Regulating Emotions About Secrets

Valentina Bianchi[1], Katharine H. Greenaway[1], Michael L. Slepian[2], and Elise K. Kalokerinos[1]

[1] Melbourne School of Psychological Sciences, University of Melbourne

[2] Columbia Business School, Columbia University

Secrecy is common and psychologically costly. Research shows that secrets have high emotional stakes, but no research has directly tested how people regulate their emotions about secrets. To fill this gap, we conducted an experimental study (Study 1), then moved to studying secrecy "in the wild" to capture regulatory processes as they unfold in everyday life (Studies 2 and 3). In Study 1 ($N = 498$), people reported using different strategies to regulate emotions about secrets compared to matched nonsecrets. In two daily diary studies ($N_{\text{Study 2}} = 174$, 1,059 surveys; $N_{\text{Study 3}} = 240$, 2,764 surveys), participants reported engaging in acceptance, distraction, and expressive suppression most—and social sharing least—to manage emotions about secrets. Moreover, in testing which kinds of secrets required most regulation, Study 3 suggested that significant, negative, controllable, and socially harmful secrets were associated with greater use of rumination, distraction, and suppression; perceived immorality of keeping secrets was associated with greater use of reappraisal; and secret discoverability did not differentially predict regulation strategies. Our findings indicate that when regulating emotions about their secrets, people appear to prioritize their intention to keep secret information hidden, despite potential well-being costs that may come with enacting this intention. Understanding the regulatory processes involved in secrecy is a foundation on which future research can build to identify ways of alleviating the burden of secrecy.

Keywords: secrecy, emotion regulation, daily diary

Supplemental materials: https://doi.org/10.1037/emo0001357.supp

"Secrets are like bees. They have the power to sting you many times over. It's best to keep them locked up." (Kidd, 2003)

We all waver sometimes about whether to reveal or conceal personal information. Whether the information is trivial or significant, recent or time-worn, positive or negative, people often choose to keep it secret from others. This is the topic of an emerging literature in the field of information regulation investigating the psychological costs of secrecy (e.g., Bingley et al., 2022; Slepian, 2022). What is missing from this literature is an interrogation of the regulation of emotions about secrets. As Kidd's quote alludes, people feel strongly about information they choose to keep secret, and about the act of secrecy itself (e.g., Bianchi et al., 2024; Slepian et al., 2019). Thus, knowing how people manage their emotions about secrets is critical to gaining a full understanding of secrecy. In an

experiment and two daily diary studies, we investigate the strategies people engage to regulate emotions about secrets.

The Emotional Side of Secrecy

Secrecy is both common and consequential. According to one estimate, 97% of people are keeping a secret at any given time, and the average person keeps up to 13 secrets at once (Bianchi et al., 2024; Slepian et al., 2017). This ubiquity is worth noting, given that research shows secrecy is entangled with affective experiences. For instance, people report feeling guilt and shame when they think about secrets (Finkenauer & Rimé, 1998; Slepian, Kirby, & Kalokerinos, 2020). Indeed, recent work suggests that feelings of shame may underpin the broader well-being costs of secrecy

(Liu et al., 2023). Keeping information secret also seems to evoke a broader range of negative emotions, including feeling worried, depressed, and lonely (Davis & Brazeau, 2021; Maas et al., 2012). For example, research has found that people feel anxious keeping secrets, and report being fearful of secrets being discovered by others (Davis et al., 2021). It is also possible that secrets may be associated with positive emotions: either in their absence, or—in the rare case of positive secrets—presence of emotions like pride, excitement, or gratitude (Bianchi et al., 2024; Slepian et al., 2023).

These prior findings reveal the emotional stakes of secrecy. Our interest in the present research is in how people seek to manage their affective experiences when they keep a secret. To study this, we turn to the literature on emotion regulation, which is defined as people's attempts to influence which emotions they have, when they have them and how they experience or express those emotions (Gross et al., 2006). Depending on the strategies people use, emotion regulation has the potential to improve one's emotional state (Aldao et al., 2010; Gross, 2015; Webb et al., 2012). What may be helpful emotionally in the moment, however, may not be practicable—or may even be counterproductive—when keeping a secret. For instance, sharing feelings about the secret with others may avail people of social benefits (e.g., validation; gaining a different perspective; Marroquín, 2011; Rimé, 2009), but could be a risky strategy, because it creates opportunities for the secret to slip out. Accordingly, we aimed to understand which regulation strategies people deploy to address the emotions they feel about secrets. In doing so, we draw on theoretical insights from two hitherto unconnected literatures on information regulation and emotion regulation.

Regulating Information and Emotion

Information regulation and emotion regulation share theoretical DNA, beyond the obvious fact that both involve exerting control over thoughts, feelings, or behavior. Recent developments in the secrecy literature have brought these similarities into focus. According to the process model of having and keeping secrets (Slepian, 2022), when people set an intention to keep information from others (i.e., a secret), this intention makes the mind more sensitive to environmental cues related to that secret. The model describes two pathways through which the secrecy process unfolds, depending on whether or not the environment requires one to conceal the secret. In the concealment pathway, when cues are activated and concealment is required, people might engage in behaviors to keep the secret hidden. For instance, people might monitor and inhibit leakages of information related to the secret (Critcher & Ferguson, 2014; Finkenauer & Rimé, 1998; Smart & Wegner, 1999). In the mind-wandering pathway, when cues are activated but concealment is not required, people's minds are free to wander to thoughts of the secret. This means that people can become preoccupied with thoughts concerning the secret (e.g., Davis et al., 2021; Pennebaker, 1989). In fact, empirical evidence shows that mind-wandering to secrets is more frequent and more damaging to well-being than concealment (Slepian et al., 2017; Slepian, Greenaway, & Masicampo, 2020).

The comparatively more established field of emotion regulation also studies processes—specifically, strategies—that contribute to well-being. The original process model of emotion regulation (Gross, 1998) identified five families of emotion regulation strategies through which people manage their emotions. Research shows that these different emotion regulation strategies have different consequences for how a person feels, thinks, and acts, both immediately and over the longer term.

Combining insights from both literatures, we aim to identify which strategies people use to manage emotions about their own secrets. Drawing from theory in the secrecy domain, we identify three regulatory processes relevant to managing secret information: inhibition (i.e., keeping thoughts or feelings hidden), preoccupation (i.e., dwelling on thoughts or feelings), and social relations (i.e., including or excluding others from one's thoughts or feelings). Drawing from theory in the emotion regulation domain, we propose that certain emotion-based strategies may be deployed in the service of these secret regulatory processes.

Inhibition

The goal of secrecy is to keep information hidden, thus necessitating inhibition to keep the secret under wraps (Pennebaker, 1985). Specifically, when secret keepers find themselves in situations requiring concealment, they may need to engage in behaviors in line with their secrecy goal, including verbal inhibition (Slepian, 2022). While inhibition is effortful and can be fatiguing (i.e., Inzlicht & Schmeichel, 2012; Slepian et al., 2012), when successfully enacted, secrecy can prevent damage to one's reputation or relationships (McDonald et al., 2020).

Inhibition in emotion regulation is studied in relation to inhibiting the expression of emotion, a strategy referred to as expressive suppression. Ironically, expressive suppression can leave emotion experience unchanged (Kalokerinos et al., 2015), or sometimes backfire to increase the emotion experience (Tull et al., 2010). As a result, this strategy may be ineffective at managing emotions and can actually compromise well-being (Gross & John, 2003; Tull et al., 2010). Nevertheless, this strategy may be employed to manage emotions about secrets, if efforts to inhibit information from becoming known spread to nonverbal channels.

Preoccupation

Even when verbal inhibition is not required, one can still be cued to a secret (Slepian, 2022). For instance, a personal loan advertisement may prompt thoughts (and feelings of anxiety or guilt) about a growing debt one keeps hidden from their family and friends, without calling for the need to actively conceal that debt from others. When this happens, people become preoccupied with thoughts of the secret, such that the mind returns over and over to the secret and its implications (Davis et al., 2021; Pennebaker, 1989). While people report wanting to engage with thoughts of significant secrets (Slepian, Greenaway, & Masicampo, 2020), this preoccupation tends be detrimental for well-being (Slepian et al., 2017). Indeed, at extreme levels, consistent mind-wandering to secrets may represent a dysregulated mind incapable of disengaging from or resolving bothersome thoughts (e.g., Slepian et al., 2015, 2016).

This thought process has parallels with rumination, an emotion regulation strategy which directs attention repetitively toward emotional elements of a situation, usually with costs to well-being (Nolen-Hoeksema, 2000). Rumination appears to be detrimental by impeding, rather than enhancing, problem solving about whatever is causing one's emotional state (Marchetti et al., 2016). On the other side of the attentional coin, people may use the opposite

strategy of distraction. This strategy involves directing attention away from emotional elements of a situation, or engaging one's attention elsewhere (Gross & Thompson, 2007; Webb et al., 2012). Hence, people may manage emotions about secrecy by dwelling on what the secret means and how it makes them feel, or by disengaging from thoughts about the secret and its implications.

Social Relations

Secrecy is a social act, requiring information to be kept from others (Bedrov et al., 2021; Bingley et al., 2022). Accordingly, social interaction is one cue that can both bring a secret to mind and necessitate secret concealment (Bianchi et al., 2024; Slepian, 2022). In these interactions, people may use socially oriented strategies to regulate emotions and information that they do or do not wish others to know. Social sharing is a strategy that involves discussing emotional experiences with others (Rimé et al., 1992) and generally has well-being benefits (Gable et al., 2004; Rimé, 2007). Emotions convey social information (Van Kleef, 2009), and hence, secret-keepers might be less likely to reveal their emotions to others for fear of giving themselves away. As such, people may manage emotions about secrecy by not sharing their emotions with others.

Other Processes

We identified three processes in the secrecy literature—inhibition, preoccupation, and social relations—that may be facilitated by four strategies commonly studied in the emotion regulation literature: suppression, rumination, distraction, and social sharing. Within the context of secrecy, suppression, rumination, and distraction may be used more than other strategies, and social sharing less. To extend understanding of the processes people may use to cope with secrecy, we also explored the degree to which two additional strategies—acceptance and reappraisal—are used to manage emotions about secrets.

Acceptance, broadly defined as recognizing and embracing emotions rather than wanting to change them (Hofmann & Asmundson, 2008), is one of the most used emotion regulation strategies in everyday life (Heiy & Cheavens, 2014; Southward et al., 2019). Some therapies suggest that acceptance is helpful when dealing with self-conscious emotions like shame and guilt, which are experienced commonly in secrecy (Heppner et al., 2015). Cognitive reappraisal, whereby people reinterpret the meaning of an experience to change its emotional impact, is also generally considered a helpful strategy (Gross & John, 2003). Despite its popularity in academic circles, people use reappraisal relatively little in everyday life (Brans et al., 2013) and find the strategy difficult to implement (Kalokerinos et al., 2015). Yet, people might use this strategy when it comes to their secrets, because keeping information from others limits their ability to access other people's perspectives, and may instead require personal perspective change. For instance, a person keeping secret that they are discontented in their romantic relationship may be understandably loath to ask their partner for advice about this experience. Instead, this person may remind themselves that all relationships go through ups and downs, and reinterpret their discontented feelings as likely to change with time. In sum, investigating these strategies will clarify whether people turn to them in the context of secrecy, over and above the other strategies that theory suggests are likely to be linked with secrecy processes.

