sampling International (SSI). SSI is a leading market research firm that primarily conducts surveys for corporate clients. The recruited sample had 1,484 respondents that were representative of the U.S. adult population based on gender, age, ethnicity, and census region.¹³ After the respondents were randomly presented with one of the treatments, they were presented with questions designed to measure how the disclosure influenced their: (1) comprehension of the disclosure; (2) willingness to share personal information; and (3) expectations about their privacy rights.

3.1. Comprehension of the Disclosure

Respondents' comprehension of the disclosures was tested in two ways. First, we measured the amount of time that respondents spent on the screen displaying the privacy disclosures. Second, we asked the respondents questions to measure their comprehension of the privacy disclosures.

¹³ Information on the demographic breakdown of the sample, the number of respondents that received each treatment, and the demographic balance across treatment groups is presented in Part 3 of the Supplementary Materials.

3.1.1. Time on the Disclosure Screen.

Best Practices intend to make disclosures easier for consumers to understand. But how should such ease affect the time spent reading disclosures? People may spend less time reading clearer disclosures because they are easier to follow, more time because they are less daunting and more accessible, or the same time because they are always clicked through as fast as possible. To test which of these effects the formal properties of privacy disclosures have, we measured the number of seconds between when respondents clicked “Next” on the initial screen to enter the disclosure screen and when respondents clicked “Next” to exit the disclosure screen.

Figure 1: Time Spent on the Disclosure Screen

Figure 1 reports the mean number (and 90% confidence intervals) of seconds that the respondents’ in each treatment group spent on the page with the privacy disclosure. Figure 1 shows that the mean number of seconds spent on the disclosure screen ranged from 19.12 for the Best Practice group to 12.58 for the Blank group. Even though the difference in mean seconds between these two groups is the largest discrepancy between our six treatments, it is not statistically significant at the 0.1 level ($p = 0.43$). Since means can be influenced by the presence of outliers in the data, Figure 1 also reports the median

number of seconds that respondents in each treatment group spent on the disclosure screen. The median values are almost indistinguishable: all fall between 4.5 and 6.0 seconds.

To put these results in perspective, our privacy disclosures ranged from 499 to 970 words long, and research suggests that the average college educated adult in the United States can read roughly 300 words per minute.¹⁴ This suggests that, even ignoring the fact that privacy policies like ours unfamiliar terminology (Jensen and Potts 2004), it should still take over a minute and a half to read even our shortest disclosure. Not only was the median amount of time our respondents spent on the disclosure screen just 5.47 seconds (just enough to aim and click the “Next” button), but only 2.5% of the respondents (36 out of 1,484) spent a minute and a half on the disclosure screen. In other words, regardless of the formal properties of the disclosure, nearly all respondents clicked through without taking the time to read it.

Of course, it is possible that the respondents that did take time to read the disclosure responded to our survey differently after doing so. In unreported results, we analyzed the responses for the respondents that spent at least 30, 60, or 90 seconds on the disclosure screen.¹⁵ These “Readers” were more likely to correctly answer the comprehension questions discussed in the next section, but these respondents also shared roughly the same amount of personal information and largely had the same attitudes as the other respondents to our survey.

3.1.2. Correct Answers to Comprehension Questions.

In addition to measuring the time respondents spent on our privacy disclosure, we also directly asked them questions designed to assess their understanding of the disclosures. At the end of our survey—after all of the other questions discussed in the subsequent sections of this paper—we asked respondents five questions about the contents of the privacy policies.

We specifically asked respondents what our policy is on: (1) the information we collect; (2) who we share the data with; (3) how long we retain the data; (4) the security

¹⁴ See, e.g., <http://www.slate.com/articles/briefing/articles/2000/02/the_1000word_dash.html> (last accessed December 21, 2015).

¹⁵ This analysis is presented in Part 5.1 of the Supplementary Materials.

measures our partners have to take; and (5) how we responded to data breaches.¹⁶ They were presented with four possible answers to each question, and one of the options for each question was that we did not mention a policy on the topic. We then counted how many of these five questions the respondents correctly answered.

Figure 2: Correct Answers to Comprehension Questions

Figure 2 reports the mean number (and 90% confidence intervals) of questions that the respondents' correctly answered about the contents of our privacy disclosures. Most notably, regardless of the format of the disclosure, respondent in all five disclosure treatments answered roughly one of the five questions correctly (mean = 0.82). The Best Practice group averaged 0.81 questions and the Worst Practice group correctly answered 0.77 questions—a difference that is far from statistically significant ($p = 0.60$). Put another way, with the exception of the Blank group, the average respondent correctly answered fewer questions than would be expected by random chance. The respondents in the sixth treatment—the Blank group—answered roughly two of the five questions correctly (mean = 1.97), but since the Blank group did not receive a disclosure, the

¹⁶ These five questions were presented in random order. Although the first four questions were all addressed in our privacy disclosures, the fifth question was not. We included this question, however, because it is a commonly covered topic in privacy disclosures, and asking respondents for our policies on it provided an additional test of whether our disclosure was actually read.

correct answers for them (“We did not mention a policy on the topic”) were different than they were for the other treatment groups.

Among the “Readers” who spent time reading the disclosures, only a very modest improvement was observed.¹⁷ In that group, about half of the improvement was obtained for all treatments, and the majority of that effect was obtained by spending 30 seconds—hardly enough to read the text. This suggests that the (small) improved comprehension is likely due to a selection effect, whereby the longer readers are more sophisticated or experienced, rather than to better delivery of the notice. In all, these results suggest that for the great majority of people, the formal properties recommend for Best Practice disclosures do not improve comprehension of their content.

3.2. Sharing Personal Information

Disclosures are aimed at changing behavior. In the privacy context, the behavior in question is the personal information people share. Thus, the ultimate measure of success for Best Practice disclosures is whether they change respondents’ willingness to share personal information. We tested this in two ways. First, respondents were asked a series of sensitive personal questions about their risky sexual behavior. Second, they were asked to provide personal identifying information.

3.2.1. Risky Behaviors Disclosed.

We asked the respondents a series of questions about their risky sexual behavior that were either taken from or based on questions used in other research on this topic (e.g. John et al. 2011). We identified ten questions on the subject that could plausibly be related to efforts to prevent the spread sexually transmitted diseases (although, admittedly, some questions are more relevant to the spread of STDs than others). These questions are listed in Table 2. The respondents were asked to answer each of these questions either “Yes” or “No”.¹⁸

¹⁷ People who spent at least 90 (60, 30) seconds on the disclosure screen answered correctly 1.25 (1.48, 1.56) on average, across all treatments. Their score improved to 1.75 (2.33, 1.71) under Best Practice treatment. See Part 5.1 of the Supplementary Materials.

¹⁸ The questions were presented in random order and the respondents viewed one question per screen. If they attempted to move to the next screen without answering, they were asked, but not required, to provide

Table 2: Questions on Risky Sexual Behavior

-
1. Have you ever had sex with someone you met the same day?
 2. Have you ever had sex with someone you met the same day without using a condom?
 3. Have you ever cheated on your partner?
 4. Have you ever had anal sex?
 5. Have you ever had sexual thoughts about a member of your same sex?
 6. Have you ever used sex toys?
 7. Have you ever taken nude pictures of yourself or of a sexual partner?
 8. Have you ever been diagnosed with a sexually transmitted disease?
 9. Have you ever lied about how recently you were tests for STDS?
 10. Have you ever neglected to tell a partner about a sexually transmitted disease from which you were suffering?
-

Figure 3: Risky Behaviors Disclosed

Figure 3 presents the mean number (and 90% confidence intervals) of “Yes” responses to these 10 questions.¹⁹ Respondents in all six treatment groups answered that on average they had engaged between two and three of risky behaviors. The mean

a response. Respondents that either answered “No” or advanced without answering were coded the same for our analysis.

¹⁹ Part 5.2 of the Supplementary Materials breaks down the tendency to share each of the 10 risky sexual behavior questions by treatment groups. Some behaviors are more often shared, but it does not appear that there are systematic differences across treatment groups.

number of risky behaviors ranges from 2.39 for the Specification group to 2.94 for the Worst Practice Group. None of the treatment groups, however, reported a number of risky behaviors that was different than the Blank group at the 0.1 level of statistical significance. And among the small subset of “Readers;”, no measureable differences were observed.²⁰ These results suggest that the formal properties recommend for Best Practice disclosures do not increase willingness to divulge sensitive information.²¹

3.2.2. Identifying Information Provided.

After the risky sexual behavior questions, the respondents were asked a series of standard demographic questions.²² After that, they were further asked to provide us with five pieces of personal identifying information: (1) the county they took the survey in; (2) the zip code where they took the survey; (3) their phone number; (4) their email address; and (5) their mailing address. For each question, the respondents had to choose between providing the information by filling in a blank answer space or clicking “I prefer not to say.” We then recorded the number of times that the respondents provided an answer. In general, we could not verify whether the responses were accurate (although we were able to conduct some verification of the zip codes provided²³).

Figure 4 reports the mean number (and 90% confidence intervals) of times that respondents filled in an answer in the space provided.²⁴ The mean number of questions

²⁰ Readers who spent at least 90 seconds disclosed on average a slightly higher number of risky behaviors (3.50), but there are too few respondents in this group to test which disclosure treatments drive this (statistically insignificant) increase. See Part 5.1 of the Supplementary Materials.

²¹ Since it is possible that privacy-sensitive subjects would react to the disclosures by terminating their participation in the survey, we also examined how many respondents dropped out between being shown the survey and the end of our questions on risky sexual behavior. The average drop out rate for the six treatments was 3.5%, and there were not any statistically significant differences between the six treatment groups. Using best practices, in other words, did not translate into a higher rate of cautionary dropping out.

²² This included asking respondents their age, gender, ethnicity, and the region of the country where they lived. The responses to these questions are reported in Part 3 of the Supplementary Materials.

²³ We verified whether the zip code responses matched the zip codes collected by the survey software. Although there are a large number of discrepancies, there are not any noticeable trends across treatment groups. Further, the great majority of people (84%) and indistinguishably across all treatments provided zip codes that were in the vicinity of the location in which they took the survey. See part 5.3 of the Supplementary Materials.

