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Secrets at work



Michael L. Slepian^{a,*}, Eric M. Anicich^b, Nir Halevy^c

^a Columbia University, New York, NY 10027, United States

^b University of Southern California, Los Angeles, CA, United States

^c Stanford University, Stanford, CA, United States

ARTICLE INFO	A B S T R A C T
<i>Keywords:</i> Secrecy Status Social isolation Stress Meaning	Organizational secrecy is central to national security, politics, business, technology, healthcare, and law, but its effects are largely unknown. Keeping organizational secrets creates social divides between those who are required to keep the secret and those who are not allowed to know it. We demonstrate that keeping organizational secrets simultaneously evokes feelings of social isolation and status, which have opposing effects on employee well-being. Specifically, organizational secrecy harms hedonic well-being through increased work stress, yet enhances eudaimonic well-being through increased meaningfulness of work. Work stress and meaningfulness, in turn, have opposing effects on overall job satisfaction. These effects emerged across five main studies and two supplemental studies using correlational and experimental methods, spanning numerous empirical contexts (N = 12,211). Moreover, we replicated these effects using multiple operationalizations of our

constructs and when accounting for important control variables.

1. Introduction

Every day, people are required to keep secrets on behalf of their work organizations. Psychologists and physicians, lawyers and bankers, government employees and intelligence officers, and those in industries as diverse as entertainment, technology, and healthcare, must all keep confidential information about their clients, products, and jobs secret. The obligation to keep such information secret becomes most apparent when it is violated, such as when companies fire employees who leak information to the media, or when national intelligence agencies expose and prosecute employees for doing the same.

Organizational secrets can provide important strategic benefits, for example, by safeguarding valuable intellectual property or securing a first mover advantage in entering a new market (Lieberman & Montgomery, 1988). Organizational secrecy has been theorized to be "woven into the fabric of all organizations" (Grey & Costas, 2016). For something so pervasive, we know surprisingly little about the effects of organizational secrets for their keepers. Recent research on the psychological effects of personal secrets finds that secrets often harm their keepers (Slepian, 2022, 2024). Given that the typical personal secret is related to negative well-being outcomes, this suggests that while keeping secrets may benefit an organization, it might simultaneously harm the well-being of those who have to keep the secret.

In the current work, we are interested in how having to keep organizational secrets shapes employee well-being. Specifically, we draw on the well-established distinction between hedonic and eudaimonic wellbeing (Kahneman & Deaton, 2010; Ryan & Deci, 2001). Hedonic wellbeing is defined in terms of affect balance (i.e., the experience of more positive affect and less negative affect), whereas eudaimonic well-being involves finding meaning in one's experiences (Nelson, Fuller, Choi, & Lyubomirsky, 2014; Ryan & Deci, 2001). Having children, for example, can increase stress while also increasing meaning, and this distinction can explain mixed effects on well-being (Glass, Simon, & Andersson, 2016). Below, we argue that being required to keep organizational secrets will similarly be associated with higher levels of stress at work, but also with finding greater meaning at work (see Fig. 1 for our overall theoretical model). In developing our arguments, we draw on Self-Determination Theory (SDT, Ryan & Deci, 2002), which provides a framework for understanding how certain workplace practices, like keeping organizational secrets, can influence these two types of wellbeing by affecting employees' ability to satisfy their fundamental needs.

Existing work on secrecy has examined the well-being harms of keeping secrets (Slepian et al., 2017, 2019, 2020). Of particular relevance to the present work is social isolation. The requirement to keep an organizational secret limits one's ability to talk about one's self and one's work, which is a major path to forging connections with others.

* Corresponding author. *E-mail address:* michael.slepian@columbia.edu (M.L. Slepian).

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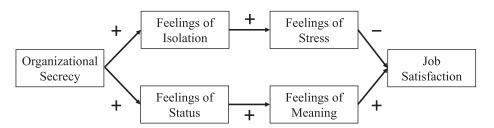


Fig. 1. Model of Employee Experiences with Organizational Secrecy.

Accordingly, having to keep organizational secrets might make people feel socially isolated. While not yet connected to the research on secrecy, stress is a well-documented outcome of social isolation (Cacioppo & Hawkley, 2003; Cacioppo et al., 2000, 2002). We thus predict that keeping organizational secrets will harm hedonic well-being by evoking feelings of social isolation and stress. Similar to other visceral experiences, social isolation and stress have direct and negative hedonic impacts in the short term (Loewenstein, 1996). If observed, these findings would point to a pervasive, yet understudied harm facing some organizational members.

In addition to psychological harms, it is possible that keeping organizational secrets also brings psychological benefits. Indeed, early theories emphasized the substantive and symbolic value of secrets. For example, Simmel (1906) noted: "what is withheld from the many appears to have a special value" (p. 464). More recent theorizing has considered the ways in which organizational secrets create divisions between those who are in the know and those who are left in the dark, thereby "creating and cementing" subgroup identities in organizations (Costas & Grey, 2014, p. 1424; Grey & Costas, 2016). We propose that being part of the special subgroup of people with whom an organizational secret is shared evokes elevated feelings of status.

The effects of organizational secrecy on employees' feelings of status, in turn, are likely to impact the meaningfulness of work, which is the basis of longer-term eudaimonic well-being. Whereas prior work has noted that people keep secrets to avoid certain harms (e.g., keeping a secret to protect a relationship, McDonald, Salerno, Greenaway, & Slepian, 2020; keeping a wrongdoing secret to escape punishment, Salerno & Slepian, 2022; Slepian & Bastian, 2017), prior work has yet to examine eudaimonic benefits to well-being such as increased meaning (cf. Slepian, Greenaway, Camp, & Galinsky, 2023). That is, even when keeping an organizational secret is stressful, it may also provide meaning. Our theory that organizational secrets provide both stress and meaning is consistent with the findings of a pilot study of individuals keeping highly confidential organizational secrets who frequently spoke of the social isolation caused by organizational secrecy, but also feelings of status (see the Supplementary Online Materials, SOM, for more details about the results of this qualitative pilot study).

Based on the existing literature discussed below, we predict that feelings of social isolation and status are proximal outcomes of organizational secrecy, whereas stress and meaning are distal outcomes of organizational secrecy (indeed, stress and meaning have been considered well-being outcomes in the well-being literature; Ryff, Boylan, & Kirsch, 2021).

The current research makes multiple contributions to research on secrecy, social relations in organizations, and employee well-being. First, we add to the secrecy literature, which has focused on personal secrets, by studying employees' ongoing experiences with organizational secrecy. To the best of our knowledge, this is the first research to offer a large-scale examination of the psychological effects of ecologically valid organizational secrets in real-world settings. We compare employees' experiences with current versus former organizational secrets, and we compare the experiences of employees with jobs that require secrecy to the experiences of employees with jobs that do not require secrecy. Additionally, we compare the effects of keeping organizational secrets to the effects of keeping two types of personal secrets – that is, personal secrets that are kept on behalf of an *individual* (e.g., a friend or coworker) and personal secrets that are kept on behalf of a *collective* (e.g., one's family).

Second, we contribute to the literature on social relations in organizations by demonstrating that a prevalent practice across numerous organizations – requiring employees to keep organizational secrets – has divergent effects on two commonly studied aspects of social relations in organizations. Specifically, we demonstrate that organizational secrecy is related to increased feelings of social isolation as well as increased feelings of social status. Hence, relational experiences in the workplace are shaped by a widespread organizational practice: requiring employees to keep secrets on behalf of their workplace.

Third, we contribute to the literature on employee well-being by documenting that organizational secrecy predicts feelings of stress and meaningfulness of work. Thus, we show how organizational secrecy can simultaneously decrease hedonic well-being and increase eudaimonic well-being. This is significant because as Ryan and Deci (2001, p. 148) note, "in spite of the significant overlap, the most interesting results may be those that highlight the factors leading to divergence rather than just convergence in the hedonic and eudaimonic indicators of well-being." Overall, our theoretical model and empirical findings link a widespread, though understudied, organizational phenomenon to important downstream consequences.

2. Defining organizational secrecy

In this section, we define organizational secrecy, develop hypotheses concerning feelings of social isolation and status as proximal outcomes of organizational secrecy, and finally, we consider the downstream implications of these effects for employees' feelings of stress, feelings of meaning, and job satisfaction.

2.1. Distinguishing personal and organizational secrets

We define *organizational secrets* as secrets about a workplace practice or activity that an employee is required to keep from organizational outsiders, other organizational insiders, or a mix of these two groups. At the core of personal and organizational secrecy is "an intention to conceal information from one or more individuals" (Slepian, Chun, & Mason, 2017, p. 2). As with personal secrets, employees may keep organizational secrets by avoiding certain conversation topics, deflecting or refraining from answering a question, or simply lying when asked about secret information (Slepian, 2022). Prior work finds that irrespective of the specific behaviors people engage in to keep their secret hidden, it is the larger meaning behind the secret that determines its effects (Slepian & Koch, 2021). Critically, organizational secrets meaningfully differ from personal secrets in two important ways. First, unlike personal secrecy, which begins with an *intrinsic intention* to keep information unknown from one or more others (Slepian, 2022), organizational secrecy begins with an organization imposing *extrinsic constraints* on an employee's freedom to share information with others. Thus, rather than being a matter of individual choice, organizational secrecy is a matter of compliance with assigned responsibility (e.g., to not disclose information about product development, upcoming layoffs, etc.). This distinction is important because external goals and constraints set by organizations can prompt reactance (Laurin, Kay, Proudfoot, & Fitzsimons, 2013) and undermine employees' intrinsic motivations (Ordóñez, Schweitzer, Galinsky, & Bazerman, 2009) and well-being (Kasser & Ryan, 2001).

Accordingly, and second, whereas the consequences of revealing personal secrets depend in part on listeners' reactions (which often prove helpful to the secret keeper; Nguyen & Slepian, 2022; Slepian & Moulton-Tetlock, 2019), the consequences of revealing organizational secrets typically involve *formal sanctions*—losing one's job, being prosecuted, or both. Thus, disclosing organizational secrets often results in tremendous *costs*: relational (expulsion), reputational (being seen as untrustworthy), legal, and financial.

2.2. Distinguishing organizational secrecy from other social boundaries

Organizational secrets create a boundary between those with and without access to the secret information, thus creating subgroups within the organization. Carton and Cummings (2012) developed a typology of three types of subgroups in work teams: 1) identity-based subgroups (e. g., based on age, gender, race), 2) resource-based subgroups (e.g., based on power), and 3) knowledge-based subgroups (e.g., based on information and expertise). Organizational secrecy most closely relates to a specific type of knowledge-based subgroup: an informational subgroup based on differing access to the organizational secret.

In organizational settings, there is often a strategic motivation to overcome faultlines and break down subgroup boundaries for the benefit of the organization. For example, diversity, equity, and inclusion initiatives aim to integrate identity-based subgroups, mentoring programs aim to integrate resource-based subgroups (e.g., between higherpower mentors and lower-power mentees), and cross-functional teams aim to integrate knowledge-based subgroups (e.g., exhibited in language such as "We need to break down silos").

