ORIGINAL ARTICLE

WILEY

Unlocking the secrets of secrets: How can we learn about experiences that cannot be recreated in the laboratory?

Michael L. Slepian[1] 🅾 | Elise K. Kalokerinos[2]

[1]Management Division, Columbia Business School, Columbia University, New York, New York, USA

[2]Melbourne School of Psychological Sciences, The University of Melbourne, Melbourne, Australia

Correspondence
Michael L. Slepian.
Email: Michael.Slepian@Columbia.edu

Abstract

People keep secrets for years with significant ramifications if the information were ever revealed. How can we understand the effects of long-held secrets? The current paper presents a new perspective on secrecy and how it can be studied. By examining the multiple experiences people have with their multiple secrets, we can obtain a fuller view of how secrets affect people in daily life. Additionally, by examining a set of common secrets, across people, we can understand how secrets (i.e., exemplars) differ from one another, and we can study how those differences relate to important variables like well-being. That is, rather than study a specific secret or secrecy situation (which will have limited generalizability), we can seek to study the entire universe of secrets, both to make generalizations across that universe and to compare different secrets to one another. Using the question of whether secrecy causes lower well-being, we discuss this Multiple Exemplar Measurement approach alongside other methodologies. We highlight the many benefits of taking an exemplar-level perspective, both for understanding secrecy and other psychological phenomena more broadly.

KEYWORDS
measurement, secrecy, well-being

At some point in time, everyone keeps secrets, and most people have several secrets right now. Secrets are not only common but also consequential. Our secrets often deal with life's most important issues—our relationships, family, finances, health, work, romance, sex, desires, discontents—and secrecy has been associated with a variety of markers

of lower well-being. But these links between secrecy and well-being are mired with complexities, both theoretical and methodological.

Recent work provides new answers to the questions of how secrecy is related to well-being and what can we do to intervene, but what we know about secrecy is inextricably linked to the methods we use to study secrecy. In exploring different perspectives on secrecy and their corresponding methods, the current paper articulates novel recommendations for how we can best understand the effects of secrecy as well as other common experiences that cannot be recreated in the laboratory context.

Through the doors of any research study, participants arrive already keeping numerous secrets, including those that have been kept for years. To understand these real secrets and their effects, we must study *real secrets*. Given that secrets have been linked with lower well-being, it is for the best that these kinds of consequential secrets cannot be realistically created in the laboratory. So how can we gain insight into the effects of real secrets? The current paper introduces the Multiple Exemplar Measurement approach and showcases its unique benefits for understanding secrecy and other common social phenomena, particularly those that cannot be recreated in the laboratory.

Specifically, by studying secrecy at the exemplar-level—that is, at the level of the secret, rather than the person—we can gain unique insights into the experiences people have with their secrets and how those experiences relate to well-being. Rather than ask, "Does secrecy hurt well-being?," by taking measures per each of the multiple secrets people keep, Multiple Exemplar Measurement allows us to answer a different question: "Which secrets hurt well-being, and why?" The current paper explores these questions, and shows how this new approach can be broadly applied to other social psychological questions.

1 | SECRECY

Early work conflated secrecy with concealment during social interactions (Smart & Wegner, 1999). This is problematic because our secrets also exist and come to mind outside of social interactions (Slepian, 2022). Defining secrecy not as an action, but as an intention, presents a far broader psychology of secrecy. Specifically, secrecy can be considered the intention to keep information unknown from one or more others (Slepian et al., 2017). Sometimes a social interaction reminds one of this intention, prompting concealment, but other times, people will be reminded of this intention outside of concealment contexts (Slepian, 2022). People have many experiences with their secrets both within social interactions and outside of them. Considering secrets in this light has enabled several new insights into secrecy.

Secrecy has been associated with several harms to well-being, including depression, anxiety, lower quality relationships, and poor health (Larson & Chastain, 1990; Larson et al., 2015; Lehmiller, 2009). These associations between secrecy and lower well-being have been shown *across people*; the more people report themselves to be secretive, the more they also exhibit lower well-being. These between person-correlations, however, are particularly susceptible to between-person third-variable explanations. For example, perhaps people with low social support keep more secrets, and low social support may better explain why such individuals have worse health (Beals et al., 2009). People who habitually use secrecy as a way of dealing with distress—rather than confronting problems and problem-solving—have an avoidant coping style that may increase distress rather than reduce it, as such people will often fail to effectively work through stressors and struggles (Larson & Chastain, 1990; Larson et al., 2015). Prior work makes clear that *people* who keep more secrets often have worse health, but is this because of the secrets, or something to do with the kinds of people who choose to keep more secrets?