The Present Research

In this research, we explored the emotion regulation landscape of personal, negative, and significant secrets. Doing so will unite theories across fields, improve knowledge about the mechanisms through which people manage the emotional side of secrets, and offer practical insights on what processes may contribute to the negative impact of secrecy.

In addition to studying which strategies people use in the context of secrecy, we explored whether certain kinds of secrets are linked with certain ways of regulating. Specifically, we identified features of secrets that make them psychologically consequential and tested whether these features predicted daily use of regulation strategies to manage emotions about the secret. Given research has shown the significance (Slepian et al., 2019) and valence (Bianchi et al., 2024) of a secret shape its psychological impact, we assessed these features as predictors of emotion regulation in Studies 2 and 3. Expanding the list of features in Study 3, we assessed how discoverable (Davis & Brazeau, 2021) and controllable the secret was (Bianchi et al., 2024), as well as assessing relevant dimensions in the form of perceived immorality of keeping secrets, as well as certainty about and the social impact of keeping secrets (Slepian & Koch, 2021). While our main focus was on understanding which regulation strategies people use to manage emotions about secrets, with these additional analyses we aimed to understand what it is about secrets that prompts the need for regulation.

In Study 1, we conducted an experiment to identify which strategies people use to manage emotions about secret versus nonsecret information. Studies 2 and 3 expanded our scope to everyday life. In Study 2, we surveyed people once per day for 7 days, assessing their use of six emotion regulation strategies to manage feelings about their most significant secret. In Study 3, we surveyed people once per day for 14 days, again assessing use of those strategies. Further, in Studies 2 and 3, we investigated features of secrets that predicted greater use of emotion regulation strategies. Together, the studies build a picture of how the regulation of emotion plays into people's ability to effectively regulate information.

Transparency and Openness

Data, code, and supplementary materials for all studies are available on the Open Science Framework (OSF). We preregistered our analysis plan for both daily diary studies; these preregistrations are also available on the OSF (https://osf.io/q9fr2/).

Study 1

Method

Participants and Design

The study (approved by Columbia University review board) was a two-cell between-subjects experimental design in which participants reflected on information that they were keeping secret versus not. Self-reported use of five[1] emotion regulation strategies were the outcome variables. The final sample consisted of 498 participants from MTurk ($M_{age} = 33.09$, $SD = 11.03$, 66% women). Though we did

---

[1] We did not assess acceptance in Study 1. We did assess situation modification and experiential suppression in this study, but do not analyze these strategies as they were not assessed across Studies 2 and 3.

not perform an a priori power analysis, we aimed to reach over 100 participants per cell. To assess the robustness of our findings, we conducted a sensitivity analysis using G*Power (Faul et al., 2007). We set the α level at .05 and conservatively selected the smallest correlation among repeated measures in our study, which was $r = .18$. The analysis revealed that our sample size yielded 80% statistical power to detect a 2 (secrecy) $\times$ 5 (strategy) mixed interaction effect with an effect size of $f = .06$ (very small, corresponding to $d = 0.12$).

Materials and Measures

Secrecy Manipulation. Participants were randomly assigned to conditions. Participants in the secret condition thought of and described significant negative personal information unknown by others that they were purposefully keeping secret. Participants in the nonsecret condition also thought of, and described, significant negative personal information unknown by others, but that they were not purposefully keeping from others (i.e., that they would discuss if raised, but that was currently unknown). This allowed us to uniquely examine the role of secrecy (i.e., intent for information to remain hidden vs. not), while holding constant that the information was (a) negative and (b) unknown by other people. We focused on negative information because research shows the majority of secrets are negative (Slepian et al., 2017, Slepian, Kirby & Kalokerinos, 2020).

Emotion Regulation Strategies. Participants reported use of five emotion regulation strategies (see Table 1; items for Study 1 adapted from Brans et al., 2013) when attempting to influence emotions about the secret/nonsecret information scored from 1 (*not at all*) to 7 (*very much*).

Honesty Check. We asked people to indicate anonymously if they had fabricated the information recalled for the manipulation (from Slepian et al., 2017). We excluded 13 participants and only analyzed data from participants who reported recalling real information ($N = 498$). We presented this item at the end of the survey and reassured participants that their reimbursement would not depend on their responses, to curb incentive to lie about the veracity of provided responses.

Results

We performed a mixed analysis of variance using the R-package afex (Singmann et al., 2020) that treated secrecy condition as a between-participants factor (secret vs. nonsecret information) and emotion regulation as a within-participants factor. The results are graphed in Figure 1.

There was no significant main effect of secrecy condition, $F(1, 496) = 1.81$, $p = .179$, $\eta^2 < .01$. However, there was a significant main effect of emotion regulation strategy, $F(3.67, 1822.43) = 49.58$, $p < .001$, $\eta^2 = .05$. Pairwise comparisons revealed that expressive suppression was the most commonly reported strategy ($M = 4.23$, $SD = 2.00$), followed by distraction ($M = 3.93$, $SD = 2.03$), $p = .007$, which in turn was more strongly endorsed than reappraisal ($M = 3.67$, $SD = 1.84$), $p = .032$, and rumination ($M = 3.60$, $SD = 2.01$), $p = .002$, although the latter two strategies did not differ significantly from one another, $p = .928$. Social sharing was the least reported strategy ($M = 2.90$, $SD = 1.79$), less even than rumination, $p < .001$.

There was a significant interaction between secrecy condition and emotion regulation strategy, $F(3.67, 1822.43) = 32.45$, $p < .001$, $\eta^2 = .03$. Simple effects revealed that thinking about secret (vs. nonsecret) information increased self-reported use of expressive suppression, $d = 0.44$, $p < .001$, and distraction $d = 0.42$, $p < .001$, and reduced self-reported use of social sharing, $d = 0.65$, $p < .001$. There was no effect of secrecy condition on rumination, $d = 0.05$, $p = .549$, or reappraisal, $d = 0.04$, $p = .645$.

Discussion

Study 1 suggests that people gravitate toward particular strategies to manage emotions about secrets compared to equivalently unknown, but nonsecret information. People reported greater expressive suppression and less social sharing to manage emotions about secrets (vs. nonsecrets). These strategies do have the benefit of increasing the chance that secrets remain secret from others—which is, after all, the ultimate goal of secrecy. That is, suppressing the expression of emotion and refraining from sharing one's emotions may help people conceal cues to secret content, or avoid topics of conversation that would lead to secret discovery.

What is good for the secret may not be good for the person, however. For instance, expressive suppression is generally considered a detrimental strategy (Cutuli, 2014), leaving emotional intensity unchanged, and instead leading to poorer well-being outcomes (Chapman et al., 2013; Gross, 2002). When met by supportive and understanding responses, social sharing can improve well-being (Pauw et al., 2022; Rimé et al., 2020). For instance, daily experiences of negative emotion are reduced when shared with supportive partners (Brans et al., 2013). As such, failing to share one's emotions with others may limit one's ability to benefit from social support known to buffer well-being.

Study 2

The findings of Study 1 implicate emotion regulation in the process of secrecy and make clear that certain strategies are used to manage secrets, relative to matched nonsecret information. Nevertheless, that study is not capable of identifying what it is about secrets that prompts such regulation. We explored this question in more detail in Studies 2 and 3, where we investigated qualities of the secret that may predict more intense emotion regulation. It might be that the degree of experienced emotion activates regulatory processes, as experiencing emotion is the precursor of regulation (Gross, 2015). As such, we considered the extent to which people feel negatively about their secret to be a relevant feature that may prompt greater emotion regulation. Another feature potentially connected to regulation is its self-rated significance, as previous research suggests that people report wanting to engage with significant (rather than trivial) secrets (Slepian, Greenaway, & Masicampo, 2020).

Further, while affording causal inference, the design of Study 1 carries inevitable shortcomings in terms of ecological validity. Daily life methods allow us to circumvent this issue by capturing processes as they unfold in people's real lives. Hence, building on Study 1 findings, we conducted two daily diary studies to investigate whether people use similar strategies to manage emotions about secrets in daily life, and whether certain secret features predict the way people regulate their feelings about secrets.

Table 1

Measures Used to Assess Emotion Regulation Strategies

Strategy	Item
Study 1	
Rumination	I ruminate or dwell on the (secret/private) information or my emotions
Distraction	I distract myself from the (secret/private) information or my emotions
Reappraisal	I changed my perspective or the way I think about the (secret/private) information
Suppression	I suppress the outward expression of my emotions
Sharing	I talk with other people about the (secret/private) information or my emotions
Study 2	
Rumination	I ruminated or dwelled on my emotions
Distraction	I distracted myself from my emotions
Reappraisal	I changed my perspective or the way I was thinking about my emotions
Acceptance	I accepted my emotions as they are
Suppression	I suppressed the outward expression of my emotions
Sharing	I talked to others about my emotions

		Reliability (correlations)	
Study 3		Between-person	Within-person
Rumination	I thought about how I feel about the secret again and again	.82	.56
	I continually thought about what was bothering me about the secret		
Distraction	I distracted myself from my emotions about the secret	.88	.54
	I engaged in activities to distract myself from thinking about the secret		
Reappraisal	I changed my perspective or the way I was thinking about the secret	.75	.46
	I looked at the situation concerning the secret from several different angles		
Acceptance	When I felt emotions about the secret, I understood it was OK to feel that way about the secret	.79	.54
	I allowed myself to feel emotions about the secret without trying to change how I felt		
Suppression	I made an effort to hide my feelings about the secret	.81	.45
	I pretended I was not feeling any emotion about the secret		
Sharing	I talked to others about my emotions concerning the secret	.75	.69
	I told others what the secret meant to me		

Note. Study 2 and Study 3 stem: "To what extent did you use each of the strategies below to influence the emotions you feel about your secret today?" Studies 1 and 2: Responses were made on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*). Study 3: Responses were made on a visual sliding scale ranging from 0 (*not at all*) to 100 (*very much*). We report within-person correlations between individual strategy items in Table S3.1b in the online supplemental materials.

Method

Participants

We analyzed data from 174 participants recruited from Prolific ($M_{age} = 34.56$, $SD = 12.46$, range 18–72; 130 women, 41 men, three nonbinary),[2] a U.K.-based recruitment platform that yields high-quality data (Peer et al., 2022). No prior daily diary research was available to extract effect sizes for power analyses. Accordingly, our sample size was constrained by available funding—we aimed for at least 150 participants after exclusions.

Design and Procedure

The study was approved by the University of Melbourne review board and had three consecutive parts. First, participants completed a baseline survey in which they read a statement introducing the study, provided informed consent, and completed demographics and questionnaires. Second, participants who reported currently keeping at least one secret in the baseline survey were invited to complete the daily diary phase. In this phase, participants completed a short survey about their experiences with their most important secret every evening for 7 consecutive days. Participants received a study notification via Prolific every evening at 6 p.m. Greenwich Mean Time. Daily surveys expired at midnight, and the survey automatically timed out 30 min from the time the link was opened. Third, participants completed a follow-up survey the day after completing the daily diary phase, but this survey was not analyzed for the present investigation. Finally, participants were debriefed, and invited to contact the researchers with any questions.