Importantly, however, with organizational secrecy, the motivational force goes in the opposite direction. That is, rather than aiming to increase information exchange, the requirement to keep organizational secrets puts pressure on employees to *avoid* crossing the informational boundary between those with and without access to the secret information. Moreover, while there is typically a pervasive belief that members of different subgroups can perform better by considering alternative sources of knowledge and different perspectives from other subgroups, information exchange across subgroup boundaries is strictly forbidden when it comes to subgroups created by organizational secrets. This prohibition, we argue, may cause feelings of social isolation and stress, and simultaneously, provide those with privileged access to the secret information a heightened sense of status and meaning. In the **Supplemental Material**, we further distinguish organizational secrecy from other evasive behaviors in the workplace.

3. Theory and hypotheses

Fig. 1 depicts our overall theoretical model. In the remainder of this section, we develop hypotheses related to each component of the model. We subsequently test our hypotheses with five main studies using diverse samples, methodologies, and comparison conditions, including comparing the effects of keeping current organizational secrets to the effects of a) former organizational secrets, b) no organizational secrecy requirement, and c) secrets kept on behalf of a friend, a coworker, or one's family.

3.1. The effects of keeping organizational secrets on fundamental need satisfaction

We propose that organizational secrecy has divergent effects on employees' need satisfaction. Below we develop testable hypotheses that focus on the fulfillment versus frustration of fundamental psychological needs (Deci, Olafsen, & Ryan, 2017). Our central claim is that being required to keep an organizational secret can facilitate, but also undermine, employees' ability to satisfy fundamental human needs, with corresponding implications for hedonic and eudaimonic wellbeing.

Two of the fundamental needs identified by self-determination theory (SDT, Ryan & Deci, 2002) are relevant to our theorizing: the need for relatedness and the need for competence.¹ The need for relatedness is closely tied to well-being. For example, Ryan and Deci (2001, p. 154) note that "of all factors that influence happiness"—a quintessential indicator of subjective well-being—"relatedness is at or very near the top of the list" (e.g., see Argyle, 1987; DeNeve, 1999; Kahneman, Diener, & Schwarz, 1999).

We focus on social isolation as a critical experience that impacts employees' momentary affective experiences. Indeed, the perception of social isolation at work (e.g., Weiss, 1973) is "a necessarily negative state" (Cacioppo & Patrick, 2008; Waytz, Chou, Magee, & Galinsky, 2015, p. 70) that can fluctuate from day to day (Gabriel, Lanaj, & Jennings, 2021). In particular, feeling isolated at work involves "employees' subjective affective evaluations of, and feelings about, whether their affiliation needs are being met by the people they work with and the organization they work for" (Ozcelik & Barsade, 2018, p. 2345). In sum, social isolation is more closely related to hedonic well-being than eudaimonic well-being and threatens employees' ability to satisfy their fundamental need for relatedness (Ryan & Deci, 2002).

As it relates to organizational secrecy, sharing information and experiences is an affiliative process that generates interpersonal closeness (Aron, Melinat, Aron, Vallone, & Bator, 1997; Leary, 2010; Ryan & Deci, 2002) and contributes to satisfying individuals' fundamental needs for relatedness (Ryan & Deci, 2002). Having to keep an organizational secret, in contrast, constrains what employees are allowed to talk about. Hence, organizational secret holders are denied a primary mechanism of social affiliation—sharing information with others (Echterhoff, 2011)—which limits their ability to connect with others (see also Jiang, John, Boghrati, & Kouchaki, 2022; Liu & Slepian, 2018). Limiting individuals' opportunities to share information about their clients, tasks, and challenges at work is likely to interfere with this affiliative path to relatedness fulfillment, and thus should increase feelings of social isolation. Taken together, we predict:

Hypothesis 1. Keeping a current organizational secret vs. a) a former organizational secret or b) no organizational secrecy requirement positively predicts feelings of social isolation.

At the same time, being trusted with privileged access to information signals confidence in an employee's ability to keep the secret, consistent with the established link between perceived competence and trustwor-thiness (Mayer, Davis, & Schoorman, 1995). Hence, being trusted with secret organizational information supports fulfillment of employees'

¹ We did not focally theorize from autonomy, the third fundamental need identified by self-determination theory, as we expect that the relationship between organizational secrecy and autonomy to be complex. Organizational secrecy may be considered a source of informational power, but it also restricts employees' autonomy by constraining information sharing. Given the potential for opposing effects on autonomy, we focused instead on relatedness and status (closely related to competence, also a fundamental human need; Anderson et al., 2015). We assessed feelings of power for completeness in our studies; because findings pertaining to power go beyond our theoretical model, we report them in the Supplementary Online Materials.

fundamental need for competence (Ryan & Deci, 2002). Receiving privileged access to organizational secrets also fulfills employees' fundamental need for status (Anderson, Hildreth, & Howland, 2015), which is distinct yet related to the need for competence (see Schwartz, 1992 for a description of the close association among different self-enhancement motives).

The perception that one possesses high status in the eyes of others (i. e., one is respected and admired by others) is directly linked to inferences of competence and the instrumental value that an individual can bring to one's group (Anderson et al., 2015; Anderson & Kilduff, 2009; Bendersky & Pai, 2018; Chapais, 2015; Kennedy, Anderson, & Moore, 2013; Leary et al., 2014; Li, Chen, & Blader, 2016). This perspective aligns with work showing that those who possess secret knowledge are perceived by those who lack access to the secret knowledge as having elevated social status (e.g., an employee who is "in the know" vs. one who is "on a need to know basis;" Fedorenko, Berthon, & Edelman, 2020; Fine & Holyfield, 1996).

Unlike social isolation, which we argue implicates hedonic wellbeing, feelings of status implicate eudaimonic well-being. Specifically, the factors that influence eudaimonic well-being (vs. hedonic wellbeing) are typically in service of longer-term goals (Ryan & Deci, 2001), which is consistent with the view that eudaimonic well-being is "more associated with being challenged and exerting effort" (Ryan & Deci, 2001, p. 146; Waterman, 1993). Importantly, these experiences and behaviors can influence one's sense of status. Indeed, two of the most common ways that individuals earn status in the eyes of others is by overcoming challenges (e.g., to acquire instrumentally useful expertise) and exerting effort (e.g., to help the group by using that expertise; Anderson et al., 2015). Taken together, we predict:

Hypothesis 2. Keeping a current organizational secret vs. a) a former organizational secret, b) no organizational secrecy requirement, or c) a secret kept on behalf of a friend, a coworker, or one's family positively predicts feelings of social status.

Note that Hypothesis 2 (vs. Hypothesis 1) includes additional comparisons to personal secrets kept on behalf of an individual or collective (i.e., secrets kept on behalf of a friend, a coworker, or one's family). Organizational secrecy, unlike these three types of personal secrecy, involves the unique combination of a collective commitment to secrecy and an organizational context. We propose that only secrets that have both of these qualities will evoke heightened feelings of status and meaning. Yet, as reviewed earlier, personal secrets do evoke feelings of social isolation (Slepian, Halevy, & Galinsky, 2019). Hence, we expect individuals to experience similarly high levels of social isolation and, in turn, stress from having to keep both personal and organizational secrets. Given that we expect no difference in feelings of social isolation and stress between personal and organizational secrets, we did not articulate formal hypotheses related to these contrasts (which involve predicted null effects).

3.2. Divergent downstream effects of organizational secrecy

Satisfying the needs for relatedness and competence—experiences that are grounded in hedonic and eudaimonic well-being (Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005, p.538; Ryan & Deci, 2001)—provides the "nutriments for human thriving" (Spreitzer & Porath, 2014, p. 245; see also Sheldon & Krieger, 2007; Sheldon & Schüler, 2011). In particular, feelings of social isolation resulting from keeping an organizational secret should be associated with finding one's work more stressful, whereas elevated feelings of status resulting from keeping an organizational secret should be associated with finding one's work more meaningful.

Stressors are conditions and events that evoke strain in a particular moment or over longer periods of time (Kahn & Byosiere, 1992; Sonnentag & Frese, 2003). Prior work has suggested a number of harmful health effects of keeping personal secrets (Kelly & McKillop, 1996) and choosing not to disclose other personally sensitive information (Boland, Slepian, & Ward, 2024; Pennebaker & O'Heeron, 1984). This work suggests that having (vs. not having) to keep an organizational secret may lead to increased stress for employees.

Social isolation in particular is a well-documented life stressor (Cacioppo & Hawkley, 2003; Cacioppo et al., 2000, 2002). Specifically, feelings of social isolation contribute to stress due to reduced perceptions of social support (Gable & Bedrov, 2022), while feelings of social connectedness provide a buffer against the negative effects of stress (Cohen & Wills, 1985). Like social isolation, stress is a hedonic experience, affecting one's momentary affective state (Marco & Suls, 1993). In one study, researchers used an experience sampling methodology to survey respondents over a seven-day period. They found that, despite being exposed to the same objective stressors throughout the day, participants who felt more (vs. less) socially isolated perceived their everyday experiences to be more stressful (Hawkley, Burleson, Berntson, & Cacioppo, 2003). Similarly, research has shown that social isolation can heighten feelings of stress as a result of maladaptive coping (Cacioppo & Hawkley, 2003) and give rise to more negative interpretations of life events (Campagne, 2019). Taken together, we predict:

Hypothesis 3a. Keeping a current organizational secret vs. a) a former organizational secret or b) no organizational secrecy requirement positively predicts feelings of work stress.

Hypothesis 3b. Feelings of social isolation mediate the positive effect of keeping a current organizational secret vs. a) a former organizational secret or b) no organizational secrecy requirement on feelings of work stress.

Next, meaningfulness of work refers to employees' beliefs that their daily work responsibilities have broader significance (Rosso, Dekas, & Wrzesniewski, 2010). We propose that being required to keep an organizational secret (vs. no requirement) is associated with employees perceiving their work as more meaningful, a core predictor of eudaimonic well-being (McGregor & Little, 1998; Ryan & Deci, 2001).

To develop this prediction, we draw on a theory of interpersonal sensemaking (Wrzesniewski, Dutton, & Debebe, 2003), which describes how work meaning is created based on cues derived from interactions with others. This perspective stipulates that "employees actively compose work meaning by what they notice and how they interpret the actions of others at work" (Wrzesniewski et al., 2003, p. 97). Being granted access to an organizational secret is a direct interpersonal cue, indicating that an employee's role or work responsibilities are deemed significant (i.e., meaningful) by powerful others in the organization. Employees' sense of meaning at work, therefore, is co-constructed in interaction with others (Cooley, 1902) because "cues employees read from others are often diagnostic about worth, competence and other indicators of value" (Wrzesniewski et al., 2003, p. 112).

Moreover, we propose that feelings of status will mediate the effect of organizational secrecy on perceived meaningfulness of work. To the extent employees who are keeping (vs. not keeping) organizational secrets perceive themselves as having higher status in the eyes of others at work, as we have argued (see H2), it follows based on our previous logic that this social cue would lead them to subsequently view their work as more meaningful (Wrzesniewski et al., 2003).