These problems illustrate a common shortcoming in psychological research: Both correlational and experimental research often examines the person as the data point, rather than the many exemplars that people encounter in daily life. Just as group differences may not reflect the processes of any single individual (Fisher et al., 2018), asking people about their tendencies toward secret keeping, or putting people into secrecy situations, is unlikely to well represent the effects of any individual secret.

To address these problems, it is necessary to examine the *secret-level* and not just the person-level. This approach builds from the knowledge that not only do most people have secrets, but also, most people have multiple secrets

at any given point in time (Slepian et al., 2017). Rather than ask participants about their tendencies to keep secrets—and rather than compare people in different situations—a recent body of work asks people about each secret they hold. Thus, instead of asking *which people* have lower well-being, this new approach asks *which exemplars* (i.e., which secrets) are most associated with reports of lower well-being. Studying secrecy at the exemplar-level has led to several new insights into secrecy and related psychological processes. More broadly, in reviewing recent insights into secrecy, this article showcases the many benefits of examining the exemplars themselves for a deep and full understanding of psychological phenomena.

In addition to accounting for the fact that people have many secrets, only some of which may hurt well-being, studying the same exemplars (i.e., the same categories of secrets) across people affords a unique experimental control. Compared to person-level observations, this approach better classifies the data, allowing us to estimate cluster specific deviations and effects, accounting for the variance associated with different types of secrets, and thus allowing for more robust and generalizable conclusions across all secrets. Additionally, this approach allows us to directly compare the different types of secrets to each other, making important secret-level inferences. In other words, rather than study a specific secret or secrecy situation (which will have limited generalizability), we can seek to study the entire universe of secrets, both to make generalizations across that universe and to compare different secrets to one another. As we will also show, this approach can offer unique insights into other research domains beyond secrecy.

2 | THE SECRETS WE KEEP

Slepian et al. (2017) developed a list of 38 common categories of secrets, which make up the Common Secrets Questionnaire (CSQ). The CSQ comprehensively covers the content of the secrets people keep. For example, 92% of free responses fit one of the categories, and the average person reported currently keeping 13 secrets from the list (Slepian et al., 2017).

These 38 common categories of secrets represent common experiences. For instance, Figure 1 plots data from 50,000 individuals who have participated in our studies (including individuals from around the world). The figure shows which experiences are most common and how commonly each of the experiences are kept secret. Of the 38 categories, 68% (26) are experiences had by at least 50% of the sample, and 84% (32) are experiences had by at least one-third of the sample. Each of the top 5 experiences are had by more than 80% of the sample, and each of the top 4 secrets are held by more than 50% of the sample, with 61% of the categories (23) representing secrets currently held by at least one-third of the 50,000 individuals.

Per each secret that participants kept from the list—across several studies—participants reported how many times in the past month (1) the secret spontaneously came to mind outside of a social interaction, and (2) how many times the secret was concealed within a social interaction (Slepian et al., 2017, 2020; Slepian & Moltoun-Tetlock, 2019). Not only did the participants report that they mind-wandered to their secrets about twice as often as they had to conceal them, but it was the frequency of mind-wandering to secrets (not concealing them) that was reliably related to lower-well-being (including when only asking about the past week or the past day; McDonald et al., 2020; Slepian et al., 2020; Slepian & Koch, 2021).

This research concludes that the secrets we most often conceal are not the secrets that are most harmful to our well-being, but rather, the secrets that most often return to our minds are the secrets that most reliably harm well-being. This conclusion is made in the context of examining a comprehensive set of exemplars that people encounter in daily life, and thus provides a picture of (nearly) the entire universe of secrecy (covering perhaps more than 90% of what people keep secret; Slepian et al., 2017). More generally, conclusions like these would be impossible to make without taking a secret-level perspective.

