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Realizing the Promise of Social Psychology in Improving Public Health

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Abstract

The theories, phenomena, empirical findings, and methodological approaches that characterize contemporary social psychology hold much promise for addressing enduring problems in public health. Indeed, social psychologists played a major role in the development of the discipline of health psychology during the 1970s and 1980s. The health domain allows for the testing, refinement, and application of many interesting and important research questions in social psychology, and offers the discipline a chance to enhance its reach and visibility. Nevertheless, in a review of recent articles in two major social-psychological journals (*Personality and Social Psychology Bulletin* and *Journal of Personality and Social Psychology*), we found that only 3.2% of 467 studies explored health-related topics. In this article, we identify opportunities for research at the interface of social psychology and health, delineate barriers, and offer strategies that can address these barriers as the discipline continues to evolve.

Keywords

social psychology, health psychology, health behavior, public health

Medicine is a social science in its very bone and marrow.

—Thomas Kottke (2011)

The leading contemporary causes of mortality are attributable to behaviors such as tobacco use, alcohol consumption, poor diet, and lack of physical activity (Mokdad, Marks, Stroup, & Gerberding, 2004), meaning that major advances in human health and well-being require the development of a sophisticated understanding of human behavior. Successful behavior change does not occur merely by providing people with more information, but rather by understanding and targeting the constellation of motives, emotions, cognitions, interpersonal processes, and situations that drive behavior. The discipline of social psychology is particularly well-equipped to measure, track, and influence these constructs in ways that can have demonstrable effects on health behavior and other health outcomes.

The current dynamics and conventions of health care and health promotion offer a particularly compelling case for the need to leverage social-psychological research. Patients are more involved than ever in the conduct of their medical care, including decisions about screening and treatment protocols as well as the management of and adherence to clinical care (e.g., Murray, Pollack, White, & Lo, 2007). As health communication shifts from the model of one-size-fits-all public service announcements to personally tailored digital messages (e.g., Lustria, Cortese, Noar, & Glueckauf, 2009) and

two-way dialogues facilitated by social media (Chou, Hunt, Beckjord, Moser, & Hesse, 2009), practitioners and patients must make sense of a more complex information environment. Shared decision making between patients and practitioners or between patients and family members involves judgments based on incomplete information, often in relational settings involving trust, power, and nonverbal communication. For example, screening and vaccination decisions often hinge upon effective communication with intimate others, accurate use and understanding of information, reconsideration of strongly held beliefs, and management of a potential conflict between emotional and cognitive signals.

Complicating matters further, the public health landscape is constantly changing with the emergence of new health threats (e.g., H1N1 virus), new products (e.g., e-cigarettes), and new technologies (e.g., direct-to-consumer genetic testing). Building on Kottke's (2011) provocative quip above, we contend that social psychologists possess the skills and

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conceptual expertise to address many public health challenges.¹ At the same time, research in a health context offers the reciprocal benefit of enriching social-psychological theories and advancing the reach, impact, and visibility of the discipline at a time when critiques from inside and outside the field have prompted intense self-scrutiny.

Relevant Strengths of Social Psychology

Most research in social psychology attempts to isolate specific causal factors using an experimental approach with refined methodological tools to develop causal models and to test mediating processes. The discipline has been instrumental in designing early methods for testing mediation (e.g., Baron & Kenny, 1986), in addition to offering methodological alternatives to statistical approaches for establishing mediation (Spencer, Zanna, & Fong, 2005). Moreover, the discipline's prevailing interest in the interaction between social processes and individual differences facilitates a focus on formulating hypotheses from a multilevel approach. This focus is important given that the success of health interventions often depends on identifying underlying mediating and moderating processes (Michie & Prestwich, 2010; Webb, Joseph, Yardley, & Michie, 2010). Moreover, a multilevel perspective often highlights how influences at one level interact with influences at another level (see, for example, Clauser, Taplin, Foster, Fagan, & Kaluzny, 2012).

Models in social psychology are also designed to be applicable in multiple contexts rather than being domain-specific. Although lifestyle behaviors and diseases differ on many dimensions, they are similar in ways that may not be apparent to investigators who take a domain-specific approach (e.g., areas of health psychology/behavioral medicine such as smoking cessation or weight loss and in medical specialties such as cardiology or oncology). For example, in what ways are the self-regulatory processes that guide eating similar to those that affect smoking, gambling, or other appetitive behaviors (see Mann, de Ridder, & Fujita, 2013)? What kinds of defensive responses emerge when people respond to personally threatening health feedback in domains such as cholesterol testing, genetic screening, and cancer risk assessment (Croyle, 1992; McQueen, Vernon, & Swank, 2013)?