Several converging lines of evidence support this link between selfperceptions of status and finding meaning in one's work. For instance, when people perceive their roles as more important, they perceive their work as being more valued by and having greater impact on others (Ashforth & Kreiner, 1999; Grant, 2008). Similarly, employees with occupations that are higher in objective prestige and employees who have a high level of self-perceived status are more likely to view their work as a calling, which in turn, is associated with greater work meaning (Duffy, Autin, & Douglass, 2016) as well as life, health, and job satisfaction (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). Other work has found that perceived occupational stigma (a marker of low status, Major, Dovidio, & Link, 2018) is *negatively* associated with employees' experienced work meaningfulness (Huang, Ma, & Huang, 2022). Social status is also associated with perceiving an alignment between meaningful personal and organizational values (Kim, Kim, & Lee, 2020), which is associated with perceiving meaning in one's work (Duffy et al., 2017). Likewise, having connections to higher-status people at work—something that shared knowledge of an organizational secret can provide—imbues one's work with a greater sense of meaning (Monnot, 2016). Finally, Park and Sohn (2018) directly tested the relationship between status and perceived meaningfulness of work using samples of American and South Korean employees and found that employees' subjective social status positively predicted the amount of meaning they felt at work. Taken together, we predict:

Hypothesis 4a. Keeping a current organizational secret vs. a) a former organizational secret, b) no organizational secrecy requirement, or c) a secret kept on behalf of a friend, a coworker, or one's family positively predicts perceived meaningfulness of work.

Hypothesis 4b. Feelings of social status mediate the positive effect of keeping a current organizational secret vs. a) a former organizational secret, b) no organizational secrecy requirement, or c) a secret kept on behalf of a friend, a coworker, or one's family on perceived meaningfulness of work.

3.3. Job satisfaction

Earlier we predicted that being required to keep an organizational secret positively predicts feelings of work stress (H3a) and perceived meaningfulness of work (H4a). Building on these hypotheses, we further propose that feelings of work stress and perceived meaningfulness of work will have opposing effects on employees' overall job satisfaction (see Rafferty & Griffin, 2009; Ryan & Deci, 2001). Indeed, decades of research have documented the negative correlation between work stress and job satisfaction (Kelloway, Barling, & Shah, 1993) and the positive correlation between perceived meaningfulness of work and job satisfaction (Wrzesniewski et al., 1997). Given these opposing effects on overall job satisfaction, we do not make any predictions regarding the direction or magnitude of the direct effect of organizational secrecy on job satisfaction. Taken together, we predict simultaneous mediation in the absence of a direct effect²:

Hypothesis 5. Feelings of work stress and perceived meaningfulness of work mediate the effect of keeping an organizational secret (vs. no organizational secrecy requirement) on job satisfaction.

4. Research overview

We tested our model across five main studies and two supplemental studies using a mix of correlational and experimental methods (N = 12,211). In Study 1, we compared the effects of keeping current (vs. former) organizational secrets. This approach allowed us to isolate the effects of organizational secrecy while holding constant the general content of the information kept secret. Study 2 used a pre-registered experiment to examine whether individuals anticipated divergent workplace experiences based on whether secrecy was required in job descriptions. Studies 3 and 4 were likewise pre-registered experiments. In Study 3, participants either recalled the experience of keeping an organizational secret or a secret about a coworker and reported their feelings of status, isolation, meaning, and stress. Study 4 compared organizational secrets to a variety of other conditions to examine the effects of different kinds of secrets on the same outcomes from Study 3.

Table 1

Summary of hypotheses tested and supported in each study.

Study #	H1	H2	НЗа	H3b	H4a	H4b	H5
1	1	1	×	1	×	1	
2	1	1	×	1	1	1	
3		1			1	1	
4		1			1	1	
5			1		1		1
S1	1	1	1	1	1	1	
S2			1		1		1

Note. \checkmark indicates that the hypothesis was supported, × indicates that the hypothesis was not supported. An empty cell indicates that the hypothesis was not tested in that study.

In Study 5, we used survey data from U.S. federal employees whose jobs require (vs. do not require) secrecy in the interest of national security or by a non-disclosure agreement (NDA) to assess the effects of organizational secrecy on self-reported work stress, work meaning, and their combined effects on overall job satisfaction.³ Table 1 displays the hypotheses tested and supported in each study. All data, code, pre-registration documents, and additional study details are available at https://osf.io/26zd5. See also SOM for the complete set of links.

5. Study 1

In Study 1, we used a methodology that allowed us to compare the effects of current organizational secrets to a closely-matched control former organizational secrets. In particular, we sampled employees' experiences with nine categories of commonly kept organizational secrets (drawn from a second pilot study, see SOM). Information about one's work that one is required to keep secret will differ in countless ways from information that is not meant to be secret. Given that former organizational secrets were once kept secret for some strategic reason, they should have much in common with current organizational secrets, except that they are no longer secret, making them a desirable comparison condition (Slepian et al., 2017). We predicted that current (vs. former) organizational secrets (reported on at Time 1) would be associated with participants reporting greater feelings of social isolation (H1) and status (H2) at Time 1, and stress (H3a) and meaning (H4a) a week later (i.e., at Time 2). We also predicted indirect effects of current (vs. former) organizational secrets on stress through feelings of social isolation (H3b) and on meaning through feelings of status (H4b).

5.1. Method

Sample. Time 1. We opened the study to 600 identity-verified participants from the Prolific Academic platform. All participants were full-time employees who were evenly recruited from the U.S. and U.K. Two participants did not submit their completion code allowing two additional participants to take part. Overall, 596 participants completed the study, of which four admitted to fabricating their answers during a final honesty check, leading to a final Time 1 sample size of 592 employees (294 U.K., 298 U.S., 292 men, 295 women, 5 other; $M_{age} = 35.23$, SD = 9.23). These employees reported on 3,046 organizational secrets (2,483 current, 563 former). We chose our sample size with the goal of being able to detect an effect size of approximately d = .10 with 90% power and alpha = .05.

Time 2. One week after reporting on their current (vs. former) organizational secrets, participants were invited to complete the dependent measures. Overall, 496 participants completed the Time 2

² Conducting mediation analysis in the absence of a direct or total effect is statistically appropriate and can be theoretically informative when specific mediated effects have opposing signs, as we predict in the current work (see Hays, 2017; Ozcelik & Barsade, 2018).

³ We replicated the results of the archival study, Study 5, in a pre-registered study with employees from a wide range of industries and work roles (see Supplemental Study 2). Studies 1 and S1 were conducted first, and all subsequent data collection was pre-registered.

Descriptive statistics and correlations among Study 1 variables.

	reliab	М	SD	S1. isolation	S2. status	S3. stress	S4. meaning	P1. workplace	P2. workplace	P3. workplace
	reliad	IVI	50	from secret	from secret	from secret	from secret	isolation	status	stress
S1. isolation from secret	$R_{kR} = .93$	2.54	1.48							
S2. status from secret	$R_{kR} = .92$	3.55	1.31							
S3. stress from secret	$R_{kR} = .94$	3.04	1.55							
S4. meaning from secret	$R_{kR} = .95$	3.38	1.51							
P1. workp isolation	$\alpha = .87$	2.96	1.17	.61***	.18***	.47***	.01			
P2. workp status	$\alpha = .95$	5.41	1.02	05	.28***	05	.26***	34***		
P3. workp stress	$\alpha = .85$	2.72	0.70	.43***	.29***	.55***	.23***	.47***	02	
P4. workp meaning	$\alpha = .93$	3.43	0.95	06	.22***	04	.40***	28***	.37***	.01

Note: Zero-order correlations cannot be appropriately calculated between secret scores, as these would ignore the clustering by category of secret (subject to bias by secret category frequency and differences between categories of secrets). Instead, only correlations with the between-person general workplace measures are reported. Correlations between the S (secret) variables and the P (participant) variables correspond to the relationships between ratings of secrets and person-level reports of general workplace experiences. Correlations between the P (participant) variables correspond to the relationships of general workplace experiences with other general workplace experiences. The formula for calculating multilevel reliability (R_{kR}), which corresponds with the generalizability of ratings of secrets across all observations (i.e., random secret effects), is from Shrout and Lane (2012). Participants worked in a diverse array of industries [Corporate (13%), Government (12%), Media (11%), Education (9%), Law (8%), Finance (7%), Construction (7%), Recreation (6%), Non-profit (5%), Arts (5%), Medical (4%), Consumer Goods (4%), Service (3%), Technology (3%), Manufacturing (2%), Agriculture (1%)]. Participants also have diverse levels of management (8% top management, 30% middle management, 24% lower management). Tenure M = 6.52 years, SD = 6.05, 95% CI = [6.04, 7.01]. * p < .05, ** p < .01, *** p < .001.

measures (84% of the final Time 1 sample; 245 U.K., 251 U.S., 248 men, 245 women, 3 other; $M_{age} = 35.71$, SD = 9.27).

Procedure. We collected the outcome variables one week after the predictor variables because temporally separating the measurement of predictor and dependent variables can reduce common method biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Following research on personal secrecy (Slepian & Moulton-Tetlock, 2019; Slepian et al., 2017; Slepian, Greenaway, & Masicampo, 2020), we used the Multiple Exemplar Method to sample employees' experiences with organizational secrets (Slepian & Kalokerinos, 2024). Specifically, we measured multiple subjective experienced exemplar). Hence, our unit of analysis is the secret (rather than the individual holding the secret), and data were analyzed within a mixed-effect modeling environment, treating participant and category of secret as cross-classified random factors.

We asked participants whether they currently keep or formerly had to keep an organizational secret about nine categories of commonly kept organizational secrets: 1) the details and identities of clients, 2) upcoming hiring and layoffs, 3) the treatment of employees, 4) future plans, 5) finances, 6) products, 7) ongoing projects, 8) unethical practices / wrongdoing, and 9) other workplace practices (this list was developed in the second pilot study; see SOM).

Measures. Time 1. For each organizational secret that participants currently (or formerly) had to keep, participants reported the extent to which the secret made them feel isolated and high status. This design allowed participants to report on having multiple organizational secrets, combining the benefits of stimulus sampling with the benefits of experience sampling (for a review of this method, see Slepian & Kalokerinos, 2024).

To minimize participant fatigue, we used a limited number of items to assess our variables.⁴ Specifically, we asked about the extent to which each secret contributed to feelings of social isolation with three items ("This secret makes me feel disconnected from others," "This secret makes me feel isolated from others," "This secret makes me feel alone"). Two additional items measured how much each secret was something only high-status people had access to ("This secret is something only high-status people (i.e., 'higher ups') know" and "Only a special set of people know about the secret"). Participants also indicated their rank at

work (4 = top-management, 3 = middle-management, 2 = lower-management, and 1 = non-management).

Time 2. Participants were shown the current and former organizational secrets from Time 1 and asked to report how much each secret was stressful (4-items; "Keeping this secret..." "can be exhausting," "can be stressful," "makes my work more challenging," "makes it difficult to do my work") and provided meaning (4-items; "Keeping this secret..." "gives my job purpose," "makes my job meaningful," "supports a mission that is important to me," "makes a meaningful impact") using scales ranging from 1-not at all to 7-very much. See Table 2 for descriptive statistics related to the variables used in Study 1.