²⁴ Part 5.2 of the Supplementary Materials provides the mean number of “yes” responses to each of the 5 requests for identifying information by treatment groups. Disaggregating the data reveals that there are

that respondents provided an answer for was roughly 2.5 for all six of the treatment groups, ranging from 2.40 for the Organization group to 2.58 for the Specification group. Once again, none of the treatment groups had average responses that were different than the Blank group at the 0.1 level of statistical significance. These results suggest that the formal properties recommend for Best Practice disclosures do not increase willingness to share identifying information.

Figure 4: Identifying Information Provided

3.3. Expectations of Privacy Rights

It is possible that even if they are not read or used, that the presence of disclosures affects people's perceptions about the disclosers. For example, in the privacy context, the presence of a privacy notice and its format may alter people's perceptions about their legal rights or about how seriously their privacy is being taken (Pan and Zinkhan 2006; Proctor et al. 2008). To gain insight on this, we asked the respondents several questions on their expectations about their legal rights and reported satisfaction with our survey.

differences in the responses by question. For example, roughly 84% of respondents provided a zip code, but only 26% of respondents provided a mailing address. Once again, it does not appear that there are systematic differences across treatment groups.

3.3.1. Expectations About Legal Rights.

To see if the format of disclosure influences legal expectations, the respondents were asked two questions (in random order). First, they were asked if they believed they would have a legal claim if we disclosed their data to a third party in a manner consistent with our privacy policy. Second, they were asked if they believed they would have a legal claim if we disclosed their data to a third party in a manner NOT consistent with our privacy policy. For both questions, answers had to be provided on five-point scale ranging from “very unlikely” (scored as a 1) to “very likely” (scored as a 5), with “neutral” (scored as 3) in between.

Figure 5: Beliefs About Legal Claims

In Figure 5, Panel A reports the mean response (and 90% confidence intervals) on whether respondents believed they had a legal claim if we disclosed their data in a manner consistent with our privacy policy. In all treatment groups the response were roughly “neutral” (mean = 2.98), without any statistically significant difference across disclosure treatments or the Blank group.

Panel B reports the mean response (and 90% confidence intervals) on whether respondents believed they had a legal claim if we disclosed their data in a way NOT

consistent with our privacy policy. More respondents thought that it was “likely” that they had a legal claim (mean = 3.57). The responses were: Best Practice, 3.61; Organization, 3.57; Presentation, 3.50; Specification, 3.52; Worst Practice, 3.49; and Blank, 3.73. Unlike our prior tests, for this questions three of the treatment groups had average responses that were different than the Blank group at a statistically significant level: the Presentation group ($p = 0.03$), the Specification group ($p = 0.06$), and the Worst Practice group ($p = 0.04$). That said, the differences between the Best Practice group and these groups were not statistically significant. Although this is weak evidence that the presence of privacy disclosures may lull respondents to think that disclosers are acting legally and that no legal violation is being committed, it does not support the more nuanced notion that a Best Practice disclosure would create different expectations than a poorly presented disclosure.

3.3.2. Reported Satisfaction.

Finally, even if Best Practices do not change consumers’ comprehension or decisions to share personal information, clearer disclosures may increase consumer satisfaction. We tested this by asking respondents two questions (in random order): “[h]ow satisfied are you that we take your privacy seriously?” and “[h]ow satisfied are you with your experience taking this survey?” For both questions, answers had to be provided on five-point scale ranging from “very dissatisfied” (scored as a 1) to “very satisfied” (scored as a 5).

In Figure 6, Panel A reports the mean level of satisfaction (and 90% confidence intervals) that respondents had about whether we were taking their privacy seriously. Overall, the respondents were roughly “satisfied” that we were taking their privacy seriously (mean = 4.09). The responses were near identical across all six of the treatment groups, and none of the treatments had an average response that was different from the Blank group at a statistically significant level. This is interesting, in part, because our privacy disclosures announced a number of aggressively unpleasant policies that should diminish people’s satisfaction. We already established that the content was largely

ignored, and we now see that the format did not affect the overall impression people gleaned from their exposure to the disclosure page.

Figure 6: Reported Satisfaction

Panel B reports the mean level of satisfaction (and 90% confidence intervals) that respondents had taking our survey. Like with the prior question on privacy, the respondents were roughly “satisfied” with their experience taking our survey (mean = 3.95), the responses were near identical across all six of the treatment groups, and none of the treatments had an average response that was different from the Blank group at a statistically significant level. In other words, providing a privacy disclosure—no matter the formatting—did not change the respondents’ attitude about a survey asking highly intimate questions about their sexual history.

4. SIMPLIFICATION BY A “WARNING LABEL”

4.1. Overview

Our results thus far did not identify any statistically significant differences between the treatments groups’ comprehension and behavior (and only very weak and

unintended effects on legal expectations). In short, despite the intrusive information they were asked to share and the nasty privacy practices we pretended to have, the respondents that received the Best Practice disclosure and those that received the Worst Practice disclosure responded indistinguishably.

Perhaps this suggests that although Best Practices are widely supported, they may not go far enough. They still require more time to review and contemplate than most people are willing to spend. More radical forms of simplification may therefore be deemed necessary, and several templates along these lines have been offered. They all share the principle that disclosures should provide very few facts in a very short format, and that they should focus on policies that are easiest for people to understand, process, and compare. Nutrition data labels are viewed as model for these kinds of designs. One prominent version of this approach is the warning label proposal in Ayres and Schwartz (2014)—a disclosure of legal terms containing only a handful of facts that are most surprising and disadvantageous to consumers.

Despite the fact that these warning label style disclosures have some intuitive appeal, we are unaware of research that has tested whether they lead consumers to behave differently than a more conventional Best Practice disclosure would. We therefore added a treatment to our survey that would allow us to test the impact of warning label disclosures. Since Ayres and Schwartz (2014) already focused in their proposal on privacy disclosures, we used their approach as our model.

4.2. Research Design

A short warning label needs to include only the utmost important items, and those might vary across firms. Accordingly, Ayres and Schwartz (2014) propose that firms should conduct research to learn which aspects of their policy are least expected. In that spirit, we administered a short preliminary survey to our colleagues and students, asking them to examine the twelve terms in the privacy policy we developed for our experiment (as listed in Table 1). They were asked to rank the terms are on a scale from “strong unexpected” to “strongly expected,” based on what they would expect for a survey on sexual practices being conducted by a corporation.²⁵

²⁵ Information on the preliminary survey is presented in Part 6 of the Supplementary Materials.

Figure 7: “Warning Label” Style Disclosure

Based on the responses to this preliminary survey, we created a warning label containing only the five items that were ranked as the most unexpected. Figure 7 presents the warning label disclosure we designed, which is almost identical to the one proposed by Ayres and Schwartz (2014). We then ran our experiment—exactly as Part 2.3 described—but, instead of a standard privacy disclosure, presented some respondents with a Warning Label disclosure.

4.3. Results

Since the results in Part 3 were nearly identical for all five our of privacy disclosures, the figures in this section simply report the comparison of the results for the “Best Practices” treatment and the new “Warning Label” treatment.

Figure 8: Comprehension of the Warning Label

Figure 8 reports the results for the two tests we designed to measure respondents' Comprehension of the Disclosures. Panel A shows that the amount of time spent on the disclosure screen was nearly identical for the respondents that received the Best Practice treatment (mean = 19.12 seconds; median 5.61 seconds) and the respondents that received Warning Label treatment (mean = 18.56 seconds; median = 6.78 seconds). Panel B, however, shows that there was a difference in the number of correct answers to the comprehension questions. While respondents that received the Best Practice disclosure averaged 0.81 correctly answered questions, the respondents that received the Warning Label treatment averaged 1.53 correctly answered questions. This difference is highly statistically significant ($p < 0.001$).

Figure 9: Willingness to Share Personal Information

Figure 9 reports the results of our two tests that measured respondents' willingness to share personal information. Panel A shows that the number of risky behaviors that respondents disclosed is comparable for both groups. On average, the Best Practice group reported having engaged in 2.70 risky behaviors and the Warning Label group reported having engaged in 2.51 risky behaviors. This difference is not statistically significant. Similarly, Panel B shows that the number of answers the respondents in both groups provided to the questions asking for identifying information. On average, the Best Practice group provided answers to 2.44 questions asking for identifying information and the Warning Label group provided answers to 2.72. This result is statistically significant at the 0.1 level ($p = 0.07$). In other words, this evidence suggests that respondents were slightly more likely to provide identifying information when we provided them with a warning label that only listed the most unexpected ways we would use their data.

Figure 10: Attitudes About Our Survey

Figure 10 reports respondents' answers regarding attitudes about our survey. Panel A and B reports respondents' legal expectations in case we shared their data with a third party, and Panel C and D reports respondents' satisfaction. For all four questions, the differences among the Best Practice group and Warning Label group were minor and far from statistically significant.

4.4. Discussion

The Warning Label group did show some improved understanding of the terms. That said, the respondents were far from fluent: only 1.53 answers correct, out of five (compared to an average of less than 1 for other treatments). This is likely attributable to the ease of reading a five-item warning box relative to even a well-designed disclosure form. But this small improvement did not translate into any detectable difference in behavior. Only very minor differences were recorded in the willingness to share

information despite the fact that the warning label cautioned people about the problematic uses of the information.²⁶

These findings suggest different lessons compared to prior literature that tested nutrition box modules of privacy disclosures (Kelley et al. 2010). Like prior work, we also see some improved understanding (although the effect is more modest). But unlike prior work, we see no change in the primary conduct. When disclosures are presented in the context of another task, their presentation format is found to be irrelevant.

It is possible that the disappointing effect of the warning label merely reflects current numbness among subjects, unmotivated to use privacy notices of any kind. It might be that in an environment where warning labels become the norm, people would learn to utilize them. Experimental methodology necessarily falls short of testing such market-wide effect, but some observational data casts doubt about this conjecture (Agarwal et. Al 2014).

5. CONCLUSION

Simplification of disclosures is one of the most widely pursued regulatory techniques of our time. The simplification paradigm makes much sense in theory, but proof of its success has so far been elusive. Our experimental results contribute to a skeptical view on the merits of simplification. Of course, there are limitations to our approach. For example, it may be the case that people that agree to take an online survey responded to privacy disclosures differently than the general public. Additionally, we only tested two simplification formats—a Best Practice presentation and a warning label—when there are surely more formats that could be tried. But with those caveats in mind, we found that that the simplification of disclosures did not change people’s understanding of them or their ensuing behavior in any meaningful direction.

