

From Secrecy to Psychopathology

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Everyone has certain thoughts that are not shared with others. Whether these thoughts are sexy, pathetic, grotesque, malevolent, or merely ordinary, psychologists since Freud (e.g., 1913/1953) have placed considerable emphasis on such thoughts in the analysis of mind and behavior. It seems sensible, after all, that any thought a person would keep secret might somehow be important to the person's psychological makeup. Usually, the logical progression here is understood as going from thought importance to secrecy: It may be that important or diagnostic or central thoughts are kept secret because they are fundamental. What we wish to suggest in this chapter is the reverse of the usual progression: Secret, innermost thoughts may start out unimportant, but then grow through the processes involved in maintaining secrecy to become fundamental preoccupations in the individual's life. Eventually, innermost thoughts may become the seeds of psychopathology. One of the reasons that opening up and sharing one's hidden thoughts is beneficial may be that disclosure staves off the nega-

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tive psychological, and oftentimes pathogenic, effects produced by keeping secrets (Ellenberger, 1966).

This chapter begins with an analysis of the kinds of thoughts that people keep secret. We then consider a *preoccupation model of secrecy* that suggests how it is that any thought might, when kept secret, become a target of obsessive thinking and attention. Evidence for this model is reviewed briefly, and finally, we examine some implications of the model for the study of the role of secrecy in psychopathology more generally.

CATEGORIES OF SECRET THOUGHTS

What makes anyone keep a secret? As a first step in understanding secret thoughts, it is useful to have a picture of the kinds of pressures that might make individuals want to keep their thoughts from others. A first general idea represented in many literatures, of course, is the notion that secret thoughts are kept inside as a result of a person's concern about the social consequences of disclosure (e.g., Bok, 1982; Burnam, 1991; Hillix, Harari, & Mohr, 1979; Larson & Chastain, 1990; Simmel, 1950; Stiles, 1987; Wegner & Erber, 1993). People keep secrets because they anticipate ostracism, retaliation, derision, maniacal laughter, armed intervention, or worse—all the results of social disapproval. We hoped to refine our understanding of this general motive for secrecy, and so we conducted an analysis of data on secret thoughts collected by Lane and Wegner (in press).

For this study, a group of 237 college students at the University of Virginia (126 women, 97 men, and 14 lost souls who did not provide gender information) spent a few minutes rating the degree to which they kept their thoughts about each of a series of topics secret from others. Each participant received a list of 50 thought topics and was asked to rate each one on a 5-point scale according to the degree to which he or she tried to keep thoughts on that topic secret. The set of topics included both those that might be highly secret for most people and those that might be secret for only a few, and were derived from an examination of the literatures on secrecy, disclosure, worry, obsessive thinking, and thought sup-

pression (see Lane & Wegner, in press). Each participant in the group administration was asked to be as forthcoming as possible in making these ratings, and confidentiality was guaranteed by arranging for the return of anonymous response sheets through a slot atop a sealed box that participants understood would only be opened when the sheets from all participants were inside and were not distinguishable.

The ratings were submitted to a principal axis factor analysis that accounted for 44% of the rating variance, and a varimax rotation was performed on the four factors with eigenvalues over 1.75. The solution for items loading above .40 on any factor is shown in Table 1. We find that the 4 factors can be understood to represent distinct categories of secret thoughts: *offenses*, *worries*, *sorrows*, and *sins*. Before we comment on the categories individually, it is worth noting that they each formed fairly reliable scales in this sample (Cronbach's α for the 4 factors, respectively, was .86, .84, .79, and .77). Also, in the population we studied, the degree of secrecy for these different topics varied. Averaging over topics within each category, secrecy was greatest for sorrows ($M = 2.81$), less for offenses ($M = 2.31$), even less for sins ($M = 1.80$), and least for worries ($M = 1.67$), with all differences significant at $p < .05$. It should be remembered, though, that ratings of keeping thoughts secret are likely to be predicated on a participant's *having* such thoughts; if a person seldom thinks of offenses at all, for example, ratings of the secrecy of thoughts of offenses might well be reduced accordingly. This could influence both the category means and reliabilities. Suffice it to say that at this exploratory stage in our research, these categories form a reasonable first sorting of the kinds of thoughts that people keep secret.

