

Supplemental Stimulus Materials

Study 2a Stimulus:

In this study you will read a newspaper article about a current event involving the Ashley Madison website. After reading the article, you will be asked a set of questions about the event. All of your answers will be confidential.

Ashley Madison is a dating site that targets people in committed relationships who want to have an affair. Their tagline is “Life is short. Have an affair” and they offer married people the opportunity to cheat on their spouses. With a claimed 37m users, it is one of the biggest of its sort. The site is run by Canadian company Avid Life Media, which operates a portfolio of similarly niche and controversial dating sites. Unlike many dating sites, Ashley Madison does not charge for membership directly. Instead, users pay for credits, which are used to send messages and open chat sessions with others on the site. The site charges men to send messages to women, and also charges men to read messages sent by women. Users can also use their credits to send gifts, or pay more to put their message at the top of a female member’s inbox.

8/23/2015

The Ashley Madison Data Dump, Explained - The New York Times



The New York Times | <http://nyti.ms/1J5snD9>

TECHNOLOGY

The Ashley Madison Data Dump, Explained

By DANIEL VICTOR AUG. 19, 2015

The release of stolen data from Ashley Madison, a dating website marketed at would-be adulterers, promises to roil the marital lives of its members.

It has also underscored the troubling limitations of Internet privacy.

On Tuesday, hackers appeared to make good on a threat to release what they said was 9.7 gigabytes of account and credit card information from 37 million users of the site.

What information was released?

The data includes members’ names, user names, addresses, phone numbers and birth dates as well as details of credit card transactions. Member passwords are encrypted, but specific users could be easily targeted for decryption, according to Quartz.

Profiles filled out by users could also contain embarrassing information about their sexual preferences.

The breach also included users of Established Men, a separate site aimed at women looking to date rich men. Both sites are owned by Avid Life Media.

8/23/2015

The Ashley Madison Data Dump, Explained - The New York Times

Is the information verified?

Cybersecurity experts are indicating that the data appears to be genuine, but that doesn't mean all of the information is reliable.

Brian Krebs, a security researcher, said in a blog post that he spoke with three people who found their information and the last four digits of their credit card numbers in the database, suggesting they were indeed stolen from the company.

"I'm sure there are millions of AshleyMadison users who wish it weren't so, but there is every indication this dump is the real deal," Mr. Krebs wrote.

Even if the information was taken from Ashley Madison, it's likely some of it was falsified. The site doesn't verify the information it gathers. A reporter at The Intercept — an unmarried woman in New York City — said a man in South Africa had used her email address to create an account.

Who released the information, and why?

A group of hackers calling themselves Impact Team posted a small portion of the data in July, and they threatened to release the rest unless the site was shut down.

The hackers said they were upset about Ashley Madison's policy for deleting user data when requested. The company has long offered members the ability to scrub their profiles and information from the site for \$19, a feature that BuzzFeed News said generated nearly \$2 million in 2014. But, as the breach showed, the data remained.

"We have explained the fraud, deceit, and stupidity of A.L.M. and their members," Impact Team wrote, referring to Avid Life Media. "Now everyone gets to see their data."

How could I check who had an account?

8/23/2015

The Ashley Madison Data Dump, Explained - The New York Times

A reminder: The information found in the data has not been verified.

But two different search tools have surfaced that claim to show whether an email address was used.

More than 15,000 email addresses in the breach were hosted on United States government and military servers, The Hill reported.

How has Avid Life Media responded?

The company is cooperating with law enforcement agencies in Canada and the United States to find the hackers. With a business that relies on the trust of its members now in turmoil, Ashley Madison has sharply denounced the hackers' talk of principles.

"This event is not an act of hacktivism, it is an act of criminality," it said in a statement. "It is an illegal action against the individual members of AshleyMadison.com, as well as any freethinking people who choose to engage in fully lawful online activities. The criminal, or criminals, involved in this act have appointed themselves as the moral judge, juror, and executioner, seeing fit to impose a personal notion of virtue on all of society."

After the initial breach, the company said it had adjusted its policy for deleting user data and was taking steps to delete the stolen data.

Study 2b Stimulus

In today's study we will show you a newspaper article about a political issue, and ask for your opinions on this topic. The topic will be one of a random set of 10 chosen topics that are related to current events. When you are ready to receive which randomly selected topic we will ask you about today, press next.

[Survey page break]

The topic you have been assigned to is described below:

Today, you will read a newspaper article about a current event involving someone who hacked an abortion clinic's website and revealed private medical information about women who got abortions. After reading the article, you will be asked a set of questions about the event. All of your answers will be confidential.



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Abortion website hacker caught

James Jeffery has admitted to stealing 10,000 database records from the British Pregnancy Advisory Service

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Ⓜ Around 10,000 database records were stolen from the British Pregnancy Advisory Service on Thursday.
Photograph: Getty Images

A member of the hacking group Anonymous broke into the website of Britain's biggest abortion provider because he "disagreed" with the decisions of two women he knew over their pregnancy terminations.

James Jeffery, 27, stole around 10,000 database records containing the personal details of women who had registered with the British Pregnancy Advisory Service's site, before posting a link on Twitter to a site exposing their personal details. The link was accompanied by messages such as "British Pregnancy Advisory Service has been attacked because they kill unborn children that have no rights. It's murder." Yesterday the BPAS website was down and carried a message saying it was "underdoing maintenance."

This incident is one of several recent cases of anti-abortion activists hacking into medical records or going through abortion clinics' trash dumpsters. Abortion opponents insist their tactics are aimed at uncovering incidents involving patients who may have been harmed by poor care or underage girls who may have been sexually abused. But those who support abortion rights say the ultimate aim of these activists is to reduce abortions by intimidating women and their doctors — using the loss of privacy as a weapon.

Replication of Study 5 Results with Continuous Outcome

In Study 5 of the main text, we measured the decision to reveal dichotomously (reported in the main text) and continuously on an 11-point likelihood scale. We found the same pattern of results across these two operationalizations and report the continuous scale results here.

Indirect effects. As predicted, when participants read about immoral secret behaviors that had already been punished, they felt less moral outrage than when they read about the same secrets going unpunished, $b = -.33$, 95% CI $[-.49, -.16]$, $SE = .08$, $t(665.32) = -3.86$, $p < .001$, which was associated with the likelihood they would to reveal the secret, $b = .51$, 95% CI $[.36, .65]$, $SE = .07$, $t(73056) = 6.80$, $p < .0001$. That is, reading that a secret immoral behavior has already been punished decreased the moral outrage they felt, which in turn was associated with participants being less likely to reveal the secret. Accordingly, we found a significant indirect effect of manipulated punishment on the likelihood of revealing the secret through moral outrage, $Z_{Med} = -3.56$, 95% CI $[-5.52, -1.60]$, $p < .001$.

Total effect. Reading about already punished (versus unpunished) immoral secrets significantly reduced their continuous likelihood of revealing the secret, $b = -.72$, 95% CI $[-1.06, -.38]$, $SE = .17$, $t(645.03) = -4.16$, $p < .0001$. This total effect of the punishment manipulation on the continuous measure of likelihood of revealing also remained significant after controlling for gossip-worthiness and interest, $b = -.67$, 95% CI $[-1.00, -.33]$, $SE = .17$, $t(647.64) = -3.94$, $p < .0001$.

Replication of Study 6 Results with Continuous Outcome

In Study 6 of the main text, we measured the decision to reveal dichotomously (reported in the main text) and continuously on an 11-point likelihood scale. We found a similar pattern of results across these two operationalizations and report the continuous scale results here.

Indirect effects. For secret versions of the immoral information, we replicated our hypothesized indirect effect of moral outrage on the reported likelihood to reveal the secret through acceptance of revealing the secret as punishment, $ZMed_{indirect} = 5.70$, 95% $CI = [3.74, 7.66]$, $p < .001$. The indirect effects of moral outrage on decisions to reveal were not significant through gossip, $ZMed_{indirect} = 1.49$, 95% $CI = [-.47, 3.45]$, $p = .14$, or interest, $ZMed_{indirect} = .99$, 95% $CI = [-.97, 2.95]$, $p = .32$.