Participants received monetary compensation, contingent upon compliance on a graded scale where fewer completed surveys meant reduced reimbursement.[3] Participants were informed of the incentive structure via email at the start of the study and were able to keep track of their compliance on Prolific. We sent a total of 1,218 daily surveys and overall compliance was 86.95% ($SD = 18.29\%$), resulting in a final observation size of 1,059.

Measures

This study was part of a larger data collection; here we only report measures relevant to the current research questions. A complete list is available online (https://osf.io/q9fr2/).

---

[2] Although we originally recruited 209 people, 35 people did not meet preregistered preprocessing criteria and were therefore not included in the final sample size. Details on exclusion are provided in the preregistration.

[3] Participants received a fixed payment for completing the baseline survey, and another for completing the follow-up. Participants received a bonus if they completed all daily surveys, in addition to a fixed payment per daily survey completed. More information on the incentive scheme is available in the preregistration.

Figure 1

Emotion Regulation Strategies as a Function of Secret Condition (Bars Indicate Standard Error)

Between-subject conditions ☐ No secret ■ Secret
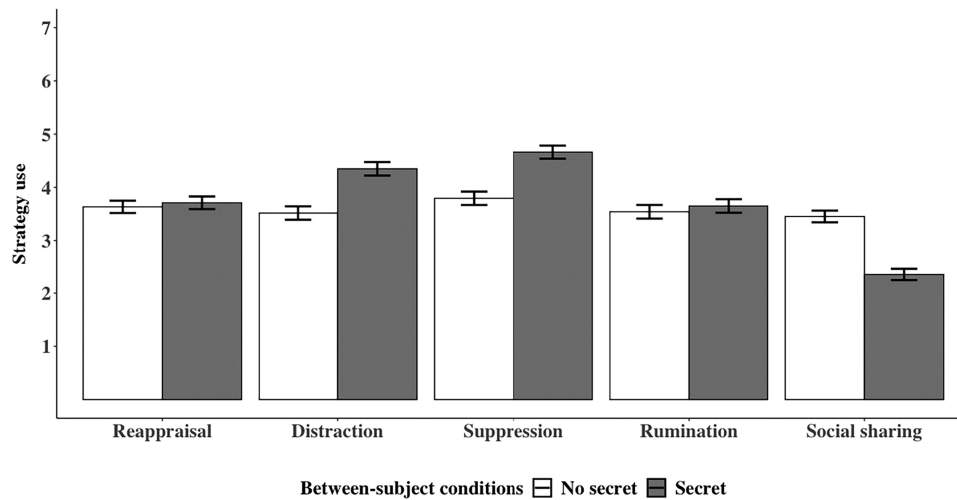
Baseline Survey.

Common Secrets Questionnaire (CSQ). The CSQ asks participants whether they have personally ever kept any secrets within 38 common categories (e.g., lying, stealing, infidelity; Slepian et al., 2017). Response options were (a) I have a secret like this, and no one knows; (b) I have a secret like this. Some people know; (c) I used to have a secret like this; (d) I have had an experience like this, but it was never a secret; and (e) I have never had this experience. Participants were identified as having a secret if they responded as having a secret that no one, or some people, know (i.e., responding 1 or 2 to a given item). We then asked participants to nominate their most important secret and write a few keywords about what this secret involved.[4] They then completed the following questions in relation to this secret only.

Significance of the Secret. We asked participants "How significant is this secret?" with ratings on a scale ranging from 1 (*not at all significant*) to 7 (*very significant*).

Negativity of the Secret. We asked participants "How do you feel about your secret?" and reversed scores of responses on a scale that originally ranged from 1 (*very negative*) to 7 (*very positive*).

Daily Diary Surveys.

Emotion Regulation Strategies. In each daily survey, participants were asked to think about the most important secret they nominated at baseline survey. They were asked to estimate the degree to which they used each of the six emotion regulation strategies to regulate emotions about their secret that day (see Table 1).

Data Analytic Strategy

Descriptive Analyses. All analyses were conducted in R (Version 4.2.2). We estimated descriptive statistics including frequencies, means, standard deviations, and intraclass correlation coefficients (ICCs) for each of the relevant variables.

Multilevel Analyses. We conducted analyses using the packages *lme4* (Bates et al., 2015) to fit linear mixed-effects models, and lmerTest to calculate *p* values (Kuznetsova et al., 2017). Our first set of multilevel analyses tested differences in the intensity of

the different emotion-regulation strategies used to manage secrets. We conducted three-level models (i.e., strategy, nested within day, and nested within persons). Variables were recoded so that emotion regulation intensity scores for each person were predicted by a factor variable comparing the different strategies (replacing each strategy as the reference category in subsequent tests). We included each reference strategy as a fixed-effect predictor. We preregistered models which included random slopes for both day and participant. However, because of convergence issues, we simplified models to include only random slopes for participants. Full-model specifications are reported in Tables S2.3 and S2.4 in the online supplemental materials.

Our second set of multilevel analyses predicted the use of each emotion regulation strategy from features of the secret assessed at baseline. We conducted two-level models (i.e., survey observations, nested within persons). We included the secret features (grand-mean centered) as fixed effect predictors, and a random intercept for participant. For each model returning a significant association, we investigated whether that strategy was used significantly more (or less) intensely than other strategies as a function of the secret feature. We used the same three-level data structure as the first set of analyses (i.e., strategy, nested within days, nested within persons). We predicted daily differences in the intensity of the strategy from secret feature (grand-mean centered) assessed at baseline as a fixed effect, the interaction between the secret feature and the emotion regulation strategy (vs. the other strategies) as a fixed effect, and included a random intercept for both day (nested within participant) and participant, and random slopes for strategy both for day and for participant. When models presented convergence or singular fit issues, we attempted to resolve issues as outlined in our preregistration, by removing random slopes with the least variance. This resulted in models in which we modeled random slopes for

---

[4] We asked participants not to provide individuating information as keywords. We specified that those keywords would be solely used to remind each participant of what secret the daily diary questions referred to, and not used by the researchers.

participant but not day (Bates et al., 2015; see Tables S2.2 and S2.3 in the online supplemental materials for final model specifications).

Results

Descriptive Analyses

Tables 2 and 3 and Figure S1 in the online supplemental materials show descriptives. In Table 2, the ICC demonstrates the proportion of total variance reflecting between-person differences. For all emotion regulation strategies, the variance was relatively evenly split across between-person and within-person sources, with reappraisal showing the highest between-person variance (ICC = .52) and social sharing showing the least (ICC = .37). Table 4 shows between- and within-person correlations among variables of interest, all of which were positive in direction. All emotion regulation strategies correlated with one another, both within-person and between-person. Secret significance and secret negativity correlated positively with one another. In supplementary analyses (see Table S2.12 in the online supplemental materials) we tested whether asking participants to report frequently on regulation "cued" them to noticing such efforts (Bolger & Laurenceau, 2013). We found that reports of emotion regulation strategies did not increase across the course of the week.

Multilevel Analyses

Results of the models reported below are shown in Tables 4 and 5.[5]

Emotion Regulation Strategies. Overall, acceptance was used most intensely, and more than all other strategies ($ps < .001$). Distraction and expressive suppression followed as the second most intensely used strategies and did not differ significantly from one another ($p = .209$). Rumination and reappraisal were used less intensely than suppression and distraction, but were not significantly different from one another ($p = .227$). As in Study 1, social sharing was the least intensely used strategy ($ps < .001$).

Secret Features.

Significance of the Secret. While acceptance remained the most intensely used strategy overall, it was not predicted by secret significance ($p = .697$; Table 5). Instead, secret significance predicted greater daily use of rumination, distraction, and expressive

suppression to manage emotions about the secret ($ps < .029$; Figure S2, Panel A in the online supplemental materials; Table 4). The more significant the secret was rated at baseline, the more intensely people reported using these strategies in daily life. Comparisons between these relationships revealed the relationship between secret significance and the three strategies were not significantly different from one another ($ps > .187$; Tables S2.5–S2.7 in the online supplemental materials).

Negativity of the Secret. Secret negativity predicted greater daily use of cognitive reappraisal, rumination, distraction, and expressive suppression to manage emotions about the secret ($ps < .035$; Figure S2, Panel B in the online supplemental materials; Table 5). Comparisons between these relationships revealed secret negativity more strongly predicted distraction ($ps < .002$; Table S2.10 in the online supplemental materials) than reappraisal, rumination, and expressive suppression.

Discussion

Study 2 represents the first window on emotion regulation of secrets as it unfolds in everyday life. Our findings suggest that acceptance—a strategy not assessed in Study 1—was used most to manage emotions about secrets. This finding is consistent with work showing acceptance in general is a common strategy in everyday life (Grommisch et al., 2020; Heiy & Cheavens, 2014; Southward et al., 2019). Echoing our experimental findings in Study 1, distraction and expressive suppression were the next most intensely used strategies, followed by reappraisal and rumination. Also as in Study 1, people reported using social sharing least intensely to regulate emotions about their secrets in daily life.

In addition to examining which strategies people reported, we assessed what kinds of secrets might need to be regulated. We assessed secret significance and negativity at baseline, finding that these features predicted more intense use of distraction, rumination, and suppression in daily life. Negativity also predicted more intense use of reappraisal. This suggests that secrets people appraise as having impactful and negative consequences for their lives are the ones that are regulated more intensely throughout the week.

Study 3

Study 3 aimed to replicate and extend Study 2. We followed people in daily life for twice as long as Study 2 to capture more instances of emotion regulation. Further, we assessed each strategy with two items to reduce error variance, addressing the limitation common to intensive longitudinal designs of assessing each construct with only one item.

In addition, encouraged by the results in Study 2 concerning the role that secret significance and negativity played in predicting regulatory processes, we investigated other features of secrets. First, we assessed self-reported discoverability of the secret, as Davis and Brazeau (2021) identified fear of discovery as a feature linked to greater preoccupation with the secret. We also considered people's

Table 2

Study 2: Descriptive Statistics

Variable	M	SD (within-person)	SD (between-person)	ICC
Time-variant variables				
Reappraisal	2.19	0.80	1.26	.52
Rumination	2.28	0.99	1.25	.46
Distraction	2.89	1.19	1.57	.48
Sharing	1.58	0.67	0.90	.37
Acceptance	3.81	1.34	1.61	.45
Suppression	2.79	1.13	1.59	.53
Time-invariant variables				
Significance	5.39	—	1.69	—
Negativity	5.32	—	1.74	—

Note. For time-variant variables: Responses were made on a 7-point scale ranging from *not at all* to *very much*. For significance: Responses were made on a 7-point scale ranging from *not at all significant* to *very significant*. For negativity: Responses were provided on a 7-point scale ranging from *very positive* to *very negative*. ICC = intraclass correlation coefficient.

---

[5] Model specifications are reported in Tables S2.2 and S2.3 in the online supplemental materials. We conducted supplementary analysis (not preregistered) as a robustness check to predict social sharing as a binary outcome (yes/no), from secret features. Results are presented in Tables S2.13 and S2.14 in the online supplemental materials.