The category of *offenses* includes primarily acts of violence and taboo sexual practices. Many of these are actually crimes, although there are some topics that are merely offensive in some way. They appear to represent overt acts that tend to harm others and that are thus not only socially disapproved but are also often punished by society or by their victims. Most of the acts have a victim other than self, and it is tempting to suggest that the emotional state underlying many if not all of these activities might be anger

Table 1

Factor Analysis of Secret Thought Topics

Topic	Offenses	Worries	Sorrows	Sins
Killing someone	.70			—
Stealing things	.69			—
Touching a stranger sexually	.66			—
Incest	.62			—
Cheating in school	.61			
Fantasies about a teacher	.60			
Being a homosexual	.59	—		
Watching X-rated videos	.52	—		
Hitting someone	.50			
Masturbation	.49			
Rape	.48			
Cheating on a lover or friend by seeing someone else	.41			
Getting mugged		.65		
Getting bitten by a dog		.62		
Sleeping in through an important class		.61		
Having someone hit me		.58		
Being hit by a car	—	.57		
Losing my keys	—	.53		
Leaving my door unlocked		.53		
Wearing clothes that aren't clean		.53		
Forgetting to put on deodorant		.48		
Failing a test		.46		—
Germs		.43	—	—
Being lonely		—	.71	
Someone I am jealous of			.61	
Someone I have a crush on			.56	
A lie I told			.54	—

(continues)

Table 1 (cont.)

(Continued)

Topic	Offenses	Worries	Sorrows	Sins
Doing poorly at school			.52	
My body			.52	
Dying			.49	
Being in love	—		.47	
Getting AIDS	—		.44	
Sexual intercourse			.42	
Using marijuana		—		.64
Drinking alcohol		—		.59
Smoking cigarettes				.53
Crack or cocaine				.52
God				.51
Devil				.48
Going crazy				.42
Making myself throw up				.41

or hostility. For the most part, these are the kinds of thoughts that are kept secret in Dostoevsky's *Crime and Punishment* and Poe's *Telltale Heart*.

Worries represent a different category of secrets, thoughts about things that could happen that would victimize oneself. Many of these worries are no doubt very real, and they seem likely to be accompanied by fear or anxiety. They involve potential violence against the self in several cases, but more often consist of the more minor concerns or doubts (e.g., losing one's keys) that come to mind from time to time and prompt checking or a desire for reassurance. By and large, however, these topics represent fairly unlikely occurrences that probably come to mind too often and so prompt thinking—but not disclosure. A person who keeps these things secret would seem to be trying to look brave in the face of worry about the multiple risks of everyday life.

Sorrows are a third category of secrets. The first impression of this category is that it is more of a hodgepodge than the others, dominated by secrets pertaining to close relationships and then containing several other lacks or embarrassments. On reflecting on the conglomeration of topics, however, we came to realize that every item involves a potential for failure or sadness, and that, more so than the other topics, these could be the kinds of things one would want to keep from others as a means of protecting one's self-esteem or avoiding depressive emotion. The relationship orientation of this category may represent the precariousness of relationships and their potential for frequent heartache in the lives of the college students sampled in this study.

We couldn't help but call the final category of secret thoughts *sins*. In part, this was because the category includes several victimless crimes, activities that are socially disapproved but that do not hurt others in any immediate way. Unlike the offenses, then, these thoughts center more on personal moral weaknesses. Curiously, though, the religious thoughts of God and the Devil appeared on this factor as well, and this is what prompted us to view the whole package as sin-relevant. The self-control of disapproved appetites might not be a religious matter in every culture, but it could still be a subset of thought topics whose secrecy covaries reliably.

