

Essays on Conflicts of Interest in Medicine

Business & Society

52(4) 666–678

© The Author(s) 2013

Reprints and permissions:

sagepub.com/journalsPermissions.nav

DOI: 10.1177/0007650313496366

bas.sagepub.com



Sunita Sah^{1,2}

Abstract

The dissertation abstract and reflection commentary present the work of Dr. Sunita Sah. The abstract provides an overview of three main research questions that address conflicts of interest in medicine. Sah first explores why physicians accept gifts from pharmaceutical companies and medical device manufacturers that appear, to many critics, to be unethical. Second, she investigates situations that may increase or decrease bias in advice. Finally, Sah examines the impact of conflicted advice on advisees, particularly when they are aware of the conflict. Disclosure (informing advisees about the conflict of interest) is one of the most commonly proposed and implemented solutions to address conflicts of interest but can have surprising and unintended effects on both advisors and advisees. The reflection commentary discusses the author's views of the research process as a junior scholar.

Keywords

conflicts of interest, ethics, advice, disclosure, decision making, bias, rationalizations

The medical profession is coming under increasing scrutiny. Recent high-profile scandals regarding substantial industry payments to physicians, surgeons, and medical researchers have raised serious concerns over conflicts

¹Georgetown University, Washington, DC, USA

²Edmond J. Safra Center for Ethics, Harvard University, Cambridge, MA, USA

Corresponding Author:

Sunita Sah, Department of Strategy, Economics, Ethics and Public Policy, McDonough School of Business, Georgetown University, 37th and O Street, Rafik B. Hariri Building, Washington, DC 20057, USA.

Email: ss3250@georgetown.edu

of interest. Against this background, the public, physicians, and policy makers alike appear to be making the same assumption regarding conflicts of interest: that doctors who succumb to industry influences are making a deliberate choice of self-interest over professionalism and are corrupt (Angell, 2000; Dana & Loewenstein, 2003; Kassirer, 2007). But, in fact, myriad evidence from social science indicates that influence arising from conflicts of interest often occurs on a subconscious and unintentional level (Babcock, Loewenstein, Issacharoff, & Camerer, 1995; Bazerman, Morgan, & Loewenstein, 1997; Dana & Loewenstein, 2003; Loewenstein, Issacharoff, Camerer, & Babcock, 1993). The issue is important because such conflicts can steer well-intentioned physicians away from their primary professional goal of providing the best possible medical advice and treatment.

In this article, I review some of the subtle influences associated with conflicts of interest that predictably change physician and patient behavior. Specifically, why do physicians accept industry gifts and other questionable compensation that many critics think are bribes? What situations or factors systematically influence the presence of bias? And do policies aimed at managing conflicts of interest, such as disclosure, have the desired effect? I explore the often unconscious rationalizations that physicians employ to satisfy their self-interests, and I reveal how certain policies intended to mitigate the effects of conflicts of interest can backfire.

Why Do Physicians Accept Industry Gifts?

Many of the scandals concerning physician conflicts of interest revolve around professionals accepting gifts or other incentives that appear to be barely disguised bribes. This circumstance generates the question, why do physicians accept conflicts of interest that place them under public scrutiny?

“Because I Am Worth It”: A Sense of Entitlement

Physicians may feel entitled to gifts that can conceivably be viewed as perks of the job and part of the cultural norm of interacting with industry. The network of relationships that connects industry and medicine is vast, multifaceted, and complex. Interactions include the offering of gifts such as pens and stationery, meals, travel expenses, sponsored continuing medical education, and compensation from speakers bureaus, consulting, presentations, educational grants (sometimes unrestricted), and sponsored research. Interaction with industry begins early in a medical career, and virtually all physicians (94%) have some type of relationship with it (Campbell et al., 2007).