Upon further reflection, these results may not be so surprising. As explained elsewhere, “simplicity’s failure grows out of mandated disclosure’s concern with complex and unfamiliar issues. Complexity can rarely be described simply to people

²⁶ We also detected a modest and statistically significant increase in the subjects’ drop out rate under the warning label treatment. For the Best Practice treatment, 3.4% of the respondents dropped out of the survey before the end of the questions on risky sexual behavior, and this rate increased to 6.3% under the warning label treatment.

unfamiliar with it” (Ben-Shahar and Schneider 2014, p. 135). Firms’ privacy practices are only one complex topic in a host of issues which disclosures address. If simplification fails in this context, is there a reason to expect it to perform better in other areas?

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Simplification of Privacy Disclosures: An Experimental Test

Omri Ben-Shahar & Adam Chilton

Supplementary Materials

Part 1: Privacy Disclosures. This Part provides the complete text for each of the privacy disclosures used in our experiment.

Part 2: Survey Questions. This Part provides the questions that we asked in our survey.

Part 3: Information About Our Sample. This Part provides demographic information about our sample and the number of respondents that were in each treatment condition.

Part 4: Complete Results. The Part provides both figures and tables with the complete results to our survey experiment.

Part 5: Additional Analysis. This Part provides additional analysis of our results that are not reported in the body of the paper.

Part 6: Preliminary Survey. This Part provides information on the preliminary survey we administered to our colleagues and students to design the Warning Label treatment.

Part 7: Pilot Survey. This Part provides information on the pilot survey we conducted on respondents recruited through Amazon's Mechanical Turk service.

1. PRIVACY DISCLOSURES

1.1. Best Practice Disclosure

Your Privacy Rights

We value your privacy. In this page, we explain our data privacy practices. We explain how we collect, use, disclose, and store the information about you that you reveal in the survey.

These disclosures of your data and personal information may be done without requesting additional consent from you. Additional disclosures of your information to government agencies will be made to the extent permitted or required by law.

Continuing past this page means that you grant us permission to engage in these practices, including the permission to share the information with others as explained below.

The Information We Collect

- We collect information on your sexual practices based on your responses to questions in this survey.
For Example, in the survey, you will be asked about your behavior in various intimate sexual situations. You do not have to provide responses, but if you do we collect your answers.
- We collect personal information that can identify you through this online interaction with your computer.
For Example, we collect information about your IP address, geographical location, zip code, the type of computer you use in this survey and its operating system, your Internet service provider, and clickstream data.
- We collect and link additional information about you from other public and private data sources.
For Example, we collect information about you from social media sites and insurance databases.

How We Use the Information

- We use the information for commercial development of a dating application for smartphones.
For Example, we use the information to create statistical tools that predict sexual behavior risks that confront people who give answers like yours.
- We use the information to develop advertising and marketing tools within the application.

For Example, we develop a database that matches people with answers like the ones you provide with products that they may wish to purchase.

- We use the information to follow up with you on future communications.
For Example, we might send you offers to access our new application and ads tailored to the preferences you reveal. We will also communicate with you if there are changes to this Privacy Policy.

Disclosure of Data to Third Parties

- We share the information with commercial partners to improve the commercial utility of the application.
For Example, we share the information with dating sites that process and analyze your responses and match them with existing databases.
- We share the data with advertisers and ad-placement companies that help us design the profit opportunities from the mobile application.
For Example, we disclose the information to Ad-Med Solutions, Inc., a commercial company affiliated with our business, that is offering personalized medical advertisements. Ad-Med Solutions, Inc., may further share the information with its affiliates and partners or sell it to others.
- We share the data with commercial health insurance companies that partner with us in developing the data-driven application.
For Example, we disclose the information to MHM Insurance (Midwestern Health Mutual Insurance), a health insurance company specializing in personalized health policies. MHM may share the information with its affiliates and partners, beyond our control, and use it for the development of its health insurance business.

Protection of Personal Information

- We retain the information indefinitely.
For Example, we may keep files containing your personal information even if we merge with another business.
- We save your personal information on cloud server with limited access.
For Example, we encrypt any files containing personal information when we transmit them to cloud-based data files.
- We encourage our partners to take high security measures in storing your data, but we are unable to verify their security practices.
For Example, we request that any of our partners receiving your personal information protect it by passwords and encryption, and ask the same if they pass the information onward.

1.2. Organization Disclosure

[Note: This disclosure starts with the Best Practice Disclosure, but deletes all the formatting. It then adds two extra paragraphs (on children's rights and the citizens of Vermont), and also adds a few redundant sentences to start each paragraph.]

Your Privacy Rights

We value your privacy. In this page, we explain our data privacy practices. We explain how we collect, use, disclose, and store the information about you that you reveal in the survey. These disclosures of your data and personal information may be done without requesting additional consent from you. Additional disclosures of your information to government agencies will be made to the extent permitted or required by law. Continuing past this page means that you grant us permission to engage in these practices, including the permission to share the information with others as explained below.

This policy covers the survey as well as any interactions you may have with us. When you review this survey, please keep in mind that it is intended for a U.S. audience and the information may be processed or transferred in the United States. Our survey is not intended for children under 13. We do not knowingly collect personal information from children under 13. If you have any relation with the survey group and any of its affiliates, we may collect information about you. If you have any questions after reviewing this policy, please address them according to the directions provided below.

In this survey we collect information on your sexual practices based on your responses to questions in this survey. You do not have to provide responses, but any response you provide is collected and stored. This includes information about sexual behavior in the present and in the past, how your behavior is affected by risks including risks of sexually transmitted diseases, and other information related to sexual conduct that you provide us.

We collect information on your sexual practices based on your responses to questions in this survey. For Example, in the survey, you will be asked about your behavior in various intimate sexual situations. You do not have to provide responses, but if you do we collect your answers. We collect personal information that can identify you through this online interaction with your computer. For Example, we collect information about your IP address, geographical location, zip code, the type of computer you use in this survey and its operating system, your Internet service provider, and clickstream data. We collect and link additional information about you from other public and private data sources. For Example, we collect information about you from social media sites and insurance databases.

We use the information for market research in the development of a new commercial dating application for smartphones, including the development of new products and services embedded in this application, the improvement of existing products and services,

the performance of data analytics, and other internal functions. We use the information for commercial development of a dating application for smartphones. For Example, we use the information to create statistical tools that predict sexual behavior risks that confront people who give answers like yours. We use the information to develop advertising and marketing tools within the application. For Example, we develop a database that matches people with answers like the ones you provide with products that they may wish to purchase. We use the information to follow up with you on future communications. For Example, we might send you offers to access our new application and ads tailored to the preferences you reveal. We will also communicate with you if there are changes to this Privacy Policy.

We share the information we collect from and about you with our affiliates and other third parties. We share some of the information with commercial partners to improve the accuracy and commercial utility of the application, to help us perform some of the analytics of this study, and to collaborate with partners that develop related products, services, advertisements, and technical capabilities. We share the information with commercial partners to improve the commercial utility of the application. For Example, we share the information with dating sites that process and analyze your responses and match them with existing databases. We share the data with advertisers and ad-placement companies that help us design the profit opportunities from the mobile application. For Example, we disclose the information to Ad-Med Solutions, Inc., a commercial company affiliated with our business, that is offering personalized medical advertisements. Ad-Med Solutions, Inc., may further share the information with its affiliates and partners or sell it to others. We share the data with commercial health insurance companies that partner with us in developing the data-driven application. For Example, we disclose the information to MHM Insurance (Midwestern Health Mutual Insurance), a health insurance company specializing in personalized health policies. MHM may share the information with its affiliates and partners, beyond our control, and use it for the development of its health insurance business.

Residents of Vermont: We will not share personally identifiable information unless authorized by you. This does not limit us from sharing certain information about your response to the survey as permitted by law.

We want you to feel confident about using this website to respond to the survey, and we are committed to protecting the information we collect. While no online platform can guarantee security, we have implemented appropriate administrative, technical, and physical security procedures to help protect the personal information you provide to us. We retain the information indefinitely. For Example, we may keep files containing your personal information even if we merge with another business. We save your personal information on cloud server with limited access. For Example, we encrypt any files containing personal information when we transmit them to cloud-based data files. We encourage our partners to take high security measures in storing your data, but we are unable to verify their security practices. For Example, we request that any of our partners receiving your personal information protect it by passwords and encryption, and ask the same if they pass the information onward.

1.3. Presentation Disclosure

[Note: This disclosure starts with the Best Practice Disclosure, and then changes the font to gray italics & turned into passive voice].

Your Privacy Rights

Your privacy is valued by us. In this page, our data privacy practices are explained. It is explained how the information revealed by you is in the survey collected, used, disclosed, transferred, and stored by us.

Without requesting additional consent from you, these disclosures of your data and personal information may be done. To the extent permitted or required by law, additional disclosures of your information to government agencies will be made.

Continuing past this page means that permission to engage in these practices is granted to us, including the permission to share the information with others, as explained below.