We are not yet willing to claim that these four factors of secret thoughts are necessarily a precise or exhaustive analysis of the domain. Indeed, we began with an idiosyncratic selection of secret thoughts, and these were rated in only one way by one college sample. And too, we want to reemphasize the preliminary nature of the factor analytic work that led us to this set of categories. We retain a certain enthusiasm for this category system despite these shortcomings, however, because of its interesting mapping on the major negative emotions (anger, fear, sadness, and guilt), and because it thus provides a straightforward way to understand why any thought might be kept secret. In essence, this analysis suggests that people keep thoughts secret to avoid the social consequences that may arise from the creation or expression of the negative emotions underlying those thoughts. Given such a range of motives to keep thoughts secret, it makes sense that people would avoid talking about many things. This is the point of departure for our preoccupation model of secrecy.

THE PREOCCUPATION MODEL OF SECRECY

We have formulated a model that may help to explain part of the connection between secrecy and the development of or maintenance of certain psychological disorders (Lane & Wegner, in press). According to this preoccupation model, secrecy sets into motion certain cognitive processes that can create an obsessive preoccupation with the secret thought. This model comprises these steps: (a) *secrecy causes thought suppression*, (b) *thought suppression causes intrusive thought*, (c) *intrusive thought causes renewed efforts at thought suppression*, and (d) *steps b and c continue in cyclic repetition, as each occurs in response to the other*. We will describe each of these steps in further detail, and then present several studies that provide support for this model.

Secrecy Causes Thought Suppression

The development of a cycle of obsessive preoccupation with a secret has its beginnings in the selection of the mental control strategy of thought suppression to help keep the secret. Secret-keepers are often placed in the unnerving position of having simultaneously to think about their cover-up and not to think about it. Thinking is required because it is important for a secret-bearer to at least be aware of the secret information so that it can be stopped from coming to light. In a sense, then, thinking about the secret is a good thing and it may even be done intentionally in hopes of reminding oneself what should not be revealed. Whenever the secret-keeper is in the presence of someone who must not know the hidden information, however, any thoughts of the secret that come to mind may well threaten to reveal themselves through nonverbal leaks or slips of the tongue. In order to defend against this mental assault it seems that a secret-keeper would be best served by choosing the proactive strategy of attempting to banish all unwanted, secret thoughts from consciousness. This predicts the use of thought suppression as a likely mental control strategy when keeping a secret. Thought suppression may also be used as a preemptive strategy, even before any actual social interaction takes place, to curb the occurrence of secret thoughts during upcoming social encounters.

Thought Suppression Causes Intrusive Thought

Unfortunately for secret-keepers, attempts to push thoughts of the secret out of mind often do not work. Past research has found that suppressing thoughts results in those thoughts returning to mind intrusively. Wegner, Schneider, Carter, and White (1987) found that trying not to think of a white bear was extremely difficult for participants, and that when suppression attempts had ended, participants actually experienced a rebound of thoughts of the white bear. A wide array of research now indicates that thought suppression (at least in the short run) is inclined paradoxically to increase the accessibility and return of the unwanted thought, even as compared with intentional concentration on the thought (Wegner, 1989, 1992).

When people attempt thought suppression, two cognitive processes are shifted into gear at the same time (Wegner, 1994). The process of which we are aware, the *operator*, actively tries to direct our thoughts toward anything other than the unwanted thought. At the same time, below the surface of our consciousness the *monitor* is at work automatically searching for occurrences of the unwanted thought. Once the monitor discovers the unwanted thought it hurls it into consciousness where the operator again attempts to suppress it. The operator is usually the dominant process but under conditions of cognitive load its resources are taxed thereby giving the monitor free reign. When the automatic processing becomes the default response, as is the case under high load, the unwanted thought is highlighted and projects into consciousness without a stopguard. In this sense the unwanted thought becomes hyperaccessible to consciousness (Wegner & Erber, 1992). Secret-keepers who rely on thought suppression to rid themselves of thoughts of the secret will quickly find that this strategy backfires and makes the secret likely to spring to mind.