But when the information was not a secret, the indirect effects of moral outrage on reported likelihood to reveal were significant through gossip, $ZMed_{indirect} = 3.74$, 95% $CI = [1.78, 5.70]$, $p < .001$, and interest, $ZMed_{indirect} = 2.51$, 95% $CI = [.55, 4.47]$, $p = .01$. These results replicate the dichotomous decision results in the main text. Also, when the information was not secret, there was an indirect effect through punishment motivation on the continuous revelation measure ($ZMed_{indirect} = 2.65$, 95% $CI = [.69, 4.61]$, $p = .01$), but this indirect effect was not reliable (i.e., there was no such indirect effect on the binary revelation decision reported in the main text). In other words, the only consistent indirect effects were through punishment for secrets, and through gossip and interest for non-secrets.

Total effect. This psychological process again resulted in a significant total effect across the 7 different scenarios: Feeling more moral outrage about a confidant's behavior was significantly associated with the likelihood of revealing the secret to someone else, $b = .41$, 95% $CI = [.26, .55]$, $SE = .07$, $t = 5.42$, $p < .001$. As one would expect, there was a main

effect of secrecy, such that people were significantly less likely to reveal secret information relative to when the same information was not a secret, $b = -1.29$, 95% $CI = [-2.05, -0.54]$, $SE = 0.38$, $t = -3.37$, $p < .001$. The total effect of moral outrage on likelihood of revealing did not, however, depend on whether the information was secret or not, $b = .09$, 95% $CI [-.10, .27]$, $SE = .09$, $t = .91$, $p = .37$.

Supplemental Study S1: Releasing a Celebrity Sex Tape

The right to privacy among celebrities is often debated. People might think that celebrities have given up their right to privacy as the price of their fame and, as a result, might feel more supportive of revealing celebrities' secrets overall. Using the paradigms of Study 2a and 2b, we tested whether our theory generalized to the context of a celebrity (Hulk Hogan) suing a website (*Gawker*) for releasing a sex tape filmed by his best friend, Bubba, of Hulk Hogan having sex with Bubba's wife.

In other words, this study tested not simply the revelation of the fact that Hulk Hogan engaged in what could be seen as sexual moral violation by some, but whether people would go so far as to support releasing the actual video footage of the sexual act (i.e., releasing a sex tape) without Hulk Hogan's consent. We thus tested whether participants would go beyond just agreeing that revealing a secret would be appropriate to supporting the release of a highly invasive video of the secret behavior. We hypothesized that the degree to which participants thought Hulk Hogan's behavior (having sex with his best friend's wife) was morally wrong would be associated with (a) increased moral outrage toward Hulk Hogan and (b) decreased moral outrage toward *Gawker*, which would both increase support for releasing his sex tape for the world to view as punishment.

Method

Participants were 150 online Mechanical Turk panelists (52% female, $M_{age} = 37.09$, $SD_{age} = 13.76$; 81% White, 7% Black, 7% Hispanic, 4% Asian, 1% Other). Participants read a shortened *New Yorker* article explaining the incident with Hulk Hogan and *Gawker*, and completed the same measures from Studies 2a and 2b, worded exactly as in those studies, except for changing the target of judgment to the sex tape: 1) the single-item *moral judgment* measure (about the morality of having sex with one's best friend's wife; $M = 81.92$, $SD = 24.69$), 2) the single-item *moral outrage* measure about Hulk Hogan ($M = 3.09$, $SD = 1.56$), 3) about *Gawker* ($M = 4.04$, $SD = 1.53$), and 4) a single item assessing whether they agreed that *releasing the sex tape* was an appropriate form of punishment on a 100-point scale from *Completely Disagree* to *Completely Agree* ($M = 26.98$, $SD = 31.41$).

Results and Discussion

Indirect effect. Consistent with Studies 2a-2b, the indirect effect of moral judgment on support for revealing Hulk Hogan's sex tape was significant through moral outrage toward Hulk Hogan (Supplemental Figure S1, which reports all path coefficients). Believing Hulk Hogan's behavior was immoral was associated with increased moral outrage toward him, which in turn, was associated with increased agreement that it is appropriate to publicly release his sex tape.

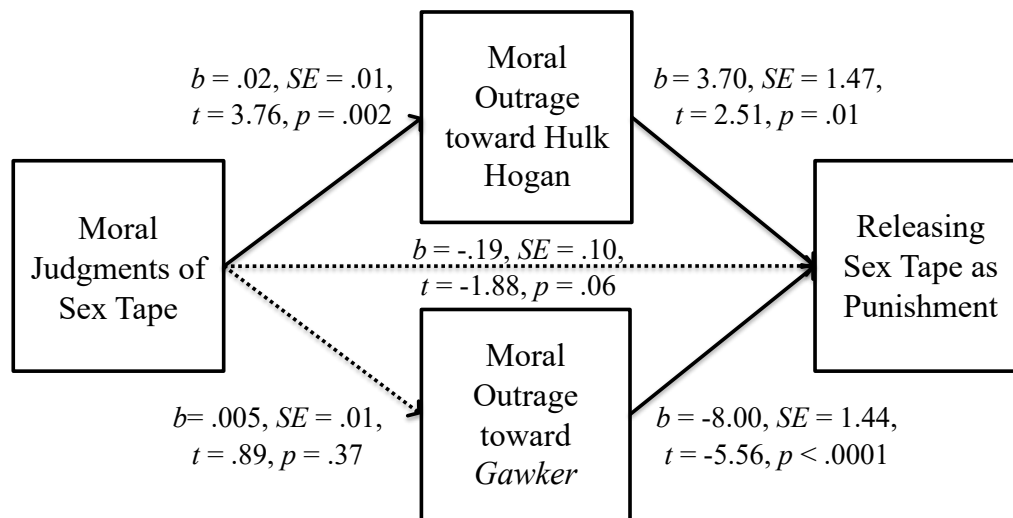
Recall also that we also examined—out of secondary interest—reactions to the person revealing the secret. That is, did participants support the person who was doing the revealing of the secret? The indirect effect of moral judgment on support for releasing the sex tape through moral outrage toward *Gawker* (the target doing the revealing) was not significant (Supplemental Figure S1).

Although moral outrage toward *Gawker* did negatively predict support for revealing the sex tape (consistent with the previous studies), believing that Hulk Hogan's behavior was morally wrong did not decrease moral outrage toward *Gawker*, who released the sex tape (likewise, subsequent to the study, the law sided against *Gawker* and decided releasing a sex tape without someone's consent is unlawful).

Total effect. In contrast to Studies 2a-2b in the main text, the total effect of moral judgment on support for releasing Hogan's sex tape was not significant, $b = -.17$, $SE = .10$, 95% $CI = [-.42, .05]$, $t = -1.67$, $p = .097$.

Supplemental Figure S1

The Indirect Effects of Moral Judgments on Support for Revealing the Sex Tape as Punishment through Moral Outrage toward Hulk Hogan and Gawker



Hulk Hogan $M_{indirecteffect} = .07$, $SE = .04$, 95% $CI = [.01, .16]$

Gawker $M_{indirecteffect} = -.04$, $SE = .05$, 95% $CI = [-.15, .06]$

Notes. Each reported path (i.e., unstandardized regression coefficient) controls for prior predictors. Thus, the path from moral judgment to releasing the sex tape as punishment represents the direct effect of the independent variable on the dependent variable while controlling for the mediators. Significant paths are denoted by solid lines and bolded coefficients.

We thus found support for the critical indirect effect of moral judgment of Hulk Hogan's infidelity on support for releasing his sex tape through moral outrage toward Hulk Hogan—but not through moral outrage toward *Gawker*.