The Information We Collect

- *Information on your sexual practices will be collected by us based on your responses to questions in this survey.
For Example, in the survey, you will be asked about your behavior in various intimate sexual situations. Responses do not have to be provided by you, but they are they will be collected by us.*
- *Personal information that can identify you will be collected by us through this online interaction with your computer.
For Example, information is collected about your IP address, geographical location, zip code, the type of computer being uses in this survey and its operating system, your Internet service provider, and clickstream data.*
- *Additional information about you from other public and private data sources will be collected and linked by us.
For Example, information about you from social media sites and insurance databases may be collected.*

How We Use the Information

- *Your information will be used by us for a dating application for smartphones being commercial developed.
For Example, the information is used for statistical tools to be developed, through which sexual behavior risks confronted by people who give answers like yours are predicted.*

- *Your information will be used by us for advertising and marketing tools that are being developed within the application.
For Example, a database that matches people with answers like the ones provided by you with products that they may wish to purchase is being developed.*
- *Your information will be used in future communications that would be followed up with by us.
For Example, offers to access to our new application as well as ads tailored to the preferences revealed by you may be sent to you. Also, changes to this Privacy Policy will be communicated.*

Disclosure of Data to Third Parties

- *So that the commercial utility of the application be improved, the information collected will be shared by us with commercial partners.
For Example, information will be shared with dating sites in which your responses are processed and analyzed, and matched with existing databases.*
- *So as to help us design the profit opportunities from the mobile application, the information will be shared by us with advertisers and ad-placement companies.
For example, information will be disclosed to Ad-Med Solutions, Inc., a commercial company affiliated with our study that is developing personalized medical advertisements. The information may further be shared by Ad-Med Solutions, Inc., with its affiliates and partners or sold to others.*
- *So that the data-driven application can be developed, the information will be shared by us with health insurance companies with whom we are partnered.
For Example, information will be disclosed to MHM Insurance (Midwestern Health Mutual Insurance), a health insurance company specializing in personalized health policies. The information may be further shared by MHM with its affiliates and partners, beyond our control, and may be used by it for the development of its health insurance business.*

Protection of Personal Information

- *Your personal information will be retained by us indefinitely.
For Example, files in which your personal information is contained will be kept even if we are merged with another business.*
- *Your personal information will be saved by us on cloud server accessed in limited fashion.
For Example, any files in which personal information is contained will be encrypted when transmitted to cloud-based data files.*

- *Our research partners will be encouraged to take high security measures in the way your data is being stored by them, but their security practices cannot be verified by us.*

For Example, any of our partners with whom your personal information will be shared will be requested to protect it by password and encryption, and asked to do the same the same if the information is passed onward.

1.4. Specification Disclosure

[Note: This disclosure uses the bullet points from the Best Practice Disclosure, but deletes all the examples and replaces them with abstract repetitive text].

Your Privacy Rights

We value your privacy. In this page, we explain our data privacy practices. We explain how we collect, use, disclose, and store the information about you that you reveal in the survey.

These disclosures of your data and personal information may be done without requesting additional consent from you. Additional disclosures of your information to government agencies will be made to the extent permitted or required by law.

Continuing past this page means that you grant us permission to engage in these practices, including the permission to share the information with others as explained below.

The Information We Collect

- We collect information on your sexual practices based on your responses to questions in this survey. You do not have to provide responses, but if you do we collect your answers.
- We collect personal information that can identify through this online interaction with your computer. This personal information is intended to customize in a statistical and automated manner your profile.
- We collect additional information about you from other public and private data sources. We collect about you from third-party databases.

How We Use the Information

- We use the information for commercial development of a dating application for smartphones. The results of this survey will be used to design tools that improve relevance of match results and reduce sexual harassment.
- We use the information to develop advertising and marketing tools within the application. The information will be used to make changes to our applications.
- We use the information to follow up with you on future communications. We will also contact you if there are issues relating to the study or to this survey that require further clarification or communication.

Disclosure of Data to Third Parties

- We share the information with commercial partners to improve the commercial utility of the application. We share some of the information with affiliates partners to help us perform some of the goals of this application, and to collaborate with other commercial entities that specialize in this field.
- We share the data with advertisers and ad-placement companies that help us design the profit opportunities from the mobile application. This includes companies and affiliates that offer commercial services, products, or programs in the area of personalized dating services, and affiliates and partners of such companies.
- We also share the data with commercial health insurance companies that partner with us in developing the data-driven application. Sharing data with these companies helps us to further develop the utility of our application.

Protection of Personal Information

- We retain the information indefinitely. Any data we collect about you may not be deleted and may be used in future business.
- We save your personal information on cloud server with limited access. We protect access to the information through our internal data protection and security.
- We encourage our partners to take high security measures in storing your data, but we are unable to verify their security practices. We encourage our partners to require their own affiliates to maintain high security standards.

1.5. Worst Practice Disclosure

[Note: This disclosure starts with the Organization Disclosure and inserts passive voice for all the topic sentences. Then the “bullet” points from the Presentation Disclosure are used, and the repetitive sentences from the Specification Disclosure are used instead of examples.]

Your Privacy Rights

Your privacy is valued by us. In this page, our data privacy practices are explained. It is explained how the information revealed by you is in the survey collected, used, disclosed, transferred, and stored by us. Without requesting additional consent from you, these disclosures of your data and personal information may be done. To the extent permitted or required by law, additional disclosures of your information to government agencies will be made. Continuing past this page means that permission to engage in these practices is granted to us, including the permission to share the information with others, as explained below.

This policy covers the survey as well as any interactions you may have with us. When this survey is being reviewed by you, please keep in mind that it is intended for a U.S. audience and the information may be processed or transferred in the United States. Our survey is not intended for children under 13. Personal information from children under 13 is not knowingly collected by us. If you have any relation with the survey group and any of its affiliates, we may collect information about you. If you have any questions after reviewing this policy, have them addressed according to the directions provided below.

Information on your sexual practices will be collected by us based on your responses to questions in this survey. Responses do not have to be provided, but any response that is provided is collected and stored. This includes information about sexual behavior in the present and in the past, how your behavior is affected by risks including risks of sexually transmitted diseases, and other information related to sexual conduct that you provide us. Information on your sexual practices will be collected by us based on your responses to questions in this survey. You do not have to provide responses, but if you do we collect your answers. Personal information that can identify you will be collected by us through this online interaction with your computer. This personal information is intended to customize in a statistical and automated manner your profile. Additional information about you from other public and private data sources will be collected and linked by us. We collect about you from third-party databases.

Your information will be used by us for market research in the development of a new commercial dating application for smartphones, including the development of new products and services embedded in this application, the improvement of existing products and services, the performance of data analytics, and other internal functions. Your information will be used by us for a dating application for smartphones being commercial developed. The results of this survey will be used to design tools that improve

relevance of match results and reduce sexual harassment. Your information will be used by us for advertising and marketing tools that are being developed within the application. The information will be used to make changes to our applications. Your information will be used in future communications that would be followed up with by us. We will also contact you if there are issues relating to the study or to this survey that require further clarification or communication.

To improve the accuracy of our findings the information will be shared by us with affiliates and other third parties. Some of the information is shared with commercial partners so that the accuracy of our findings be improved, that the analytics of this study be performed, and collaboration with partners that develop related products, services, advertisements, and technical capabilities be pursued. So that the commercial utility of the application be improved, the information collected will be shared by us with commercial partners. We share some of the information with affiliates partners to help us perform some of the goals of this application, and to collaborate with other commercial entities that specialize in this field. So as to help us design the profit opportunities from the mobile application, the information will be shared by us with advertisers and ad-placement companies. This includes companies and affiliates that offer commercial services, products, or programs in the area of personalized dating services, and affiliates and partners of such companies. So that the data-driven application can be developed, the information will be shared by us with health insurance companies with whom we are partnered. This includes companies and affiliates that offer commercial services, products, or programs in the area of personalized dating services, and affiliates and partners of such companies.

Residents of Vermont: Unless authorized by you, personally identifiable information will not be shared by us. This does not limit us from sharing certain information about your response to the survey as permitted by law.

We want you to feel confident about using this website to respond to the survey and we are committed to protecting the information being collected by us. While no online platform can guarantee security, appropriate administrative, technical, and physical security procedures have been implemented by us to help protect the personal information that is being provided to us. Your personal information will be retained by us indefinitely. Any data we collect about you may not be deleted and may be used in future business. Your personal information will be saved by us on cloud server accessed in limited fashion. We protect access to the information through our internal data protection and security. Our research partners will be encouraged to take high security measures in the way your data is being stored by them, but their security practices cannot be verified by us. We encourage our partners to require their own affiliates to maintain high security standards.

2. SURVEY QUESTIONS

2.1. *Risky Behavior Questions*

1. Have you ever had sex with someone the same day you met them?
A. Yes
B. No
2. Have you ever had sex with someone you met the same day without a condom?
A. Yes
B. No
3. Have you ever cheated on your partner?
A. Yes
B. No
4. Have you ever had anal sex?
A. Yes
B. No
5. Have you ever had sexual thoughts about a member of your same sex?
A. Yes
B. No
6. Have you ever used sex toys?
A. Yes
B. No
7. Have you ever taken nude pictures of yourself or of a sexual partner?
A. Yes
B. No
8. Have you ever been diagnosed with a sexually transmitted disease?
A. Yes
B. No
9. Have you ever lied about how recently you were tested for STDs?
A. Yes
B. No
10. Have you ever neglected to tell a partner about a sexually transmitted disease from which you were suffering?

A. Yes
B. No

2.2. Personal Information Questions

1. In which county did you take this survey?
A. _____
B. Prefer not to say.
2. What is the zip code where you took this survey?
A. _____
B. Prefer not to say.
3. What is your phone number?
A. _____
B. Prefer not to say.
4. What is your email address?
A. _____
B. Prefer not to say.
5. What is your mailing address?
A. _____
B. Prefer not to say.

2.3. Comprehension Questions

1. What is our policy on the information we collect?
 - a) We retain the right to collect information about you from facebook
 - b) We only collect your answers to this survey
 - c) We collect, among other things, information based on our online interaction with your computer (* correct answer)
 - d) We did not mention what types of data we collect
2. What is our policy on whom we share your data with?
 - a) We share data with commercial health insurance companies (* correct answer)
 - b) We do not share your data with anyone outside our company
 - c) We share your data with any interested third parties
 - d) We did not mention a policy on how long we will retain your data
3. What is our policy on how long we retain your data?
 - a) We will immediately delete your data after analyzing the results of this survey
 - b) We will delete your data after one year
 - c) We will retain your data indefinitely (* correct answer)
 - d) We did not mention a policy on how long we will retain your data
4. What is our policy on the security measures our partners have to take?
 - a) We do not discuss security measures with anyone we share your data with
 - b) We encourage anyone we share your data with to take high security measures (* correct answer)
 - c) We verify that anyone we share your data with take high security measures
 - d) We did not mention any policy on data security
5. What is our policy on how to respond to data breaches?
 - a) We will immediately contact you about any data breaches
 - b) We will take aggressive legal action against those responsible for data breaches
 - c) We will work with the government to investigate any data breaches
 - d) We did not mention a policy on how we respond to data breaches (* correct answer)

2.4. Expectations of Privacy Questions

1. If we comply with all of the policies contained in our statement on “Your Privacy Rights”, how likely do you think it is that you would have a legal claim against us if we share your data with a third party?
 - a) Extremely likely
 - b) Likely
 - c) Neutral
 - d) Unlikely
 - e) Extremely unlikely
2. If we DO NOT comply with all of the policies contained in our statement on “Your Privacy Rights”, how likely do you think it is that you would have a legal claim against us if we share your data with a third party?
 - a) Extremely likely
 - b) Likely
 - c) Neutral
 - d) Unlikely
 - e) Extremely unlikely
3. How satisfied are you that we take your privacy seriously?
 - a) Very satisfied
 - b) Somewhat satisfied
 - c) Neither satisfied or dissatisfied
 - d) Somewhat dissatisfied
 - e) Very dissatisfied
4. How satisfied are you with your experience taking this survey?
 - a) Very satisfied
 - b) Somewhat satisfied
 - c) Neither satisfied or dissatisfied
 - d) Somewhat dissatisfied
 - e) Very dissatisfied

3. INFORMATION ABOUT OUR SAMPLE

A sample of 1,484 respondents was recruited by Survey Sampling International (SSI). SSI is a leading market research firm that primarily conducts surveys for corporate clients. First, we provide the demographic breakdown of our sample compared the adult population of the United States. Second, we provide the number of respondents that received each treatment. Third, we present the results of testing we conducted to make sure that the respondents in each of the treatment groups were balanced.

