

Damned Spot: Guilt, Scrubbing, and More Guilt

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Lady Macbeth is one of Shakespeare's most complex characters, and by far the bard's most obsessive. Immorally ambitious, she prods her husband to murder Scotland's king, and then deludes herself into believing that "a little water will clear us of this deed." But for all of her repeated hand washing, the ritual cannot cleanse her of her consuming guilt, and by Act V the stubborn blood stains have driven the illegitimate queen to madness and suicide.

Cruel fate. But Lady Macbeth has recently enjoyed something of a second career, this one in the field of psychological science. The compulsive washer has become a symbol of the human mind's deep connection between morality and cleanliness—and between immorality and filth. A large and growing body of empirical work has demonstrated the intriguing link first embodied by Shakespeare's villain: Immoral thoughts and memories can indeed put the mind into a state of mental contamination—a condition that the actual physical act of washing might undo.

So far, the "Lady Macbeth Effect" has been mostly a curiosity—a peek at the quirkiness of the not-entirely-rational human mind. But might this scientific insight actually be clinically useful? Tel Aviv University psychological scientist Reuven Dar and his colleagues thought that it might. If morality and cleanliness are so tightly bound up in the normal human mind, what about those who suffer from an extreme form of mental contamination—that is, obsessive-compulsive disorder, or OCD? Might the lab insights point a way to alleviating the obsessive thoughts and ritualistic washing associated with this debilitating disorder? Dar decided to explore this in the laboratory.

Cleanliness and morality are both central concerns for those who suffer from OCD. It's common for people with this mental disorder to be preoccupied with obsessive thoughts about moral transgressions—an imaginary hit-and-run accident, for example. And of course the elaborate hand-washing rituals are well known. Cleaning—and especially hand scrubbing—is important, both practically and symbolically. Sufferers are just as likely to scrub away "dirty thoughts" as actual dirt, and their feelings of personal pollution are exacerbated by guilt and shame and disgust. Given all this, Dar suspected that the "Lady Macbeth Effect" might be especially pronounced in those suffering from OCD, and what's more, he wondered if actual cleansing might alleviate some of these obsessive thoughts.

He recruited a group of men and women who had been officially diagnosed with OCD. Some were "washers" and others were "checkers"—they had to check the stove over and over to be convinced it had been turned off. Still others had mixed symptoms. He also recruited a group of people about the same age and education to serve as controls. Using the same experimental design that was used to establish this mental link, Dar had each of the volunteers sit at a computer and write a detailed narrative about an unethical act they had done sometime in the past—and any emotions associated with that moral lapse. Volunteers wrote about lying to friends, stealing groceries, being unfaithful in marriage, and much more.

Afterward, about half of each group washed their hands—they were told that this was the lab's

recommendation for anyone using a public computer. They all then completed a rating of their emotional state—disgust, happiness, embarrassment, guilt, confidence, and so forth.

The last step in the experiment involved a ruse. They were told that the study was complete, but they were asked if they would volunteer for another study in order to help a desperate graduate student. The grad student needed to complete the study for her dissertation, but had run out of funds. Could they help out? Dar included this step because, in the original study, volunteers who did not actually wash their hands were more likely to act altruistically—presumably to compensate for their immoral thoughts.

So Dar wanted to see if a moral threat—from writing about past transgressions—would motivate volunteers to help others, and if washing would lessen this motivation by making such moral calculus unnecessary. He wanted to see, further, if these effects were more prominent in people with OCD—both the contamination and the cleansing.

And they were, clearly. As Dar reports in a forthcoming article in the journal *Clinical Psychological Science*, hand washing did salve guilt about past misdeeds, and reduce willingness to help another person. This was expected. But even more important here, the OCD patients were particularly susceptible to this effect. In fact, they were extremely willing to help the hapless grad student if they had not washed their hands; and if they did wash their hands, they showed zero inclination to lend a hand. What's more, it appears that this psychological effect works by relieving moral emotions like guilt, shame and embarrassment. Put another way, the ritualistic washing seems to have created a sense of “moral relief.”

These are interesting findings, given the leading theories about OCD. One is that OCD sufferers have a dysfunctional feedback mechanism: Their washing is meant to prevent harm to themselves and others, but they never get the signal that it's worked—and that they can stop washing. They have a persistent sense of incompleteness, so they continue the moral cleansing. These findings suggest that the cleaning did lead to a sense of completion and relief—even if the effect is short-lived. The next step might be to help OCD patients develop more realistic and relevant ways of coping with guilt and moral threat, so that they—unlike the miserable Lady Macbeth—can break the cruel cycle of guilt and compulsive hand washing.

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