Among the many rationalizations that physicians advance for accepting conflicts of interest (Chimonas, Brennan, & Rothman, 2007) is that they deserve such benefits because of the hard work and sacrifices they have made to become physicians (Sah & Loewenstein, 2010). A study of third-year medical students found that more than 80% believed that they were entitled to gifts from industry due to hardships described as “considerable debt and minimal income” (Sierles et al., 2005). Former president of the American Medical Student Association Brian Palmer (2008) further observed,

The training is difficult . . . people feel beaten down. They are overworked; they have got hundreds of thousands of dollars of debt. You have an industry that has figured out how to capitalize on that by saying, “Oh, doctor, can we do that for you? You deserve it.” It fuels an entitlement that we all long for that we are worth it. . . . The only way really to rationalize accepting all this is to say, I deserve it.

I set out, with George Loewenstein, to test this proposed causal relationship between perceived hardships and accepting industry gifts (Sah & Loewenstein, 2010). We designed an experiment to determine whether subtle reminders of hardships could increase physicians’ willingness to accept gifts and other incentives from industry. The sample population was 301 family practice and pediatric medicine residents who answered survey questions regarding the acceptability of different types of industry gifts, ranging from sponsored continuing medical education and research to gifts for office and personal use. Other questions prompted physicians to think about the sacrifices that they had made and were currently making for their careers, including hours of sleep when on call, quality of working conditions, salary, and debt amassed in pursuing their medical education. For physicians who answered these sacrifice reminder questions before answering the acceptability of industry gift questions, the self-stated willingness to accept gifts doubled, from 21.7% to 47.5%. That this occurred even though few physicians explicitly reported their working conditions as poor suggests that justification may not occur at a conscious level. Another group of physicians received the same sacrifice reminder questions but were also exposed to an explicit rationalization stating that such sacrifices would justify accepting industry gifts. Although most disagreed with the notion that stagnant salaries and poor working conditions entitle physicians to accept gifts and other forms of compensation from industry, exposure to this rationalization further increased the number of physicians who thought that gift taking was acceptable, to 60.3%.

Another subtle manipulation consisted of altering the response scales on which physicians answered the sacrifice reminder questions to create two subgroups: a *feel-poor* subgroup and a *feel-rich* subgroup. The response

FEEL POOR CONDITION:

Please indicate your average gross annual salary:

\$0-\$100k	\$100k-\$150k	\$150k-\$200k	\$200k-\$250k	\$250k-\$300k	\$300k-\$350k	\$350k+
<input checked="" type="radio"/>	<input type="radio"/>					

FEEL RICH CONDITION:

Please indicate your average gross annual salary:

\$0-\$20k	\$20k-\$25k	\$25k-30k	\$30k-35k	\$35-40K	\$40-50K	\$50K+
<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>				

Figure 1. Different response categories for the feel-poor and feel-rich subgroups.

scales for the salary question are shown in Figure 1. Medical residents in the feel-poor subgroup observed much higher salaries in the response categories than did those in the feel-rich subgroup. Most medical residents who participated in the study earned a salary of approximately \$45,000. All the residents in the feel-poor subgroup responded in the first category on the left-hand side (\$0-\$100,000), whereas residents in the feel-rich subgroup responded in the final two categories. This subtle manipulation altered physicians' perceptions of their working conditions—with 50.0% of those in the feel-poor subgroup reporting poor working conditions, compared with 37.3% in the feel-rich subgroup—and it consequently affected their perceptions of the acceptability of industry gifts, which was significantly higher in the feel-poor subgroup (60.9%) than in the feel-rich subgroup (47.6%).

Rationalizations rejected at a conscious level may thus still help justify behaviors that doctors would usually find unacceptable. Humans have a strong capacity to rationalize whatever benefits them, and as long as gifts remain legal and culturally acceptable, it will be hard to change these unconscious attitudes. Only by prohibiting industry gifts and establishing strong professional norms of independence will we create a culture in which physicians view gifts as unethical bribes.

Which Situations Increase Bias?