Table 3
Study 2: Correlations

Variable	1	2	3	4	5	6	7	8
1. Reappraisal	—	.21***	.33***	.19***	.23***	.28***		
2. Rumination	.65***	—	.22***	.33***	.10**	.36***		
3. Distraction	.67***	.74***	—	.10**	.19***	.41***		
4. Sharing	.52***	.50***	.32***	—	.06	.11***		
5. Acceptance	.36***	.18*	.29***	.20**	—	.14***		
6. Suppression	.56***	.72***	.79***	.28***	.33***	—		
7. Significance	.09	.20**	.23**	.02	−.03	.17*	—	
8. Negativity	.16*	.24**	.35***	−.07	−.01	.17*	.34***	—

Note. Between-person correlations underneath the diagonal, within-person correlations above.
* $p < .05$. ** $p < .01$. *** $p < .001$.

beliefs about controllability of the secret, given that keeping a secret requires exerting control over information (Bingley et al., 2022). Finally, Slepian and Koch (2021) identified three foundational features of secrets that predict their psychological outcomes: perceived immorality of keeping the secret, the harm keeping the secret poses to one's relationships, and certainty about why one is keeping the secret. We explored whether these features predicted how people managed feelings about their secrets, because the degree to which a secret is discoverable, controllable, immoral, harmful, and uncertain have been shown to raise the psychological stakes of secrecy, and thus these may be dimensions that correspond to secrets requiring greater regulation.

Method

Participants

Our target sample size was based on a simulated power curve calculation (Murayama et al., 2022) using multilevel parameters from Study 2. The calculation suggested that we required a sample size of $N = 211$ to obtain 80% power with an α level of .5 to detect a small ($d = 0.20$) within-person effect. Thus, we aimed to recruit 250 participants to allow for attrition and to reach the necessary sample size threshold. We recruited participants who met our eligibility criteria as assessed through a brief screener. We provide further details on final sample size and data exclusion in Figure S3 in the online supplemental materials and in the preregistration (https://osf.io/q9fr2/).

We analyzed data from 240 participants recruited from Prolific ($M_{age} = 42.72$, $SD = 11.99$, range from 20 to 80; 165 women, 71 men, three self-identifying, one gender-queer/nonconforming). Most of the sample ($n = 217$; 90.42%) identified with U.K. nationalities (British, Scottish, Welsh, or Northern Irish), and a small proportion of the sample with European ($n = 16$; 6.67% of the sample) or other nationalities (including North, Central and South American, Asian, and African; $n = 7$; 2.91% of the sample).

Design and Procedure

The study was approved by The University of Melbourne review board and had two consecutive parts. The baseline component worked in the same way as in Study 2. In the daily diary phase, participants completed a short survey about their experiences with their most important secret every evening for 14 consecutive days. Participants received a study notification via the Prolific platform every evening between 5:30 and 6:30 p.m. Daily surveys expired at midnight. Finally, participants were debriefed and received

monetary compensation, contingent upon compliance on a graded scale.[6] All participants were informed of the incentive structure prior to completing the study. Participants received a reminder via Prolific on the seventh day of daily survey, to increase their engagement and compliance, if they had completed fewer than six out of seven daily surveys. We sent a total of 3,360 daily surveys and overall compliance (percentage of surveys completed of those received) was 82.23% ($SD = 24.70$%), resulting in a final observation size of 2,763. On average, each individual completed 11–12 daily surveys ($M = 11.5$, $SD = 3.46$) over the 14 days.

Measures

As this study was part of a larger data collection, we detail only the measures relevant to the current research questions. A complete list is available online (https://osf.io/q9fr2/).

Baseline Survey.

CSQ. The CSQ was administered as per Study 2. However, in this study, participants did not provide any keywords about their most significant secret.

Features of the Secret. We asked participants to rate eight features of their secret, as show in Table 6. We preregistered that we would index two items together ("harm to relationships" and "protection of relationships," reversed scored). However, as these items did not form a reliable scale (α = .51), we elected to keep the two items separate.

Daily Diary Surveys. At the beginning of each daily survey, we asked participants whether they could remember what the secret was, and whether it was still secret. Data from 10 participants were excluded, as their responses were inconsistent across the phase of the study, on whether they could remember the secret, or identify it as still being secret.

Emotion Regulation Strategies. Participants indicated their use of six emotion regulation strategies (two items per strategy, provided in randomized order; see Table 1).

Data Analytic Strategy

Descriptive Analyses. As per Study 2, we estimated descriptive statistics including frequencies, means, standard deviations, and ICCs for each of the relevant variables.

---

[6] Participants received a fixed payment for completing the baseline survey. They received a bonus payment for completing at least 13 daily surveys, in addition to a fixed payment per daily survey completed. More information on the incentive scheme is available in the preregistration.

Table 4

Study 2: Comparing Emotion Regulation Strategies Used to Manage Secrets

Effect	Estimate (*SE*)	95% CI	*p*
Model 1E			
Intercept	3.81 (0.12)	[3.57, 4.05]	**<.001**
Acceptance versus distraction	−0.92 (0.14)	[−1.20, −0.64]	**<.001**
Acceptance versus rumination	−1.53 (0.14)	[−1.81, −1.26]	**<.001**
Acceptance versus reappraisal	−1.63 (0.13)	[−1.88, −1.38]	**<.001**
Acceptance versus suppression	−1.02 (0.14)	[−1.30, −0.74]	**<.001**
Acceptance versus sharing	−2.22 (0.13)	[−2.47, −1.97]	**<.001**
Model 1C			
Intercept	2.89 (0.12)	[2.66, 3.13]	**<.001**
Distraction versus rumination	−0.61 (0.08)	[−0.77, −0.45]	**<.001**
Distraction versus reappraisal	−0.71 (0.09)	[−0.88, −0.53]	**<.001**
Distraction versus suppression	−0.10 (0.08)	[−0.25, 0.06]	.209
Distraction versus sharing	−1.30 (0.12)	[−1.53, −1.07]	**<.001**
Model 1D			
Intercept	2.28 (0.10)	[2.09, 2.47]	**<.001**
Rumination versus reappraisal	−0.10 (0.08)	[−0.25, 0.06]	.227
Rumination versus **suppression**	0.51 (0.09)	[0.35, 0.68]	**<.001**
Rumination versus sharing	−0.68 (0.09)	[−0.85, −0.51]	**<.001**
Model 1A			
Intercept	2.18 (0.09)	[2.00, 2.37]	**<.001**
Reappraisal versus **suppression**	0.61 (0.10)	[0.40, 0.82]	**<.001**
Reappraisal versus sharing	−0.59 (0.08)	[−0.75, −0.43]	**<.001**
Model 1B			
Intercept	2.79 (0.12)	[2.55, 3.03]	**<.001**
Suppression versus sharing	−1.20 (−1.12)	[−1.44, −0.96]	**<.001**

Note. Bold strategy indicates significant difference. The leading strategy on each line was set as the reference category. Hence, negative estimates indicate the alternative strategies were used less than the reference strategy, while positive estimates indicate the alternative strategies were used more than the reference strategy. Bold indicates significant fixed effects. CI = confidence interval.

Results

Descriptive Analyses

Descriptive statistics are shown in Tables 7 and 8 and Table S3.1 in the online supplemental materials. Echoing results from Study 2, the variance in emotion regulation strategies was relatively evenly split across between-person and within-person sources, with rumination showing the highest between-person variance (ICC = .56) and social sharing the least (ICC = .34). Table 9 shows between- and within-person correlations among variables of interest. As in Study 2, all emotion regulation strategies correlated with one another, both within-person and between-person. Almost all secret features were significantly correlated. As in Study 2, supplementary analyses (see Table S3.27 in the online supplemental materials) showed self-reported emotion regulation did not increase over the course of the study.

Multilevel Analyses

Results of multilevel models are shown in Tables 9 and 10.[7]

Emotion Regulation Strategies. As in Study 2, acceptance was used most intensely (*p*s < .001), although was not significantly different from distraction (*p* = .287). Expressive suppression was used less intensely than distraction (*p* < .001), but more intensely than

Multilevel Analyses. Our analyses mirrored those conducted in Study 2. We report final model specifications in Tables S3.2–S3.4 in the online supplemental materials.

rumination (*p* < .001), which was used more intensely than reappraisal (*p* < .001). Again, social sharing was the least intensely reported strategy (*p*s < .001).

Secret Features.

Significance of the Secret. Secret significance predicted greater daily use of rumination, distraction, acceptance, and expressive suppression (*p*s < .034; Figure S5, Panel A in the online supplemental materials; Table 9). Echoing findings from Study 2, the more significant the secret was rated at baseline, the more intensely people reported using these strategies in daily life (although significance did not predict acceptance in Study 2). Comparisons between these relationships revealed significance predicted the strategies to a similar degree (*p*s > .126; Tables S3.11–S3.14 in the online supplemental materials).

Negativity of the Secret. Secret negativity predicted greater daily use of distraction and suppression, and less daily use of acceptance to manage emotions about the secret (*p*s < .002; Figure S5, Panel B in the online supplemental materials; Table 9). Comparisons between these relationships revealed negativity predicted less intense acceptance more strongly than all other strategies (*p*s < .001; Table S3.12 in the online supplemental materials) and predicted suppression and

---

[7] Tables S3.5 and S3.6 in the online supplemental materials provide a summary of results for Study 2 and Study 3. Because the intensity of social sharing was so low, we report supplementary analyses predicting occurrence (yes/no) of social sharing from secret features in Tables S3.28–S3.35 in the online supplemental materials.

Table 5

Study 2: Multilevel Models Predicting Intensity of Emotion Regulation From Features of the Secret

Effect	Estimate (*SE*)	95% CI	*p*	Effect	Estimate (*SE*)	95% CI	*p*
Reappraisal				Sharing			
Intercept	2.19 (0.09)	[2.00, 2.37]	**<.001**	Intercept	1.59 (0.07)	[1.45, 1.72]	**<.001**
Secret significance	0.06 (0.06)	[−0.05, 0.17]	.271	Secret significance	0.01 (0.04)	[−0.07, 0.09]	.812
Secret negativity	0.12 (0.05)	[0.01, 0.22]	**.035**	Secret negativity	−0.04 (0.04)	[−0.11, 0.04]	.351
Rumination				Acceptance			
Intercept	2.27 (0.09)	[2.09, 2.46]	**<.001**	Intercept	3.81 (0.12)	[3.57, 4.05]	**<.001**
Secret significance	0.14 (0.06)	[0.04, 0.25]	**.010**	Secret significance	−0.03 (0.07)	[−0.17, 0.11]	.697
Secret negativity	0.17 (0.05)	[0.07, 0.28]	**.002**	Secret negativity	−0.01 (0.07)	[−0.15, 0.13]	.893
Distraction				Suppression			
Intercept	2.89 (0.12)	[2.66, 3.11]	**<.001**	Intercept	2.78 (0.12)	[2.55, 3.02]	**<.001**
Secret significance	0.21 (0.07)	[0.07, 0.35]	**.003**	**Secret significance**	0.16 (0.07)	[0.02, 0.30]	**.029**
Secret negativity	0.31 (0.06)	[0.19, 0.44]	**<.001**	**Secret negativity**	0.16 (0.07)	[0.02, 0.29]	**.022**

Note. All predictors are grand-mean centered. Bold indicates significant fixed effects. CI = confidence interval.

distraction similarly (*p* = .077; Tables S3.11 and S3.13 in the online supplemental materials).