Intrusive Thought Causes Renewed Efforts at Thought Suppression

For a secret-keeper, the recurrence of thoughts of the secret in consciousness represents a potential difficulty in maintenance of the secret. If thoughts of the secret intrude while the person is engaged in an interac-

tion with someone from whom the secret must be kept, immediate efforts are made to push the unwanted thought from mind so as not to reveal the secret. The secret thought can also intrude even when the bearer of the secret is not actively engaged in the endeavor to conceal. The thought can be particularly worrisome in this instance because of its frequent appearance at such irrelevant moments. Again, attempts are made to relegate the secret thought to the unconscious realm whence it came. Thought suppression is likely when intrusions of the secret thought come to mind.

Thought Suppression and Intrusive Thoughts Occur Cyclically, Each in Response to the Other

Secrecy sets into motion a self-sustaining cycle of obsessive preoccupation with the secret. Attempts made to suppress the secret thought are responded to with intrusive thinking of the secret, which in turn engenders further efforts to eliminate the secret thought. Once this loop has been started, removing the secret nature of the information does not guarantee that obsessive preoccupation with the secret will cease. The cognitive consequences of secrecy may haunt the mind for quite a while after the secrecy itself is gone.

EVIDENCE FOR THE PREOCCUPATION MODEL

A set of studies by Wegner, Lane, and Dimitri (1994) shows evidence for the workings of the preoccupation model in secret relationships. In a first survey study, participants reported the former loves and crushes that they still ruminated about were more likely to have been secret at the time of the relationship. Along the same vein, a second survey study revealed that participants who reported their past relationship was secret also reported that relationship continues as the target of their obsessive preoccupation. It seems that the imposition of secrecy on a relationship can have the unintended long-term consequence of promoting an obsessive preoccupation with that relationship. As this model would predict, secrecy seemed to foster obsessive preoccupation with partner-related and relationship-related thoughts that lasted for years after the relationship had ended.

In a third study, Wegner, Lane, and Dimitri formed impromptu couples in the laboratory and gave half of them instructions to play "footsie" with their partners during a card game. Of the couples making foot contact, half were asked to keep this contact a secret. As compared with couples who did not touch feet or couples who touched openly, couples who kept secret contact reported greater attraction to each other after the game. The specific combination of suppression and intrusive thinking—obsessive preoccupation—was found only in the secret contact condition. This pattern suggests that there is something unique about the social situation of secret-keeping that helps cultivate the ground upon which obsessive preoccupation grows.

A series of studies conducted by Lane and Wegner (in press) focused on cognitive consequences of secrecy beyond just the context of romantic relationships. We will discuss here the results of each of these studies in terms of what evidence they provide for the preoccupation model of secrecy. The first of these studies was intended to examine whether keeping a secret created increased accessibility to thoughts of that secret. As mentioned previously, Wegner and Erber (1992) found that participants suppressing thoughts of a word while they were under cognitive load showed hyperaccessibility of those suppressed target words to consciousness. If keeping secrets involves suppressing thoughts of the secret, as proposed in step one of the preoccupation model, then participants keeping secrets under high load should experience increased sensitivity to occurrences of the secret thoughts. The prediction for this study, then, was that participants who kept secrets under high load would show greater accessibility of thoughts of the secret target word than when not under load and than participants who did not keep secrets.

Participants in the study read instructions that the experimenter either knew or did not know their target word (e.g., *mountain*). Participants who thought the experimenter did not know the target word were instructed to keep it secret from her during the entire experiment. Participants were then given either a two-digit (low cognitive load condition) or a nine-digit number (high cognitive load condition) to rehearse during a subsequent computer task. After receiving the number, participants per-

formed a two-color Stroop reaction time (RT) task on the computer. For each of a series of words appearing on a computer monitor the participants pressed either a red key or blue key corresponding to the color in which the word was printed. The task consisted of naming the colors of target words, (e.g., *mountain*), nontarget words (e.g., *car*), and target-related words (e.g., *climb*). The experimenter stood looking over participants' shoulders while they performed the computer task. Participants who were trying to keep a secret from the experimenter were told that she would be watching their reactions on the computer to try to guess their target word, whereas participants not keeping a secret were told the experimenter would just be watching their reactions. After the computer task, participants completed a short questionnaire.