We term this approach of considering participants' multiple relevant exemplars and standardizing the list of exemplars across participants Multiple Exemplar Measurement. This approach combines benefits from multiple methodological approaches. The approach shares similarity with experience sampling methods (Csikszentmihalyi &
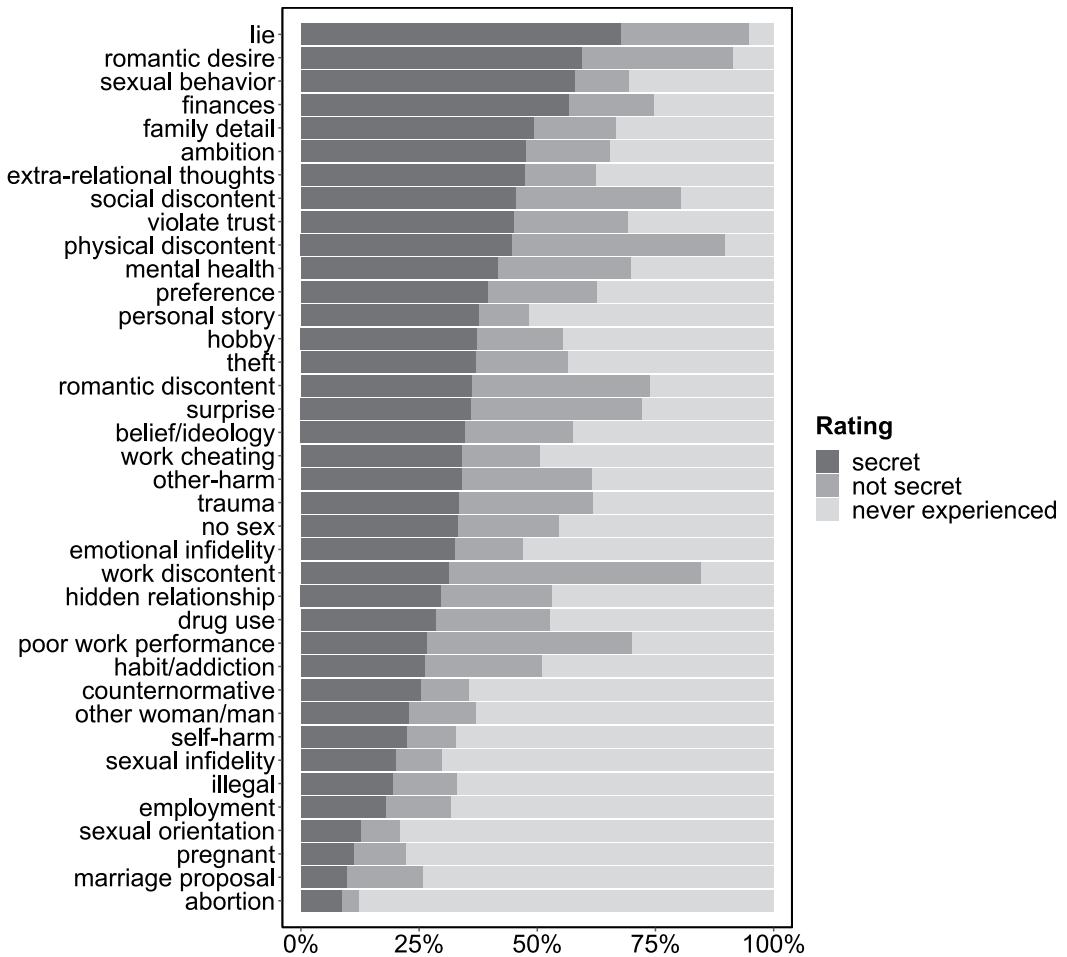
FIGURE 1 Common secrets across 50,000 participants (from the Common Secrets Questionnaire).

Larson, 1987), but rather than sample experiences across multiple points in time, the researcher samples across participants' real-world exemplars. This methodological approach is also related to research that has asked participants to list multiple recent experiences and to rate them (Pemberton et al., 1996) while also considering real-life experiences as stimuli (exemplars) to be modeled as a random factor (Judd et al., 2012).

In addition to these qualities, a unique feature of Multiple Exemplar Measurement is that all participants are considering the same comprehensive set of exemplars. This allows for a secret-level perspective, rather the typical person-level perspective, because we can classify secrets as belonging to the same category, across people. Furthermore, by using the same comprehensive set, across multiple studies and multiple papers, this method enables generalizations across studies and papers to the same universe of secrets.

By controlling the set of exemplars considered, Multiple Exemplar Measurement enables unique insights. Experimental control, while typically considered within the context of randomization to condition, can also be applied to measurement, that is, the researcher can take controlled observations (Cowan, 2018). For instance, perhaps across people, there are similarities in their experiences, having experienced the same exemplar. We can ask: Across people, how do the different exemplars compare to one another? And how do those differences relate to well-being?