Discoverability of the Secret. Secret discoverability predicted greater daily use of cognitive reappraisal, although the evidence for this link was weak (*p* = .047). This relationship was not stronger than the other nonsignificant associations with secret discoverability (*p*s > .111; Table S3.14 and Figure S6 in the online supplemental materials).

Controllability of the Secret. Secret controllability predicted greater daily use of all emotion regulation strategies, except social sharing (*p*s < .001; Table 9). Comparisons between these relationships revealed secret controllability predicted all strategies to a similar degree (*p*s > .107; Tables S3.15–S3.19 and Figure S7 in the online supplemental materials).

Immorality of Keeping the Secret. Perceived immorality of keeping the secret predicted greater daily use of cognitive reappraisal (*p* = .007). This relationship was significantly stronger than the nonsignificant relationships between perceived immorality and acceptance (*p* = .006) and social sharing (*p* = .006; Table S3.20 and Figure S8 in the online supplemental materials).

Social Harm of Keeping the Secret. Perceiving keeping the secret as harmful to one's relationships predicted daily use of all strategies except acceptance (most *p*s < .008; Figure S9, Panel A in the online supplemental materials; Table 9). This was the only secret feature to predict greater use of social sharing (though barely; *p* = .043). Harm to relationships predicted social sharing less strongly than reappraisal, rumination, and suppression (*p*s < .017), but not less than distraction (*p* = .058; Table S3.21 in the online supplemental materials).

Social Protection of Keeping the Secret. Perceiving keeping the secret as protecting one's relationships predicted greater daily use of expressive suppression (barely; *p* = .043; Figure S9, Panel B in the online supplemental materials; Table 9). This relationship was not stronger than the other nonsignificant associations with secret protection (*p*s > .085; Tables S3.21–S3.23 in the online supplemental materials).

Certainty About Keeping the Secret. This feature of the secret did not predict daily use of any of the emotion regulation strategies we included in the study (*p*s > .073).

Discussion

Study 3 consolidates findings from our previous studies. Acceptance was again the most intensely used strategy to manage emotions about secrets, followed by distraction and expressive suppression. Social sharing was used least intensely in all three studies. Taken together, our findings indicate that as people go about their daily lives, they seek to cope with secrets by moving on from them, either by accepting or distracting away from their feelings. What people do not do to manage emotions about secrets is share those feelings with others, either by expressing them or by reaching out for social support.

Study 3 confirmed secret significance as an important predictor of emotion regulation strategies. The more significant a secret was, the more intensely people used suppression and rumination, as well as distraction. Secret negativity was also associated with greater use of suppression and distraction, as well as less use of acceptance. While future research would do well to investigate the relatively

Table 6

Study 3: Items Assessing Secret Features

Feature	Item	7-point scale anchors
Significance	How significant is this secret?	*Not at all* to *very significant*
Negativity	How do you feel about your secret?	*Very positive* to *very negative*
Discoverability	This secret is discoverable	*Strongly disagree* to *strongly agree*
Controllability	I feel able to keep this secret	*Strongly disagree* to *strongly agree*
Immorality	Keeping this secret is immoral	*Strongly disagree* to *strongly agree*
Social harm	Keeping this secret is harmful to at least one of my relationships	*Strongly disagree* to *strongly agree*
Social protection	Keeping this secret protects at least one of my relationships	*Strongly disagree* to *strongly agree*
Certainty	I know why I am keeping this secret	*Strongly disagree* to *strongly agree*

Table 7
Study 3: Descriptive Statistics

Variable	M	SD (within person)	SD (between person)	ICC
Time-variant variables				
Reappraisal	14.03	10.89	15.28	.52
Rumination	16.11	12.28	17.72	.56
Distraction	25.77	16.78	22.45	.54
Sharing	5.11	5.92	8.79	.34
Acceptance	27.62	18.75	21.09	.46
Suppression	20.52	15.54	19.48	.50
Time-invariant variables				
Significance	5.46	—	1.57	—
Negativity	5.27	—	1.70	—
Discoverability	4.25	—	1.91	—
Controllability	4.90	—	1.82	—
Immorality	2.50	—	1.65	—
Social harm	3.68	—	2.11	—
Social protection	4.32	—	2.18	—
Certainty	6.06	—	1.25	—

Note. For time-variant variables: Responses were made on visual sliding scale ranging from 0 (*not at all*) to 100 (*very much*). For significance: Responses were made on a 7-point scale ranging from *not at all significant* to *very significant*. For negativity: Responses were provided on a 7-point scale ranging from *very positive* to *very negative*. The other time-invariant variables were assessed on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

unexplored areas of trivial and positive secrets (Slepian, Greenaway, & Masicampo, 2020; Slepian et al., 2023), our studies link the selection of short-term emotion regulation strategies to certain type of secrets, namely the important and negative ones.

The lack of consistent associations between perceived immorality of keeping the secret and regulation was surprising. Secrets are a moral issue, with both the act and the content of secrecy often considered ethically questionable. For example, people can perceive secret keeping as immoral (Hart et al., 2024) and reveal other people's secrets when morally outraged as a way of punishing the secret-keeper (Salerno & Slepian, 2022). In Study 3, we found that people who perceived keeping their secret as immoral reported greater reappraisal. It might be that reappraisal in this context is used to justify the decision to keep the secret, or to minimize the perceived immorality of keeping the secret to decrease negative emotion.

Of the remaining secret features, harm to relationships and controllability emerged as consistent predictors of most emotion regulation strategies—perhaps indicating that with these kinds of secrets, people try many ways to manage their feelings. Where harm to relationships may reflect a need to regulate, as we elaborate in the general discussion, controllability may track the degree to which people feel they can regulate emotions about their secrets. Indeed, controllability is an important ingredient in regulation, with expected success being an antecedent to regulation effort (Bigman et al., 2016). In this light, our findings provide empirical support for the theoretical link between people's beliefs around the controllability of their emotions and the occurrence of regulation (Ford & Gross, 2019).

General Discussion

We conducted three studies to understand how people manage the emotional stakes of the information they choose to keep secret. Building on an experimental study, we moved to studying secrecy

Table 8
Study 3: Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Reappraisal	—	.36***	.25***	.21***	.36***	.24***								
2. Rumination	.67***	—	.29***	.20***	.38***	.35***								
3. Distraction	.54***	.61***	—	.05*	.23***	.46***								
4. Sharing	.49***	.48***	.21**	—	.22***	.08***								
5. Acceptance	.53***	.50***	.31***	.37***	—	.25***								
6. Suppression	.57***	.72***	.78***	.34***	.34***	—								
7. Significance	.09	.20**	.21***	.03	.14*	.19**	—							
8. Negativity	-.03	.08	.25***	-.10	-.22***	.20**	.41***	—						
9. Discoverability	.13*	.11	.06	.06	.09	.10	.13*	-.06	—					
10. Controllability	.24**	.21***	.26***	.08	.22***	.29***	.51***	.28***	.16*	—				
11. Immorality	.17**	.10	.02	.05	-.02	.09	.21***	.27***	.08	.33***	—			
12. Harm to relationships	.20**	.21**	.17**	.13*	.04	.27***	.27***	.23***	.22***	.44***	.32***	—		
13. Protection of relationships	.10	.06	.04	.06	.07	.13*	.32***	.22***	-.06	.48***	.24***	.35***	—	
14. Uncertainty of goal	.04	.09	.07	-.03	.07	.12	.30***	.22***	-.13*	.34***	.07	.09	-.36***	—

Note. Between-person correlations underneath the diagonal, within-person correlations above.
* *p* < .05.   ** *p* < .01.   *** *p* < .001.

Table 9
Study 3: Comparing Emotion Regulation Strategies Used to Manage Secrets

Effect	Estimate (SE)	95% CI	p
Model 1E			
Intercept	27.71 (1.36)	[25.03, 30.39]	**<.001**
Acceptance versus distraction	−1.79 (1.68)	[−5.10, 1.52]	.287
Acceptance versus rumination	−11.47 (1.27)	[−13.97, −8.97]	**<.001**
Acceptance versus reappraisal	−13.62 (1.19)	[−15.97, −11.28]	**<.001**
Acceptance versus suppression	−7.30 (1.54)	[−10.32, −4.27]	**<.001**
Acceptance versus sharing	−22.73 (1.27)	[−25.22, −20.24]	**<.001**
Model 1C			
Intercept	25.91 (1.46)	[23.04, 28.79]	**<.001**
Distraction versus rumination	−9.68 (1.21)	[−12.05, −7.30]	**<.001**
Distraction versus reappraisal	−11.83 (1.25)	[−14.29, 9.37]	**<.001**
Distraction versus suppression	−5.50 (0.93)	[−7.34, −3.67]	**<.001**
Distraction versus sharing	−20.94 (1.45)	[−23.79, −18.08]	**<.001**
Model 1D			
Intercept	16.24 (1.17)	[13.94, 18.54]	**<.001**
Rumination versus reappraisal	−2.15 (0.92)	[−3.96, −0.35]	**.020**
Rumination versus **suppression**	4.17 (0.94)	[2.33, 6.02]	**<.001**
Rumination versus sharing	−11.26 (1.03)	[−13.29, −9.24]	**<.001**
Model 1A			
Intercept	14.08 (1.00)	[12.12, 16.05]	**<.001**
Reappraisal versus **suppression**	6.33 (1.08)	[4.20, 8.45]	**<.001**
Reappraisal versus sharing	−9.11 (0.88)	[−10.84, −7.38]	**<.001**
Model 1B			
Intercept	20.41 (1.26)	[17.94, 22.89]	**<.001**
Suppression versus sharing	−15.43 (1.20)	[−17.79, −13.07]	**<.001**

Note. Responses were made on visual sliding scale ranging from 0 (*not at all*) to 100 (*very much*). Bold strategy indicates significant difference. The leading strategy on each line was set as the reference category. Hence, negative estimates indicate the alternative strategies were used less than the reference strategy, while positive estimates indicate the alternative strategies were used more than the reference strategy. Bold indicates significant fixed effects. CI = confidence interval.

"in the wild" to capture regulation as it unfolds in everyday life. The findings of Study 1 indicate that people manage emotions about secrets differently than information simply deemed private (i.e., unknown but open for discussion). In particular, people reported using expressive suppression, as well as distracting themselves from negative secret information—and using less social sharing—compared to negative private information. Findings from Studies 2 and 3 replicated this broad pattern of usage, with the potential silver lining that people also reported using acceptance to manage their emotions. In unpacking which secrets required the most regulation, findings from Studies 2 and 3 suggest that significant, negative, controllable, and socially harmful secrets are associated with greater use of rumination, suppression, and distraction.

Implications for Regulation of Information and Emotion

Our findings offer a window into the types of strategies people use to manage emotions about secrets. Some of these findings were expected. For example, relative to some other strategies, people reported using expressive suppression more intensely and social sharing less intensely to manage secrets. These findings align with theory that emphasizes inhibition as a key process in secrecy (Critcher & Ferguson, 2014; McDonald et al., 2020; Pennebaker, 1985; Slepian, 2022). Here, we find this inhibition extends beyond verbal channels to include emotional inhibition. These emotion regulation strategies seem likely to increase the chances that secret information remains secret, though may also come with costs, as

suppression and (lack of) social sharing can have detrimental social and personal consequences (John & Gross, 2004; Rimé et al., 2020; although this is not always the case: Butler et al., 2007; Ford & Mauss, 2015; Kalokerinos, Greenaway, & Casey, 2017).