Studies 2a-2b assess support for revealing a secret, whereas this study demonstrated that participants are willing to not only reveal the fact of the behavior in question, but go well beyond that and release video footage of that act (of Hogan having sex) without Hogan's consent—a far more extreme invasion of privacy to the monetary benefit of a corporation. We continued to find the hypothesized psychological process at play: support for revealing the secret (here in the form of supporting the release of the sex tape) was judged as an appropriate punishment to the extent to which the secret behavior violated the perceiver's moral values.

Supplemental Study S2: Pre-Registered Direct Replication of Study 5

This was a pre-registered direct replication of Study 5 in the main text.¹ Pre-registration available at: https://osf.io/6p97b/?view_only=3be233a338494451b10c10118c42f2c7

Method

Participants, design, and procedure. We recruited participants from Prolific Academic ($N = 150$; 49% female; 68% White, 11% Black, 10% Asian, 11% “Other”, $M_{\text{age}} = 32.27$ years, $SD_{\text{age}} = 10.94$). Only one person had a questionable response to the open-ended attention check, but removing that one participant did not change the results. Thus, we report the full sample. The materials, measures, and procedure were a direct replication of the methods reported in Study 5 of the main text.

Results and Discussion

Analyzing the data via multilevel modeling (as per Studies 3-5; i.e., analyzing each moral judgment nested within participants), we found that our manipulation was successful. The

“already punished” secret behaviors were perceived as having been more severely punished than unpunished secret behaviors, $b = 1.53$, 95% $CI = [1.35, 1.71]$, $SE = .09$, $t(684.05) = 16.48$, $p < .0001$. The punished secret behaviors did not directly, however, elicit less acceptance of revealing the secret as punishment relative to than unpunished secret behaviors, $b = .08$, 95% $CI = [-.13, .29]$, $SE = .11$, $t(519.50) = .76$, $p = .45$, as it did in Study 5 of the main text (See Table S1 for descriptive statistics).

Table S1

Mean(SD) Moral Judgments, Moral Outrage, and Revealing Secrets (Supplemental Study S2)

	Unpunished ($n_{SS} = 150$, $n_{Secrets} = 402$)	Punished ($n_{SS} = 150$, $n_{Secrets} = 348$)	Total ($n_{SS} = 150$, $n_{Secrets} = 750$)
Moral Outrage toward secret keeper	4.33 (1.43)	4.00 (1.58)	4.17 (1.51)
Revealing secret as punishment	2.87 (1.49)	2.86 (1.54)	2.86 (1.51)
Likelihood of revealing secret	5.11 (3.35)	4.53 (3.18)	4.84 (3.28)

Note. Moral judgment = “How morally wrong is it for someone to... [secret behavior]?” (1-*Perfectly OK* to 10-*Extremely Wrong*). Moral outrage = “I would feel morally outraged if someone... [secret behavior]” (1-*Completely Disagree* to 6-*Completely Agree*). Punish– “Revealing their secret would be an appropriate form of punishment” (1-*Completely Disagree* to 6-*Completely Agree*). Likelihood of revealing the secret– “How likely would you be to reveal the secret to at least one person (1-0% *Likely* to 11-100% *Likely*). The n_{SS} value represents the number of participants in each condition and the $n_{Secrets}$ value represents the total number of secrets that the participants rated (nested within participants).

Indirect effect. Importantly, we found significant indirect effects of punishment on (a) the dichotomous decision to reveal the immoral secret through moral outrage, $ZMed = -2.86$, 95% $CI = [-4.82, -.90]$, $p = .004$, and (b) the continuous likelihood of revealing the secret through moral outrage, $ZMed = -2.97$, 95% $CI = [-4.93, -1.01]$, $p = .003$.

Indirect effects. As predicted, when participants read about immoral secret behaviors that had already been punished they felt less moral outrage, $b = -.30$, 95% $CI [-.48, -.13]$, $SE = .09$, $t(660.70) = -3.36$, $p < .001$, which was associated with fewer decisions to reveal the secret, $B = .52$, $SE = .09$, $OR = 1.68$, 95% $CI [1.42, 2.00]$, $z = 6.03$, $p < .0001$, and being less likely to

decide to reveal the secret, $b = .55$, 95% CI [.40, .70], $SE = .08$, $t(696.15) = 7.33$, $p < .0001$. That is, reading that a secret immoral behavior has already been punished decreases the moral outrage they felt, which in turn is associated with a reduced likelihood of deciding to reveal the secret.

Next, we tested whether this indirect effect would remain significant above and beyond the two alternative explanations: how gossip-worthy and how interesting they thought the secret was (See Figure S2). The indirect effects of punishment motivation on the decision to reveal the immoral secret was significant through moral outrage, but *not* through how gossip-worthy or interesting participants found the secret to be.

Thus, reading about an immoral secret that had already been punished reduced moral outrage and, in turn they were less likely to reveal the secret relative to the same secret that had not yet been punished. Whether the secret had been punished or not did not affect how gossip-worthy or interesting the secret was, although the degree to which they did find the secret gossip-worthy (but not interesting) was related to deciding to reveal the secret. Critically, moral outrage predicted the decision to reveal above and beyond these factors. Further, we again replicated the same pattern of results when the continuous likelihood of revealing the secret measure was used as the outcome of this model.

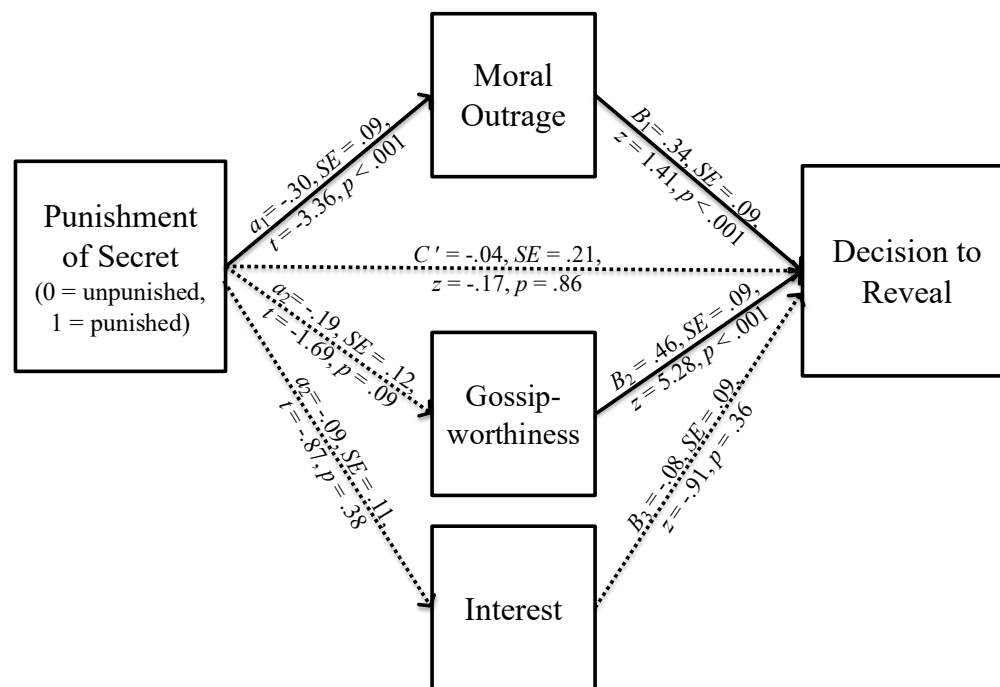
Total effect. Reading about already punished (versus unpunished) secret immoral behaviors did not significantly change the dichotomous decision of whether to reveal the secret, $B = -.20$, $SE = .19$, $OR = .82$, 95% $CI = [.55, 1.20]$, $z = 1.04$, $p = .30$, but did significantly decrease their likelihood of reporting the secret, $b = -.48$, 95% $CI = -.86, -.10]$, $SE = .19$, $t(650.79) = -2.50$, $p = .01$.