As predicted, keeping a secret under cognitive load resulted in enhanced accessibility of the secret thought (as shown by higher color-naming RTs), compared with keeping a secret under low load or not keeping a secret. RTs to secret targets followed a similar pattern to those of suppressed target words in the Wegner and Erber (1992) study, suggesting that keeping a secret does indeed entail suppression of thoughts of the secret. The finding that keeping a secret under high load created an interference of thoughts of the secret with color naming is consistent with the idea that suppression leads to intrusions of the secret and, one step further, that secrecy leads to intrusions of the secret through the mechanism of thought suppression. The self-report measure participants completed after the computer task also showed evidence for secrecy causing thought suppression. Participants instructed to keep the target secret reported greater attempts to suppress the target than participants given no instructions.

According to the preoccupation model, the cognitive consequences of secrecy should endure beyond the specific attempts at secrecy. To assess this possibility, Lane and Wegner performed a second study, now looking at the effect of secrecy on memory. It was predicted that participants instructed to respond to an experimenter's questions about a target topic with a secret, rather than with the truth or a lie, would show earlier recall of the secret words 10 minutes after the questioning. While being video-

taped, participants answered questions about 24 topic words (e.g., *date*) by responding according to instructions with either a truthful statement on the topic, a lying statement on the topic, or an irrelevant statement on the topic during which the participant kept his or her true sentiments secret. Also, after answering each question aloud, participants wrote down a statement. If they had just told a truth or a lie they were supposed to write down exactly what they had stated. On the other hand, if they had just told a secret they were supposed to write down their true feelings on the target topic rather than record the irrelevant statement they had made verbally. After participants had answered all of the experimenter's questions, they completed a 10 min filler task. Participants were then asked to write down as many of the 24 target topics as they could recall.

There was no overall difference in the number of secret, truth, or lie topics recalled. However, analyses revealed that more secret items were remembered in the first half of the list than truth or lie items. Secret topics were remembered less than truth or lie topics in the second half. So, although secrets were no more frequently recalled, they were recalled earlier. This finding of earlier recall for secret items points to the idea that secrecy might prompt intrusive thinking or rumination over an extended period of time. Secret-keepers may try to push thoughts of the secret from mind, but these thoughts continue to intrude into consciousness even after the attempts at secrecy are ended. The unwanted, secret thoughts are poised on the brink of consciousness, ready to spring to mind from memory before other thoughts.

The third study in this series was intended to obtain a broader perspective on the relationship between secrecy and the elements of obsessive preoccupation—thought suppression and intrusive thinking. It was predicted that participants who read instructions to keep a word secret during a stream of consciousness task would report increased attempts to suppress thoughts of the secret, and that the suppression effort would be correlated with self-reports of unintentional thinking of the word. Four target words were presented, one at a time, to participants along with one of four possible instructions regarding what to do with that target word when writing stream of consciousness for 5 min. The instructions indi-

cated participants should (a) try to think about the target word, (b) try not to think about the word (suppress), (c) try to keep the word a secret, or (d) write their stream of consciousness with no special instructions regarding the word. After each writing task, participants completed a short questionnaire assessing aspects of their cognitive functioning during the writing task.

This study provided an overarching view of the relationship between elements in the preoccupation model. First of all, the link between secrecy and suppression was again found by observing participants' self-report measures. When receiving instructions to keep a target word secret, participants showed higher levels of thought suppression than when they received instructions to think about the target word or when they were given no instructions at all. Along these same lines, self-reports of secrecy and suppression were significantly positively correlated in every condition, a finding in accord with the idea that thought suppression may be the strategy of choice for secret-keepers.