Some other strategies that we theorized to be implicated in secrecy did not emerge. For example, given the role of preoccupation in recent theories of secrecy (Davis et al., 2021; Pennebaker, 1989; Slepian et al., 2015, 2016), we suspected that rumination may be used in the daily management of secrets. Contrary to this assumption, we found rumination was not a commonly reported strategy. Instead of dwelling on their feelings, our findings suggest that people prefer to distract themselves away from how they feel about their secrets. This strategy may have some emotional benefits. Indeed, attentional redeployment can be helpful in downregulating negative emotions (i.e., Gross & Thompson, 2007). Distraction also requires relatively little effort (Sheppes, 2014), and this may be particularly true in daily life where people have many opportunities to distract from how they feel when secrets come to mind. However, while refocusing attention elsewhere can provide short-term relief to secret keepers, it may come at a longer-term well-being cost. For example, choosing not to focus on processing feelings about secrets may get in the way of finding a resolution (Slepian, 2022), which would allow one to break the cycle of repeatedly having a secret come to mind.

Another unexpected finding came in the popularity of acceptance as a strategy in Studies 2 and 3. Acceptance is used consistently and commonly in everyday life (i.e., Heiy & Cheavens, 2014; Grommisch et al., 2020; Lennarz et al., 2019; Southward et al.,

Table 10
Study 3: Multilevel Models Predicting Intensity of Emotion Regulation From Features of the Secret

Variable	Reappraisal Est (SE)	95% CI	p	Sharing Est (SE)	95% CI	p	Rumination Est (SE)	95% CI	p	Acceptance Est (SE)	95% CI	p	Distraction Est (SE)	95% CI	p	Suppression Est (SE)	95% CI	p
Intercept	14.04 (0.99)	[12.09, 15.98]	<.001	5.09 (0.56)	[3.98, 6.20]	<.001	16.12 (1.13)	[13.90, 18.34]	<.001	27.66 (1.35)	[24.99, 30.32]	<.001	25.81 (1.42)	[23.00, 28.62]	<.001	20.52 (1.24)	[18.08, 22.97]	<.001
Significance	0.88 (0.63)	[−0.36, 2.12]	.163	0.15 (0.36)	[−0.56, 0.86]	.679	**2.23 (0.72)**	**[0.81, 3.64]**	**.002**	**1.84 (0.86)**	**[0.14, 3.54]**	**.034**	**3.06 (0.91)**	**[1.27, 4.85]**	**.001**	**2.29 (0.79)**	**[0.73, 3.85]**	**.004**
Negativity	−0.28 (0.58)	[−1.43, 0.87]	.631	−0.54 (0.33)	[−1.18, 0.11]	.105	0.84 (0.67)	[−0.48, 2.17]	.212	**−2.72 (0.78)**	**[−4.26, −1.17]**	**.001**	**3.24 (0.83)**	**[1.61, 4.88]**	**<.001**	**2.31 (0.73)**	**[0.88, 3.75]**	**.002**
Discoverable	**1.02 (0.51)**	**[0.01, 2.03]**	**.047**	0.30 (0.29)	[−0.28, 0.88]	.307	0.97 (0.60)	[−0.21, 2.14]	.107	0.96 (0.71)	[−0.44, 2.36]	.180	0.69 (0.76)	[−0.80, 2.19]	.361	1.01 (0.65)	[−0.28, 2.30]	.125
Controllable	**2.04 (0.53)**	**[0.99, 3.08]**	**<.001**	0.36 (0.31)	[−0.24, 0.97]	.240	**2.07 (0.62)**	**[0.85, 3.29]**	**.001**	**2.46 (0.73)**	**[1.01, 3.91]**	**.001**	**3.18 (0.78)**	**[1.65, 4.71]**	**<.001**	**3.05 (0.67)**	**[1.73, 4.36]**	**<.001**
Immorality	**1.61 (0.59)**	**[0.45, 2.78]**	**.007**	0.25 (0.34)	[−0.42, 0.92]	.468	1.10 (0.69)	[−0.27, 2.46]	.115	−0.21 (0.83)	[−1.84, 1.42]	.796	0.25 (0.88)	[−1.49, 1.99]	.775	1.06 (0.76)	[−0.44, 2.56]	.164
Social harm	**1.45 (0.46)**	**[0.55, 2.36]**	**.002**	**0.54 (0.26)**	**[0.02, 1.06]**	**.043**	**1.73 (0.53)**	**[0.68, 2.78]**	**.001**	0.39 (0.65)	[−0.88, 1.66]	.548	**1.82 (0.68)**	**[0.48, 3.16]**	**.008**	**2.45 (0.57)**	**[1.32, 3.59]**	**<.001**
Social protection	0.73 (0.45)	[−0.16, 1.62]	.108	0.23 (0.26)	[−0.28, 0.73]	.382	0.49 (0.53)	[−0.55, 1.53]	.353	0.67 (0.62)	[−0.56, 1.90]	.284	0.38 (0.67)	[−0.94, 1.69]	.574	**1.17 (0.57)**	**[0.04, 2.30]**	**.043**
Certainty	0.44 (0.80)	[−1.14, 2.01]	.585	−0.25 (0.45)	[−1.15, 0.64]	.578	1.25 (0.92)	[−0.57, 3.08]	.176	1.17 (1.10)	[−1.00, 3.34]	.288	1.25 (1.17)	[−1.06, 3.56]	.286	1.82 (1.01)	[−0.17, 3.82]	.073

Note. For time-variant variables: Responses were made on visual sliding scale ranging from 0 (*not at all*) to 100 (*very much*). For significance: Responses were made on a 7-point scale ranging from (*not at all significant*) to (*very significant*). For negativity: Responses were provided on a 7-point scale ranging from *very positive* to *very negative*. The other time invariant variables were assessed on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). All predictors are grand-mean centered. Bold indicates significant fixed effects. Est = estimate; CI = confidence interval.

2019) and is generally associated with better well-being outcomes (i.e., Ford et al., 2018; Koval et al., 2012). Our findings might hint at this being a helpful strategy in people's regulation toolkit if they are actively accepting emotions about their secrets (by nonjudgmentally embracing their feelings). However, acceptance can be maladaptive when it is deployed passively, in which case it may reflect the absence of intentional efforts to regulate (i.e., Aldao & Nolen-Hoeksema, 2010; Hayes et al., 1996). Considered in this light, people might be passively noticing how they feel about their secrets, rather than intentionally engaging in acceptance with the purpose of regulating. As such, future research would do well to investigate people's goals when engaging emotion regulation strategies to manage their secrets.

Emerging research emphasizes the importance of understanding the goal of regulation prior to studying the selection and implementation of a strategy (i.e., Eldesouky & English, 2019; Greenaway & Kalokerinos, 2019; Greenaway et al., 2021; Kalokerinos, Tamir, & Kuppens, 2017; Tamir, 2016; Tamir et al., 2019; Wilms et al., 2020). When secrets are on the mind, people have multiple goals to juggle. For example, people may choose to use a strategy like expressive suppression in order to keep a misdeed secret (information regulation goal), or to regulate guilt felt about the misdeed (emotion regulation goal). Further, one might use cognitive reappraisal to think about the pros and cons of keeping the secret (information regulatory goal) or to help themselves feel better (or worse) about the reason for the secret (emotion regulation goal). Our findings point to the possibility that people may use strategies that accomplish one or more of these goals simultaneously. Having a more precise understanding of people's regulatory goals would allow researchers to better contextualize regulatory success, rather than paint strategies with a broad brush (i.e., in adaptive vs. maladaptive terms; Bonanno & Burton, 2013). This is because deciding whether a regulation strategy is effective requires understanding what people are trying to achieve by regulating in the first place.

In addition to identifying the strategies people use to cope with emotions about secrets, our findings provide insight into what it is about secrets that prompts the use of these strategies. In so doing, our work contributes to a broader theme in the emotion regulation literature on regulatory flexibility (Bonanno & Burton, 2013; Bonanno et al., 2004), which explores how context shapes strategy selection and implementation (Pauw et al., 2019; Sheppes, 2020). Our findings also contribute to the secrecy literature by exploring which dimensions do (or do not) distinguish the ways people cope with secrets. In this vein, we identified several features that influenced the strategies people selected to manage the emotions they felt about their secrets. First, we considered significance and negativity of secrets, finding a link between those features and greater daily use of suppression, rumination, and distraction. Second, we investigated newly identified features that influence the psychological weight of secrets (Slepian & Koch, 2021), including the harm they pose to relationships, the immorality of keeping the information secret, and certainty about why one is keeping the secret. Of these features, perceived controllability predicted greater daily use of nearly all strategies (except social sharing) and social harm predicted greater daily use of all strategies (and less use of social sharing).

Interestingly, appraising keeping the secret as harmful to, and not protective of, relationships is what appeared to prompt greater regulation. Understanding the reasons for this distinction will require future research that delves more deeply into the motives people

have for keeping secrets in the first place (i.e., to answer the question: Why would people keep a secret that harms their relationships?). Speculatively, however, it may be that appraising a secret as harmful to relationships exacerbates the motivational conflict inherent in secrecy between keeping information hidden on the one hand and affiliating on the other (Slepian et al., 2019). As such, appraising secrecy as socially harmful may prompt a greater need to regulate as one manages the internal conflict between keeping personal information hidden and maintaining social harmony.

At a practical level, our findings suggest some avenues for future research to explore ways of improving the well-being of people who chose to keep secrets. For instance, interventions will need to account for the fact that individuals may seek to cope with their secrets while still keeping them hidden from others. Existing advice like confiding in a third party (Slepian & Moulton-Tetlock, 2019) might not be useful to individuals who are not yet ready to talk about their secrets and still hold secrecy as an intention. Instead, interventions could identify and target the effectiveness of currently underutilized strategies (e.g., cognitive reappraisal). Using this strategy would avail people of the benefits that come from considering a different perspective (e.g., Webb et al., 2012), while avoiding the potential costs of confiding the secret (Slepian & Moulton-Tetlock, 2019). In addition, while it might not be practical to share the content of the secret with others, it might be possible (and useful) for people share their emotions evoked by the secret without discussing the secret itself (Finkenauer & Rimé, 1998), or to reflect on how keeping the secret is beneficial for their relationships (McDonald et al., 2020). Further, our findings provide insight into the kinds of secrets that may be in danger of poor regulation. For instance, secret significance, negativity, and perceived social harm may be internal "warning signals" that people need to put effort into regulating emotions in relation to those secrets.

Limitations and Future Directions

While offering valuable insights into the regulation of real-life secrets, our studies do have limitations. First, and common in emotion research, our measures of emotion regulation tend to conflate frequency and intensity of emotion regulation strategy use, though more closely resemble the latter. Future research would do well to distinguish how much people employ a strategy versus the effort they invest in using a given strategy (Gutentag & Tamir, 2022; Tran et al., 2024). Additionally, future work could expand the range of regulation assessment further by assessing different emotion regulation strategy tactics (Gross, 2015; Koole, 2009), which are theoretically related, yet not fully overlapping, ways of implementing specific strategies.