We re-ran the model with the continuous likelihood of revealing outcome, this time with potential alternative explanations (i.e., gossip-worthiness and interest). We found that although

gossip-worthiness was a significant predictor of the likelihood of revealing the secret, $b = .60$, 95% $CI [.47, .74]$, $SE = .07$, $t(732.83) = 8.71$, $p < .0001$, the punishment manipulation remained significant after controlling for these factors, $b = -.37$, 95% $CI [-.72, -.02]$, $SE = .18$, $t(647.13) = -2.05$, $p = .04$. How interesting the participants believed the secret to be was not a significant predictor of their likelihood of revealing the secret, $b = -.03$ 95% $CI [-.18, .12]$, $SE = .08$, $t(724.38) = -.35$, $p = .73$,

Supplemental Figure S2

The Indirect Effect of Punishment of Immoral Secrets Manipulation on Decision to Reveal the Secret through Moral Outrage, Gossip-worthiness, and Interest in the Secret (Supplemental Study S2)



Indirect Effects:

Moral Outrage: $ZMed_{indirect} = -2.45$, 95% $CI = [-4.41, -.49]$, $p = .01$

Gossip: $ZMed_{indirect} = -1.49$, 95% $CI = [-3.45, .47]$, $p = .14$

Interest: $ZMed_{indirect} = .46$, 95% $CI = [-1.50, 2.42]$, $p = .64$

Note. Each reported path (i.e., unstandardized regression coefficient) controls for prior predictors. Thus, the path from the punishment manipulation to revealing the secret as punishment represents the direct effect of the independent variable on the dependent variable while controlling for the mediators. Significant paths are denoted by solid lines and non-significant paths are denoted by dotted lines.

In summary, this direct replication was consistent with almost all of the findings in the main-text Study 5. First, it provided causal evidence for the role of punishment motivation in the decision to reveal secrets—even those that were specifically confided by a friend, coworker or family member. Whether or not the same immoral secret had already been punished directly decreased the likelihood that the participant would reveal it—before ever being asked about the morality, gossip-worthiness, or their interest in the secret. This direct effect was significant for the continuous measure of how likely they were to reveal the secret, but not the dichotomous outcome (which was significant in the original study)—this represents the only difference between this replication findings and our original study.

Further, we replicated all of our indirect-effect findings. More specifically, the effect of punishment motivation was explained by a reduction in feeling moral outrage, but not how gossip-worthy or interesting they thought the secret was. In conjunction with main-text experiments (Studies 3-5), these findings provide experimental evidence that the decision to reveal secrets confided by close others is due, at least in part, to an affective moral outrage reaction and a desire to see them punished for their secret behavior.

Supplemental Study S3: Revealing Secrets in Everyday Life

Supplemental Study S3 was a near-exact replication of Study 7 in the manuscript, with one exception: rather than measuring moral and punishment judgments in two different blocks, participants completed moral and punishment judgments per secret (i.e., blocked by category of secret). This study was conducted prior to Study 7, and is only reported here for streamlining purposes. Each Study 7 effect replicated with this alternate procedure.

Method

Participants and design. Participants were 150 online Mechanical Turk panel members (50% female; $M_{\text{age}} = 34.63$ years, $SD_{\text{age}} = 11.27$). Participants were provided with the list of 20 behaviors that are commonly kept secret. In response to each category of secrets, participants checked either *Yes, I know someone who has secretly engaged in this* or *No, I do not know anyone who has secretly engaged in this*. Subsequently, for each secret that they had learned, they answered the following series of measures in one block of questions for each secret (see Supplemental Table S2).

Measures. First, they reported whether they ever revealed the secret to anyone in a dichotomous yes/no format. Next, they indicated how morally wrong they thought that the secret behavior was, 1-*Perfectly OK* to 10-*Extremely Wrong*. Next, participants indicated their level of agreement with the statement “I felt morally outraged by the secret keeper,” 1-*Strongly Disagree* to 6-*Strongly Agree*, and responded to two 9-point items stating “The fact that they [insert secret behavior] made me feel [angry, disgusted].” from 1-*Not at all*, to 9-*Very*. Finally, we assessed agreement that revealing the secrets was an appropriate form of punishment for their behavior, 1-*Completely Disagree* to 10-*Completely Agree*.

Results and Discussion

Among our 150 participants, 144 had discovered at least one secret. Across the 20 categories of secrets, these 144 participants learned 1,904 secrets and revealed 554 (29%) of them overall. We hypothesized that their judgments of how morally wrong they perceived each specific secret behavior would predict moral outrage, which in turn would predict whether they revealed the secret. We analyzed the results using the same analytic method as in Study 7.

Indirect effects. Believing that the secret behavior was morally wrong was associated with increased moral outrage toward the secret keeper, $b = .40$, $SE = .01$, 95% $CI = [.38, .42]$, $t = 47.49$, $p < .001$. Moral outrage, in turn, predicted the likelihood that participants actually revealed the secret to someone, $B = 0.24$, $SE = 0.05$, $OR = 1.27$, 95% $CI = [1.15, 1.41]$, $z = 4.70$, $p < .001$. Consequently, we replicated the hypothesized indirect effect whereby moral judgments of the secret behavior predicted revealing the secret through moral outrage, $ZMed = 2.99$, 95% $CI [1.03, 4.95]$, $p = .003$.

Furthermore, this effect was mediated itself by punishment motivation: A serial model that also included participants' explicit agreement that revealing the secret is an appropriate form of punishment was also significant (see Supplemental Figure S3 for all coefficients), $ZMed = 4.48$, 95% $CI [2.52, 6.44]$, $p < .001$. This model demonstrates that the link between moral outrage and revealing the secret was explained by a desire to punish the secret keeper specifically.

Anger and disgust. We replicated the indirect effect through moral outrage when using the alternative operationalization of moral outrage: the anger-and-disgust composite. The indirect effect of moral judgment on whether they actually revealed the secret through the anger-and-disgust composite was also significant, $Z_{med} = 3.31$, 95 % $CI = [1.35, 5.27]$, $p < .001$.² The more immoral they thought the real-world secrets were, the more anger and disgust they reported, $b = 4.73$, 95% $CI [4.43, 5.02]$, $SE = .15$, $t = 31.55$, $p < .0001$, which in turn was associated with a greater likelihood that they actually revealed the secret, $B = .01$, 95% $CI [1.01, 1.02]$, $OR = 1.02$, $z = 5.74$, $p < .0001$.

Total effect. Perceiving a secret behavior to be morally wrong was significantly associated with greater likelihood that the participant revealed the secret, $B = 0.08$, $SE = 0.02$, $OR = 1.08$, 95% $CI = [1.04, 1.11]$, $z = 4.62$, $p < .0001$.

Supplemental Table S2

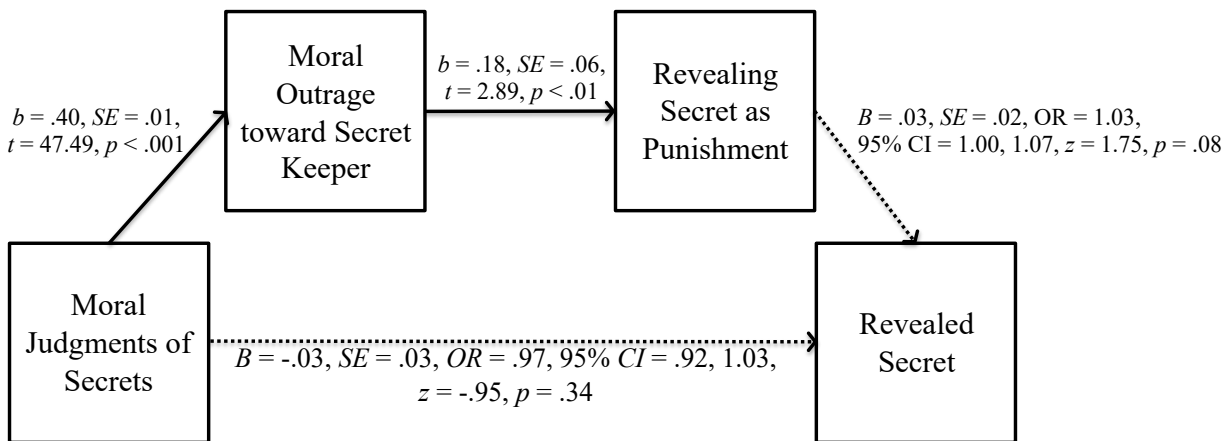
Descriptive Statistics for Moral Judgments, Moral Outrage, and Revealing Secrets (Supplemental Study S3)