5.2. Results and discussion

Given that we obtained multiple observations per each category of secret and per each participant, we analyzed our data via mixed-effect modeling. Specifically, we used R-packages lme4 and lmerTest to estimate models using Satterthwaite approximation tests to calculate p-values (estimating degrees of freedom to approximate the F distribution; Kuznetsova et al., 2013). The multilevel models are cross-classified (i.e., secrets are not nested within participants because the same secret can be had by multiple participants, and participants will not have every secret). We implement these models, entering random intercepts for participant and category of secret. The covariance matrix was unconstrained, and fit models used the REML (REstricted Maximum Likelihood) criterion.

Current (vs. former) organizational secrets were associated with higher levels of reported social isolation, b = .14, SE = .06, p = .02, and status, b = .19, SE = .06, p = .001 (see Table 3, lending support to Hypotheses 1 and 2, respectively.

Current (vs. former) organizational secrecy did not consistently directly predict stress (*ps* ranging from .33 to .39), or meaning (*ps* ranging from .04 to .25); including when controlling for work rank (see Table 3, and SOM for exact coefficients and *p*-values), suggesting perhaps that former secrets can still prove stressful (e.g., when sensitive information becomes public it can produce stress) and that former secrets can still prove meaningful (e.g., if employees feel that past secrets were important and impactful). Thus, Hypotheses 3a and 4a were not supported.

Importantly, however, status from the organizational secret was positively associated with feelings of meaning, b = .20, SE = .02, p = .001, whereas social isolation was positively associated with feelings of stress, b = .31, SE = .02, p < .0001 (Table 4).

Having to keep a current (vs. former) organizational secret was associated with heightened feelings of meaning through heightened

⁴ When rating one's experiences, short measures are appropriate if the items are highly face valid and used in situations where survey length and respondent burden are valid concerns (Gable & Bedrov, 2016), particularly when the participant's task is to rate a subjective experience (van Hooff, Geurts, Kompier, & Taris, 2007) and the items provide adequate coverage of a large domain (Goffman, 2019; see also Bianchi et al., 2024).

Effects of current (vs. former) organizational secrets, Study 1.

Social Isol (DV)	Model	1	Model	2	Model	3	Model	4
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Secret (current v former) Status from	.14 *	.06			.13 * .23	.06 .02	.12 * .23	.06 .02
Secret Workplace					.13	.02	.25 *** .09	.02
Status				0.4	**			
Workplace Isolation			.66 ***	.04	.66 ***	.04	.65 ***	.04
Workplace Rank							.14 **	.05
Status (DV)	Model	1	Model	2	Model	3	Model	4
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Secret (current v former)	.19 **	.06			.16 **	.06	.15 **	.06
Isolation from Secret					.20 ***	.02	.20 ***	.02
Workplace Status			.33 ***	.05	.42 ***	.05	.37 ***	.05
Workplace Isolation					.20 ***	.04	.19 ***	.04
Workplace Rank							.18 ***	.05
Stress (DV)	Model	1	Model	2	Model	3	Model	4
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Secret (current v former)	.06	.06			.06	.06	.06	.06
Workplace Stress			1.18 ***	.09	1.16 ***	.09	1.12 ***	.09
Meaning from Secret					.01	.02	.01	.02
Work as					.03	.06	.02	.06
Meaning							.11	.06
Meaning Workplace Rank								
Workplace	Model 3	1	Model	2	Model	3	Model	4
Workplace Rank	Model : Coef.	1 SE	Model Coef.	2 SE	Model Coef.	3 SE	Model Coef.	
Workplace Rank								SE
Workplace Rank Meaning (DV) Secret (current v	Coef.	SE			Coef.	SE	Coef.	4 SE .06
Workplace Rank Meaning (DV) Secret (current v former) Work as	Coef.	SE	Coef.	SE	Coef. .13 * .65	SE .06	Coef. .13 * .62	SE .06
Workplace Rank Meaning (DV) Secret (current v former) Work as Meaning Stress from	Coef.	SE	Coef.	SE	Coef. .13 * .65 ***	SE .06 .07	Coef. .13 * .62 ***	SE .06 .07

Note. Under the corresponding value, * p < .05, ** p < .01, *** p < .001.

Table 4

Independent effects of 3,046 organizational secrets on meaning and stress, Study 1.

Predictor	Meaning from	the Secre	t	Stress from	the Secre	et
	b (SE) [95% CI]	t	р	b (SE) [95% CI]	t	р
Status from Secret	.20 (.02) [.16, .25]	8.72	<.0001	.08 (.02) [.03, .12]	3.38	.001
Isolation from Secret	05 (.02) [10,01]	-2.47	.014	.31 (.02) [.27, .36]	14.29	<.0001

Note: In each model, the predictors were entered simultaneously (including cross-classified random intercepts for participant and category of secret). Controlling for rank (4 = top-management, 3 = middle-management, 2 = lower-management, and 1 = non-management) did not change the results (see SOM).

feelings of status, $Z_{\text{med}} = 2.38$, 95% CI = [0.42, 4.34], p = .017, and heightened feelings of stress through heightened feelings of social isolation, $Z_{\text{med}} = 2.00$, 95% CI = [0.04, 3.96], p = .046.⁵ These findings lend support to Hypotheses 3b and 4b, respectively.

Study 1 examined the effects of organizational secrecy at the secretlevel and found support for Hypotheses 1, 2, 3b and 4b, while failing to find support for Hypotheses 3a and 4a. Comparing the effects of current and former organizational secrets allowed us to account for the content of the secret, finding that feelings of social isolation can explain the stress of organizational secrets, whereas feelings of status can explain perceived meaningfulness of work from organizational secrets.

6. Study 2

The findings of Study 1 raise the question of whether employees anticipate the multifaceted consequences of having to keep organizational secrets. Therefore, in Study 2, we sought to compare expectations about jobs that require vs. do not explicitly require organizational secrecy. Specifically, we experimentally manipulated whether participants evaluated an ad for a job that required organizational secrecy or did not mention secrecy, and assessed how much they expected that working in this role would make them feel isolated, high status, meaningful, and stressed.

6.1. Method

Sample. We pre-registered all aspects of Study 2 including the design, analyses, and exclusion criteria. We recruited 800 identity-verified participants from the Prolific Academic platform. All participants were full-time employees in the U.S. and U.K. As pre-registered, participants who did not pass both attention checks, one at the beginning of the study and one at the end, were excluded from analyses (n = 29), leading to a final sample size of 771 participants (503 U.S., 268 U. K., 437 men, 323 women, 11 other; $M_{age} = 38.18$, SD = 11.68).

Stimuli. To increase the generalizability of our findings, we used a stimulus sampling approach (Judd, Westfall, & Kenny, 2012) that involved randomly presenting participants with a job ad for one of the following four roles: paralegal specialist, executive assistant to the CEO, business analysist, and software engineer. Different responsibilities were listed for each job (based on real job ads), whereas other features were held constant (e.g., that it was full-time job and the salary was \$85,416 a year). Importantly, we included two versions of each ad. In the organizational secrecy condition, participants read, "This job involves access to highly confidential information that is specifically required by law to be kept secret. Additionally, employees will be required to sign nondisclosure agreements as part of their work." This language was directly adapted from descriptions of government jobs involving organizational secrecy that we use to test our hypotheses in Study 5. In the control condition, the job ad included no mention of organizational secrecy.

Procedure. After reading the randomly assigned job ad, participants viewed the following prompt: "I expect that working in this role would make me feel ..." (from 1 =do not at all expect to 7 = very much expect)

 $^{^5}$ There is no consensus on how to conduct the present mediation (i.e., how to bootstrap cross-classified data). To circumvent this issue, we used a formula for calculating indirect effects that addresses this issue (Iacobucci, 2012; e.g., Sun & Slepian, 2020). Each path coefficient was divided by its standard error, and we multiplied the resulting *z*-values; this product was then divided by the pooled standard error (i.e., the square root of the sum of the squared *z*-values and one), yielding the Zmediation coefficient, for which its statistical significance can be tested by a *z*-test.

Independent effects on meaning and stress, Study 2.

Predictor	Meaning			Stress		
	b (SE) [95% CI]	t	р	b (SE) [95% CI]	t	р
Status	.52 (.03) [.47, .58]	19.06	<.0001	.04 (.04) [03, .11]	1.12	.26
Isolation	14 (.02) [18,09]	-5.59	<.0001	.34 (.03) [.28, .40]	10.83	<.0001
Secrecy	.10 (.08) [05, .25]	1.33	.18	16 (.10) [35, .03]	-1.66	.10

Note: In each model, the predictors were entered simultaneously.

and then responded to the following items: isolated, high status, purposeful, meaningful, exhausted, and stressed (one item per each mediator in our conceptual model,⁶ followed by two items per each DV in our conceptual model; $r_{meaning} = .82$, $r_{stress} = .81$, see SOM for all items). Finally, we collected participants' demographic information, industry, and rank at work.

6.2. Results and discussion

As pre-registered, we conducted mixed-effect models that included a random intercept for the job displayed in the ad, predicting each experience from whether secrecy was mentioned as a requirement of the work (1 = yes, 0 = no). Explicit mention that organizational secrecy is required increased expectations of social isolation (b = .36, 95% CI = [.15, .58], *SE* = .11, *t*(766.01) = 3.31, *p* = .001), status (*b* = .38, 95% CI = [.19, .57], *SE* = .10, *t*(766.01) = 3.88, *p* = .0001), and meaning (*b* = .25, 95% CI = [.07, .43], SE = .09, t(766.11) = 2.71, p = .007), but not stress (b = -0.02, 95% CI = [-0.22, 0.18], SE = .10, t(766.00) = -0.22, p = .83). These results provide support for Hypotheses 1, 2, and 4a, but not Hypothesis 3a. The hypothetical study design may have contributed to our failure to find the predicted effect of organizational secrecy on anticipated job stress. It is possible, for example, that participants made assumptions or held stereotypes about the hypothetical jobs that overshadowed any divergent views they may otherwise have had about the organizational secrecy requirement.

Next, we tested the indirect effects predicted in Hypotheses 3b and 4b, using Z_{med} , as in Study 1. We found an indirect effect of organizational secrecy on expectations of meaning as a function of higher status, $Z_{med} = 3.80, 95\%$ CI = [1.84, 5.76], p = .0001. Additionally, we found a simultaneous indirect effect of organizational secrecy on expectations of stress as a function of greater social isolation, $Z_{med} = 3.14, 95\%$ CI = [1.89, 5.11], p = .002. While organizational secrecy predicted expectations of meaning, it no longer did so when controlling for expectations of status (b = .05, 95% CI = [-0.10, 0.20], SE = .08, t(765.04) = 0.62, p = .53), consistent with a mediation effect (see Table 5). Although there was no significant direct or total effect of organizational secrecy on expectations of stress, we found a significant indirect effect of organizational secrecy on anticipated stress through expectations of social isolation. These results provide support for Hypotheses 3b and 4b.