Many of the physicians who are asked to contribute recommendations to clinical practice guidelines that affect the treatment of patients are subject to conflicts of interest (Kassirer, 2004). Normatively, one would expect advisors to be more diligent in their attempts to suppress bias in situations in

which their advice affects the welfare of many people as opposed to a single recipient. Yet, as Loewenstein and I (Sah & Loewenstein, 2012) demonstrated, contrary to what one might expect, the advice of advisors confronting a financial conflict of interest was more biased when multiple recipients were involved, and in the case of a single recipient, advice was more biased when the advisor did not know the recipient's name. These results were driven by an "identifiability" effect that increased for single and named recipients. Identifiability appears to decrease psychological distance, thus builds empathy and reduces bias in advisors.

In two experiments, participants, acting as advisors, gave advice to other participants, called *estimators*. Advisors viewed a grid of dots (30×30), some filled and some clear, and advised estimators on the number of filled dots. Estimators were rewarded for their accuracy in estimating the number of filled dots in the large grid but had access to only a subset of the grid (3×3) as well as the advice from their advisors. Some advisors were subject to a conflict of interest whereby they were rewarded if the estimator overestimated the number of filled dots.

The first experiment included an *identified* condition, in which advisors were told the name and age of the single estimator, and an *unidentified* condition, in which no information about the estimator was provided. In the second experiment, advisors gave advice to either a single estimator or a group of estimators (sometimes identified, other times unidentified). Advisors gave more biased advice when there was no identifying information and when they were advising a group (identified or not). Increased intensity of feelings and empathy toward single, identified recipients appeared to drive a reduction in bias. In other words, advisors gave more biased advice when they felt psychologically removed from those affected.

This study also sheds light on the degree to which these biases are conscious. We asked the advisors, after they had given their advice to the estimators, to rate the quality of advice they had given. We also asked advisors to provide their "best estimate" of the number of dots in the large grid. The advisors were incentivized to be accurate in their best estimates, which they were assured would not be passed on to the estimators. Only advisors with single identified estimators were aware of potential bias in their advice (despite giving the least biased advice) and could undo any remaining bias in their advice by giving accurate best estimates. Advisors with unidentified or multiple estimators reported that they gave good advice, and the best estimates of these advisors were inflated. These experiments suggest, consistent with prior research on subconscious self-serving biases (Dana & Loewenstein, 2003; Kunda, 1990; Pronin, Lin, & Ross, 2002), that the underlying psychological processes associated with biased advice may be partly unconscious. Identifiability

increased advisors' awareness of the extent of bias in their advice and their motivation to reduce the bias.

These results demonstrate that advisors may be less concerned about reducing bias when their advice is intended for many recipients (e.g., a public recommendation) and, consequently, that medical guidelines may be more compromised than we suspect given their importance. Patients should thus not assume medical guidelines to be free of bias nor the recommendations proffered therein to be of higher quality than advice received directly from their own physicians. Most important, patients should, whenever possible, seek unconflicted advice and give greater weight to advice from those who disclose an absence of any conflict of interest. It therefore appears all the more important that physicians who contribute to clinical guidelines be free of any potential conflicts of interest. Moreover, when advice is being given to many recipients or an unidentified patient, perspective taking (i.e., imagining that you are the advice recipient) may help to reduce bias (Sah & Loewenstein, 2012).

How Can We Manage Conflicts of Interest?

Given the various rationalizations and biases identified so far, what can policy makers do to manage conflicts of interest and ensure good quality advice from the medical profession? Disclosure is the solution most commonly proposed and implemented to mitigate the effects of conflicts of interest. The American Medical Association, the Medicare Payment Advisory Committee, and the 2010 Patient Protection and Affordable Care Act all advocate disclosure as an important component in dealing with conflicts of interest. Disclosure is popular because it is perceived to work. Information about physicians' entanglements with industry should, in theory, provide consumers with the ability to make informed decisions, as by discounting a given physician's advice or exercising the option to seek another opinion. Physicians, for their part, may want to avoid conflicts of interest to be able to disclose the absence of any conflicts of interest. The expectation is that disclosure will result in better decisions being made by patients and their physicians.