In addition, people normally hold multiple types of secrets at any given time (Slepian et al., 2017), yet here we only considered emotion regulation of one (namely, the most important) secret per person. While we designed our studies to explore within-person use of emotion regulation strategies, an intriguing future direction would be to explore between-secret variation, that is, whether certain types of secrets (e.g., addiction vs. infidelity) require greater regulation than others.

Our findings also open avenues for future exploration. Our work focused on regulation of secrets concerning one's own personal information. However, secrets are often about other people (e.g., knowing that a friend is being cheated on, and not letting them know) or are held for other people (i.e., a friend confiding that they are cheating, and asking you to not tell anyone; Slepian & Greenaway, 2018; Slepian & Kirby, 2018). Future studies would do well to identify whether people use similar or distinct types of regulation strategies to manage these different types of secrets. Additionally, extending on our studies' insights, we suggest future studies directly investigate well-being outcomes following implementation of the strategies used by secret-keepers. Gaining more real-life understanding of which strategies result in the best regulatory outcomes would provide practical guidance on how to improve the well-being of people living with secrets.

Conclusion

We explored processes at the novel intersection of information regulation and emotion regulation. In an experiment, we found that people regulate emotions about secrets in ways that are different from information that is simply unknown. In two daily diary studies, we investigated how people regulate emotions about secrets as they unfold in real life contexts. We found that people predominantly use acceptance, distraction, and suppression—and avoid social sharing—to cope with their secrets as they juggle everyday activities. Further, secrets that are significant, negative, controllable, and socially harmful appeared to be the secrets most intensely regulated. Our findings lay the groundwork for future investigations of regulatory processes that support the well-being of people living with secrets—that is, all of us.

References

Aldao, A., & Nolen-Hoeksema, S. (2010). Specificity of cognitive emotion regulation strategies: A transdiagnostic examination. *Behaviour Research and Therapy*, *48*(10), 974–983. https://doi.org/10.1016/j.brat.2010.06.002

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, *30*(2), 217–237. https://doi.org/10.1016/j.cpr.2009.11.004

Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, *67*(1), 1–48. https://doi.org/10.18637/jss.v067.i01

Bedrov, A., Gable, S., & Liberman, Z. (2021). It takes two (or more): The social nature of secrets. *WIRES Cognitive Science*, *12*(6), Article e1576. https://doi.org/10.1002/wcs.1576

Bianchi, V., Greenaway, K. H., Moeck, E. K., Slepian, M. L., & Kalokerinos, E. K. (2024). Secrecy in everyday life. *Personality and Social Psychology Bulletin*. https://doi.org/10.1177/01461672241226560

Bigman, Y. E., Mauss, I. B., Gross, J. J., & Tamir, M. (2016). Yes I can: Expected success promotes actual success in emotion regulation. *Cognition and Emotion*, *30*(7), 1380–1387. https://doi.org/10.1080/02699931.2015.1067188

Bingley, W. J., Greenaway, K. H., & Haslam, S. A. (2022). A Social-Identity Theory of Information-Access Regulation (SITIAR): Understanding the psychology of sharing and withholding. *Perspectives on Psychological Science*, *17*(3), 827–840. https://doi.org/10.1177/1745691621997144

Bolger, N., & Laurenceau, J. P. (2013). *Intensive longitudinal methods: An introduction to diary and experience sampling research*. Guilford Press.

Bonanno, G. A., & Burton, C. L. (2013). Regulatory flexibility: An individual differences perspective on coping and emotion regulation. *Perspectives on Psychological Science*, *8*(6), 591–612. https://doi.org/10.1177/1745691613504116

Bonanno, G. A., Papa, A., Lalande, K., Westphal, M., & Coifman, K. (2004). The importance of being flexible: The ability to both enhance and suppress emotional expression predicts long-term adjustment. *Psychological Science*, *15*(7), 482–487. https://doi.org/10.1111/j.0956-7976.2004.00705.x

Brans, K., Koval, P., Verduyn, P., Lim, Y. L., & Kuppens, P. (2013). The regulation of negative and positive affect in daily life. *Emotion*, *13*(5), 926–939. https://doi.org/10.1037/a0032400

Butler, E. A., Lee, T. L., & Gross, J. J. (2007). Emotion regulation and culture: Are the social consequences of emotion suppression culture-specific? *Emotion*, *7*(1), 30–48. https://doi.org/10.1037/1528-3542.7.1.30

Chapman, B. P., Fiscella, K., Kawachi, I., Duberstein, P., & Muennig, P. (2013). Emotion suppression and mortality risk over a 12-year follow-up. *Journal of Psychosomatic Research*, *75*(4), 381–385. https://doi.org/10.1016/j.jpsychores.2013.07.014

Critcher, C. R., & Ferguson, M. J. (2014). The cost of keeping it hidden: Decomposing concealment reveals what makes it depleting. *Journal of Experimental Psychology: General*, *143*(2), 721–735. https://doi.org/10.1037/a0033468

Cutuli, D. (2014). Cognitive reappraisal and expressive suppression strategies role in the emotion regulation: An overview on their modulatory effects and neural correlates. *Frontiers in Systems Neuroscience*, *8*, Article 175. https://doi.org/10.3389/fnsys.2014.00175

Davis, C. G., & Brazeau, H. (2021). Factors promoting greater preoccupation with a secret. *British Journal of Social Psychology*, *60*(4), 1419–1435. https://doi.org/10.1111/bjso.12462

Davis, C. G., Brazeau, H., Xie, E. B., & McKee, K. (2021). Secrets, psychological health, and the fear of discovery. *Personality and Social Psychology Bulletin*, *47*(5), 781–795. https://doi.org/10.1177/0146167220946195

Eldesouky, L., & English, T. (2019). Regulating for a reason: Emotion regulation goals are linked to spontaneous strategy use. *Journal of Personality*, *87*(5), 948–961. https://doi.org/10.1111/jopy.12447

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/BF03193146

Finkenauer, C., & Rimé, B. (1998). Socially shared emotional experiences vs. emotional experiences kept secret: Differential characteristics and consequences. *Journal of Social and Clinical Psychology*, *17*(3), 295–318. https://doi.org/10.1521/jscp.1998.17.3.295

Ford, B. Q., & Gross, J. J. (2019). Why beliefs about emotion matter: An emotion-regulation perspective. *Current Directions in Psychological Science*, *28*(1), 74–81. https://doi.org/10.1177/0963721418806697

Ford, B. Q., Lam, P., John, O. P., & Mauss, I. B. (2018). The psychological health benefits of accepting negative emotions and thoughts: Laboratory, diary, and longitudinal evidence. *Journal of Personality and Social Psychology*, *115*(6), 1075–1092. https://doi.org/10.1037/pspp0000157

Ford, B. Q., & Mauss, I. B. (2015). Culture and emotion regulation. *Current Opinion in Psychology*, *3*, 1–5. https://doi.org/10.1016/j.copsyc.2014.12.004

Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, *87*(2), 228–245. https://doi.org/10.1037/0022-3514.87.2.228

Greenaway, K. H., & Kalokerinos, E. K. (2019). The intersection of goals to experience and express emotion. *Emotion Review*, *11*(1), 50–62. https://doi.org/10.1177/1754073918765665

Greenaway, K. H., Kalokerinos, E. K., Hinton, S., & Hawkins, G. E. (2021). Emotion experience and expression goals shape emotion regulation strategy choice. *Emotion*, *21*(7), 1452–1469. https://doi.org/10.1037/emo0001012

Grommisch, G., Koval, P., Hinton, J. D., Gleeson, J., Hollenstein, T., Kuppens, P., & Lischetzke, T. (2020). Modeling individual differences in emotion regulation repertoire in daily life with multilevel latent profile analysis. *Emotion*, *20*(8), 1462–1474. https://doi.org/10.1037/emo0000669

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, *2*(3), 271–299. https://doi.org/10.1037/1089-2680.2.3.271

Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, *39*(3), 281–291. https://doi.org/10.1017/S0048577201393198

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, *26*(1), 1–26. https://doi.org/10.1080/1047840X.2014.940781

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, *85*(2), 348–362. https://doi.org/10.1037/0022-3514.85.2.348

Gross, J. J., Richards, J. M., & John, O. P. (2006). Emotion regulation in everyday life. In D. K. Snyder, J. Simpson, & J. N. Hughes (Eds.), *Emotion regulation in couples and families: Pathways to dysfunction and health* (pp. 13–35). American Psychological Association.

Gross, J. J., & Thompson, R. A. (2007). Emotion regulation: Conceptual foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3–24). The Guilford Press.

Gutentag, T., & Tamir, M. (2022). Putting effort into emotion regulation: Manipulating desirability and motivational strength. *Affective Science*, *3*(4), 878–893. https://doi.org/10.1007/s42761-022-00155-0

Hart, E., VanEpps, E. M., Yudkin, D. A., & Schweitzer, M. E. (2024). The interpersonal costs of revealing others' secrets. *Journal of Experimental Social Psychology*, *110*, Article 104541. https://doi.org/10.1016/j.jesp.2023.104541

Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology*, *64*(6), 1152–1168. https://doi.org/10.1037/0022-006X.64.6.1152

Heiy, J. E., & Cheavens, J. S. (2014). Back to basics: A naturalistic assessment of the experience and regulation of emotion. *Emotion*, *14*(5), 878–891. https://doi.org/10.1037/a0037231

Heppner, W. L., Spears, C. A., Vidrine, J. I., & Wetter, D. W. (2015). Mindfulness and emotion regulation. In B. D. Ostafin, M. D. Robinson, & B. P. Meier (Eds.), *Handbook of mindfulness and self-regulation* (pp. 107–120). Springer Science + Business Media. https://doi.org/10.1007/978-1-4939-2263-5_9

Hofmann, S. G., & Asmundson, G. J. (2008). Acceptance and mindfulness-based therapy: New wave or old hat? *Clinical Psychology Review*, *28*(1), 1–16. https://doi.org/10.1016/j.cpr.2007.09.003

Inzlicht, M., & Schmeichel, B. J. (2012). What is ego depletion? Toward a mechanistic revision of the resource model of self-control. *Perspectives on Psychological Science*, *7*(5), 450–463. https://doi.org/10.1177/1745691612454134

John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality*, *72*(6), 1301–1334. https://doi.org/10.1111/j.1467-6494.2004.00298.x

Kalokerinos, E. K., Greenaway, K. H., & Casey, J. P. (2017). Context shapes social judgments of positive emotion suppression and expression. *Emotion*, *17*(1), 169–186. https://doi.org/10.1037/emo0000222

Kalokerinos, E. K., Greenaway, K. H., & Denson, T. F. (2015). Reappraisal but not suppression downregulates the experience of positive and negative emotion. *Emotion*, *15*(3), 271–275. https://doi.org/10.1037/emo0000025

Kalokerinos, E. K., Tamir, M., & Kuppens, P. (2017). Instrumental motives in negative emotion regulation in daily life: Frequency, consistency, and predictors. *Emotion*, *17*(4), 648–657. https://doi.org/10.1037/emo0000269

Kidd, S. M. (2003). *The secret life of bees*. Headline Review.

Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition & Emotion*, *23*(1), 4–41. https://doi.org/10.1080/02699930802619031

Koval, P., Kuppens, P., Allen, N. B., & Sheeber, L. (2012). Getting stuck in depression: The roles of rumination and emotional inertia. *Cognition & Emotion*, *26*(8), 1412–1427. https://doi.org/10.1080/02699931.2012.667392

Kuznetsova, A., Brockhoff, P. B., & Christensen, R. H. (2017). Lmertest package: Tests in linear mixed effects models. *Journal of Statistical Software*, *82*(13), 1–26. https://doi.org/10.18637/jss.v082.i13

Lennarz, H. K., Hollenstein, T., Lichtwarck-Aschoff, A., Kuntsche, E., & Granic, I. (2019). Emotion regulation in action: Use, selection, and success of emotion regulation in adolescents' daily lives. *International Journal of Behavioral Development*, *43*(1), 1–11. https://doi.org/10.1177/01650254 18755540

Liu, Z., Kalokerinos, E. K., & Slepian, M. L. (2023). Emotion appraisals and coping with secrets. *Personality and Social Psychology Bulletin*, *49*(9), 1379–1391. https://doi.org/10.1177/01461672221085377

Maas, J., Wismeijer, A. A. J., Van Assen, M. A. L. M., & Aquarius, A. E. A. M. (2012). Is it bad to have secrets? Cognitive preoccupation as a toxic element of secrecy. *International Journal of Clinical and Health Psychology*, *12*(1), 23–37.

Marchetti, I., Koster, E. H., Klinger, E., & Alloy, L. B. (2016). Spontaneous thought and vulnerability to mood disorders: The dark side of the wandering mind. *Clinical Psychological Science*, *4*(5), 835–857. https://doi.org/10.1177/2167702615622383

Marroquín, B. (2011). Interpersonal emotion regulation as a mechanism of social support in depression. *Clinical Psychology Review*, *31*(8), 1276–1290. https://doi.org/10.1016/j.cpr.2011.09.005

McDonald, R. I., Salerno, J. M., Greenaway, K. H., & Slepian, M. L. (2020). Motivated secrecy: Politics, relationships, and regrets. *Motivation Science*, *6*(1), 61–78. https://doi.org/10.1037/mot0000139

Murayama, K., Usami, S., & Sakaki, M. (2022). Summary-statistics-based power analysis: A new and practical method to determine sample size for mixed-effects modeling. *Psychological Methods*, *27*(6), 1014–1038. https://doi.org/10.1037/met0000330

Nolen-Hoeksema, S. (2000). The role of rumination in depressive disorders and mixed anxiety/depressive symptoms. *Journal of Abnormal Psychology*, *109*(3), 504–511. https://doi.org/10.1037/0021-843X.109.3.504

Pauw, L. S., Sauter, D. A., Van Kleef, G. A., & Fischer, A. H. (2019). Stop crying! the impact of situational demands on interpersonal emotion regulation. *Cognition and Emotion*, *33*(8), 1587–1598. https://doi.org/10.1080/02699931.2019.1585330

Pauw, L. S., Sauter, D. A., van Kleef, G. A., Lucas, G. M., Gratch, J., & Fischer, A. H. (2022). The avatar will see you now: Support from a virtual human provides socio-emotional benefits. *Computers in Human Behavior*, *136*, Article 107368. https://doi.org/10.1016/j.chb.2022.107368

Peer, E., Rothschild, D., Gordon, A., Evernden, Z., & Damer, E. (2022). Data quality of platforms and panels for online behavioral research. *Behavior Research Methods*, *54*(4), 1643–1662. https://doi.org/10.3758/s13428-021-01694-3

Pennebaker, J. W. (1985). Traumatic experience and psychosomatic disease: Exploring the roles of behavioural inhibition, obsession, and confiding. *Canadian Psychology*, *26*(2), 82–95. https://doi.org/10.1037/h0080025

Pennebaker, J. W. (1989). Confession, inhibition, and disease. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 22, pp. 211–244). Academic Press.

Rimé, B. (2007). The social sharing of emotion as an interface between individual and collective processes in the construction of emotional climates. *Journal of Social Issues*, *63*(2), 307–322. https://doi.org/10.1111/j.1540-4560.2007.00510.x

Rimé, B. (2009). Emotion elicits the social sharing of emotion: Theory and empirical review. *Emotion Review*, *1*(1), 60–85. https://doi.org/10.1177/1754073908097189

Rimé, B., Bouchat, P., Paquot, L., & Giglio, L. (2020). Intrapersonal, interpersonal, and social outcomes of the social sharing of emotion. *Current Opinion in Psychology*, *31*, 127–134. https://doi.org/10.1016/j.copsyc.2019.08.024

Rimé, B., Philippot, P., Boca, S., & Mesquita, B. (1992). Long-lasting cognitive and social consequences of emotion: Social sharing and rumination. *European Review of Social Psychology*, *3*(1), 225–258. https://doi.org/10.1080/14792779243000078

Salerno, J. M., & Slepian, M. L. (2022). Morality, punishment, and revealing other people's secrets. *Journal of Personality and Social Psychology*, *122*(4), 606–633. https://doi.org/10.1037/pspa0000284

Sheppes, G. (2014). Emotion regulation choice: Theory and findings. In J. J. Gross (Ed.), *Handbook of emotion regulation* (2nd ed., pp. 126–139). The Guilford Press.

Sheppes, G. (2020). Transcending the "good & bad" and "here & now" in emotion regulation: Costs and benefits of strategies across regulatory stages. In B. Gawronski (Ed.), *Advances in experimental social psychology* (pp. 185–236). Elsevier Academic Press. https://doi.org/10.1016/bs.aesp.2019.09.003

Singmann, H., Bolker, B., Westfall, J., Aust, F., Ben-Shachar, M. S., Højsgaard, S., Fox, J., Lawrence, M. A., Mertens, U., Love, J., Lent, R., & Christensen, R. H. B. (2020). *afex: Analysis of factorial experiments* (R package) [Computer software]. https://cran.rproject.org/package=afex

Slepian, M. L. (2022). A process model of having and keeping secrets. *Psychological Review*, *129*(3), 542–563. https://doi.org/10.1037/rev0000282

Slepian, M. L., Camp, N. P., & Masicampo, E. J. (2015). Exploring the secrecy burden: Secrets, preoccupation, and perceptual judgments. *Journal of Experimental Psychology: General*, *144*(2), e31–e42. https://doi.org/10.1037/xge0000052

Slepian, M. L., Chun, J. S., & Mason, M. F. (2017). The experience of secrecy. *Journal of Personality and Social Psychology*, *113*(1), 1–33. https://doi.org/10.1037/pspa0000085

Slepian, M. L., & Greenaway, K. H. (2018). The benefits and burdens of keeping others' secrets. *Journal of Experimental Social Psychology*, *78*, 220–232. https://doi.org/10.1016/j.jesp.2018.02.005

Slepian, M. L., Greenaway, K. H., Camp, N. P., Halevy, N., & Galinsky, A. D. (2023). The bright side of secrecy: The energizing effect of positive secrets. *Journal of Personality and Social Psychology*, *125*(5), 1018–1035. https://doi.org/10.1037/pspa0000352

Slepian, M. L., Greenaway, K. H., & Masicampo, E. J. (2020). Thinking through secrets: Rethinking the role of thought suppression in secrecy. *Personality and Social Psychology Bulletin*, *46*(10), 1411–1427. https://doi.org/10.1177/0146167219895017

Slepian, M. L., Halevy, N., & Galinsky, A. D. (2019). The solitude of secrecy: Thinking about secrets evokes goal conflict and feelings of fatigue. *Personality and Social Psychology Bulletin*, *45*(7), 1129–1151. https://doi.org/10.1177/0146167218810770

Slepian, M. L., & Kirby, J. N. (2018). To whom do we confide our secrets? *Personality and Social Psychology Bulletin*, *44*(7), 1008–1023. https://doi.org/10.1177/0146167218756032

Slepian, M. L., Kirby, J. N., & Kalokerinos, E. K. (2020). Shame, guilt, and secrets on the mind. *Emotion*, *20*(2), 323–328. https://doi.org/10.1037/emo0000542

Slepian, M. L., & Koch, A. (2021). Identifying the dimensions of secrets to reduce their harms. *Journal of Personality and Social Psychology*, *120*(6), 1431–1456. https://doi.org/10.1037/pspa0000202

Slepian, M. L., Masicampo, E. J., & Galinsky, A. D. (2016). The hidden effects of recalling secrets: Assimilation, contrast, and the burdens of secrecy. *Journal of Experimental Psychology: General*, *145*(8), e27–e48. https://doi.org/10.1037/xge0000194

Slepian, M. L., Masicampo, E. J., Toosi, N. R., & Ambady, N. (2012). The physical burdens of secrecy. *Journal of Experimental Psychology: General*, *141*(4), 619–624. https://doi.org/10.1037/a0027598

Slepian, M. L., & Moulton-Tetlock, E. (2019). Confiding secrets and well-being. *Social Psychological and Personality Science*, *10*(4), 472–484. https://doi.org/10.1177/1948550618765069

Smart, L., & Wegner, D. M. (1999). Covering up what can't be seen: Concealable stigma and mental control. *Journal of Personality and Social Psychology*, *77*(3), 474–486. https://doi.org/10.1037/0022-3514.77.3.474

Southward, M. W., Heiy, J. E., & Cheavens, J. S. (2019). Emotions as context: Do the naturalistic effects of emotion regulation strategies depend on the regulated emotion? *Journal of Social and Clinical Psychology*, *38*(6), 451–474. https://doi.org/10.1521/jscp.2019.38.6.451

Tamir, M. (2016). Why do people regulate their emotions? A taxonomy of motives in emotion regulation. *Personality and Social Psychology Review*, *20*(3), 199–222. https://doi.org/10.1177/1088868315586325

Tamir, M., Halperin, E., Porat, R., Bigman, Y. E., & Hasson, Y. (2019). When there'sa will, there'sa way: Disentangling the effects of goals and means in emotion regulation. *Journal of Personality and Social Psychology*, *116*(5), 795–816. https://doi.org/10.1037/pspp0000232

Tran, A., Greenaway, K. H., Kostopoulos, J., Tamir, M., Gutentag, T., & Kalokerinos, E. K. (2024). Does interpersonal emotion regulation effort pay off? *Emotion*, *24*(2), 345–356. https://doi.org/10.1037/emo0001289

Tull, M. T., Jakupcak, M., & Roemer, L. (2010). Emotion suppression: A preliminary experimental investigation of its immediate effects and role in subsequent reactivity to novel stimuli. *Cognitive Behaviour Therapy*, *39*(2), 114–125. https://doi.org/10.1080/16506070903280491

Van Kleef, G. A. (2009). How emotions regulate social life: The emotions as social information (EASI) model. *Current Directions in Psychological Science*, *18*(3), 184–188. https://doi.org/10.1111/j.1467-8721.2009.01633.x

Webb, T. L., Miles, E., & Sheeran, P. (2012). Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological Bulletin*, *138*(4), 775–808. https://doi.org/10.1037/a0027600

Wilms, R., Lanwehr, R., & Kastenmüller, A. (2020). Emotion regulation in everyday life: The role of goals and situational factors. *Frontiers in Psychology*, *11*, Article 877. https://doi.org/10.3389/fpsyg.2020.00877