Overall, Study 2 provides initial causal evidence that is largely supportive of our hypotheses. Participants who evaluated an ad for a job that required organizational secrecy expected that working in this role would lead to more feelings of social isolation, status, and meaning (but not stress) than participants who evaluated the same job ad with no mention of secrecy. Furthermore, anticipated feelings of social isolation and status mediated the effects of organizational secrecy on anticipated feelings of stress and meaning, respectively. Thus, a central contribution of Study 2 is documenting divergent effects of organizational secrecy, via separate paths, on both hedonic (stress) and eudaimonic (meaning) well-being.

7. Study 3

One limitation of the previous study is that participants responded to a hypothetical scenario involving an unspecified organizational secret. In contrast, many real-world organizational secrets implicate years of work, are requested from real managers, and have real stakes associated with them. Accordingly, in the current study, we used an experimental recall paradigm to study real-world secrets (Slepian et al., 2019).

We randomly assigned participants to an organizational secret condition or a coworker secret condition. Unlike organizational secrets, a coworker's secret does not serve the collective interest of a large group with which the employee identifies. Therefore, we expected participants in the coworker secret condition to report weaker feelings of status and meaningfulness as compared with participants in the organizational secret conditions.

More specifically, we used two separate organizational secret conditions to disentangle the effects of two types of organizational secrets—secrets that have to be kept from only organizational outsiders and secrets that have to be kept from organizational outsiders *and* some organizational insiders. Thus, the current study had three conditions in total. With regards to social isolation, given that the latter limits employees' ability to talk about their work more than the former, we explored whether organizational secrets kept from outsiders *and* some insiders would produce greater social isolation than organizational secrets kept from outsiders only. With regards to status, we explored whether the former, which also excludes other employees from being "in the know," produces greater feelings of status than the latter.

7.1. Method

Sample. We pre-registered all aspects of Study 3 including the design, analyses, and exclusion criteria. We recruited 600 identity-verified participants from the Prolific Academic platform with the goal of being able to detect an effect size of approximately d = .10 with 90% power and alpha = .05. All participants were full-time employees in the U.S. and U.K.

Two participants did not submit their completion code, allowing 2 additional participants to take part; 7 participants admitted to fabricating their answers during a final honesty check, and 135 participants said they did not have a secret to recall that fit the prompt.⁷ As preregistered, these participants were excluded from analyses, resulting in a final sample size of 460 participants (334 U.K., 126 U.S., 214 men, 242 women, 4 other; $M_{age} = 36.64$, SD = 10.55).

Procedure

Manipulation. We randomly assigned participants to one of three conditions. In two conditions, we asked participants to recall a current secret about a workplace practice or activity that the employee is required to keep. In the *organizational secret kept from outsiders only* condition, we further specified that the secret had to be kept from all those outside of the organization. In the *organizational secret kept from outsiders and some insiders* condition, we further specified that the secret had to be kept from all those outside of the organization. In the *organizational secret kept from outsiders and some insiders* condition, we further specified that the secret had to be kept from all those outside of the organization as well as some coworkers. In the *coworker secret* condition, we asked participants to recall a secret about a coworker that the coworker had explicitly shared

⁶ Single-item scales measuring subjective experiences have been found to be valid in a number of related domains, including affect (Russell, Weiss, & Mendelsohn, 1989), subjective well-being (Sandvik, Diener, & Seidlitz, 1993), stress (Fast et al., 2003; West, Dyrbye, Satele, Sloan, & Shanafelt, 2012), job satisfaction (Nelson et al., 2002; Wanous, Reichers, & Hudy, 1997), and social closeness (Aron, Aron, & Smollan, 1992; Huang et al., 1987).

⁷ Breakdown of participants without relevant secrets: 52 out of 207 in the org. secret kept from outsiders only condition, 45 out of the 195 in the org. secret kept from outsiders and some insiders condition, and 38 out of the 193 in the coworker secret condition, 25%, 23%, and 20%, respectively.

Descriptive statistics and correlations among Study 3 variables.

	Scale reliability	Social isolation	Status	Stress
Social isolation	<i>r</i> = .87			
Status	r = .82	.11*		
Stress	$\alpha = .94$.63***	.19***	
Meaning	$\alpha = .82$.01	.51***	.15**

p* < .05; *p* < .001; ****p* < .0001.

with them.

In all conditions, we told participants that the recalled secret should be important and non-trivial. Participants were asked to write about the general topic if they were not allowed to discuss specifics, and to indicate if they could not recall a secret that fit the mentioned criteria. This manipulation builds on prior findings, which show that much of the well-being harm of secrets stems not from speech inhibition during conversation, but rather from how people reflect on the meaning of the secret (Slepian & Moulton-Tetlock, 2019; Slepian et al., 2017; Slepian et al., 2020).

Measures. Subsequently, participants completed measures of social isolation (r = .87; e.g., "Keeping this secret makes me feel disconnected from others"), status (r = .82; e.g., "I gain status from knowing this secret"), stress ($\alpha = .94$; e.g., "This secret can be stressful"), and meaning ($\alpha = .82$; e.g., "This secret gives me a sense of meaning"; see SOM for all items). Finally, participants reported their industry, tenure, and rank (controlling for these variables did not change the results). See Table 6 for descriptive statistics related to the variables used in Study 3.

7.2. Results and discussion

Supporting Hypotheses 2 and 4a, compared to participants in the coworker secret condition, participants in the two organizational secret conditions reported greater feelings of status (t = 3.23, p = .001) and meaning (t = 5.38, p < .001). See Table 7. Further, elevated status was

Table 7

Descriptive (*M* (*SD*) [95% CI]), and inferential (ANOVA and contrasts) statistics for Study 3.

	Social isolation	Status	Stress	Meaning
Org. secret kept from outsiders & some insiders	2.78 (1.77) [2.50, 3.07]		2.82 (1.84) [2.53, 3.11]	. ,
Org. secret kept from outsiders only	2.34 (1.61) [2.08, 2.59]	2.69 (1.71) [2.42, 2.96]	2.82 (1.84) [2.53, 3.11]	3.15 (1.60) [2.90, 3.41]
Coworker secret	1.96 (1.23) [1.76, 2.15]	2.23 (1.37) [2.01, 2.44]	2.31 (1.50) [2.07, 2.55]	
ANOVA	<i>F</i> = 11.34, <i>p</i> < .0001	F = 6.11, p = .002	F = 8.00, p = .0004	,
Org. secret vs. coworker secret Planned contrast (0.5, 0.5, -1)	t = 3.93, p = .0001	t = 3.33, p = .001	t = 3.62, p = .0003	t = 5.38, p < .0001
Org. also some insiders vs. only outsiders Planned contrast (1, -1, 0)	t = 2.52, p = .02	<i>t</i> = 0.56, <i>p</i> = .57	t = 1.23, p = .22	t = -1.16, p = .25
Org. outsiders only vs. coworker Contrast (1, 0, -1)	t = 2.14, p = .03	t = 2.52, p = .02	t = 2.52, p = .02	t = 5.26, p < .0001
Org. outs. also some ins. vs. coworker Contrast (0, 1, -1)	t = 4.64, p < .0001	t = 3.07, p = .007	t = 3.73, p = .0006	t = 4.05, p = .0001

Note: ANOVA $df_{(n,d)} = (2, 457)$. Contrasts df = 457. Participants worked in a diverse array of industries [Education (16%), Medical (11%), Technology (9%), Government (9%), Finance (9%), Service (7%), Consumer Goods (6%), Manufacturing (6%), Non-profit (5%), Construction (5%), Recreation (3%), Corporate (3%), Transportation (3%), Media (3%), Arts (2.5%), Legal (2%), Agriculture (0.5%)]. Participants also have diverse levels of management (6% top management, 21% middle management, 22% lower management, 51% non-management). Tenure M = 6.46 years, SD = 6.54, 95% CI = [5.92, 6.99].

Table 8

]	lnc	lepend	lent	effects	on	mean	ing a	and	stress,	Study	3.	

Predictor	Stress from	the Secr	et	Meaning from	the Secre	t
	b (SE) [95% CI]	t	р	b (<i>SE</i>) [95% CI]	t	р
Isolation from Secret	.70 (.04) [.62, .78]	16.96	<.0001	05 (.04) [12, .023]	-1.23	.22
Status from Secret	.13 (.04) [.06, .21]	3.35	.001	.47 (.04) [.40, .54]	12.90	<.0001

Note: In each model, the predictors were entered simultaneously.

positively associated with feelings of meaning, b = .47, SE = .04, p < .0001, replicating our previous results (see Table 8).

Next, we used R-package mediation (with 5,000 bootstraps) and estimated the effect of recalling an organizational secret (vs. a coworker secret) on stress and meaning as a function of social isolation and status, when controlling for the other experiences. Supporting Hypothesis 4b, we found an indirect effect of recalling organizational secrets on work meaning as a function of feelings of status, IE = .21, 95% CI = [.05, 0.38], p = .009.

Although we expected our manipulation to produce null effects on feelings of social isolation and stress based on past work showing that personal secrets can also evoke feelings of social isolation (Slepian et al., 2019), we found that compared to participants in the coworker secret condition, participants in the two organizational secret conditions reported greater feelings of social isolation (t = 3.93, p < .001) and stress (t = 3.62, p < .001), perhaps because the personal secret was about a coworker rather than the employee. Additionally, social isolation from the organizational secret (vs. coworker secret) was positively associated with feelings of stress, b = .70, SE = .04, p < .0001, and there was a significant simultaneous indirect effect of recalling an organizational secret (vs. a coworker secret) on feelings of stress as a function of greater social isolation, IE = .25, 95% CI = [.03, .43], p = .02.⁸ These findings suggest that organizational secrecy may exert the strongest effects on feelings of social isolation and stress, followed by personal secrets kept on behalf of another, followed by simply reflecting on undisclosed, but not secret, personal information (e.g., see Slepian et al., 2019).

Finally, exploratory analyses revealed that compared to an organizational secret that *only* has to be kept from organizational outsiders, an organizational secret that *also* has to be kept from some organizational insiders was associated with more social isolation, t = 2.52, p = .02. There were no significant differences between the two organizational secret conditions on the other outcomes (all other *p*-values > .21). In all conditions, we specified that the recalled secret should be important and not trivial, and this restriction could have drowned out any differences between the two organizational secret conditions in status, meaning, and stress. That the only difference between the "outsiders only" and "outsiders and some insiders" conditions was on feelings of social isolation suggests that this difference across conditions most relates to employees being denied experiences of social affiliation (i.e., those that stem from sharing information with others; Afifi & Afifi, 2020; Echterhoff, 2011; Willems, Finkenauer, & Kerkhof, 2020).

Overall, the results of Study 3 experimentally show that organizational secrets that have to be kept from (at least) those outside the organization evoke greater feelings of social isolation, status, stress, and meaning, compared to a secret about a coworker. Moreover, feelings of social isolation and status from organizational secrecy explained feelings of stress and meaning, respectively.

⁸ Note that this is the only study where swapping the mediator and DV (for both stress models and meaning models) produced significant indirect effects. For all other studies that measure isolation, status, stress, and meaning, swapping the mediators (isolation and status) for the DVs (stress and meaning) does not produce consistent significant indirect effects (see SOM).