However, a number of problems can arise when disclosure is prescribed to treat tainted advice. Patients, to discount advice accurately, must be able to assess the degree to which it is biased by the conflict of interest. Patients must also feel comfortable rejecting their primary physicians' advice, which in reality proves difficult to do.

Disclosure can have unintended consequences for advisors and advisees alike (Loewenstein, Cain, & Sah, 2011; Loewenstein, Sah, & Cain, 2012). Advisors have been shown to sometimes increase the bias in their advice with

disclosure—either strategically, because they anticipate that their advice will be discounted, or via a process called *moral licensing*, whereby disclosure mitigates the guilt they feel in giving biased advice (Cain, Loewenstein, & Moore, 2005). Moreover, whether or not advice is biased, recipients may experience the unintended burden of feeling much more uncomfortable about discounting advice accompanied by disclosure (Sah, Loewenstein, & Cain, 2013).

Burden of Disclosure

A serious problem with disclosure is that it may result in patients being subjected to greater pressure, often unwittingly, by physicians to comply with their recommendations (Sah et al., 2013). This “burden of disclosure” effect occurs because, although the disclosure warns the recipient that there is uncertainty in the quality of the advice, knowledge of the conflict means that rejecting the physician’s recommendation signals distrust. Patients, whether or not they believe the advice to be biased, typically do not want to imply that they believe their doctors to be biased. My colleagues and I called this tendency *insinuation anxiety*—to feel discomfort at turning down an advisor’s recommendations for fear of signaling distrust (Sah et al. 2013). In a series of studies, participants read about a common situation that they might face in a physician’s office. In some conditions, doctors revealed a financial or nonfinancial conflict of interest. Participants in these conditions trusted the advice less but worried that its rejection might insinuate a belief that the doctor was biased or corrupt. In other words, they felt much more uncomfortable about turning down advice with disclosure than without it.

Recipients may also be induced to comply with the advice of advisors who disclose conflicts of interest, by perceived pressure to help the advisors satisfy their self-interests. This *panhandler effect* can be considered a form of *reluctant altruism* (Broberg, Ellingsen, & Johannesson, 2007; Dana, Cain, & Dawes, 2006; DellaVigna, List, & Malmendier, 2012). Again, disclosure effectively places advisees in a bind; they trust the advice less but feel pressured to comply with it.

By increasing the pressure to comply with advisors’ recommendations, disclosure becomes a burden on those for whom it was intended to serve as a warning. In follow-up studies, I found this pressure to comply to be motivated not by altruism but by reluctance to signal distrust or appear unwilling to abet advisors’ publicly disclosed interests. The burden of disclosure was significantly reduced (i.e., advisees were less likely to comply) when disclosure was secretly provided by a third party rather than directly by the advisor. Advisees who were able to make their decisions in private or who were

afforded a cooling-off period during which they could change their minds were also less likely to comply with advice accompanied by disclosure.

Although perhaps a necessary step in managing conflicts of interest, disclosure is not sufficient and may impose undesired burdens on advisees. Further work is required to establish in which situations disclosure is beneficial to recipients and in which it is likely to be ineffective or even make matters worse.

Conclusion

I have explored a number of psychological mechanisms that alter the behavior of physicians and patients in response to conflicts of interest and policies designed to manage such conflicts. Three sets of findings emerged from this dissertation.

First, rationalizations exhibit a strong predictable influence on permitting physicians to accept industry gifts. I demonstrated through experiments that subtle “because I’m worth it” primes and justifications altered physicians’ rationale and perceptions of their working conditions (Sah & Loewenstein, 2010). If the perception of the quality of working conditions is so subjective and easily manipulated, then the important role that rationalizations play in conflict of interest–related behavior is more readily appreciated. For example, physicians will usually find a way to convince themselves that the drugs they are paid to prescribe or give talks to promote really are the best and that their patients really do need radiographs from the imaging centers they own.

Second, biases, conscious as well as unconscious, have been found to corrupt the doctor-patient relationship and compromise medical advice as the number of advisees increases. Patients who are less identifiable or part of a crowd occasion a lack of empathy that results in advisors becoming less aware of potential bias in their advice and less inclined to exert effort to rein in such bias (Sah & Loewenstein, 2012).