Social psychologists are also particularly adept at framing a research question and then conducting a set of empirical tests that in the aggregate provide convergent evidence of a phenomenon, often leading to published articles containing multiple incremental and complementary studies. In sum, the strong analytical, methodological, and theoretical skills cultivated in social psychology position the discipline well to tackle difficult research questions in the health landscape.

Social-Psychological Theories Benefit From Health Research

Testing social-psychological theories in the health domain can also have the reciprocal benefit of refining those theories

(Rothman, 2004). Gustavsen (2001, p. 17) reminded us of Kurt Lewin's dictum that ". . . an action research experiment must not only express theory but it must express theory in such a way that the results of the experiment can be fed back directly to the theory" (Lewin, Lippitt, & White, 1939). Some of the most important and well-known theories in social psychology have been refined, strengthened, or expanded because of theory testing in a health or another "applied" context. For example, Festinger's cognitive dissonance theory (Cooper & Fazio, 1984; Festinger, 1957), assumed that a necessary condition for dissonance to emerge was the specter of a negative outcome. This assumption was debunked, however, by evidence from experiments on health behavior (Stone, Aronson, Crain, Winslow, & Fried, 1994), altering a key facet of the theory.

There are many other examples. Social comparison theory (Festinger, 1954) has evolved greatly as a result of seminal research on coping in samples such as breast cancer patients (e.g., Taylor & Lobel, 1989). Self-affirmation theory (Steele, 1988) continues to develop as a result of research on people's responses to information about potential health threats (e.g., Harris & Epton, 2009). Taylor and Brown's (1988) positive illusions formulation led to systematic comparisons across health-related contexts that helped identify when and how positive illusions are adaptive or maladaptive (Klein & Cooper, 2008; Segerstrom & Roach, 2008). Tests of the Theory of Reasoned Action (Fishbein, 1980) in health contexts informed refinements in the theory ranging from the inclusion of perceived behavioral control (Madden, Ellen, & Ajzen, 1992) to the incorporation of willingness as an additional proximal predictor of behavior (e.g., Gibbons, Gerrard, Blanton, & Russell, 1998). In addition to affording these kinds of refinements to theory, testing theoretical principles in more complex environments provides the opportunity to demonstrate the robustness of these principles.

Health Poses Provocative Research Questions

Health provides a rich and meaningful domain for social-psychological research because it has universal personal relevance across the life span, invites comparisons across disparate populations, and relates to a wide range of theories and ideas. The health domain affords an invaluable opportunity to examine the relations among affect, cognition, motivation, and social influence, engage research participants, and enhance both mundane realism and external validity (Croyle & Ditto, 1990).

The pursuit of stimulating, counterintuitive, and complex research questions that scrutinize commonsense models of human behavior exemplifies the discipline of social psychology (e.g., Ross, Lepper, & Ward, 2010). Questions raised in the health domain are not only practical but also interesting and provocative—a combination consistent with Kurt Lewin's vision of use-inspired research (Lewin, 1946, 1951). For example, why do patients fail to adhere to prescribed

medication (Zhang, Wu, Fendrick, & Baicker, 2013)? The answers are surely predicated on principles of self-regulation, processing of complex information, and environmental constraints. Why do people over- or under-report symptoms and risk factors to their health care providers (Courtney et al., 2012; Suls & Howren, 2012) or not return to receive test results (Melnik & Shepperd, 2012)? A nuanced investigation of threat responses and social influence might help address these questions. When patients establish living wills, why do their kin (unintentionally) fail to adhere to their wishes (Fagerlin, Ditto, Hawkins, Schneider, & Smucker, 2002)? From a social psychological perspective, one could imagine examining the dynamics of projection, decision making, and relationship functioning in this context. When two authoritative bodies offer conflicting guidelines about health care practices such as screening recommendations (as in mammography; see U.S. Preventive Services Task Force, 2009, and Smith, Brooks, Cokkinides, Saslow, & Brawley, 2013), how do people process and respond to these mixed messages? The attitudes literature would benefit from understanding the factors that moderate the processing of and reactions to conflicting messages, especially when both come from expert sources.

In short, all of these questions introduce complex puzzles begging for creative solutions that could in turn advance theory and the understanding of interesting basic phenomena. In many cases, addressing a health question can be accomplished simply by choosing a dependent measure such as physical activity, seat belt use, medication use, vaccination, smoking cessation attempts, oral health, or sexual activity.