8. Study 4

We posited in the introduction that organizational secrets are meaningfully different from personal secrets. Here we substantiate this claim by demonstrating empirically that the effects of organizational secrecy proposed in our theoretical model (Fig. 1) are unique to organizational secrecy. In Study 4, we compared organizational secrets, which are kept on behalf of a collective in an organizational setting, with three other kinds of secrets (family secret, coworker secret, and a friend's secret). Our focal analyses compare organizational secrecy to these comparison conditions. In the SOM, we further examine potential boundary conditions of our proposed effects by comparing organizational vs. personal settings and individual vs. collective commitments.

8.1. Method

Sample. We pre-registered all aspects of Study 4 including the design, analyses, and exclusion criteria. Using the sample size from Study 2, we recruited 800 identity-verified participants from the Prolific Academic platform. All participants were full-time employees in the U.S. or U.K.

One participant did not submit a completion code, allowing one additional participant to take part; 20 participants admitted to fabricating their answers during a final honesty check, and 174 participants said they did not have a secret to recall that fit the prompt.⁹ As preregistered, these participants were excluded from analyses, leading to a final sample size of 607 participants (442 U.K., 165 U.S., 316 men, 288 women, 3 other; $M_{age} = 38.03$, SD = 11.16).

Procedure. We randomly assigned participants to one of four conditions. In the *collective secret in organizational setting* condition, we asked participants to recall an organizational secret, specifying that the secret should be about a workplace practice or activity that the employee is not allowed to talk about. In the *individual secret in organizational setting* condition, we asked participants to recall a secret about a coworker, specifying that they know the secret because the coworker shared it with them. In the *collective secret in personal setting* condition, we asked participants to think about a family secret, specifying that the secret should be about something the family wants to keep hidden, either from outsiders or specific others. Finally, in the *individual secret in personal setting* condition, we asked participants to recall a secret about a friend, specifying that they know the secret because the friend shared it with them.

Subsequently, participants read the prompt, "Thinking about your commitment to this secret..." and completed the same measures as in Study 3, including feelings of social isolation (r = .92), status (r = .89), stress ($\alpha = .86$), and meaning ($\alpha = .87$).

8.2. Results and discussion

We report the complete main effect and interaction results of secret source (collective = 1, individual = 0) and setting (organizational = 1, personal = 0) on each outcome measure in the SOM. Here, we focus on reporting results related to the three hypotheses tested in the current study: H2, H4a, and H4b.

We found that keeping an organizational secret (vs. a secret kept on behalf of a friend, a coworker, or one's family) positively predicted feelings of social status (supporting H2) and perceived meaningfulness of work (supporting H4a). Specifically, there was a secret source (collective vs. individual) by setting (organizational vs. personal) interaction on feelings of status (b = 1.46, SE = .26, 95% CI = [.94, 1.98], t (603) = 5.52, p < .0001) and meaning (b = .89, SE = .25, 95% CI = [.40,

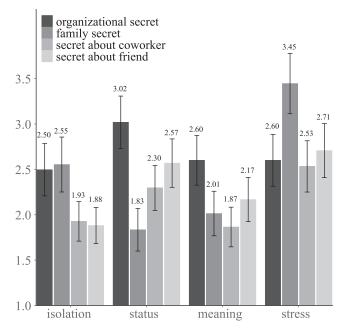


Fig. 2. Study 4 means by condition (error bars denote 95% CI).

1.38], t(603) = 3.56, p = .0004). Simple effects analyses revealed that among individual secrets, there was no effect of organizational (vs. personal) setting on feelings of status (b = -0.27, SE = .19, 95% CI = [-0.64, 0.09], t(603) = -1.46, p = .14) or meaning (b = -0.30, SE = .18, 95% CI = [-0.65, 0.04], t(603) = -1.72, p = .09). In contrast, collective secrets in organizational settings evoked greater feelings of status (b = 1.18, SE = .19, 95% CI = [.82, 1.55], t(603) = 6.33, p < .0001) and meaning (b = .59, SE = .18, 95% CI = [.24, 0.93], t(603) = 3.32, p = .001) than collective secrets in organizational settings. In sum, organizational secrets (i.e., collective secrets in organizational settings) evoked the most feelings of status and meaning, supporting Hypotheses 2 and 4a. See Fig. 2.

Indirect effects. As in Study 3, we tested for indirect effects using R-package mediation (with 5,000 bootstraps). We compared keeping an organizational secret to the other three conditions. We estimated the effect of recalling an organizational secret vs. recalling the secrets specified in the other conditions on stress and meaning as a function of social isolation and status, respectively, controlling for the other experience. As predicted in Hypothesis 4b, we found an indirect effect of recalling organizational secrets on feelings of meaning as a function of status, IE = .43, 95% CI = [.27, 0.62], p < .0001.

In sum, collective secrets in an organizational setting evoked the strongest feelings of status, and through status, a sense of meaning (see SOM for further analyses and discussion).

9. Study 5

Finally, in Study 5, we analyzed data from a large-scale survey about workplace issues sent to employees working for the U.S. federal government. Embedded in the survey were our focal measures of interest: workplace stress, experienced meaningfulness of one's work, and overall job satisfaction. Respondents also reported various job characteristics, including whether their job required secrecy (by law in the interest of national security/foreign affairs, or by an NDA).

9.1. Method

Sample. The sample size was based on the availability of relevant archival data. We acquired and analyzed data from the 2016 Merit

⁹ Breakdown of participants without relevant secrets: 44 out of 198 in the family secret condition, 43 out of the 203 in the organizational secret condition, 42 out of the 197 in the coworker secret condition, and 45 out of 203 in the friend secret condition, 22%, 21%, 21%, and 22%, respectively.

Variables	bles	Mean	SD	z	1	2	ŝ	4	D D	9	7	8	6	10	11	12	13	14 15	5 16
	Job Requires Secret or NDA	0.35	0.48 8440	8440															
	(1 = Yes, 0 = No)																		
2	Job Requires $(0 = Neither, 1)$	0.43	0.65 8440	8440	0.919^{**}														
	= Secret or NDA, 2 $=$ Secret																		
	& NDA)																		
	Work Stress	2.84	1.00	8369	0.009	0.017													
	Meaningfulness of Work	4.06	0.85	8338	0.056**	0.055**	-0.237**												
	Job Satisfaction	3.83	1.08	8419	-0.004	-0.005	-0.479^{**}	0.604^{**}											
	Tenure in Fed Govt	3.24	1.11	8405	-0.039^{**}	-0.042^{**}	0.013	0.046**	0.068**										
	Tenure in Agency	1.92	0.27	8402	-0.008	-0.006	0.049^{**}	0.017	0.016	0.316^{**}									
	Supervisory Status	2.34	1.31	8406	0.139^{**}	0.134^{**}	0.070^{**}	0.219^{**}	0.162^{**}	0.239^{**}	0.085^{**}								
	Number of Employees	26.00	56.48	8345	0.080^{**}	0.086**	0.023^{*}	0.057^{**}	0.019	0.035**	-0.001	0.245^{**}							
10	Gender	1.41	0.49	8307	-0.187^{**}	-0.181^{**}	0	-0.027^{*}	-0.016	0.063**	-0.012	-0.093^{**}	-0.059^{**}						
	(ref. Male)																		
11	Age Group	1.87	0.34	8319	0.003	0.006	-0.035^{**}	0.089^{**}	0.059**	0.380^{**}	0.160^{**}	0.177^{**}	0.041^{**}	-0.030^{**}					
	(ref. 39 and Under)																		
12	Work Location $(1 =$	0.37	0.48	8375	0.079**	0.080**	-0.016	-0.020	-0.011	-0.047** -0.075**	-0.075**	0.065**	0.007	$0.052^{**} - 0.008$	-0.008				
	Headquarters, $2 = Field$)																		
13	Telework Status ($0 = No$	0.58	0.49	8386	8386 -0.104**	-0.091^{**}	-0.001	-0.004	0.031^{**}	0.006	0.008	0.008	-0.029^{**}	0.113^{**}	-0.038**	0.171**			
14	Telework, I = Telework) Ethical Organizational	4 00	0.90	8778	0.018	0.019	-0 265**	0 364**	0 447**	0.029**	-0.013	0 186**	0.036**	-0.062**	0 040**	-0.003	0.068**		
	Culture																		
15	Satisfaction with Immediate	3.83	1.20	8426	8426 -0.010	-0.005	-0.325^{**}	0.317^{**}	0.579**	-0.001	-0.012	0.070**	0.012	-0.041**	-0.006	-0.017	0.033** 0.360**	0.360^{**}	
	Supervisor																		
16	Satisfaction with Supervisor	3.36	1.29 8427	8427	0.007	0.009	-0.360^{**}	0.371^{**}	0.610^{**}	-0.009	-0.043^{**}	0.109**	0.016	-0.014	0.007	0.006	0.020	0.440** 0	0.586**
17	Social Engagement	3.37	0.63 8414	8414	0.084^{**}	0.085**	-0.106^{**}	0.429**	0.351^{**}	0.039**	0.015	0.287**	0.077**	0.035**	0.058**	0.052**	0.037**	0.249** 0	0.037** 0.249** 0.214** 0.250**

Principles Survey, a government-wide survey of federal employees administered by the U.S. Merit Systems Protection Board (MSPB). The survey that included our variables of interest was sent to 37,397 federal employees across twenty-four federal agencies using a stratified random sampling procedure. The survey was completed by 14,473 employees (38.7% response rate). Our final sample size was 8,419 employees who responded to our variables of interest.

Measures. Employees responded to the following two questions about whether or not their job requires them to keep a secret on behalf of their organization: "Does your job involve access to information that is specifically required by law or executive order to be kept secret in the interest of national defense or the conduct of foreign affairs?" (0 = No, 1)= Yes, M = .29, SD = .45) and "In the past two years, has your agency asked you to enter into a nondisclosure agreement?" (0 = No, 1 = Yes, M= .15, SD = .35). Participants who responded "Yes" to either of these questions were coded as having a job that requires organizational secrecy (1 = job requires secrecy for national security or requires signingan NDA, 0 = job requires neither secrecy nor an NDA; M = .35, SD =.48). The results we report below do not meaningfully change when using a continuous measure of organizational secrecy (0 = job has no requirement for secrecy, 1 = job requires secrecy for national security or requires signing an NDA, 2 = job requires secrecy for national security and requires signing an NDA; M = .43, SD = .65, see Tables S10 and S11 in the SOM).

We assessed three outcome measures in the current study. First, we assessed *workplace stress* ($\alpha = .77$)—an indicator of hedonic wellbeing—using the following items: "Satisfaction: Your level of job stress"

(from 1 to very dissatisfied to 5-very satisfied), "I put so much into my work that it negatively affects other areas of my life" (from 1-strongly disagree to 5-strongly agree), and "I leave work feeling emotionally exhausted" (from 1-strongly disagree to 5-strongly agree). Second, we assessed *meaningfulness of work* ($\alpha = .86$) —an indicator of eudaimonic well-being—using the following items (all from 1-strongly disagree to 5-strongly agree): "My work supports a purpose, cause, or mission that is important to me," "My work gives me a good opportunity to make a meaningful difference or impact," and "My work is consistent with my personal sense of purpose or calling." These are the same three items that we used in Study 1. Third, we assessed overall job satisfaction using the following item: "Considering everything, how satisfied are you with your job?" (from 1 to very dissatisfied to 5-very satisfied).