3.1. Demographic Characteristics of Our Sample

Demographic Characteristics of Our Sample			
	# in Sample	% of Sample	% of U.S. Population
Gender			
Male	695	47%	48%
Female	789	53%	52%
Age			
18-24	174	12%	13%
25-34	270	19%	18%
35-44	278	19%	18%
45-54	275	19%	19%
55-64	235	16%	16%
65+	251	17%	17%
Race/Ethnicity			
White	1,020	69%	69%
Hispanic	191	13%	14%
Black	180	12%	11%
Asian	60	4%	4%
Other	32	2%	2%
Region			
Northeast	273	18%	18%
Midwest	322	22%	22%
South	544	37%	37%
West	345	23%	23%

3.2 Number of Respondents by Treatment Group

Number of Respondents by Treatment	
Treatment	Respondents
1. Best Practice	203
2. Organization	220
3. Presentation	211
4. Specification	199
5. Worst Practice	213
6. Blank	229
7. Warning Label	209
Complete Sample	1,484

3.3. Balance Testing

Before analyzing the results of our survey, we tested to make sure that the groups that received each of our six treatments were similar. To do so, we used the balance test from Hansen & Bowers (2008) to evaluate whether there was any evidence of imbalance among demographic variables reported in the Table in Part 3.1 of the Supplementary Materials.¹

Using this test, the overall χ^2 statistic and the associated overall p-values for each group are: Best Practice, 11.3 (p = 0.33); Organization, 10.2 (p = 0.42); Presentation, 5.91 (p = 0.82); Specification, 14.6 (p = 0.15); Worst Practice, 16.2 (p = 0.09); Blank, 11.3 (p = 0.34), and Warning Label, 8.1 (p = 0.62). There suggests that our seven treatment groups are largely balanced, although we cannot reject the possibility of some imbalance for our Worst Practice Treatment group.

¹ Hansen, Ben B. and Jake Bowers. 2008. Covariate Balance in Simple, Stratified and Clustered Comparative Studies. *Statistical Science* 23(2): 219-236.

4. COMPLETE RESULTS

4.1. Time on the Disclosure

Treatment	Mean	Median	90% Confidence Interval	
1. Best Practice	19.12	5.61	5.07	33.16
2. Organization	15.25	4.67	10.83	19.68
3. Presentation	16.23	5.99	12.51	20.03
4. Specification	13.78	5.51	10.90	16.66
5. Worst Practice	14.62	4.68	10.85	18.39
6. Blank	12.58	5.50	5.85	19.32
7. Warning Label	18.56	6.78	9.69	27.44
Complete Sample	15.69	5.47	13.18	18.21

4.2. Number of Correct Answers

Treatment	Mean	Median	90% Confidence Interval	
1. Best Practice	0.81	1.00	0.71	0.91
2. Organization	0.91	1.00	0.82	0.99
3. Presentation	0.80	1.00	0.71	0.89
4. Specification	0.84	1.00	0.73	0.94
5. Worst Practice	0.77	1.00	0.68	0.85
6. Blank	1.97	1.00	1.75	2.19
7. Warning Label	1.53	1.00	1.39	1.68
Complete Sample	1.100	1.00	1.05	1.15

4.3. Risky Behaviors

Treatment	Mean	Median	90% Confidence Interval	
1. Best Practice	2.70	2.00	2.40	3.00
2. Organization	2.80	2.00	2.53	3.08
3. Presentation	2.55	2.00	2.28	2.83
4. Specification	2.39	2.00	2.12	2.66
5. Worst Practice	2.94	3.00	2.66	3.21
6. Blank	2.63	2.00	2.36	2.89
7. Warning Label	2.51	2.00	2.23	2.79
Complete Sample	2.65	2.00	2.55	2.76

4.4. Identifying Information Provided

Treatment	Mean	Median	90% Confidence Interval	
1. Best Practice	2.44	2.00	2.25	2.63
2. Organization	2.40	2.00	2.56	2.55
3. Presentation	2.47	2.00	2.29	2.65
4. Specification	2.58	2.00	2.40	2.77
5. Worst Practice	2.43	2.00	2.25	2.62
6. Blank	2.48	2.00	2.32	2.65
7. Warning Label	2.72	2.00	2.55	2.89
Complete Sample	2.50	2.00	2.44	2.57

4.5. Certainty About Legal Claims

Treatment	Mean	Median	90% Confidence Interval	
Panel A – Legal Claim if We Comply				
1. Best Practice	3.00	3.00	2.85	3.15
2. Organization	3.04	3.00	2.90	3.18
3. Presentation	2.90	3.00	2.75	3.04
4. Specification	3.01	3.00	2.86	3.16
5. Worst Practice	2.90	3.00	2.75	3.05
6. Blank	3.05	3.00	2.91	3.19
7. Warning Label	2.98	3.00	2.83	3.13
Complete Sample	2.98	3.00	2.93	3.04
Panel B – Legal Claim if We DO NOT Comply				
1. Best Practice	3.61	4.00	3.47	3.75
2. Organization	3.57	4.00	3.44	3.70
3. Presentation	3.50	3.00	3.37	3.63
4. Specification	3.52	4.00	3.38	3.65
5. Worst Practice	3.49	4.00	3.35	3.64
6. Blank	3.73	4.00	3.61	3.85
7. Warning Label	3.54	4.00	3.40	3.67
Complete Sample	3.57	4.00	3.52	3.62

4.6. Attitudes About Our Survey

Treatment	Mean	Median	90% Confidence Interval	
Panel A – Satisfied We Take Privacy Seriously				
1. Best Practice	4.09	4.00	3.97	4.20
2. Organization	3.91	4.00	3.80	4.03
3. Presentation	3.99	4.00	3.87	4.12
4. Specification	4.02	4.00	3.89	4.14
5. Worst Practice	4.01	4.00	3.89	4.13
6. Blank	4.04	4.00	3.93	4.15
7. Warning Label	4.09	4.00	3.97	4.20
Complete Sample	4.02	4.00	3.98	4.06
Panel B – Satisfied with our Survey				
1. Best Practice	3.97	4.00	3.86	4.08
2. Organization	3.91	4.00	3.80	4.01
3. Presentation	3.87	4.00	3.76	3.99
4. Specification	3.95	4.00	3.83	4.06
5. Worst Practice	4.01	4.00	3.89	4.13
6. Blank	3.97	4.00	3.86	4.08
7. Warning Label	4.07	4.00	3.95	4.19
Complete Sample	3.96	4.00	3.92	4.01

5. ADDITIONAL ANALYSIS

In addition to the primary results reported in the text of our paper, we also conducted three additional analyses. This part of our supplementary materials presents those results. First, we analyze the results for respondents that spent at least 30, 60, and 90 seconds on our initial disclosure screen. Second, we disaggregate our results for each our risky behavior and identifying information questions. Third, we present whether we were able to verify the zip codes that respondents self-reported.

5.1. Results for “Readers” Only

The median amount of time that our full sample spent on our privacy disclosures screens was 5.47 seconds. As we explain in Part 3.1.1 of the paper, it should take an average reader over 90 seconds to read even our shortest disclosure. Since the vast majority of our respondents spent so little time on our disclosure screens, we also subset our sample to just readers that spent at least 30, 60 and 90 seconds on the disclosure screen. The below table reports the number of respondents in each treatment group that met that criteria.

# of Respondents That Remained on the Disclosure Screen by Time			
Treatment	30 Seconds	60 Seconds	90 Seconds
1. Best Practice	17	6	4
2. Organization	21	11	9
3. Presentation	24	13	8
4. Specification	22	9	4
5. Worst Practice	23	12	5
6. Blank	9	4	2
7. Warning Label	17	5	4
Complete Sample	133	60	36

The below table presents the average responses for each of our questions for respondents that spent at least 30, 60 and 90 seconds on the privacy disclosure screen. It also presents the average responses for respondents that were exposed the two most radical best practice techniques (the Best Practice treatment and the Warning Label Treatment).

	30	60	90
	Seconds	Seconds	Seconds
1. Average Time on the Disclosure	103.16	178.14	249.06
- <i>Best Practice</i>	147.53	337.31	468.27
- <i>Warning Label</i>	129.35	343.80	409.32
2. Correct Answers to Comp. Questions	1.56	1.48	1.25
- <i>Best Practice</i>	1.71	2.33	1.75
- <i>Warning Label</i>	2.65	2.20	2.00
3. Risky Behaviors Disclosed	2.53	2.80	3.50
- <i>Best Practice</i>	2.12	2.67	2.25
- <i>Warning Label</i>	2.47	3.00	3.50
4. Identifying Information Provided	2.62	2.50	2.83
- <i>Best Practice</i>	3.18	3.83	4.00
- <i>Warning Label</i>	2.24	2.00	1.75
5.A. Legal Claims if We Comply	2.78	2.78	3.08
- <i>Best Practice</i>	2.94	3.33	3.5
- <i>Warning Label</i>	2.65	2.20	2.00
5.B. Legal Claims if We Do Not Comply	3.55	3.83	3.58
- <i>Best Practice</i>	3.56	3.67	4.00
- <i>Warning Label</i>	3.76	3.00	3.00
6.A. Satisfied we take Privacy Seriously	3.98	4.07	4.22
- <i>Best Practice</i>	4.12	4.67	4.00
- <i>Warning Label</i>	4.00	4.40	4.25
6.B. Satisfied with our Survey	3.95	4.12	4.25
- <i>Best Practice</i>	4.06	4.17	4.00
- <i>Warning Label</i>	3.88	4.40	4.75

5.2. Sharing Personal Information – Breakdown of Results

In Part 3.2.1 of the paper, we present the average number of 10 risky sexual behavior questions that respondents answered yes to. The tables below repeats those 10 questions and then present the average number of times respondents answered yes to each those questions by treatment groups.