Third, patients’ desire to maintain a harmonious relationship with their physicians can render disclosure of conflicts of interest ineffective (Sah et al., 2013). At its worst, this “burden of disclosure” effect can impair the doctor-patient relationship and promote compliance with advice that is trusted less. It effectively places patients in a bind between rejecting advice they do not trust and complying to avoid signaling distrust of their physicians or to help satisfy their advisors’ self-interests.

Greater understanding of the psychological processes at play will enable physicians and policy makers to more effectively discern and account for the impact and influence of conflicts of interest. In particular, although conscious corruption does occur, unconscious bias remains a pervasive problem that eludes resolution through self-regulation and professionalism. Medical

conflicts of interest that steer physicians away from giving the best possible advice have contributed to the rocketing cost of health care in the United States. Recourse to disclosure is not always effective at mitigating these problems; it can even exacerbate them. The only effective way to manage the problems associated with conflicts of interest is to eliminate rather than merely disclose them. Cultivating a strong culture of independence within the medical profession will lead physicians to feel shame rather than gratification when accepting conflicts of interest and will encourage the provision of unbiased advice.

Appendix

Sunita Sah: Commentary on the Research Process

I was once advised that I should make a career of “doing the thing that I could do best.” Simple advice, but how do you know what you can do best? To find out, you need to reflect on what you know, what you care about, and what you want to spend much of your time thinking about. What do you find curious about the world? What problem do you want to solve in society? What keeps you awake at night?

The path to my PhD was unusual: medical doctor, marketing director, and management consultant. Colleagues rarely ask about my life preacademia, but it is impossible for me to reflect on my doctoral research process without considering the experiences that inspired my area of research, cultivated most of my skills, and, without a doubt, fostered my passion in research. Working both in medicine and as a consultant to the pharmaceutical industry, I became fascinated with, and was driven to investigate, conflicts of interest and the relationships between the medical profession and industry.

I completed my PhD in just over 2 years from entry, a record at Carnegie Mellon University. Those who ask me how this achievement was possible are either unaware of, or have forgotten about, the more than 10 years I spent working in the commercial world and, before that, as a hospital doctor. I highlight the preacademia, real-world experience that undoubtedly prepared me for academe not so much because I feel its value is often neglected but because I am being asked to give some advice that may be helpful to others. The speed of my accomplishments was not planned, nor would it suit everyone, but the steps to a PhD are generally similar. I am often asked how one goes about completing a PhD, and so I offer here my reflections with the important caveat that one should always look beyond the degree to doing the research that one cares about.

My experience and observations suggest two major challenges to completing a PhD. First, at least in U.S. business schools, there are—together with a heavy course load in the first 2 years—qualifying or comprehensive

exams. One could reasonably expect that having already successfully completed three previous degrees, I had managed to become efficient at learning new material. Much of the credit for this efficiency is due to medical school, which required memorization of an enormous volume of facts. I learned how to absorb material quickly and focus on what was important.

Second, I believe that many students find it difficult to decide on and stick to a dissertation topic. I entered my PhD program knowing what I wanted to do. I had had many years to reflect on and understand where my passions lie. For those unsure of a topic, I recommend taking time to find out, either pre-PhD or during the first 2 years. Sample a variety of courses, and work on your own ideas, not your advisor's. Most important, work on something that you feel strongly about. This focus will help to ensure that you feel engaged with, passionate about, and connected to the projects you undertake.

These two challenges do not address what is arguably the most important factor: choosing the right advisors. Before embarking on the pursuit of a PhD, do the necessary research to determine where you would like to end up and especially with whom you would like to work. I could neither have completed a PhD nor begun my research without the right environment and support.

My dissertation chair greatly supported my enthusiasm for my research, leading to more ideas being generated than we had time to pursue. It was my chair who suggested that I defend my dissertation proposal immediately after my qualifying exams and finish in just 2 years. Thinking it a joke, I laughed at the idea, which he voiced for the first time early in my second year. As I found with so many other things over the past few years, he turned out to be right.