A recent series of multidimensional scaling studies provide answers to these questions, by showing that people indeed reliably experience the same category of secret in similar ways. Slepian and Koch (2021), using a variety of methods, asked participants to sort the common secret exemplars so that more similar exemplars were closer
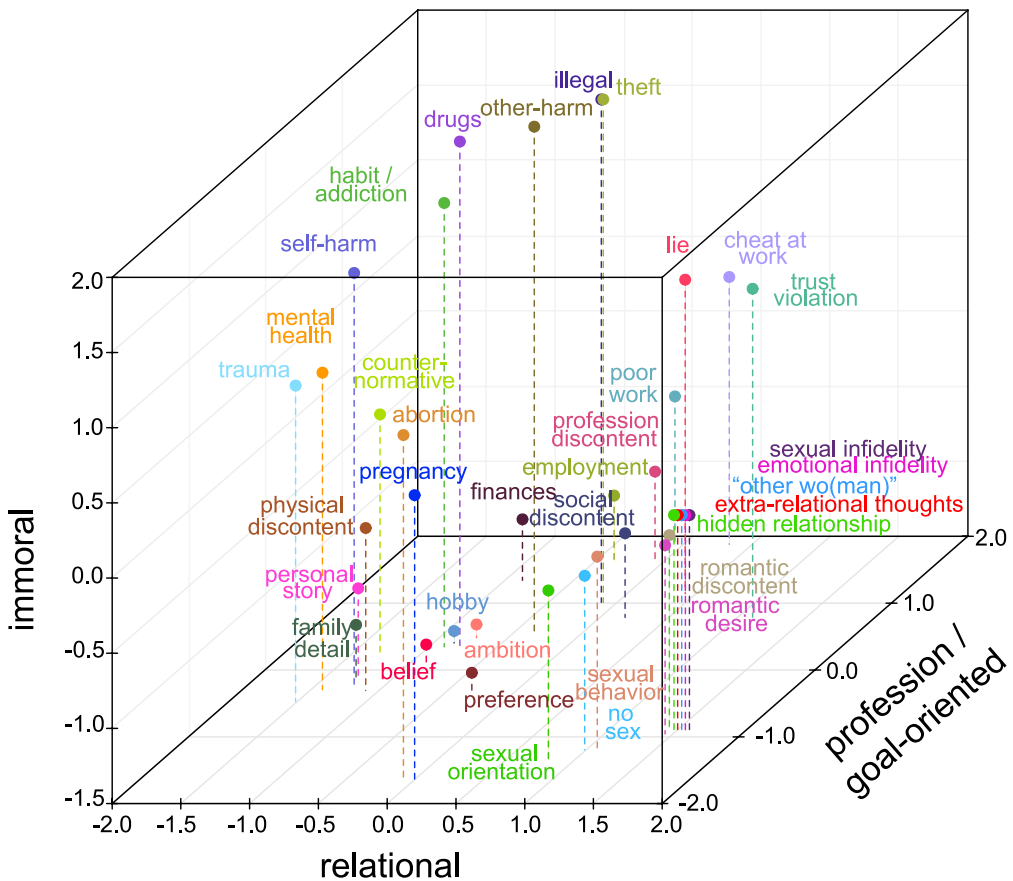
FIGURE 2 The three dimensions of common secrets.

together and more dissimilar exemplars were farther apart. The data suggested a three-dimensional structure best described how participants had naturally arranged the different exemplars. A series of follow-up studies explored each potential dimension running through the space, finding that another group of participants gleaned three primary dimensions running through the space: how immoral, relational (i.e., related to relationships), and goal-oriented is the secret. This space is represented by the three-dimensional graph presented in Figure 2, which also plots where participants consensually perceive the different exemplars along the three dimensions.

These three dimensions of secrets were identified in an entirely data-driven manner, and the exemplars themselves were also identified in a data-driven manner (Slepian et al., 2017; Slepian & Koch, 2021). Accordingly, these are secrets that people commonly hold, and this is how people naturally think about these secrets, as existing along these three dimensions.

Each content dimension was, in turn, related to a unique experience. Secrets that were perceived as more immoral evoked more shame. Secrets that were perceived as low in relationality were more isolating to keep. And secrets that were perceived as low in goal-orientation evoked more uncertainty (i.e., lack of insight into the secret).

Specifically, the secrets' coordinates (as shown above, and downloadable in Slepian & Koch, 2021) can be treated as predictors of how people experience their secrets. Thus, simply by knowing which categories of secrets someone has (i.e., which exemplars), we can predict how one will feel about those secrets (i.e., whether one feels shame, isolation, or uncertainty). In turn, each of these experiences were independently related to reports of lower well-being. And so, by knowing which exemplars participants have, we can predict the harm those secrets have for their well-being, with insight into the mechanisms of that harm.