	% (n_{ss}) learned the secret	Moral Judgments	Moral Outrage	Reveal as Punishment	%(n_{ss}) revealed the secret
1. Hurt another person (e.g., emotionally/physically hurt someone)	58% (87)	8.43 (1.55)	4.12 (1.27)	5.46 (2.66)	51% (44)
2. Used illegal drugs, OR abused/was addicted to a legal drug	75% (114)	6.00 (2.60)	3.04 (1.52)	4.11 (2.64)	35% (40)
3. Had a secret habit or addiction that did NOT involve drugs	46% (69)	4.88 (2.60)	2.80 (1.32)	3.67 (2.34)	27% (19)
4. Stolen something from someone or some place	71% (107)	8.07 (1.88)	4.24 (1.30)	5.45 (2.64)	33% (35)
5. Engaged in something illegal (other than drugs or stealing)	57% (86)	7.06 (2.23)	3.68 (1.45)	5.31 (2.58)	26% (22)
6. Physically harmed themselves on purpose	53% (79)	6.92 (2.83)	3.41 (1.69)	4.29 (3.10)	49% (38)
7. Had an abortion	45% (68)	4.25 (3.01)	2.63 (1.67)	2.87 (2.53)	15% (10)
8. Lied to someone	88% (132)	6.08 (2.36)	3.26 (1.30)	4.99 (2.57)	34% (44)
9. Had romantic desires about someone while being single (e.g., a crush, in love with someone, wanting relations with a specific person)	79% (119)	3.58 (3.01)	2.29 (1.59)	3.18 (2.68)	19% (22)
10. Is/was unhappy in a relationship	77% (115)	3.35 (2.67)	1.90 (1.13)	2.44 (2.07)	26% (29)
11. Thought about having relations with another person while in a Relationship	72% (108)	6.24 (2.95)	3.31 (1.66)	3.99 (2.84)	17% (18)
12. Committed emotional infidelity that did NOT involve sexual infidelity	64% (96)	6.83 (2.41)	3.78 (1.59)	4.85 (2.67)	23% (22)
13. Committed sexual infidelity	61% (92)	8.58 (2.13)	4.80 (1.42)	6.21 (3.00)	37% (33)
14. Was the “other man/woman” by being in a relationship with someone else who themselves actually had a partner	53% (79)	7.62 (2.66)	4.22 (1.48)	5.44 (2.81)	28% (22)
15. Had mental health issues (anxieties, depression, mental disorders, eating disorders)	71% (106)	2.38 (2.18)	1.74 (1.11)	2.33 (2.12)	31% (33)
16. Cheated or did something improper at work/school, lied to get a job/into school	66% (99)	6.40 (2.44)	3.48 (1.39)	5.31 (2.47)	22% (22)
17. Performed poorly at work (or school)	71% (107)	3.25 (2.26)	1.99 (1.00)	3.24 (2.34)	21% (23)
18. Work discontent	21% (31)	2.13 (2.00)	1.61 (1.07)	2.27 (2.07)	21% (25)
19. Violated someone’s trust—but NOT by a lie, infidelity, or any of the secrets already listed (e.g., snooping, breaking or losing something)	61% (91)	6.30 (2.66)	3.79 (1.47)	4.96 (2.67)	37% (33)
20. Was planning a surprise for someone	79% (119)	1.61 (1.60)	1.47 (1.03)	1.76 (1.81)	17% (20)

Note. *Moral judgments* were assessed on a scale from 0 to 10. *Moral Outrage* was assessed on a scale from 1 to 6. The percentage who learned the secret is the number of participants (n_{ss}) relative to the full sample, and the percentage who revealed the secret is the number of participants (n_{ss}) relative to only those who had learned the secret.

Supplemental Figure S3

The Indirect Effect of Moral Judgments on Likelihood of Revealing the Secret through Moral Outrage and Revealing Secrets as Punishment (Supplemental Study S3)



Notes. Each reported path (i.e., unstandardized regression coefficient) controls for prior predictors. Thus, the path from moral judgment to revealed secret represents the direct effect of the independent variable on the dependent variable while controlling for the mediators. Significant paths are denoted by solid lines and bolded coefficients.

Supplemental Study S4: Revealing Secrets in Everyday Life

Supplemental Study S4 was another near-exact replication of Study 7 in the manuscript and Supplemental Study S3. This study and Study 7 are very similar, but vary in the order in which participants completed the measures. This study was explicitly framed as being about learning secrets from the beginning. Participants 1) reported what secrets they had learned in real life, 2) made moral judgments of those behaviors, and finally 3) reported whether they revealed them or not. Study 7 did not frame the study as about secrets and changed the order of measures, such that they 1) first made moral judgments about the general behavioral categories (e.g., how wrong is it to get an abortion?) *before* the participants knew that the study was about learning and revealing secrets, and subsequently 2) reported which they had learned in their real life and which they revealed. The only other difference was that in this study we did not measure how appropriate participants thought it was to reveal the secret behaviors as gossip as we did in Study 7. This study

was conducted prior to Study 7, and is only reported here for streamlining purposes. Each Study 7 effect replicated with this alternate procedure.

Method

M-Turk panelists ($N = 150$; 42% female; 75% White, 6% Black, 9% Hispanic, 6% Asian, 4% “Other”; $M_{age} = 31.65$ years, $SD_{age} = 9.38$) were provided with a list of the 20 behaviors from Study 4. They were told, “These are the kinds of things people tend to keep secret. We want to know whether at any time if you have learned that someone that you know secretly engaged in one of the below behaviors. Do you know anyone who has secretly done any of the following? Please reach each item carefully, and only check yes if you know someone who did this, but is specifically a secret.”, and then for each behavior, participants checked *Yes, I know someone who has secretly engaged in this* or *No, I do not know anyone who has secretly engaged in this*.

Second, for each of the secrets they had learned in real life (i.e., answered “yes”), they completed a block of questions, including moral judgment (i.e., “How morally wrong was it for the person to [insert secret behavior]?” from 1-*Perfectly Ok* to 10-*Extremely Wrong*), moral outrage (i.e., “I felt morally outraged by the secret keeper” from 1-*Strongly Disagree* to 6-*Strongly Agree*) measures from Studies 4-5, and moral emotion items: “The fact that they hurt another person made me feel...” “...anger” and then a second item “...disgust” on 9-point scales from 1-*Not at all* to 9-*Very*, which we multiplied to again create our anger-and-disgust composite.

Finally, we asked whether they revealed the secret to someone (i.e., “Did you reveal to anyone that they [insert secret behavior], choosing *Yes* or *No*), and if revealing the secret would be an appropriate punishment (i.e., “Revealing that they [insert secret behavior] would be an appropriate form of punishment for their behavior”) from 1-*Completely Disagree* to 10-*Completely Agree*.