Questions on Risky Sexual Behavior

1. Have you ever had sex with someone you met the same day?
2. Have you ever had sex with someone you met the same day without using a condom?
3. Have you ever cheated on your partner?
4. Have you ever had anal sex?
5. Have you ever had sexual thoughts about a member of your same sex?
6. Have you ever used sex toys?
7. Have you ever taken nude pictures of yourself or of a sexual partner?
8. Have you ever been diagnosed with a sexually transmitted disease?
9. Have you ever lied about how recently you were tests for STDS?
10. Have you ever neglected to tell a partner about a sexually transmitted disease from which you were suffering?

Proportion of “Yes” Response by Treatment Group

Question	(1) Best	(2) Org.	(3) Present.	(4) Spec.	(5) Worst	(6) Blank	(7) Warning	Overall
1	0.36	0.42	0.36	0.31	0.42	0.39	0.42	0.38
2	0.25	0.32	0.30	0.25	0.32	0.26	0.29	0.28
3	0.30	0.26	0.23	0.25	0.28	0.31	0.23	0.27
4	0.36	0.42	0.38	0.36	0.44	0.40	0.33	0.38
5	0.25	0.27	0.26	0.24	0.34	0.21	0.24	0.26
6	0.51	0.55	0.49	0.45	0.50	0.49	0.47	0.50
7	0.40	0.36	0.36	0.32	0.41	0.34	0.38	0.37
8	0.14	0.11	0.11	0.12	0.13	0.11	0.07	0.11
9	0.07	0.05	0.03	0.04	0.06	0.08	0.04	0.05
10	0.06	0.04	0.03	0.06	0.04	0.05	0.04	0.05

In Part 3.2.2 of the paper, we present the average number of 5 identifying information questions that respondents provided an answer to. The tables below repeats those 5 questions and then present the average number of times respondents provided information in response to each those questions by treatment groups.

Questions Requesting Identifying Information

1. In which county did you take this survey?
 2. What is the zip code where you took this survey?
 3. What is your phone number?
 4. What is your email address?
 5. What is your mailing address?
-

Proportion of Information Provided by Treatment Group

Question	(1) Best	(2) Org.	(3) Present.	(4) Spec.	(5) Worst	(6) Blank	(7) Warning	Overall
1	0.77	0.86	0.79	0.84	0.79	0.82	0.89	0.82
2	0.81	0.85	0.83	0.82	0.79	0.86	0.90	0.84
3	0.23	0.15	0.21	0.24	0.24	0.21	0.26	0.22
4	0.37	0.33	0.36	0.36	0.36	0.37	0.40	0.36
5	0.27	0.21	0.27	0.33	0.25	0.23	0.26	0.26

5.3. Verification of Identifying Information

One of the 5 pieces of identifying information that we requested from each respondent was their zip code. Since our survey software collected the IP addresses for the respondents that completed our survey, we are able to compare respondents self-reported zip code to the zip code collected by our survey software. It is important to note, however, that many respondents reported a zip code that was slightly different than the one identified by the survey software, possibly reporting genuine addresses that differed from the location in which they took the survey. As a result, we report both the proportion of respondents where all 5-digits of the zip code was verified, as well as respondents where the first 2 digits of their zip code was verified.

% of Respondents Where Self-Reported Zip Code Matches IP Address

Treatment	5 Digits	2 Digits
1. Best Practice	0.33	0.86
2. Organization	0.33	0.84
3. Presentation	0.39	0.89
4. Specification	0.31	0.82
5. Worst Practice	0.33	0.82
6. Blank	0.38	0.83
7. Warning Label	0.26	0.83
Complete Sample	0.33	0.84

6. PRELIMINARY SURVEY

Creating the “Warning Label” treatment required identifying which of the 12 substantive policies in our privacy disclosure were the “most unexpected.” To determine which 5 policies were the most unexpected, we sent a link to a preliminary survey to our colleagues and students. The survey presented each of the 12 substantive policies from our privacy disclosure in random order, and asked respondents to say how unexpected they policy would be on a 7-point scale from “Strongly Expected” (coded as 1) to “Strongly Unexpected” (coded as 7). This section presents: (1) the wording of the request that we sent and (2) the results of the preliminary survey.

6.1. Preliminary Survey – Wording of the Request

We are currently researching how privacy notices influence willingness of users to disclose personal information on websites.

As part of the project, we are conducting a survey experiment that tells respondents that we are developing a commercial dating app, and ask them for information on their sexual practices and to provide their contact information. The experimental treatment is that, before completing the survey, the respondents are provided with different versions of disclosure that outlines our privacy practices.

One of the things we are testing is whether a reduced-form “nutrition label” style disclosure is more effective than a complete disclosure. In order to develop that reduced disclosure, we have to identify which aspects of our privacy disclosure are the most “unexpected.”

In this short survey, we would like you to look at the 12 practices contained in the privacy disclosure we have developed. These are the things the company allegedly does with the respondents information. We would then like you to place each item on a scale from “strong unexpected” to “strongly expected” based on what you would expect for a survey on sexual practices being conducted by a corporation.

6.2. Preliminary Survey – Results

The following Table Presents the average score each policy was given on a 7-point scale from “Strongly Expected” (coded as 1) to “Strongly Unexpected” (coded as 7). The 5 policies with the highest score were then used in the Warning Label treatment.

Substantive Policies	Mean Score	Rank
The Information We Collect		
• We collect information on your sexual practices based on your responses to questions in this survey.	2.73	9
• We collect personal information that can identify you through this online interaction with your computer.	3.60	3
• We collect and link additional information about you from other public and private data sources.	4.27	2
How We Use the Information		
• We use the information for commercial development of a dating application for smartphones.	2.73	9
• We use the information to develop advertising and marketing tools within the application.	2.10	12
• We use the information to follow up with you on future communications.	2.17	11
Disclosure of Data to Third Parties		
• We share the information with commercial partners to improve the commercial utility of the application.	2.85	8
• We share the data with advertisers and ad-placement companies that help us design the profit opportunities from the mobile application.	3.02	7
• We share the data with commercial health insurance companies that partner with us in developing the data-driven application.	4.83	1
Protection of Personal Information		
• We retain the information indefinitely.	3.54	4
• We save your personal information on cloud server with limited access.	2.15	6
• We encourage our partners to take high security measures in storing your data, but we are unable to verify their security practices.	3.51	5

7. PILOT SURVEY

We initially conducted a pilot survey during the week of October 12, 2015. The pilot survey was administered to respondents recruited through Amazon's Mechanical Turk platform. The survey for the pilot used a slightly modified framing and set of privacy disclosures. The results of that pilot were presented at the *Contracting Over Privacy* conference held at the University of Chicago Law School on October 16-17, 2015. This section presents information on the pilot's: (A) Framing; (B) Privacy Disclosures; (C) Sample; and (D) Results.

7.1. Pilot Survey – Framing

Our pilot survey was framed as research being conducted to halt the spread of sexually transmitted diseases. The respondents were given this information in during the opening screen of the survey. That screen presented the following information:

Purpose of the Survey

This survey is conducted by a research group in Chicago developing a new medical treatment for sexually transmitted diseases. The research examines risky sexual behavior. The results will be used to design programs to help halt the spread of sexually transmitted disease. It is important that you answer all questions honestly.

7.2. Pilot Survey – Privacy Disclosures

7.2.1. Best Practice Disclosure

Your Privacy Rights

We value your privacy. In this page, we explain our data privacy practices. We explain how we collect, use, disclose, transfer, and store the information about you that you reveal in the survey. Continuing past this page means that you grant us permission to engage in these practices, including the permission to share the information with others as explained below.

The Information We Collect

- We collect information on your sexual practices based on your responses to questions in this survey.
For Example: In the survey, you will be asked how your sexual behavior is affected by risks of transmitted diseases. You do not have to provide responses, but if you do we collect your answers.
- We collect personal information that can identify you through this online interaction with your computer.
For Example, we collect information about your IP address, geographical location, zip code, the type of computer you use in this survey.
- We collect additional information about you from other public and private data sources.
For Example, we collect information about you from social media sites and insurance databases.

How We Use the Information

- We use the information for academic research.
For Example, we use statistical tools to measure the potential effectiveness of the medical treatments we are developing.
- We use the information to develop future medical treatments.
For Example, we develop medical treatments that depend on each patient's personal medical history.
- We use the information to follow up with you on future communications.
For Example, we might send you offers to access to our new medical treatments. We will also communicate with you if there are changes to this Privacy Policy.

Disclosure of Data to Third Parties

- We share the information with research partners to improve the accuracy of our findings.
For Example, we share the information with an outside research company that performs some analysis for us and with other researchers in academic institutions that study sexually transmitted diseases.
- We share the data with our partners that work with us on developing a new medical treatment and making it available for patients.
For example, we disclose the information to iMed Solutions, Inc., a commercial company affiliated with our study that is developing personalized medical treatments. iMed Solutions, Inc., may further share the information with its affiliates and partners or sell it to others.
- We share the data with insurance companies that partner with us in developing the new medical treatment.
For Example, we disclose the information to MHM Company (Midwestern Health Mutual Company), a health insurance company specializing in personalized health policies. MHM may share the information with its affiliates and partners, beyond our control, and use it for the development of its health insurance business.

These disclosures of your data and personal information may be done without requesting additional consent from you. Additional disclosures of your information to government agencies will be made to the extent permitted or required by law.