What initially seemed almost impossible to study—the consequences of what people hide away—can be brought into focus, by employing the same exemplars across people and systematically examining individuals' experiences with the comprehensive set of exemplars. In presenting this exemplar-level view, we next discuss Multiple Exemplar Measurement alongside other methods (i.e., between-person correlations and manipulations, ecological momentary assessment, and longitudinal methods). We use the question of whether secrecy causes lower well-being to compare the different methodologies, and subsequently, we show how Multiple Exemplar Measurement can be broadly applied to other psychological questions.

3 | DOES SECRECY CAUSE LOWER WELL-BEING? THE UNIQUE BENEFITS OF EXEMPLAR-LEVEL DATA

Differences between people may not explain what makes keeping a secret harmful, because secrecy could be an outcome that follows from other qualities of those people (or the situations that they encounter) that explain lower well-being. For instance, social anxiety may create distress and discourage disclosure. This is a problem, because it means that even when examining changes over time, one cannot explain whether secrecy was a cause of lower well-being, or a symptom of lower well-being. For example, an event during the day may increase social anxiety, prompting both secrecy and distress, giving the appearance of lower well-being from secrecy, when both could be caused by an increase in social anxiety.

Given these challenges, how can we obtain an estimate of the effect of secrecy on well-being? We propose a simple, but powerful approach that enables a secret-level analysis: Simply asking about the secret. Some secrets, for instance, will cause more shame than others (e.g., secrets about immoral actions; Slepian & Koch, 2021), and by taking a measure of shame, per each secret, the researcher can learn how these secrets differ from each other. For example, people report that secrets that cause them more shame (vs. less) more hurt their well-being (Liu et al., 2023). And so, from knowing the category of secret, we can predict the self-reported well-being harm of the secret (Slepian & Koch, 2021). By studying the same comprehensive set of exemplars across multiple studies, we have learned how these secrets differ from each other including with respect to well-being.

Can we establish this well-being effect causally? Yes and no. Creating a brand-new secret in the laboratory is limited—for ethical reasons—to only relatively mundane and trivial secrets. Yet many common secrets can cause shame, and these are off-limits in terms of creating brand-new secrets (e.g., abortion, addiction, drug use, harming another person, infidelity, illegal behavior, self-harm, struggles with mental health, traumatic experiences). Other common exemplars simply cannot be created in the lab, including family secrets and secrets around gender identity, sexual behavior, sexual orientation, and violating a close other's trust.

In addition, the typical secret is one that people keep for years, and this is impossible to recreate in the lab. In pilot work, 100 participants were exposed to the CSQ and indicated which secrets they were keeping from the list of 38 categories. Participants were asked how long they had each of their secrets, with no constraint on the unit of time. All estimates were then converted to years. Across the 1421 secrets, the mean length of time people held their secrets was 8.97 years, and the median length of time a secret was held was 5 years.

This problem is not unique to research on secrecy. For instance, romantic relationships, family relationships, and friendships also last for years and cannot easily be created in the lab. Perhaps something like a "Fast Friends" procedure (Aron et al., 1997) can recreate the situation of having just met someone and hitting it off, but this should not be conflated with the real-world case of having known someone for longer than 30 minutes.

This is not to say that experiments serve no utility when it comes to studying secrecy or similarly complex phenomena. When participants have multiple real-life exemplars of a given phenomenon of interest, researchers can take their dependent measures per each exemplar, and the exemplars themselves can be randomly assigned to receive different manipulations. Conducting this kind of secret-level (i.e., exemplar-level) experiment allows us to see if a manipulation applied to one secret—but not another secret—has an influence on some outcome of interest. One

study (Liu et al., 2022) followed this approach, and found that secrets paired with a shame framing led participants to feel less capable when it came to coping with the secret, compared to both a guilt framing and an anger framing. This design enabled causal conclusions about the relationships between momentary negative emotions and feelings of coping efficacy with respect to real secrets. Using experiments like this to establish causal processes with real secrets allows for generalizing to the secrets people keep in their real lives.

Interventions can also be applied at the exemplar-level. Rather than ask, for example, whether an intervention helped one person, relative to another, this exemplar-level approach can test whether an intervention on a given exemplar is effective compared to exemplars that have not been intervened upon. For instance, one study (Slepian & Moulton-Tetlock, 2019) asked participants which secrets they currently held and have confided in someone. Then, participants' confided secrets were divided into two sets. For approximately half of their confided secrets, participants were led to consider the benefits they obtained from confiding the secret, whereas there was no such framing for their remaining secrets. Being reminded of benefits like emotional and practical support led participants to feel more capable in coping with their secret. Again, these conclusions are made in the context of examining a comprehensive set of exemplars.