We controlled for employee and work characteristics that may affect the relationship between our predictor and outcome variables including supervisory status (1 = non-supervisor, 2 = team leader, 3 = supervisor, 4 = manager, 5 = executive), tenure within the federal government (1 = 3 years or less, 2 = 4–11 years, 3 = 12–19 years, 4 = 20–31 years, 5 = 32 or more years), tenure within current agency (1 = 3 years or less, 2 = 4 years or more), number of employees in the work unit, employee gender (1 = male, 2 = female), age group (1 = 39 and under, 2 = 40 and over), work location (1 = headquarters, 2 = field office), and telework status (0 = no telework, 1 = some telework). We used the coding categories provided in the dataset. We also controlled for variables related to the work environment that may affect employees' ability and/or desire to keep an important organizational secret, including the perception that their organizational culture is ethical, satisfaction with immediate

Table 10

Effect of organizational secrecy on work stress (Models 1-3) and meaningfulness of work (Model 4-6) from Study 5.

	DV = Wor	k Stress					DV = Mean	ningfulness	of Work			
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Job Requires Secret or NDA $(1 = Yes, 0 = No)$	0.057*	(0.026)	0.063*	(0.027)	0.052*	(0.024)	0.128***	(0.023)	0.073**	(0.023)	0.075***	(0.021)
Tenure in Federal Governm	nent (ref. 3 ye	ears or less)										
4–11 Years			0.188**	(0.072)	0.079	(0.065)			-0.098	(0.062)	-0.010	(0.055)
12–19 Years			0.283***	(0.074)	0.131	(0.067)			-0.169**	(0.064)	-0.044	(0.057)
20-31 Years			0.285***	(0.075)	0.129	(0.068)			-0.204**	(0.065)	-0.075	(0.057)
32 or More Years			0.113	(0.078)	-0.007	(0.071)			-0.116	(0.067)	-0.015	(0.059)
Tenure in Agency (ref. 3 years or less)			0.086	(0.052)	0.075	(0.047)			0.052	(0.043)	0.054	(0.038)
Supervisory Status (ref. No	n-Supervisor)											
Team Leader	1		0.054	(0.034)	0.075*	(0.032)			0.133***	(0.030)	0.111***	(0.028)
Supervisor			0.229***	(0.028)	0.292***	(0.026)			0.244***	(0.024)	0.176***	(0.022)
Manager			0.171***	(0.035)	0.310***	(0.033)			0.395***	(0.029)	0.262***	(0.026)
Executive			0.090	(0.051)	0.336***	(0.048)			0.627***	(0.037)	0.398***	(0.032)
Number of Employees in			0.000	(0.000)	0.000	(0.000)			-0.000	(0.000)	0.000	(0.000)
Work Unit												
Gender			0.133***	(0.023)	0.104***	(0.022)			0.011	(0.020)	0.038*	(0.018)
(ref. Male)												
Age Group			-0.182^{***}	(0.037)	-0.170***	(0.034)			0.181***	(0.033)	0.169***	(0.030)
(ref. 39 and Under)												
Work Location (1 = Headquarters, 2 = Field)			-0.016	(0.025)	-0.041	(0.023)			-0.080***	(0.021)	-0.058**	(0.019)
Telework Status (0 = No Telework, 1 = Telework)			0.044	(0.025)	0.068**	(0.023)			0.023	(0.021)	-0.003	(0.020)
Ethical Organizational Culture					-0.140***	(0.014)					0.202***	(0.013)
Satisfaction with Immediate Supervisor					-0.129***	(0.011)					0.088***	(0.011)
Satisfaction with Supervisor Above My Supervisor					-0.172***	(0.011)					0.127***	(0.010)
Fixed Effects for Agency	Yes		Yes		Yes		Yes		Yes		Yes	
Constant	2.700***	(0.071)	2.440***	(0.092)	4.232***	(0.101)	4.001***	(0.060)	3.808***	(0.080)	2.118***	(0.092)
N N	8,369	(0.071)	8,116	(0.092)	4.232**** 7,996	(0.101)	8,338	(0.000)	8,078	(0.000)	2.118****	(0.092)

* p < .05, ** p < .01, *** p < .001; positive and negative coefficients rounded to three decimal places that round to zero are not exactly zero.

Effect of organizational secrecy, work stress, and meaningfulness of work on overall job satisfaction from Study 5.

DV = Job Satisfaction	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Work Stress Meaningfulness of Work	Coef.	SE	Coef.	SE	Coef.	SE	Coef. -0.373*** 0.655***	SE (0.010) (0.011)	Coef. -0.384*** 0.635***	SE (0.010) (0.012)	Coef. -0.237*** 0.458***	SE (0.009) (0.012)
Job Requires Secret or NDA $(1 = Yes, 0 = No)$	0.033	(0.029)	-0.026	(0.030)	-0.000	(0.022)	-0.027	(0.021)	-0.045*	(0.012)	-0.021	(0.012)
Tenure in Federal Government (ref. 3 years or less)												
4–11 Years			-0.197*	(0.080)	-0.013	(0.061)			-0.047	(0.058)	0.007	(0.052)
12–19 Years			-0.250**	(0.082)	0.003	(0.063)			-0.024	(0.059)	0.044	(0.053)
20-31 Years			-0.269**	(0.083)	-0.006	(0.063)			-0.015	(0.060)	0.056	(0.053)
32 or More Years			-0.094	(0.086)	0.103	(0.065)			0.033	(0.062)	0.102	(0.055)
Tenure in Agency			0.056	(0.057)	0.068	(0.040)			0.052	(0.041)	0.064	(0.035)
(ref. 3 years or less)												
Supervisory Status (ref. N	on-Superviso	r)										
Team Leader			0.123**	(0.038)	0.088**	(0.029)			0.052	(0.029)	0.047	(0.025)
Supervisor			0.204***	(0.030)	0.099***	(0.023)			0.127***	(0.022)	0.081***	(0.019)
Manager			0.400***	(0.037)	0.170***	(0.027)			0.208***	(0.026)	0.119***	(0.022)
Executive			0.637***	(0.050)	0.246***	(0.037)			0.263***	(0.037)	0.136***	(0.031)
Number of Employees in Work Unit			-0.000	(0.000)	-0.000	(0.000)			-0.000	(0.000)	-0.000	(0.000)
Gender (ref. Male)			-0.018	(0.025)	0.029	(0.019)			0.023	(0.018)	0.032*	(0.016)
Age Group (ref. 39 and Under)			0.122**	(0.040)	0.106***	(0.031)			-0.066*	(0.028)	-0.012	(0.025)
Work Location $(1 = Headquarters, 2 = Field)$			-0.070**	(0.027)	-0.028	(0.020)			-0.020	(0.019)	-0.007	(0.017)
Telework Status (0 = No Telework, 1 = Telework)			0.045	(0.027)	-0.000	(0.020)			0.047*	(0.020)	0.020	(0.017)
Ethical Organizational Culture					0.198***	(0.013)					0.072***	(0.011)
Satisfaction with Immediate Supervisor					0.276***	(0.011)					0.202***	(0.010)
Satisfaction with Supervisor Above My Supervisor					0.290***	(0.010)					0.190***	(0.009)
Fixed Effects for Agency	Yes		Yes		Yes		Yes		Yes		Yes	
Constant	3.836***	(0.076)	3.781***	(0.100)	0.668***	(0.093)	2.214***	(0.079)	2.287***	(0.094)	0.718***	(0.089)
Ν	8,419		8,153		8,024		8,256		8,009		7,893	

* p < .05, ** p < .01, *** p < .001; positive and negative coefficients rounded to three decimal places that round to zero are not exactly zero.

supervisor, and satisfaction with managers above immediate supervisor (all response scales labeled 1-strongly disagree to 5-strongly agree). Finally, we included fixed effects to account for the federal agency where participants worked. See Table 9 for descriptive statistics related to the variables used in Study 5.

9.2. Results and discussion

OLS regressions with robust standard errors and fixed effects for the agency where the employee worked revealed that when employees' jobs required them to keep secrets, they experienced their work as more stressful in general, b = .057, SE = .026, p = .028 (Table 10, Model 1), but also more meaningful in general, b = .128, SE = .023, p < .001(Table 10, Model 4), supporting Hypotheses 3a and 4a. These effects remained significant after adding supervisory status, tenure within the federal government, tenure within current agency, number of employees in the work unit, employee gender, age group, work location, and telework status to the model as control variables, b = .063, SE = .027, p = .019, and b = .073, SE = .023, p = .002, respectively (Table 10, Models) 2 and 5). These effects also remained significant after adding ethical organizational culture, satisfaction with immediate supervisor, and satisfaction with managers above immediate supervisor to the model as control variables, *b* = .052, *SE* = .024, *p* = .032, and *b* = .075, *SE* = .021, p < .001, respectively (Table 10, Models 3 and 6).

our theorizing predicts that organizational secrecy produces both wellbeing harms (i.e., work stress) and benefits (i.e., meaningfulness of work), we make no prediction about the direction or magnitude of the direct or total effect of organizational secrecy on overall job satisfaction. Instead, we predict that feelings of work stress and perceived meaningfulness of work will simultaneously mediate the effect of an organizational secrecy requirement (vs. no requirement) on job satisfaction (H5).

meaningfulness of work as predictors of overall job satisfaction. Since

We found no consistent direct or total effect of having an organizational secrecy requirement (vs. no requirement) on employees' overall job satisfaction (see Table 11, Models 1–3). This null finding is consistent with our theorizing that organizational secrecy simultaneously produces both well-being harms and benefits. Importantly, however, feelings of work stress had a negative and significant effect on overall job satisfaction, b = -.373, SE = .010, p < .001, while perceived meaningfulness of work had a positive and significant effect on overall job satisfaction, b = .655, SE = .011, p < .001 (see Table 11, Model 4). The effect of feelings of work stress on overall job satisfaction remained significant after adding the control variables to the model in the same two steps described above, b = -.384, SE = .010, p < .001, and b =-.237, SE = .009, p < .001, as did the effect of perceived meaningfulness of work on overall job satisfaction, b = .635, SE = .012, p < .001, and b

Finally, we considered feelings of work stress and perceived

= .458, SE = .012, p < .001 (Table 11, Models 5–6).¹⁰

Next, to test our simultaneous mediation prediction (H5), we conducted three separate bootstrapping procedures with 5,000 resamples each (Hayes, 2017). When including only our proposed mediators (feelings of work stress and perceived meaningfulness of work) and agency fixed effects in the model, we found that feelings of work stress (95% CI = [-.0422, -.0040]) and perceived meaningfulness of work (95% CI = [0.0558, 0.1140]) simultaneously mediated the effect of an organizational secrecy requirement (vs. no requirement) on job satisfaction. These mediation effects remained significant after adding the control variables to the model in the same two steps described above: Step 2 (stress, 95% CI = [-.0459, -.0058]; meaning, 95% CI = [.0183, .0752]) and Step 3 (stress, 95% CI = [-.0255, -.0020]; meaning, 95% CI = [.0165, .0544]). These results provide support for Hypothesis 5.