Results and Discussion

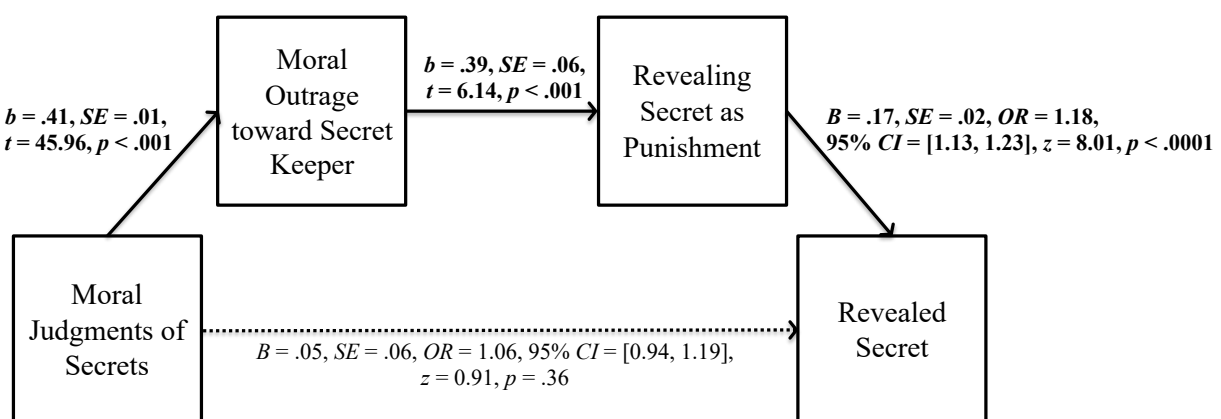
Among our 150 participants, 148 had discovered at least one secret and, overall, learned 1,775 secrets for which to test our hypotheses. They revealed 445 (25%) of them. See Table S3 for descriptive statistics.

Indirect effects. To test the indirect effects, we used the same *Zmed* analysis strategy from Studies 5-8. An initial mediation model (not pictured) replicated the prior studies: moral judgments of secret behaviors predicted agreement that revealing the secret as punishment would be appropriate through moral outrage, $Z_{Med} = 6.42$, 95% *CI* [4.46, 8.38], $p < .0001$.

Critically, a serial model also demonstrated that this extended to *actual revelations* (Figure S4). Perceiving the secret behavior as morally wrong was associated with increased moral outrage, which was associated with increased agreement that revealing the secret would be an appropriate punishment, which ultimately was associated with an increased likelihood that the participant actually revealed the secret to someone, $Z_{Med} = 53.44$, 95% *CI* [51.48, 55.40], $p < .0001$.

Figure S4

The Indirect Effect of Moral Judgments on Likelihood of Revealing the Secret through Moral Outrage and Revealing Secrets as Punishment (Study S4)



Notes. Each reported path (i.e., unstandardized regression coefficient) controls for prior predictors. Thus, the path from moral judgment to revealed the secret represents the direct effect of the independent variable on the dependent variable while controlling for the mediators. Significant paths are denoted by solid lines and bolded coefficients.

Table S3.

Descriptive Statistics for Moral Judgments, Moral Outrage, and Revealing Secrets (Study S4)

	% (<i>n_{ss}</i>) learned the secret	Moral Judgments	Moral Outrage	Reveal as Punishment	%(<i>n_{ss}</i>) revealed the secret
1. Hurt another person (e.g., emotionally or physically hurt someone)	49% (73)	8.33 (1.90)	4.10 (1.33)	4.58 (2.64)	42% (30)
2. Used illegal drugs, OR either abused/was addicted to a legal drug	71% (107)	5.71 (2.70)	2.90 (1.49)	3.48 (2.38)	33% (35)
3. Had a secret habit or addiction that did NOT involve drugs	39% (59)	5.03 (2.95)	2.92 (1.66)	3.14 (2.55)	20% (12)
4. Stolen something from someone or some place	60% (90)	7.84 (1.91)	4.00 (1.36)	5.37 (2.98)	33% (29)
5. Engaged in something illegal (other than drugs or stealing)	45% (68)	6.38 (2.25)	3.36 (1.29)	4.09 (2.63)	19% (13)
6. Physically harmed themselves on purpose	40% (61)	6.37 (2.36)	3.12 (1.58)	3.49 (3.07)	35% (21)
7. Had an abortion	42% (63)	3.94 (3.17)	2.46 (1.74)	2.27 (2.20)	16% (10)
8. Lied to someone	84% (126)	5.97 (2.29)	3.21 (1.39)	4.87 (2.92)	45% (56)
9. Had romantic desires about someone while being single (e.g., a crush, in love, wanting relations with a specific person)	73% (109)	2.68 (2.80)	1.81 (1.41)	2.61 (2.54)	21% (23)
10. Is/was unhappy in a relationship	72% (109)	2.55 (2.15)	1.70 (1.08)	2.32 (2.15)	16% (17)
11. Thought about having relations with another person while in a Relationship	60% (90)	5.76 (2.66)	3.27 (1.47)	3.50 (2.86)	19% (17)
12. Committed emotional infidelity that did NOT involve sexual Infidelity	55% (82)	7.12 (2.41)	4.04 (1.39)	4.51 (3.04)	24% (19)
13. Committed sexual infidelity	56% (84)	8.46 (2.34)	4.75 (1.50)	5.74 (3.20)	24% (20)
14. Was the “other man/woman” by being in a relationship with someone else who themselves actually had a partner	46% (69)	7.70 (2.50)	4.54 (1.35)	5.15 (3.04)	25% (17)
15. Had mental health issues (anxieties, depression, mental disorders, eating disorders)	63% (95)	1.91 (1.80)	1.48 (1.07)	2.16 (2.90)	19% (18)
16. Cheated or did something improper at work/school, lied to get a job/into school	59% (88)	6.20 (2.29)	3.30 (1.24)	5.03 (2.66)	19% (17)
17. Performed poorly at work (or school)	67% (101)	2.76 (2.03)	1.87 (1.15)	3.24 (2.64)	25% (25)
18. Work discontent	69% (103)	1.82 (1.76)	1.53 (1.10)	2.18 (1.97)	21% (22)
19. Violated someone’s trust—but NOT by a lie, infidelity, or any of the secrets already listed (e.g., snooping, breaking or losing something)	55% (82)	6.28 (2.44)	3.86 (1.29)	5.11 (2.85)	31% (24)
20. Was planning a surprise for someone	77% (116)	1.45 (1.56)	1.30 (0.89)	2.09 (2.17)	17% (20)

Notes. Moral judgments were assessed from 1 (*Perfectly Ok*) to 10 (*Extremely Wrong*). Moral Outrage was assessed from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*). Revealing the Secret is Appropriate Punishment was assessed from 1 (*Completely Disagree*) to 10 (*Completely Agree*). The percentage who learned the secret is the number of participants (*n_{ss}*) relative to the full sample, and the percentage who revealed the secret is the number of participants (*n_{ss}*) relative to only those who had learned the secret.

Anger and disgust. We again tested mediation through the alternative operationalization of moral outrage. The indirect effect of moral judgment on actual revealing through the anger-and-disgust composite was significant, $Z_{Med} = 3.31$, 95% CI [1.35, 5.27], $p < .001$. More specifically, when people perceived the secret behavior to be more immoral, they reported more anger and disgust, $b = 4.49$, 95% $CI = [4.18, 4.81]$, $SE = 0.16$, $t(844.46) = 27.77$, $p < .0001$, which in turn, was related to increased likelihood of them actually having revealed that secret in real life, $B = 0.01$, $SE = 0.003$, $OR = 1.01$, 95% $CI = [1.00, 1.01]$, $z = 2.33$, $p = .02$.³

Total effect. This psychological process again resulted in a significant total effect. Perceiving the secret behavior to be morally wrong was significantly associated with greater likelihood that participants actually revealed the secret to someone in real life, $B = 0.06$, $SE = 0.02$, $OR = 1.07$, 95% $CI = [1.03, 1.11]$, $z = 3.40$, $p < .001$. With each 1-unit increase in judgments of perceived immorality (on a 10-point scale), our participants were 7% more likely to reveal the secret. Thus, across diverse secrets learned in everyday life, the more immoral the participant believed the secret behavior to be, the more likely they revealed the secret to a third party in real life.