A compromise between experimentally creating a secret and studying real secrets is the recall experiment, where the researcher asks participants to recall a real-life experience, and experimentally constrains the features of the recalled experience. For instance, one study (Slepian et al., 2019) randomly assigned participants to think about significant personal information that others were not aware of because it had yet to come up in conversation (undisclosed information) or to think about significant personal information that others were not aware of because they intended to keep the information secret (secret information). Recalling secret, relative to undisclosed, information led participants to report feeling more socially isolated.

Experiments that prompt people to think about a real secret outside of a concealment context recreate the most common experience people have with their secrets, which is simply thinking about the secret outside of concealment settings. This kind of experiment, however, will only be a useful as its control condition. There is no perfect control condition for secrecy, as each potential control has strengths and weaknesses. Control conditions that have been used in previous studies include former secrets (Slepian et al., 2017), negative but known information (Slepian et al., 2017), and unknown information but with no intention to conceal (i.e., undisclosed but not secret; Slepian et al., 2019). Conducting recall experiments with multiple comparison conditions would allow for more robust conclusions.

Importantly, the recall experiment can be implemented at the secret-level by using the same set of exemplars across multiple conditions. For example, a recent study on positive secrets identified a comprehensive list of good news that people recently encountered (Slepian et al., 2023). Participants were exposed to the list of exemplars and selected which they currently held that were secret, and which they currently held that were non-secret. Participants were then randomly assigned to recall, one-by-one, each of their secret pieces of good news, or each of their non-secret pieces of good news. Across the same exemplars, secret good news was more energizing than non-secret good news.

What about concealment experiments? The typical concealment study instructs a social interaction partner to ask questions directly related to the secret (using an interview format; Critcher & Ferguson, 2014; Newheiser & Barreto, 2014; Smart & Wegner, 1999). Such studies find concealment can be taxing, but do the results generalize to all secrets? What about when the individual is not fielding direct questions about the secret? Logically, a common concealment situation would be one in which a person simply thinks of a secret during a social interaction, but holds back mention of it (Slepian, 2022). Presumably this common form of concealment is less taxing than the concealment captured in studies that use an interview format. A broader picture of concealment would consider the multiple exemplars people conceal and the multiple situations that prompt concealment.

Finally, we consider temporal processes. In everyday life, secrecy experiences can be fleeting. Someone may think about a secret outside a concealment context, and within seconds, the mind may move on. Or during a conversation, a person may think of a secret and hold it back for just a moment, and then the conversation moves on. Accordingly, ecological momentary assessment methods could seek to capture multiple experiences, across multiple

exemplars, shortly after they happen. But outside of using such methods, a retrospective design would be required to capture such fleeting experiences. One could ask about the past day, the past week, the past month, or even longer periods, depending on how rare the events of interest are. Of course, the researcher should consider the possibility of biases in memory and recall. For instance, perhaps concealment episodes are more memorable than episodes of mind-wandering to a secret; and yet this would explain reporting more concealment episodes than mind-wandering episodes, when the reality is the opposite. People report more recent mind-wandering episodes than concealment episodes (Slepian et al., 2017; Slepian & Moulton-Tetlock, 2019), including when reporting only on the past week (Slepian et al., 2020), the past day (Slepian & Koch, 2021), or the past 2 hours (Bianchi et al., 2024).

A longitudinal approach would also yield numerous insights into secrecy. While a longitudinal approach does not allow for causal inferences absent an experimental manipulation, examining how processes change over time would shed new light on secrecy, and provides steps toward establishing directionality of effects. Intensive longitudinal methods (e.g., daily diary, momentary assessment) allow for measurement closer in time to the most recent secrecy event. Ideally, such methods would examine multiple exemplars (i.e., secrets) per person over time, allowing the researcher to compare exemplars to each other, across people and over time. Within such a study, a manipulation could also be applied at the exemplar-level. For example, a framing intervention can be applied to a portion of participants' real-world exemplars, and at a later point in time, intervened upon exemplars can be compared to exemplars that have not been intervened upon.

4 | MULTIPLE EXEMPLAR MEASUREMENT: SECRECY AND BEYOND

The Multiple Exemplar Measurement approach described here has led to several new insights within the domain of secrecy. As reviewed earlier, this approach has shown that it is the frequency of mind-wandering to secrets that is most predictive of harm to well-being, and not the frequency of concealing those secrets (Slepian et al., 2017). This approach has also demonstrated that confiding secrets is associated with well-being benefits, not as a function of less frequent concealment, but less frequent mind-wandering (Slepian & Moulton-Tetlock, 2019).