A positive correlation between self-reports of unintentional thinking and thought suppression in the suppression and secret conditions was found and is consistent with the preoccupation model's steps of suppression leading to intrusions and in turn, intrusions creating more thought suppression. This positive relationship between suppression and intrusions was not found when participants were given no instructions and, in fact, the two variables were negatively related for participants attempting to think about the target word. Expanding on other research that has shown that obsessive thinking of given thoughts may be a product of thought suppression (Wegner & Zanakos, 1994), this study suggests that secrecy may also be a mental task that touches off a cycle of obsessive preoccupation with thoughts of the secret.

Using yet another paradigm, Lane and Wegner completed a fourth study to examine the relationships among secrecy, thought suppression, and intrusion within individual participants across a wide range of possible thought topics. Participants completed a "Secret Thoughts" questionnaire divided into three parts. In the first section, participants indicated how secret their thoughts were on 50 diverse, preselected topics

(these were the ratings on which we based the factor analysis shown in Table 1). The second section asked participants to rate how much they tried to suppress thoughts of each of these same 50 topics whenever they came to mind. Lastly, participants rated how much they found each of these 50 thought topics coming intrusively to mind. It was hypothesized that topics about which a participant suppressed thoughts and topics that were likely to be intrusive were also more likely to be secret topics for that participant, and that suppressed topics and intrusive topics would also tend to be positively correlated within each participant.

A significant positive mean within-subject correlation across 50 topics was found between participants' self-ratings of secrecy and suppression. Although this finding may represent the preoccupation model's assertion that secrecy creates thought suppression, the direction of causation, of course, cannot be determined from correlational analyses. It may be the case that attempts to try not to think particular thoughts spur on people to try actively to keep them secret from others so they don't remind them of the unwanted thoughts.

A significant mean within-subject correlation was also found between thought suppression and intrusive thinking, thus providing additional support for the preoccupation model's steps of suppression creating intrusive thinking, which then leads to further suppression. Although the causal direction of this relationship also cannot be determined from these data, the preoccupation model would predict a causal link between suppression and intrusions in both directions. A path from secrecy to intrusions via thought suppression can also be inferred from the significant positive within-subject correlation between secrecy and intrusive thinking. Although it is possible that this finding may be interpreted as meaning that people tend to keep secret those items that intrude into consciousness, it seems that these thoughts would serve as likely topics of conversation. Considered together with findings from the other three studies, it seems more probable that secrecy creates intrusive thinking by initiating the process of thought suppression. Together, these studies trace the road leading from secrecy to obsessive preoccupation. This journey may begin with the simple initial decision to keep information hidden,

but as it progresses, the cognitive repercussions of the secret oftentimes make for a long, winding, and wearying misadventure.

SECRECY AND PSYCHOPATHOLOGY

The preoccupation model suggests that when people have good reasons to keep their thoughts in some area a secret, they may eventually find that those thoughts return repetitively and intrusively, perhaps to the point that the thoughts become so bothersome that they lead to the self-perception of disordered thinking. We suspect that this may be a common pathway. A person might hide a particular thought from others because it represents an offense, for example, or a fear, sorrow, or sin, and for this reason engage the preoccupation cycle. As a result, the person would soon find thoughts of this topic returning to mind often—in fact, too often. The sources of this apparent obsession might not be clear, as we believe that most people do not appreciate the possibility that their secrets can turn into “fixed ideas” that absorb them and guide much of their conscious life. Unexpected and unexplained obsessions, then, form the bases for all sorts of inferences about the self. People begin to think they are crazy.

Let us consider how this might happen for each of the four categories of secret thoughts. As we review these sources of secrecy, we will consider what kinds of psychopathology might be engendered in each case.

Offenses

Thoughts about sexual and aggressive crimes are, of course, not very smart to reveal to others. Even talking about a bomb near airport security can get you into prison, as there are multiple penalties for mentioning thoughts or intentions of offenses to others. This cloak of secrecy should prompt the occurrence of the very thoughts that society abhors, and so should serve to initiate a variety of forms of psychopathology centering on intrusive thoughts of harm to others.