Supplemental Study S5: Pre-Registered Replication of Study 8

This was a pre-registered direct replication of Study 8 in the main text. Pre-registration available at https://osf.io/epmzg/?view_only=59155a8328fc48b69a9a772885e75b04.

Method

Participants, design, and procedure. We recruited from Prolific Academic ($N = 151$; 61% female; 71.5% White, 9% Black, 9% Asian, 10.5% “Other”, $M_{age} = 33.70$ years, $SD_{age} = 1.62$). Only one person had a questionable response to the open-ended attention check, but removing that one participant did not change the results. Thus, we report the full sample. The

materials, measures, and procedure were a direct replication of the methods reported in Study 8 of the main text.

Results and Discussion

Among our 151 participants, 147 had discovered at least one secret and, overall, learned 1,948 secrets and revealed 455 (23%) of them (Supplemental Table S4).

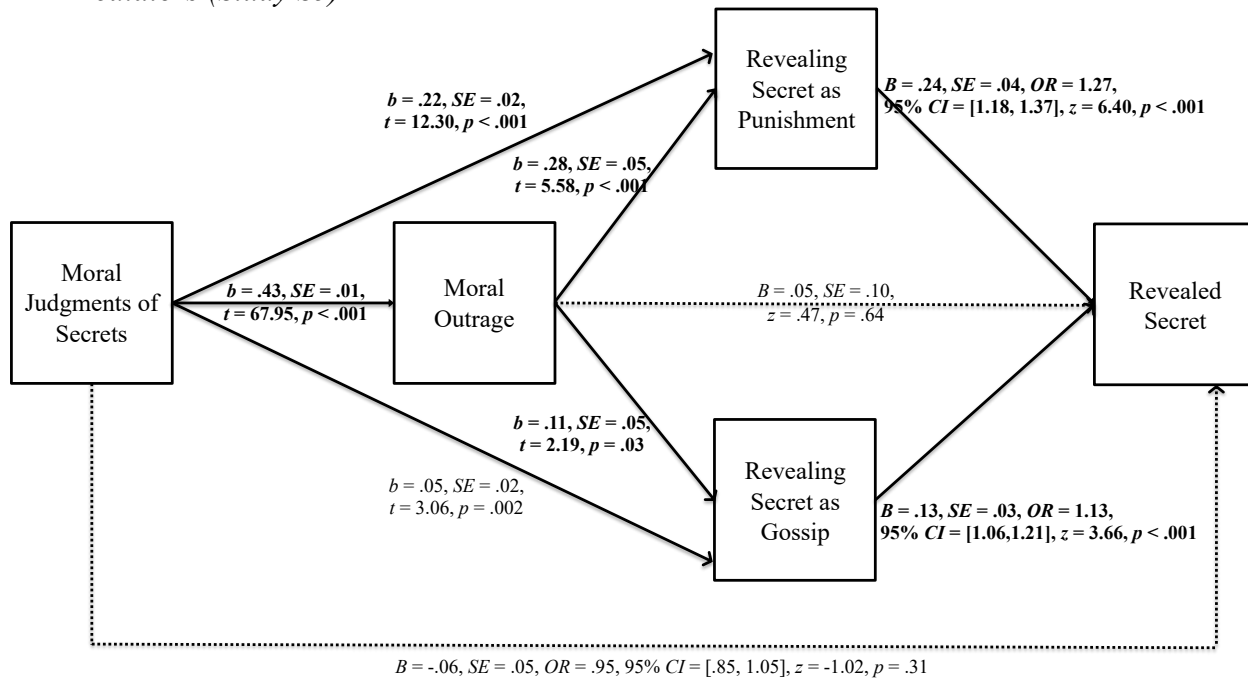
Indirect effects. To test the indirect effects, we used the same *Zmed* analysis strategy from Studies 5-8, and found that the serial model replicated, such that there was a significant indirect effect of moral judgments on revealing secrets through moral outrage and agreement that revealing the secret as punishment is appropriate (this time controlling for the acceptability of revealing the secret as gossip), $ZMed = 33.00$, 95% $CI [31.04, 34.96]$, $p < .0001$ (Figure S5). Thus, the indirect effect replicated even though we asked about moral judgments of general behaviors in the abstract before ever mentioning the concept of learning or revealing secrets and asked only about secrets that had been directly confided in the participants.

Second, as one would expect from the gossip literature, the parallel indirect effect through *gossip* was also significant, $ZMed = 9.47$, 95% $CI [7.51, 11.43]$, $p < .0001$ (Figure S5). More specifically, there was a significant indirect effect of moral judgments on revealing secrets through moral outrage and their agreement that revealing the secret as gossip would be acceptable. Critically, the path through punishment existed above and beyond this indirect effect through gossip. Further, the indirect effect through punishment was significantly stronger than the indirect effect through gossip (i.e., the confidence intervals do not overlap). Thus, support for our hypothesis replicated in relation to secrets people confided in participants in real life, while also accounting for the effect of thinking that moral violations are more worthy of gossip.

Anger and disgust. We found that the indirect effect through the anger-and-disgust composite was significant, $Z_{Med} = 3.00$, 95% $CI [1.04, 4.96]$, $p = .003$.⁴ More specifically, when people found the confided secret behavior more immoral, they reported more anger and disgust, $b = 2.78$, 95% $CI = [2.68, 2.87]$, $SE = 0.05$, $t(821.61) = 56.25$, $p < .0001$, which in turn, was related to an increased likelihood of them actually having revealed that secret in real life, $B = 0.03$, $SE = 0.01$, $OR = 1.03$, 95% $CI = [1.00, 1.06]$, $z = 2.19$, $p = .03$.

Supplemental Figure S5

Serial Model of the Indirect Effects of Moral Judgments on Secret Revealing through Proposed Mediators (Study S5)



Notes. Each reported path (i.e., unstandardized regression coefficient) controls for prior predictors. Thus, the path from moral judgment to revealed the secret represents the direct effect of the independent variable on the dependent variable while controlling for the mediators. Significant paths are denoted by solid lines and bolded coefficients.

Total effect. Consistent with Study 8, perceiving a behavior to be morally wrong, in the abstract, did not have a total effect on greater likelihood that the participant actually revealed someone else's secret involving that specific behavior to someone else, $B = .03$, $SE = .03$, $OR = 1.03$, 95% $CI = [.96, 1.09]$, $z = .84$, $p = .40$. Thus, we replicated all of our focal effects from Study 8 in the main text.

Table S4

Descriptive Statistics for Moral judgments, Moral Outrage, and Revealing Secrets (Supplemental Study S5)