Multiple Exemplar Measurement has also provided insights on how to reduce the harms of secrets. Beyond confiding the secret in a trusted other (Slepian & Kirby, 2018), one can focus on prosocial aspects of the secret (McDonald et al., 2020), on one's wrongful behavior rather than how bad one feels about oneself (Liu et al., 2022), and on the present and future, rather than the past (Slepian et al., 2020). Each of these framings are associated with lower harm to well-being. Additionally, another approach asks participants to focus on how a secret is *not* hurting them, and this can improve feelings of coping efficacy with dividends for well-being (Slepian & Koch, 2021).

Multiple Exemplar Measurement has also provided evidence for the notion that a common understanding of thought suppression seems to be wrong. Experiments that induce thought suppression, for example, look nothing like what thought suppression looks like in daily life, and this is a real problem for this area of study. When an experimenter asks participants to suppress a novel thought that they have never tried to suppress before, they are likely to fail, but when it comes to thoughts people intrinsically want to suppress, they seem able to do so (Kelly & Kahn, 1994; Slepian et al., 2020). More generally, when a behavior is extrinsically created (by an experimenter), it could look very different from what that same behavior looks like when it is intrinsically chosen in daily life.

Importantly, Multiple Exemplar Measurement can be extended to many domains beyond secrecy. For instance, Multiple Exemplar Measurement has provided new insights into conversational dynamics. Among conversation topics that people frequently seek to avoid discussing (e.g., politics, money, religion, family, sex), the more a specific conversation topic causes a concern for privacy, the more people feel anxious, whereas the more a specific conversation topic causes a concern for creating a conflict, the more people become annoyed (Sun & Slepian, 2020). In turn, the former is associated with staying quiet within the conversation (not speaking to the topic), whereas the latter is associated with exiting the conversation.

Multiple Exemplar Measurement has also recently informed diversity and inclusion research by providing evidence that feelings of inclusion and belonging are distinct experiences. One challenge facing diversity research is that most

research studies focus on one marginalized identity at a time (e.g., race in education, gender in a male-dominated field), limiting conclusions to the single setting. In contrast, a recent series of studies recruited a very diverse set of participants, with many marginalized identities represented (Slepian & Jacoby-Senghor, 2021). The study identified 30 common categories of identity threatening situations that can occur for any marginalized identity (e.g., being the only person in the room with a given social identity, being asked to speak on behalf of a social group, someone expressing surprise that one counters a stereotype). Across the common exemplars of identity threatening situations, when a recent identity threatening situation made people feel *not* included, they most often felt greater negative emotions in response (anger and sadness), but when a recent identity threatening situation made people feel that they did *not* belong, they most often felt less able to be their authentic selves.

5 | CONCLUSION

Only a subset of social psychology is interested in behaviors that can be seen with the naked eye. Indeed, several areas within social psychology focus on *processes* that do not well lend themselves to behavioral observation: for example, perception, memory, emotion, non-conscious processes, and so on. This observation led Wegner and Gilbert (2000) to conclude that—rather than the science of social behavior—social psychology could better be characterized as the science of human experience.

So much of daily life cannot be recreated in the laboratory. Studying the same exemplars across people, especially when people have multiple real-life exemplars for a given phenomenon (here termed Multiple Exemplar Measurement), provides the kind of control that the experimenter so often seeks (Cowan, 2018), but with a more fine-grained resolution (e.g., modeling variance attributable to the person and also to the category of secret, and being able to calculate both between-person effects as well as between-secret effects). Importantly, this approach is domain general, and can be combined with experimentation. Rather than compare people to each other, the researcher examines the multiple experiences people have in a given domain, and how those experiences differ from each other. In doing so, the experience becomes the unit of analysis, bringing social psychological research closer to the science of human experience.

ORCID
Michael L. Slepian https://orcid.org/0000-0002-4728-2178

REFERENCES
Aron, A., Melinat, E., Aron, E. N., Vallone, R. D., & Bator, R. J. (1997). The experimental generation of interpersonal closeness: A procedure and some preliminary findings. *Personality and Social Psychology Bulletin, 23*(4), 363–377. https://doi.org/10.1177/0146167297234003

Beals, K. P., Peplau, L. A., & Gable, S. L. (2009). Stigma management and well-being: The role of perceived social support, emotional processing, and suppression. *Personality and Social Psychology Bulletin, 35*(7), 867–879. https://doi.org/10.1177/0146167209334783

Bianchi, V., Greenaway, K. H., Moeck, E. K., Slepian, M. L., & Kalokerinos, E. K. (2024). Secrecy in everyday life. *Personality and Social Psychology Bulletin*.