Research on this topic has typically indicated that secrecy is indeed an important part of disorders involving hostility and sexual harm to others, especially including the paraphilias (cf. Denko, 1976; Moser, 1988; Sum-

mit, 1983). As a rule, the observation of secrecy in these circumstances is taken to indicate that offenders are simply avoiding apprehension—not that they may be creating or aggravating their own disordered behavior in the process of keeping it undisclosed. But this may be a real possibility that deserves investigation in studies of the etiology of such problems. The finding that sexual offenders often retrospectively report repressive approaches toward sexuality in their families is one sort of evidence in this direction (Goldstein & Kant, 1973; O'Connor, Leberg, & Donaldson, 1990). If a person becomes involved in thinking about a crime, the very pressure he or she perceives to avoid reporting those thoughts could eventually come around to motivate the criminal behavior.

Worries

It is common for people who have anxiety problems to keep secret the things that they worry about (Stekel, 1962). This is particularly evident in the case of obsessive-compulsive disorder. The point is highlighted in two books on this topic: "Obsessionals are more secretive than other sufferers from psychological problems" (Toates, 1990, p. 78) and "Secrecy is part of the disorder. . . . We see new patients every week who have suffered in silence for years" (Rapoport, 1989, p. 13). It makes sense that the forms of anxiety disorder that are particularly related to thinking would be most susceptible to the obsession-generating effects of secrecy (see also Wegner, 1988). Unfortunately for individuals keeping secret their worries, any attempts to control worry may pave the way for its uncontrollability (Roemer & Borkovec, 1993).

It may be that secrecy has a role in the production of anxiety disorders more generally, however, as it is quite possible that people might be embarrassed or keep secret the thoughts they have about minor fears. Even more plausible, in turn, is the idea that serious ongoing fears could be kept secret, so to evolve into preoccupations that emerge into psychopathology. Although the literature on the topic of multiple personality or related dissociative disorders is currently under flux, for example, there are some commentators in this area who attribute the development of such responses to anxiety to the early strategic use of secrecy (e.g., Buchele, 1993; Coons, 1986).

Sorrows

In a way, this source of secrecy and psychopathology is the flipside of the offenses category examined above. Just as the perpetrators of offenses keep secrets, so do the victims and potential victims, and this is one way in which secret sorrows develop. Offenders often coerce their victims into secrecy to avoid being caught, and it is widely reported that the shame and fear of retaliation surrounding victimization can complicate responses to trauma by the victim for this reason (e.g., Pennebaker, 1990; Summit, 1983; Swanson & Biaggio, 1985). But there is much more here to keep secret. The kinds of sorrows implied by incest, sexual or physical abuse in childhood, torture, betrayal, or other deep traumas remind us that the sorrowful secret thoughts in our college student questionnaire just begin to scratch the surface of the experiences in this category that people may live through and then feel compelled by shame or disgrace to conceal from others.

Considered most broadly, sorrows may be understood as the sorts of events that precipitate depression. People commonly keep their failures, losses, and lacks secret from others, as advertising these things is a quick route to social rejection (Gurtman, 1987). It makes sense that the decision not to disclose such items could prompt the now-familiar cycle of preoccupation, and that this tendency could enhance the development of automatic negative thought and affect surrounding the secret thought topics (Wenzlaff, 1993). With this in mind, it is not surprising to find that a reticence to disclose to others is often found to be associated with depression (Burnum, 1991; Raphael & Dohrenwend, 1987). Our interpretation of such findings, and of the more general tendency for the lack of disclosure of trauma to produce ill health (Pennebaker, 1990), is that the active nondisclosure of these sorrows promotes their expansion into pathologies.

Sins

The various lapses in self-control that people keep secret include issues of eating, alcohol, drugs, *and beyond*. These "sins" are not necessarily as socially undesirable as some of the offenses or sorrows, and more resemble

the worries as signs of personal weakness. Some of the sins are criminalized in our society, of course, and their disclosure has certain costs as a result. The sins seem to involve private struggles, or struggles with one's demons, that people strive to keep to themselves. Rather than admitting to one's "weakness of will" in succumbing to some vice, a person may keep the whole thing secret.