My other advisor took a sabbatical at a West Coast university during my first year. Knowing that he would not be physically present, I arrived in Pittsburgh a couple of weeks earlier in the summer to discuss projects. I spoke with him on the phone often, not only about research, but in search of what proved to be invaluable advice about how to be productive, which courses to take, and where to focus my efforts. Even now, I continue to benefit from his advice.

Many other researchers inspired me along the way, and I am deeply indebted to all who have helped and continue to guide and advise me. Although they and others often criticized my work and however harsh it may have seemed at the time, constructive feedback is incredibly helpful. Absorbing the feedback when I presented my research and discussed my ideas enabled me to progressively refine my ideas and approach.

Completing a PhD in a scant 2 years may make it seem like a breeze for me, but pain definitely preceded the rewards. Although my preacademic career helped immensely to inform my research, it was a lot to sacrifice to

move into academia: rather more than I realized at the time. I moved with my husband and 1-year-old son from London, a city I love, to Pittsburgh, forsaking the status and income for which I had strived for over many years, and I soon found myself missing being near family and friends who knew me well. It takes time to rebuild a professional and personal life; though now it feels worth the sacrifice to be in the career that I love, I often felt as though I was starting over from scratch.

My most intuitive advice would be to view one's goal not as obtaining a PhD but instead the research and field by which one is most fascinated and in which one would like to specialize. Look beyond the PhD, beyond placing the article in the right journal, getting the job, and securing tenure. Academics often spend too much time thinking about things that are not as rewarding as engaging in research. Think about what you want to understand and discover about the world. Find the thing that *you* can do best.

Acknowledgment

Much of this dissertation summary appears in the article "Conflicts of Interest and Your Physician: Psychological Processes That Cause Unexpected Changes in Behavior," published in the *Journal of Law, Medicine, and Ethics*, 40(3), 482-487 (2012), and is reproduced here with permission.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

References

- Angell, M. (2000). Is academic medicine for sale? *New England Journal of Medicine*, 342(20), 1516-1518.
- Babcock, L., Loewenstein, G., Issacharoff, S., & Camerer, C. (1995). Biased judgments of fairness in bargaining. *American Economic Review*, 85(5), 1337-1343.
- Bazerman, M. H., Morgan, K. P., & Loewenstein, G. (1997). The impossibility of auditor independence. *Sloan Management Review*, 38(4), 89-94.
- Broberg, T., Ellingsen, T., & Johannesson, M. (2007). Is generosity involuntary? *Economics Letters*, 94(1), 32-37.
- Cain, D. M., Loewenstein, G., & Moore, D. A. (2005). The dirt on coming clean: Perverse effects of disclosing conflicts of interest. *Journal of Legal Studies*, 34(1), 1-25.