	% (n) were told the secret	Moral Judgments	Moral Outrage	Reveal as Punishment	Reveal as Gossip	%(n) revealed the secret
1. Hurt another person	23% (35)	8.65 (1.43)	5.01 (1.02)	5.14 (3.57)	3.99 (3.28)	34% (12)
2. Illegal drug use	75% (112)	5.23 (2.72)	3.13 (1.50)	2.89 (2.52)	2.83 (2.54)	25% (28)
3. Secret habit or addiction (non-drug related)	53% (80)	4.81 (2.14)	2.78 (1.23)	2.46 (2.18)	2.57 (2.26)	10% (8)
4. Theft	62% (94)	8.23 (2.15)	4.75 (1.19)	4.25 (3.15)	3.83 (3.14)	29% (27)
5. Illegal activity	56% (85)	7.13 (2.09)	4.19 (1.24)	3.50 (2.70)	3.02 (2.66)	23% (19)
6. Physical self-harm	55% (82)	6.60 (2.60)	3.42 (1.51)	2.55 (2.62)	2.45 (2.37)	29% (24)
7. Had an abortion	44% (66)	3.62 (2.13)	2.27 (1.64)	1.77 (1.95)	2.00 (2.19)	9% (6)
8. Lied to someone	86% (129)	6.37 (2.03)	3.62 (1.28)	3.32 (2.44)	3.22 (2.63)	33% (42)
9. Had romantic desires while single	85% (128)	1.79 (1.95)	1.44 (1.07)	2.30 (2.36)	3.82 (3.34)	25% (32)
10. Unhappy in a relationship	85% (128)	2.15 (1.97)	1.61 (1.06)	2.13 (2.15)	2.75 (2.61)	23% (29)
11. Extra-relational romantic thoughts	59% (89)	6.46 (2.80)	3.74 (1.52)	3.27 (2.82)	2.97 (2.65)	15% (13)
12. Emotional infidelity	47% (71)	7.32 (2.13)	4.14 (1.42)	3.72 (2.98)	3.00 (2.64)	25% (18)
13. Sexual infidelity	47% (71)	8.68 (1.93)	4.75 (1.31)	4.34 (3.42)	3.14 (2.84)	35% (25)
14. Was the “other man/woman”	42% (63)	7.94 (2.31)	4.54 (1.43)	3.80 (3.08)	3.20 (2.91)	25% (16)
15. Mental health issues	85% (129)	1.55 (1.56)	1.28 (.79)	1.74 (1.96)	2.13 (2.36)	19% (24)
16. Cheated at work/school	68% (103)	6.80 (2.32)	3.77 (1.29)	3.74 (2.75)	3.35 (2.72)	24% (25)
17. Lied to get a job/into school	40% (61)	6.69 (2.45)	3.83 (1.35)	3.77 (2.83)	3.44 (2.83)	26% (16)
18. Performed poorly at work (or school)	66% (99)	3.20 (2.27)	2.11 (1.09)	2.41 (2.39)	3.22 (2.91)	22% (22)
19. Work discontent	79% (119)	1.74 (1.74)	1.49 (.97)	2.26 (2.28)	3.49 (3.04)	34% (40)
20. Planning a surprise for someone	82% (123)	1.36 (1.25)	1.22 (.67)	2.15 (2.37)	3.59 (3.29)	24% (29)

Notes. Moral judgments were assessed from 1 (*Perfectly Ok*) to 10 (*Extremely Wrong*). Moral Outrage was assessed from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*). Revealing the Secret as Punishment and Gossip were assessed from 1 (*Perfectly Ok*) to 10 (*Extremely Wrong*) and were reverse scored. The percentage who learned the secret is relative to the full sample, and the percentage who revealed the secret is relative to only those who had learned the secret. The secret names have been abbreviated; for full descriptions see Table S2.

Supplemental Materials: Measures Not Reported in the Manuscript

Two relevant measures were collected, but not analyzed for the current project, described below.

First, in Studies 2a and 2b our primary hypotheses were about moral judgments and punishment of the secret keepers, but we also collected measures of moral judgments and desire to punish the *hackers* (i.e., How morally wrong was it for hackers to reveal [Ashley Madison users' secrets/the clinic patients' secrets about having an abortion]? (0 [*Perfectly Ok*] to 10 [*Extremely Wrong*]), “I think that the hackers should be punished for revealing [Ashley Madison users'/abortion clinic patients'] secrets” (1 [*Strongly Disagree*] to 6 [*Strongly Agree*]).

As these measures are tangentially related to hypotheses concerning morality of the secret behavior (i.e., they do not deal with the behavior, but rather concern the people revealing the behavior), we did not analyze these measures to keep the manuscript hypotheses focused and the manuscript a manageable length. Reports of these data are available upon request.

In Supplemental Studies S3-S4), we included additional emotion measures that we did not analyze because we did not have them for the rest of the studies, which included the degree to which they felt infuriated, outraged, repulsed, sickened, grossed-out. To be consistent across studies, we only used the anger and disgust items in the other studies.

We also asked participants a series of additional demographic measures, collected in the event that more information about the current participants was desired. The demographic questions listed below were collected in several of the reported studies and are available upon request.

1. What is your ethnicity?

White / Black or African American / American Indian or Alaska Native / Asian / Native Hawaiian or Pacific Islander / Other _____

2. When it comes to politics, how liberal or conservative are you?

1-Extremely liberal to 7-Extremely conservative

3. Please answer how accurately the below sentence describes you: I have a secret that I am keeping from someone:

1. does not at all accurately describe me to 7. very accurately describes me

4. Please answer how accurately the below sentence describes you: I have a big secret that I am keeping from someone:

1. does not at all accurately describe me to 7. very accurately describes me

5. What is your current religion? That is, what is your current denominational preference? Please choose all that apply.

Fundamentalist / Christian / Catholic / Jewish / Muslim / Hindu / Buddhist / Non-denominational/ Agnostic / Atheist

6. How religious do you consider yourself to be?

1. Strongly not religious to 5. Strongly religious

7. To what degree would you say that you are politically engaged?

1. not at all politically engaged to 7. very much politically engaged

8. Please indicate which degrees you have completed (Please check ALL that apply):

High School Diploma / Bachelor's Degree / Master's Degree / Doctoral Degree / Law Degree / Medical Degree / Other

Finally, a subset of the studies included measures that have not been analyzed as they were collected as part of other independent projects. These measures are not directly relevant to the current hypotheses and therefore were not analyzed for the current work. These measures are reported below along with the studies in which they were included. These data are available upon request.

Studies 2a-2b:

- Do you support or oppose [people using the Ashley Madison website to commit adultery/a woman's right to decide to get an abortion]? Support / Oppose

- How weak or strong is your support [opposition] for [people using the Ashley Madison website to commit adultery/a woman's right to decide to get an abortion]?

1. very weak to 7. very strong:

- Do you support or oppose people hacking the [Ashley Madison/abortion clinic's] to reveal its users' secrets? Support / Oppose

- How weak or strong is your support [opposition] for people hacking the [Ashley Madison/abortion clinic's] website to reveal its users' secrets?

1. very weak to 7. very strong:

- Please indicate how much your feelings about [adultery/abortion] reflect your core moral values and convictions.

- Please indicate how much your feelings about [adultery/abortion] are connected to your fundamental beliefs about right and wrong.

- Please indicate how much your feelings about the hackers revealing others' [adultery/abortions] reflect your core moral values and convictions.

- Please indicate how much your feelings about the hackers revealing others' [adultery/abortions] are connected to your fundamental beliefs about right and wrong.

From 1-not at all to 7-very much.

- Please answer how accurately the below sentence describes you. Independent of whether I would condone [cheating on a partner/abortion]

I cannot at all understand the temptation to 7. I very much can understand the temptation

- Have you ever had a romantic partner commit [infidelity/adultery]? (Study 2a only) Yes / No

- Have you ever committed adultery/infidelity? That is, have you ever cheated on someone? (Study 2a only) Yes / No
- Have you or a romantic partner ever had an abortion? (You can skip this question if you would like to). (Study 2b only) Yes / No

Footnotes

1. This was a second attempt to collect these data because in our first attempt, we omitted the second block of measures from the survey, which included the moral outrage measures as well as manipulation checks and covariates. Because this prevented us from being able to test our hypotheses we did not use the first dataset and instead collected a second dataset, which we analyzed and report here.
2. Note that this indirect effect replicates with just anger, $ZMed = 5.31$, 95% $CI [3.35, 7.27]$, $p < .0001$, or just disgust, $ZMed = 4.60$, 95% $CI [2.64, 6.56]$, $p < .0001$, in single mediator models—supporting conceptualizations of moral outrage as an interactive combination of anger and disgust (Salerno & Peter-Hagene, 2013).
3. Note that this indirect effect replicated for a model with just anger, $ZMed_{indirect\ effect} = 3.32$, 95% $CI [1.36, 5.28]$, $p < .001$, but not for disgust, $ZMed_{indirect\ effect} = 1.66$, 95% $CI [-.30, 3.62]$, $p = .10$, in single mediator models.
4. Note that this indirect effect did not replicate with just anger, $ZMed = .22$, 95% $CI [-1.74, 2.18]$, $p = .82$, or just disgust, $ZMed = -.33$, 95% $CI [-2.29, 1.63]$, $p = .74$, in single mediator models.