There are several sources of evidence indicating that psychopathological involvement in the private sins is indeed linked with secrecy. So, for instance, it appears that difficulties in abstinence from drug use are associated with keeping the use secret (Murphy & Irwin, 1992). Secrecy plays a role in eating disorders as well: The cycle of binge eating and purging in bulimia is exacerbated by the desire to keep these acts secret (Vognsen, 1985); obesity is often associated with secrecy surrounding eating (Ganley, 1989); and anorexia tends to occur in the presence of secrecy and shame about eating as well (Lemberg, Phillips, & Fischer, 1992). Self-control activities often take on all the characteristics of full-blown preoccupations, and in some proportion of cases it may be that secrecy precedes and induces the obsession.

There could be other cases of secrecy leading to psychopathology that do not fit our four-category scheme. A review of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*, 4th Edition (1994), indicates that secrecy is mentioned often in the contexts of a wide variety of disorders. Indeed, it may be that secrecy is tempting whenever issues of mental health are raised at all. Almost any mental disorder may be the target of secrecy, simply because the label of a mental disorder itself is stigmatizing. The label of "mental patient" or "former mental patient" is not usually something people freely disclose to others, nor is a diagnostic category something people show much pride in proclaiming ("Guess what, Mom, I'm a borderline!"). The desire to avoid discrimination or derogation based on these things may lead to ardent attempts at secrecy (Herman, 1993; Link, Cullen, Struening, Shrout, & Dohrenwend, 1989).

This recognition suggests that our basic model of the role of secrecy in psychopathology might need to be expanded to include postdiagnosis

and posttreatment secrets. Although we have suggested that symptoms may be magnified when secrecy is imposed at points well before any diagnosis is made or treatment is offered, it is also true that the stigmatization of the mentally ill contributes to still another layer of preoccupation and turmoil following any initial secrecy. The further concealment of a diagnosis or treatment would seem to create yet another focus for concern and intrusive doubts and worries.

CONCLUSION

We have presented here the idea that secrecy is not always imposed on odd, crazy, or improper thoughts or behaviors *after* they have happened. Rather, in some cases secrecy may precede and cause these things. Currently, we can only point to two general sources of evidence on this claim, neither of which "nails it," but both of which are supportive and suggest that further research is warranted. First, it appears that secrecy imposed on a thought is linked with the intrusive and obsessive return of that thought, probably through the mechanism of thought suppression. These lab findings suggest that the link is indeed causal, in that manipulations of secrecy lead to indications of cognitive intrusion. The second line of research findings that is consistent with our idea involves the cases in which secrecy is associated with disordered thought and behavior. One can always claim that secrecy is a response to such behavior, not a cause, of course, and it certainly is true that the social history of the treatment of madness includes a strong impulse to hide its victims in the basement. But if secrecy does have the role in the etiology of psychopathology that is suggested by this laboratory work, it would seem wise to open up the basement to the light of day whenever we can. Breaking secrecy may be a first step toward the successful treatment of several forms of psychological disorder.

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Disclosure and Worry: Opposite Sides of the Emotional Processing Coin

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Research by James Pennebaker and colleagues has repeatedly documented the beneficial effects that follow from the disclosure of past traumatic events, irrespective of whether that disclosure is in oral or written form (see Pennebaker, 1989, for a review). Such disclosure has been found to promote better health in studies employing retrospective report (Pennebaker & Susman, 1988), immune function assessment immediately following disclosure (Pennebaker, Kiecolt-Glaser, & Glaser, 1988), and prospective report of health care utilization following disclosure (Pennebaker & Beall, 1986). To some degree, it is not surprising that verbal disclosure of traumatic events would lead to beneficial results. This is an assumption upon which the majority of verbal psychotherapy rests. Obviously, therapists, regardless of whether their orientation involves psychodynamic, experiential, or cognitive behavioral perspectives, are invested in one way or another in the belief that verbalizing emotional events is therapeutic. However, the mechanisms by which either psychological or

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