Study 5 demonstrated that government employees who are required to keep organizational secrets (vs. those who are not required to keep organizational secrets) indicated that their work was more stressful, but also more meaningful. These opposing effects, in turn, mediated the effect of organizational secrecy (vs. no requirement) on overall job satisfaction. Finally, while we might expect people higher up in the hierarchy to have more access to organizational secrets as well as higher stress and meaning, the reported effects also emerged while controlling for respondents' formal organizational position (as well as other important employee and work characteristics). Importantly, we replicated the results of this archival study using a pre-registered study design with workers from a wide range of industries and work roles (see Supplemental Study 2).

10. General discussion

Every day, people are trusted with sensitive information and are required to keep it secret. Diplomats, executives, healthcare workers, and employees in sectors such as finance, manufacturing, and consulting, must all keep confidential information about their clients, products, and jobs secret. Secrecy protects company assets and provides security, but what effect does it have on the employees who must keep organizational secrets? The current work is the first to tackle this important research question. We addressed this question using five main studies and two supplemental studies involving over 12,000 participants drawn from diverse industries and organizations in the U.S. and U.K.

Our results show that being trusted to keep an organizational secret is experienced as a burden, but also as a privilege. Specifically, we found that keeping an organizational secret lowers employees' hedonic wellbeing by increased feelings of social isolation and stress. At the same time, keeping an organizational secret was related to higher eudaimonic well-being among employees, who experienced elevated feelings of status and perceived meaning as a result of holding privileged organizational information.

As Table 1 shows, some of our hypotheses received more consistent support than others. Specifically, Hypotheses 1, 2, 3b, and 4b received

consistent support across all studies that could test these hypotheses (regarding effects on isolation and status, and their effects on stress and meaning, respectively). In contrast, Hypotheses 3a and 4a, which pertain to direct effects on our distal outcome measures-stress and meaningfulness-received support in most studies (3 out of 5 for H3a, and 6 out of 7 for H4a, stress and meaning, respectively). Given the consistent support we found for the indirect effects of organizational secrecy on stress via social isolation (H3b), and on meaningfulness of work via status (H4b), we are confident that organizational secrecy indeed shapes stress and meaningfulness at work, indirectly. Finally, given that Hypothesis 5 was only tested in one main study (i.e., Study 5) and one supplemental study (Study S2), we believe that this hypothesis will benefit from replication efforts. Overall, our multi-method investigation of the psychological effects of organizational secrecy offers insights into how being trusted with organizational secrets and being required to keep them produces divergent consequences for employees' eudaimonic and hedonic well-being.

10.1. Theoretical contributions

The current work makes several theoretical contributions. Whereas past work has largely focused on personal secrets, the current work examines organizational secrets. Unlike personal secrecy, which follows from an intrinsic intention to keep information unknown (Slepian, 2022), keeping a secret on behalf of a workplace begins with an organization imposing extrinsic constraints on employees' freedom to share information with others. These extrinsic constraints come with significant costs but also benefits. They deny employees an important pathway to affiliating with others, and thereby prompt social isolation and stress. However, they also support employees' sense of status and perceptions that their work is meaningful. We show these effects of organizational secrecy across a number of comparison conditions including compared to the effects of a) former organizational secrets, b) no organizational secrecy requirement, and c) secrets kept on behalf of a friend, a coworker, or one's family.

The current work thus offers several new insights into the psychology of secrecy. While the actions taken to keep a secret are the same across different kinds of secrets, the content of a secret can vary greatly (Slepian & Koch, 2021; Slepian, 2022). Only recently has work begun to reveal how the content of a secret affects its keeper. For instance, when it comes to a personal secret, the more the content of a secret is rated as immoral, the more that secret is associated with the experience of shame; and the more a secret is goal-oriented, the more insight people feel they have into their secret (Slepian & Koch, 2021). The current studies reveal aspects of secrecy not captured in prior work, specifically when it comes to feelings of status and meaning. Unlike most personal secrets, organizational secrets come from higher up in the organizational hierarchy and involve highly significant information. The discovery that keeping organizational secrets can boost feelings of status and meaning can help inform future research on the psychology of secrecy by examining how the origin of the secret and the significance of the secret relate to feelings of status and meaning also in non-work contexts.

Our findings also advance knowledge on the antecedents of employee well-being. Our studies highlight that the same behavior—keeping an organizational secret—can simultaneously diminish and enhance distinct aspects of well-being, through different pathways. Having to keep an organizational secret may decrease immediate, visceral and hedonic forms of well-being by increasing daily experiences of social isolation and job stress. At the same time, having to keep an organizational secret may increase more eudaimonic forms of wellbeing, such as meaningfulness (Oishi, Graham, Kesebir, & Galinha, 2013). Our findings also directly contrast organizational secrets with other kinds of secrets, including family secrets, coworkers' secrets, and friends' secrets. We find that the collective source and the organizational setting of secrecy interact in producing higher levels of status and meaningfulness. These findings go beyond previous work that did not

¹⁰ Exploratory analysis revealed that social engagement behavior at work moderated the relationship between an employee's organizational secrecy requirement and work stress (interaction effect, b = -.110, SE = .036, p = .002) such that for jobs that required secrecy, the more social engagement employees reported, the less job stress they reported experiencing, b = -.099, SE = .029, p = .001. This effect did not emerge for jobs that did not require secrecy, b = .013, SE = .022, p = .57. Additionally, the interaction between organizational secrecy requirement and social engagement on meaningfulness of work was not significant, b = .018, SE = .033, p = .59, suggesting that social engagement (or lack thereof) does not moderate the beneficial effect of organizational secrecy on meaningfulness of work. Overall, this pattern of results suggests that organizational secret holders may be able to attenuate the social isolation that we theorize drives the relationship between organizational secrecy and work stress. See the SOM for additional details related to this exploratory analysis.

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examine the effects of secret source (individual vs. collective) and setting (personal vs. organizational) on secret keepers' experiences. Overall, work on personal secrecy would benefit from the distinction between hedonic and eudaimonic well-being and from considering the source and settings of secrets.

Finally, our research advances knowledge on subgroups created by organizations. Compared to other subgroups formed in organizations, the subgroups created by organizational secrecy are unique in that organizations seek to bolster their boundaries, in part, by punishing boundary-spanners who share organizational secrets beyond the boundaries of the subgroup. Whereas organizations typically aim to reduce or eliminate boundaries that limit communication between resource-based, knowledge-based, and identity-based subgroups, the opposite is true when it comes to secrecy-based subgroups in organizations. This, in turn, prompts unique outcomes such as feelings of social isolation and stress. Future work should examine the broader consequences of organizational secrecy on subgroup formation and maintenance.

10.2. Practical implications

The current work offers several implications for managers in organizations. Our findings highlight the need to help employees manage the social isolation and stress emanating from the requirement to keep organizational information secret. Prior research on personal secrecy finds that framing interventions can make people feel better about their secret in the moment (Liu, Kalokerinos, & Slepian, 2023; Slepian & Koch, 2021). Thus, managers can support employees' ability to cope with the burdens of secrecy by helping them reframe their organizational secrets. Rather than focusing on how a secret limits the extent to which one may discuss one's work freely with others, managers could emphasize the potential for camaraderie and social support among those who are required to keep the same secret. Highlighting the potential for social support within the circle of secret keepers may foster feelings of social connection and common fate to combat the feelings of stress documented in the current work. If feelings of social isolation can be mitigated or shifted through reframing, we might expect reduced feelings of stress from an organizational secret.

Another approach to helping employees with their organizational secrets could highlight the positive meaning that stems from organizational secrecy. By framing access to the privileged information positively (e.g., emphasizing how keeping the secret benefits employees and aligns with organizational goals), managers can support employees' feelings of status and meaningfulness of work. Such a reappraisal approach to regulating employees' feelings (Gross & John, 2003) may also require de-emphasizing the negative aspects of organizational secrecy (e.g., how failing to keep the secret will result in punishment). Helping employees focus on the status and meaningfulness benefits emanating from secrecy may help redirect attention away from those aspects that make the secret stressful to keep, consistent with research on emotion regulation (Bianchi et al., 2024).

Finally, supplementing approaches that examine how the employee perceives the secret, another fruitful future direction might focus on employees' relationships with their supervisors and the organization as a whole. Perhaps when employees have higher quality relationships with their supervisors (Schriesheim, Castro, & Cogliser, 1999) or perceive greater support (Eisenberger, Huntington, Hutchison, & Sowa, 1986), employees will be better able to cope with the burdens imposed by their organizational secrets, and thus experience more of the benefits and fewer of the costs of organizational secrecy.

10.3. Future directions

We see the current theoretical model and empirical evidence as merely a first step toward a more comprehensive understanding of employee reactions to organizational secrecy. The current theory and findings highlight several promising directions for future research on organizational secrecy.

First, future research may examine how organizational communication about the need for secrecy shapes employees' reactions to the need to keep secrets. The extent to which organizations cultivate a climate of informational justice may support positive reactions among employees (Liao & Rupp, 2005), especially if the need to keep organizational secrets is seen as well-justified.

Second, future research may examine how the organizational sanctions imposed on those who disclose organizational secrets (e.g., losing one's job, being prosecuted) relate to employees' subjective experiences with organizational secrecy. Investigating how employees think and feel about the ramifications of revealing an organizational secret may help shed additional light on the relationships between organizational secrecy, stress, and meaningfulness observed in the current work.

Finally, future research may venture beyond organizational secrets to examine other kinds of secrets that offer a heightened sense of status and meaning. The perceived significance of the secret, feeling a sense of exclusivity, and ascribing importance to the ultimate goal underlying the need to keep information secret may contribute to a greater sense of meaningfulness when keeping secrets on behalf of various collectives.

10.4. Conclusion

Organizational secrecy is central to national security, politics, business, law, technology, and healthcare, but the effects of such secrecy for the people who must keep the secrets have eluded empirical attention, likely because of the inherent difficulties of studying that which organizations intend to keep secret. To illuminate this understudied yet consequential everyday experience, we examined the experiences of individuals who are tasked with keeping organizational secrets, including organizational secrets kept in service of national security interests (Study 5) as well as common organizational secrets kept by employees across diverse industries and firms (Studies 1-4). We find that having to keep secrets on behalf of workplaces is associated with wellbeing costs as well as benefits, and we found these effects when examining real secrets, including those that have been kept for years, with dramatic real-world consequences if the information were to be revealed. Given the ubiquity and significance of organizational secrets, our findings suggest that managers and employees alike would be wise to find ways to maximize the benefits while minimizing the costs of organizational secrecy.

Author statement

All authors contributed to study design and writing the manuscript. Studies 1-4 and S1-S2 were analyzed by MS, and Study 5 was analyzed by EA.

CRediT authorship contribution statement

Michael L. Slepian: Writing – original draft, Formal analysis, Data curation, Conceptualization. **Eric M. Anicich:** Writing – review & editing, Formal analysis, Data curation, Conceptualization. **Nir Halevy:** Writing – review & editing, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data and code available at https://osf.io/26zd5.

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Appendix Supplementary material

Supplementary data to this article can be found online at https://doi. org/10.1016/j.obhdp.2024.104335.

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