Protection of Personal Information

- We keep the personal information protected.
For Example, files containing your personal information will be locked at specially designated file cabinet in our office.
- We secure any communication that contains your personal information.
For Example, we encrypt any files containing personal information when we share or transmit them among our research and commercial partners.
- We hold our research partners to equally high data security standards.
For Example, we request that any of our partners receiving your personal information protect it by password.

7.2.2. Organization Disclosure

Your Privacy Rights

We value your privacy. In this page, we explain our data privacy practices. We explain how we collect, use, disclose, transfer, and store the information about you that you reveal in the survey or in any other interaction, transaction, or engagement that links, references, or presents this policy. Continuing past this page means that you grant us permission to engage in these practices, including the permission to share the information with others as explained below.

This policy covers the survey as well as any interactions you may have with us. When you review this survey, please keep in mind that it is intended for a U.S. audience and the information may be processed or transferred in the United States. Our survey is not intended for children under 13. We do not knowingly collect personal information from children under 13. If you have any relation with the survey group and any of its affiliates, we may collect information about you. If you have any questions after reviewing this policy, please address them according to the direction provided below.

We collect information on your sexual practices based on your responses to questions in this survey. You do not have to provide responses, but any response you provide is collected and stored. This includes information about sexual behavior in the present and in the past, how your behavior is affected by risks including risks of sexually transmitted diseases, and other information related to sexual conduct that you provide us. For Example, in the survey you will be asked how your sexual behavior is affected by risks of transmitted diseases. You do not have to provide responses, but if you do we collect your answers. We also collect personal information that can identify you, including but not limited to your location information, the type of device you are using to respond to this survey, the web browser software, and the IP address of your computer. This information is collected through this online interaction with your computer and is intended to customize in a statistical and automated manner your profile. For Example, we collect information about your IP address, geographical location, zip code, the type of computer you use in this survey. In addition, we may collect and supplement or substitute the personal information collected through this online transaction with additional personal and non-personal information available from affiliated entities, research partners, and other independent third-party sources. These include but are not limited to social media sites, public and private databases, and insurance records, all in accordance with these providers' policies. We acquire information from other trusted sources to update or supplement the information you provided or we collected automatically. Local law may require that you authorize the third party to share your information with us before we can acquire it. We may also collect other personal information when you provide such information or where we believe it is reasonably required for ordinary completion of the research that is part of this study. For Example, we collect information about you from social media sites and insurance databases.

We use the information for academic research, operating and improving our line of research, including the development of new products and services, the improvement of existing products and services, the performance of data analytics, and other internal function. For Example, we use statistical tools to measure the potential effectiveness of the medical treatments we are developing. The main use of the information is in developing a new medical treatment for sexually transmitted diseases. The research examines risky sexual behavior. The results will be used to design programs to help halt the spread of sexually transmitted diseases. We employ statistical tools in the analysis of the answers we receive from you and other survey subjects to measure the potential effectiveness of the medical treatments we are developing. We also use the information to develop future medical treatments in partnership with our research affiliates. The medical treatments we are developing are personalized, which means that they depend on each patient's personal medical history. We also use the information in complying with and enforcing applicable legal requirements, relevant industry standards, contractual obligations and our policies; and for any other purposes that we may specifically disclose at the time you provide or we collect your information. We may also use data that we collect on an aggregate or anonymous basis (such that it does not identify any individual respondent) for various research purposes, where permissible under applicable laws and regulations. For Example, we develop medical treatments that depend on each patient's personal medical history. Finally, we use the information to follow up with you on future communications, and we might send you offers to access to our new medical treatments. We will also communicate with you if there are changes to this Privacy Policy. For Example, we might send you offers to access to our new medical treatments. We will also communicate with you if there are changes to this Privacy Policy.

We share the information we collect from and about you with our affiliates and other third parties. We share some of the information with research partners to improve the accuracy of our findings, to help us perform some of the analytics of this study, and to collaborate with researchers that study related topics. For Example, we share the information with an outside research company that performs some analysis for us and with other researchers in academic institutions that study sexually transmitted diseases. We also share the data with our partners that work with us on developing a new medical treatment and making it available for patients, which includes companies that offer commercial services, products, or programs in the area of personalized medical treatments, and affiliates and partners of such companies. For example, we disclose the information to iMed Solutions, Inc., a commercial company affiliated with our study that is developing personalized medical treatments. iMed Solutions, Inc., may further share the information with its affiliates and partners or sell it to others. We also share the data with insurance companies that partner with us in developing the new medical treatment, including companies specializing in health and wellness, and affiliates and partners of such companies. Where appropriate, we will limit sharing of your information in accordance with the policies specified in this notice and in accordance with applicable laws and regulations, industry practices, and contractual obligations. These disclosures of your data and personal information may be done without requesting additional consent from you. Additional disclosures of your information to government agencies will be made to the extent permitted or required by law. For Example, we disclose the information to MHM Company (Midwestern Health Mutual Company), a health insurance company specializing in personalized health policies. MHM may share the information with its affiliates and partners, beyond our control, and use it for the development of its health insurance business.

Residents of Vermont: We will not share personally identifiable information unless authorized by you. This does not limit us from sharing certain information about your response to the survey as permitted by law.

We want you to feel confident about using this website to respond to the survey, and we are committed to protecting the information we collect. While no online platform can guarantee security, we have implemented appropriate administrative, technical, and physical security procedures to help protect the personal information you provide to us. We use reasonable physical, electronic, and procedural safeguards that comply with safety standards to protect and limit access to personal information. This includes device safeguards and secured files and buildings. For Example, files containing your personal information will be locked at specially designated file cabinet in our office. We lock the information in secure locations, and require our partners and affiliates to do the same and to password protect the files when necessary. For Example, we request that any of our partners receiving your personal information protect it by password. When we transmit the information, we encrypt any files containing personal information, and we employ firewalls and intrusion detection systems to help prevent unauthorized persons from gaining access to your information. For Example, we encrypt any files containing personal information when we share or transmit them among our research and commercial partners protect it by password.

7.2.3. Presentation Disclosure

Your Privacy Rights

Your privacy is valued by us. In this page, our data privacy practices are explained. It is explained how we collect, use, disclose, transfer, and store the information about that is being revealed by you in the survey. Continuing past this page means that permission to engage in these practices is granted to us, including the permission to share the information with others, as explained below.

The Information We Collect

- *Based on your responses to questions in this survey, information on your sexual practices will be collected by us.
For Example: In the survey, you will be asked how your sexual behavior is affected by risks of transmitted diseases. Responses do not have to be provided by you, but if they are, they will be collected by us.*
- *Through this online interaction with your computer, personal information that can identify you will be collected by us.
For Example, information about your IP address, geographical location, zip code, the type of computer being used in this survey is collected.*
- *Additionally, from other public and private data sources, personal information that can identify you will be collected by us.
For Example, information about you from social media sites and insurance databases may be collected.*

How We Use the Information

- *Academic research is how your information will be used by us.
For Example, statistical tools to analyze the information and to measure the potential effectiveness of the medical treatments we are developing will be used.*
- *Developing future medical treatments is another way that the information will be used by us.
For Example, medical treatments that depend on each patient's personal medical history are being developed.*
- *To follow up with you on future communications is another way that your information may be used by us.
For Example, offers to access to our new medical treatments may be sent to you. Also, changes to this Privacy Policy will be communicated.*

Disclosure of Data to Third Parties

- *To improve the accuracy of our findings, the information will be shared by us with research partners.
For Example, information will be shared with an outside research company that performs some analysis for us and with other researchers in academic institutions that study sexually transmitted diseases.*
- *Our partners that work with us on developing a new medical treatment and making it available for patients will have the data shared with by us.
For example, information will be disclosed to iMed Solutions, Inc., a commercial company affiliated with our study that is developing personalized medical treatments. iMed Solutions, Inc., may further share the information with its affiliates and partners or sell it to others.*
- *Insurance companies that partner with us in developing the new medical treatment will have the data shared with by us.
For Example, information will be disclosed to MHM Company (Midwestern Health Mutual Company), a health insurance company specializing in personalized health policies. MHI may share the information with its affiliates and partners, beyond our control, and use it for the development of its health insurance business.*

These disclosures of your data and personal information may be done without requesting additional consent from you. Additional disclosures of your information to government agencies will be made to the extent permitted or required by law.

Protection of Personal Information

- *Your personal information will be protected by us.
For Example, files containing your personal information will be locked at specially designated file cabinet in our office.*
- *Any communication that contains your personal information will be secured by us.
For Example, any files containing personal information will be encrypted when we share or transmit them among our research and commercial partners.*
- *Our research partners will be held to equally high data security standards by us.
For Example, any of our partners receiving your personal information will be requested to protect it by password.*

7.2.4. Specification Disclosure

Your Privacy Rights

We value your privacy. In this page, we explain our data privacy practices. We explain how we collect, use, disclose, transfer, and store the information about you that you reveal in the survey. Continuing past this page means that you grant us permission to engage in these practices, including the permission to share the information with others as explained below.

The Information We Collect

- We collect information on your sexual practices based on your responses to questions in this survey. You do not have to provide responses, but any response you provide is collected and stored.
- We collect personal information that can identify through this online interaction with your computer. This information is collected through this online interaction with your computer and is intended to customize in a statistical and automated manner your profile.
- We collect additional information about you from other public and private data sources. We may collect and supplement or substitute the personal information collected through this online transaction with additional personal and non-personal information available from affiliated entities, research partners, and other independent third-party sources.

How We Use the Information

- We use the information for academic research, operating and improving our line of research, including the development of new products and services, the improvement of existing products and services, the performance of data analytics, and other internal functions.
- We use the information to develop future medical treatments. We employ statistical tools in the analysis of the answers we receive from you and other survey subjects to measure the potential effectiveness of the medical treatments we are developing.
- We use the information to follow up with you on future communications. We use the information to follow up with you on future communications, and we might send you offers to access to our new medical treatments.

Disclosure of Data to Third Parties

- We share the information with research partners to improve the accuracy of our findings. We share some of the information with research partners to improve the accuracy of our findings, to help us perform some of the analytics of this study, and to collaborate with researchers that study related topics.
- We share the data with our partners that work with us on developing a new medical treatment and making it available for patients. This includes companies that offer commercial services, products, or programs in the area of personalized medical treatments, and affiliates and partners of such companies.
- We also share the data with insurance companies that partner with us in developing the new medical treatment, including companies specializing in health and wellness, and affiliates and partners of such companies.