Cowan, N. (2018). Experimental psychology generally, and the journal today. *Journal of Experimental Psychology: General*, *147*(4), 459–461. https://doi.org/10.1037/xge0000439

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

Csikszentmihalyi, M., & Larson, R. (1987). Validity and reliability of the experience sampling method: Mental disorders in their natural settings. *The Journal of Nervous and Mental Disease*, *175*(9), 526–536. https://doi.org/10.1097/00005053-198709000-00004

Fisher, A. J., Medaglia, J. D., & Jeronimus, B. F. (2018). Lack of group-to-individual generalizability is a threat to human subjects research. *Proceedings of the National Academy of Sciences*, *115*(27), E6106–E6115. https://doi.org/10.1073/pnas.1711978115

Judd, C. M., Westfall, J., & Kenny, D. A. (2012). Treating stimuli as a random factor in social psychology: A new and comprehensive solution to a pervasive but largely ignored problem. *Journal of Personality and Social Psychology*, *103*(1), 54–69. https://doi.org/10.1037/a0028347

Kelly, A. E., & Kahn, J. H. (1994). Effects of suppression of personal intrusive thoughts. *Journal of Personality and Social Psychology*, *66*(6), 998–1006. https://doi.org/10.1037/0022-3514.66.6.998

Larson, D. G., & Chastain, R. L. (1990). Self-concealment: Conceptualization, measurement, and health implications. *Journal of Social and Clinical Psychology*, *9*(4), 439–455. https://doi.org/10.1521/jscp.1990.9.4.439

Larson, D. G., Chastain, R. L., Hoyt, W. T., & Ayzenberg, R. (2015). Self-concealment: Integrative review and working model. *Journal of Social and Clinical Psychology*, *34*(8), 705–729. https://doi.org/10.1521/jscp.2015.34.8.705

Lehmiller, J. J. (2009). Secret romantic relationships: Consequences for personal and relational well-being. *Personality and Social Psychology Bulletin*, *35*(11), 1452–1466. https://doi.org/10.1177/0146167209342594

Liu, Z., Kalokerinos, E. K., & Slepian, M. L. (2022). Emotion appraisals and coping with secrets. *Personality and Social Psychology Bulletin*, *49*(9), 1379–1391. https://doi.org/10.1177/01461672221085377

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

Newheiser, A.-K., & Barreto, M. (2014). Hidden costs of hiding stigma: Ironic interpersonal consequences of concealing a stigmatized identity in social interactions. *Journal of Experimental Social Psychology*, *52*, 58–70. https://doi.org/10.1016/j.jesp.2014.01.002

Pemberton, M. B., Insko, C. A., & Schopler, J. (1996). Memory for and experience of differential competitive behavior of individuals and groups. *Journal of Personality and Social Psychology*, *71*(5), 953–966. https://doi.org/10.1037/0022-3514.71.5.953

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

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

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

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

Slepian, M. L., Halevy, N., & Galinsky, A. D. (2019). The solitude of secrecy: Social isolation mediates the effect of secrecy on fatigue. *Personality and Social Psychology Bulletin*, *45*(7), 1129–1151. https://doi.org/10.1177/0146167218810770

Slepian, M. L., & Jacoby-Senghor, D. (2021). Identity threats in everyday life: Distinguishing belonging from inclusion. *Social Psychological and Personality Science*, *12*(3), 392–406. https://doi.org/10.1177/1948550619895008

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

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

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

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

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

Sun, K. Q., & Slepian, M. L. (2020). The conversations we seek to avoid. *Organizational Behavior and Human Decision Processes*, *160*, 87–105. https://doi.org/10.1016/j.obhdp.2020.03.002

Wegner, D. M., & Gilbert, D. T. (2000). Social psychology: The science of human experience. In *The message within: The role of subjective experience in social cognition and behavior* (pp. 1–9). Psychology Press.

AUTHOR BIOGRAPHIES

Michael L. Slepian is the Sanford C. Bernstein & Co. Associate Professor of Leadership and Ethics at Columbia Business School. He studies the psychology of secrecy, person perception, and the development and formation of trust. He is the author of The Secret Life of Secrets (2022).

Elise K. Kalokerinos is a senior lecturer in psychology and co-director of the Functions of Emotions in Everyday Life Lab at the University of Melbourne. She studies how people manage their emotions, and the emotions of others, as they navigate their daily lives.