- Campbell, E. G., Weissman, J. S., Ehringhaus, S., Rao, S. R., Moy, B., Feibelman, S., & Goold, S. D. (2007). Institutional academic-industry relationships. *JAMA: The Journal of the American Medical Association*, 298(15), 1779-1786.
- Chimonas, S. C., Brennan, T. A., & Rothman, D. J. (2007). Physicians and drug representatives: Exploring the dynamics of the relationship. *Journal of General Internal Medicine*, 22(2), 184-190.
- Dana, J., Cain, D. M., & Dawes, R. M. (2006). What you don't know won't hurt me: Costly (but quiet) exit in dictator games. *Organizational Behavior and Human Decision Processes*, 100(2), 193-201.
- Dana, J., & Loewenstein, G. (2003). A social science perspective on gifts to physicians from industry. *JAMA: The Journal of the American Medical Association*, 290(2), 252-255.
- DellaVigna, S., List, J. A., & Malmendier, U. (2012). Testing for altruism and social pressure in charitable giving. *Quarterly Journal of Economics*, 127(1), 1-56.
- Kassirer, J. P. (2004, August 1). Why should we swallow what these studies say? *Washington Post* (Outlook), p. B3.
- Kassirer, J. P. (2007). Commercialism and medicine: An overview. *Cambridge Quarterly of Healthcare Ethics*, 16(4), 377-386.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480-498.
- Loewenstein, G., Cain, D. M., & Sah, S. (2011). The limits of transparency: Pitfalls and potential of disclosing conflicts of interest. *American Economic Review: Paper and Proceedings*, 101(3), 423-428.
- Loewenstein, G., Issacharoff, S., Camerer, C., & Babcock, L. (1993). Self-serving assessments of fairness and pretrial bargaining. *Journal of Legal Studies*, 22, 135-159.
- Loewenstein, G., Sah, S., & Cain, D. M. (2012). The unintended consequences of conflict of interest disclosure. *JAMA: The Journal of the American Medical Association*, 307(7), 669-670.
- Palmer, B. (2008). *Remarks: Meeting 3 of the Committee on Conflict of Interest in Medical Research, Education, and Practice*. Washington, DC: Institute of Medicine of the National Academies. Retrieved from <http://www.iom.edu/Activities/Workforce/ConflictOfInterest/2008-MAR-13.aspx>
- Pronin, E., Lin, D. Y., & Ross, L. (2002). The bias blind spot: Perceptions of bias in self versus others. *Personality and Social Psychology Bulletin*, 28(3), 369-381.
- Sah, S., & Loewenstein, G. (2010). Effect of reminders of personal sacrifice and suggested rationalizations on residents' self-reported willingness to accept gifts: A randomized trial. *JAMA: The Journal of the American Medical Association*, 304(11), 1204-1211.
- Sah, S., & Loewenstein, G. (2012). More affected = more neglected: Amplification of bias in advice to the unidentified and many. *Social Psychological and Personality Science*, 3(3), 365-372.
- Sah, S., Loewenstein, G., & Cain, D. M. (2013). The burden of disclosure: Increased compliance with distrusted advice. *Journal of Personality and Social Psychology*, 104(2), 289-304.

Sierles, F. S., Brodkey, A. C., Cleary, L. M., McCurdy, F. A., Mintz, M., Frank, J., ... Woodard, J. L. (2005). Medical students' exposure to and attitudes about drug company interactions: A national survey. *JAMA: The Journal of the American Medical Association*, 294(9), 1034-1042.

Author Biography

Sunita Sah is an assistant professor of business ethics at Georgetown University and a research fellow at the Edmond J. Safra Center for Ethics of Harvard University. Prior to joining the Georgetown faculty, Sunita was a postdoctoral associate at the Fuqua School of Business at Duke University. She holds a PhD and an MS in organizational behavior from Carnegie Mellon University, an MBA from London Business School, an MB ChB (U.K. equivalent to the U.S. MD) in medicine and surgery, and a BSc (Hons) in psychology from the University of Edinburgh. Before entering academia, Sunita worked as a medical doctor for the U.K. National Health Service, a senior consultant and European marketing director at IMS Health Consulting, and a managing director (CEO) of Organisational Dynamics Ltd.

Sunita's research focuses on organizational corruption, business ethics, influence, and advice. In particular, Sunita studies how professionals who give advice alter their behavior as a result of conflicts of interest and disclosure policies. Sunita applies organizational behavior, psychology, and behavioral economics theory to the study of different aspects of giving and reacting to biased or overconfident advice. Her work has been published in top academic outlets, including the *American Economic Review*, *Organizational Behavior and Human Decision Processes*, *Journal of the American Medical Association*, *JAMA Internal Medicine*, *Journal of Personality and Social Psychology*, and *Social Psychological and Personality Science*.

Sunita has won best paper awards from the Academy of Management, Society of Business Ethics, London Business School, Society of Judgment and Decision Making, and Society of Personality and Social Psychology, and scholar awards from Harvard University, the International Association of Conflict Management and Dispute Resolution Center (Kellogg School of Management), Medical Research Council (U.K.), and National Science Foundation.