These disclosures of your data and personal information may be done without requesting additional consent from you. Additional disclosures of your information to government agencies will be made to the extent permitted or required by law.

Protection of Personal Information

- We keep the personal information protected. We use reasonable physical, electronic, and procedural safeguards that comply with safety standards to protect and limit access to personal information.
- We secure any communication that contains your personal information. When we transmit the information, we encrypt any files containing personal information, and we employ firewalls and intrusion detection systems to help prevent unauthorized persons from gaining access to your information.
- We hold our research partners to equally high data security standards. We require our partners and affiliates to implement the same high data security standards that we do.

7.2.5. Worst Practice

Your Privacy Rights

Your privacy is valued by us. In this page, our data privacy practices are explained. It is explained how we collect, use, disclose, transfer, and store the information about you that is being revealed by you in the survey or in any other interaction, transaction, or engagement that links, references, or presents this policy. Continuing past this page means that permission to engage in these practices is granted to us, including the permission to share the information with others as explained below.

This policy covers the survey as well as any interactions you may have with us. When this survey is being reviewed by, please keep in mind that it is intended for a U.S. audience and the information may be processed or transferred in the United States. Our survey is not intended for children under 13. Personal information from children under 13 is not knowingly collected by us. If you have any relation with the survey group and any of its affiliates, we may collect information about you. If you have any questions after reviewing this policy, have them addressed according to the direction provided below.

Information on your sexual practices based on your responses to questions in this survey will be collected by us. Responses do not have to be provided, but any response that is provided is collected and stored. This includes information about sexual behavior in the present and in the past, how your behavior is affected by risks including risks of sexually transmitted diseases, and other information related to sexual conduct that you provide us. Also collected is personal information that can identify you, including but not limited to your location information, the type of device you are using to respond to this survey, the web browser software, and the IP address of your computer. This information is collected through this online interaction with your computer and is intended to customize in a statistical and automated manner your profile. In addition, the personal information collected through this online transaction with additional may be supplemented or substituted with personal and non-personal information available from affiliated entities, research partners, and other independent third-party sources. These include but are not limited to social media sites, public and private databases, and insurance records, all in accordance with these providers' policies. In addition, information from other trusted sources is acquired to update or supplement the information you provided or that is collected automatically. Local law may require that you authorize the third party to share your information with us before we can acquire it. Other personal information may be collected when you provide such information or where we believe it is reasonably required for ordinary completion of the research that is part of this study.

Your information will be used by us for academic research and for operating and improving our line of research, including the development of new products and services, the improvement of existing products and services, the performance of data analytics, and other internal functions. The main use of the information is in developing a new medical treatment for sexually transmitted diseases. The research examines risky sexual behavior. The results will be used to design programs to help halt the spread of sexually transmitted diseases. Statistical tools in the analysis of the answers we receive from you and other survey subjects will be employed to measure the potential effectiveness of the medical treatments we are developing. The information will also be used to develop future medical treatments in partnership with our research affiliates. The medical treatments that are being developed are personalized, which means that they depend on each patient's personal medical history. The information is also used in complying with and enforcing applicable legal requirements, relevant industry standards, contractual obligations and our policies; and for any other purposes that would be specifically disclosed at the time you provide or we collect your information. The information that is being collected may also be used on an aggregate or anonymous basis (such that it does not identify any individual respondent) for various research purposes, where permissible under applicable laws and regulations. Finally, the information is used to follow up with you on future communications, and offers to access to our new medical treatments might be sent to you. If there are changes to this Privacy Policy, they will be communicated to you.

To improve the accuracy of our findings the information will be shared by us with research partners. Some of the information is shared with research partners to improve the accuracy of our findings, to help us perform some of the analytics of this study, and to collaborate with researchers that study related topics. The data is also shared with our partners that work with us on developing a new medical treatment and making it available for patients, which includes companies that offer commercial services, products, or programs in the area of personalized medical treatments, and affiliates and partners of such companies. The data is also shared with insurance companies that partner with us in developing the new medical treatment, including companies specializing in health and wellness, and affiliates and partners of such companies. Where appropriate, sharing of your information will be limited in accordance with the policies specified in this notice and in accordance with applicable laws and regulations, industry practices, and contractual obligations. These disclosures of your data and personal information may be done without requesting additional consent from you. Additional disclosures of your information to government agencies will be made to the extent permitted or required by law.

Residents of Vermont: Unless authorized by you, personally identifiable information will not be shared by us. This does not limit us from sharing certain information about your response to the survey as permitted by law.

We want you to feel confident about using this website to respond to the survey and we are committed to protecting the information being collected by us. While no online platform can guarantee security, appropriate administrative, technical, and physical security procedures have been implemented by us to help protect the personal information that is being provided to us. Reasonable physical, electronic, and procedural safeguards that comply with safety standards are used to protect and limit access to personal information. This includes device safeguards and secured files and buildings. Your information is locked in secure locations, and our partners and affiliates are required to do the same and to have the files password protected when necessary. When the information is being transmitted, any files containing personal information are encrypted, and firewalls and intrusion detection systems are employed to help prevent unauthorized persons from gaining access to your information.

7.3. Pilot Survey – Sample

We recruited 767 respondents to take our survey through Amazon’s Mechanical Turk (mTurk) service. mTurk is a service that pays individuals a small fee for completing short tasks. The tables below provide the demographic breakdown of our sample compared the adult population of the United States and the number of treatments that received each treatment.

Demographic Characteristics of the Sample for the Pilot Survey			
	# in Pilot	% of Pilot	% of U.S. Population
Gender			
Male	440	57%	48%
Female	327	43%	52%
Age			
18-24	136	18%	13%
25-34	378	49%	18%
35-44	146	19%	18%
45-54	72	9%	19%
55-64	28	4%	16%
65+	7	1%	17%
Race/Ethnicity			
White	613	80%	69%
Hispanic	32	4%	14%
Black	52	7%	11%
Asian	5	1%	4%
Other	8	1%	2%
Region			
Northeast	148	19%	18%
Midwest	167	22%	22%
South	264	34%	37%
West	188	25%	23%

Number of Respondents by Treatment	
Treatment	Respondents
1. Best Practice	123
2. Organization	139
3. Presentation	124
4. Specification	134
5. Worst Practice	143
6. Control	104
Complete Sample	767

7.4. Pilot Survey – Results

7.4.1. Time Spent on the Disclosure

Treatment	Mean	Median	90% Confidence Interval	
1. Best Practice	11.62	4.07	7.25	15.98
2. Organization	22.68	4.78	13.50	31.86
3. Presentation	10.59	4.50	7.84	13.34
4. Specification	10.03	2.90	7.16	12.91
5. Worst Practice	8.38	3.35	6.12	10.65
6. Control	9.27	4.86	5.95	12.59
Complete Sample	12.53	4.08	10.23	14.29

7.4.2. Number of Correct Answers

Treatment	Mean	Median	90% Confidence Interval	
1. Best Practice	1.54	1.00	1.39	1.69
2. Organization	1.25	1.00	1.13	1.37
3. Presentation	1.50	1.00	1.36	1.64
4. Specification	1.35	1.00	1.24	1.46
5. Worst Practice	1.23	1.00	1.11	1.35
6. Control	2.66	3.00	2.37	2.96
Complete Sample	1.54	1.00	1.47	1.61

7.4.3. Risky Behaviors

Treatment	Mean	Median	90% Confidence Interval	
1. Best Practice	3.22	3.00	2.89	3.55
2. Organization	3.07	3.00	2.77	3.38
3. Presentation	3.23	3.00	2.91	3.57
4. Specification	3.73	4.00	3.41	4.05
5. Worst Practice	3.77	4.00	3.45	4.08
6. Control	3.15	3.00	2.81	3.50
Complete Sample	3.38	3.00	2.25	3.51

7.4.4. Personal Information Provided

Treatment	Mean	Median	90% Confidence Interval	
1. Best Practice	1.22	1.00	1.06	1.38
2. Organization	1.21	1.00	1.06	1.36
3. Presentation	1.35	1.00	1.18	1.53
4. Specification	1.43	1.00	1.27	1.59
5. Worst Practice	1.28	1.00	1.11	1.45
6. Control	1.19	1.00	0.99	1.39
Complete Sample	1.28	1.00	1.22	1.35

7.4.5. Certainty About Legal Claims

Treatment	Mean	Median	90% Confidence Interval	
Panel A – Legal Claim if We Comply				
1. Best Practice	2.54	2.00	2.38	2.71
2. Organization	2.47	2.00	2.32	3.63
3. Presentation	2.40	2.00	2.24	2.56
4. Specification	2.54	2.00	2.39	2.70
5. Worst Practice	2.43	2.00	2.28	2.59
6. Control	2.54	2.00	2.36	2.71
Complete Sample	2.49	2.00	2.42	2.55
Panel B – Legal Claim if We DO NOT Comply				
1. Best Practice	3.71	4.00	3.53	3.88
2. Organization	3.67	4.00	3.52	3.82
3. Presentation	3.66	4.00	3.50	3.83
4. Specification	3.57	4.00	3.39	3.75
5. Worst Practice	3.87	4.00	3.72	4.01
6. Control	3.55	4.00	3.34	3.75
Complete Sample	3.68	4.00	3.61	3.74

7.4.6. Attitudes About Our Survey

Treatment	Mean	Median	90% Confidence Interval	
Panel A – Satisfied We Take Privacy Seriously				
1. Best Practice	3.79	4.00	3.64	3.94
2. Organization	3.63	4.00	3.48	3.78
3. Presentation	3.86	4.00	3.72	4.01
4. Specification	3.60	4.00	3.43	3.76
5. Worst Practice	3.91	4.00	3.77	4.04
6. Control	3.83	4.00	3.67	3.98
Complete Sample	3.77	4.00	3.71	3.83
Panel B – Satisfied with our Survey				
1. Best Practice	4.06	4.00	3.93	4.19
2. Organization	3.83	4.00	3.70	3.97
3. Presentation	3.96	4.00	3.82	4.10
4. Specification	3.89	4.00	3.74	4.04
5. Worst Practice	4.06	4.00	3.93	4.20
6. Control	3.96	4.00	3.81	4.11
Complete Sample	3.96	4.00	3.90	4.02