Historical Context

Social psychologists have a long history of engagement with significant health problems. Many were major contributors to the development of health psychology as an independent discipline in the 1970s and 1980s. Some of Lewin's (1943) earliest work addressed how to convince people to eat more nutritious foods that were considered otherwise unappealing. Janis and Feshbach's (1953) research on fear appeals was designed in part to help eradicate health problems such as gum disease. Festinger (1957) developed dissonance theory in part to understand how smokers like himself could continue to use tobacco despite knowing its dangers (the grip of addiction notwithstanding). Schachter's (1974) research on obesity and smoking was driven by an interest in how people make sense of ambiguous physiological sensations. Leventhal (1986) introduced the notion that patient perceptions and mental representations were key antecedents to symptom interpretation, health behavior, and adherence. Adler (1981) was an early leader in understanding psychological dimensions of reproductive health and contraceptive use. Pennebaker conducted groundbreaking work on symptom reports (e.g., Pennebaker & Skelton, 1981) and on the

effect of expressive writing about traumatic experiences on well-being (Pennebaker, 1989).

A few social-psychological theories have been particularly successful at being adopted broadly in health settings. For example, the Theory of Planned Behavior (Fishbein & Ajzen, 2010)—with its focus on attitudes, norms, and perceived behavioral control—has been used to predict and guide efforts to intervene on a wide variety of health behaviors (e.g., Albarracín, Johnson, Fishbein, & Muellerleile, 2001). Deci and Ryan's (2012) self-determination theory—a theory highlighting the importance of competence, autonomy, and relatedness—has been useful in the design of interventions for smoking cessation and weight loss (e.g., Ryan, Patrick, Deci, & Williams, 2008).

More recent work offers a window into the wide range of possibilities for integrating social psychology into health research. A 2013 special issue of *Health Psychology* (HP) on theoretical innovations in social psychology and their implications for health (Klein, Rothman, & Cameron, 2013) highlighted research in the areas of self-regulation (Mann et al., 2013), implicit processes (Sheeran, Gollwitzer, & Bargh, 2013), emotion and emotion regulation (DeSteno, Gross, & Kubzansky, 2013), intergroup processes such as discrimination (Major, Mendes, & Dovidio, 2013), and interpersonal relationships (Pietromonaco, Uchino, & Dunkel Schetter, 2013). Most of the forward-thinking ideas and research featured in this special issue reveal tremendous potential for addressing health problems.

Yet the Discipline Can Do More

Despite these promising examples, we suggest that the discipline falls short in realizing the potential of a productive social/health interface. One relevant metric is the extent to which health topics appear in the pages of high

prestige journals in the discipline. We reviewed all published articles ($n = 133$) appearing during 2012 in six issues of each of two high-impact journals in social psychology—the *Journal of Personality and Social Psychology* (JPSP) and *Personality and Social Psychology Bulletin* (PSPB). We started with the January issue and surveyed every other month's issue after that. We assumed this sample of articles to be a reasonably representative sample of work conducted in contemporary social psychology. For each article (excluding meta-analyses and nonempirical articles), we scanned the title for terms such as health, diet, smoking, physical activity, and well-being, and then evaluated the content of each study ($n = 467$ studies). An independent coder with a PhD in psychology conducted an initial survey of articles, and then two of the authors (J.A.S. and J.S.) scrutinized the coding and established agreement. Disagreements were relatively rare and were resolved in discussion. Raw data are available from the authors.

Overall, we found that a scant 3.0% of the articles ($n = 4$ articles) had health-relevant titles, and 3.2% of the studies

Table 1. Coding for Health Journals (165 Articles, 174 Studies) and Social Journals (133 Articles, 467 Studies).

	Health journals				Social journals				χ^2	<i>p</i>
	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)		
Coding journals										
1. Health in title	0.0	0	100	165	97.0	129	3.0	4	282.2	.0001
2. Includes nonpsychologist author	33.1	54	66.9	109	78.8	104	21.2	28	61.1	.0001
3. Author from health-related department	19.0	31	81.0	132	93.9	124	6.1	8	164.2	.0001
Coding studies										
4. Study content is health	0.6	4	97.7	170	96.8	452	3.2	15	551.3	.0001
5. Behavior outcome	77.0	134	23.0	40	81.2	379	18.8	88	1.4	.243
6. Self-reported behavior	44.8	78	55.2	96	93.8	438	6.2	29	193.6	.0001
7. College student sample	92.5	160	7.5	13	24.0	112	76.0	354	241.8	.0001
8. Children and teen sample	92.0	160	8.0	14	96.8	451	3.2	15	6.8	.009
9. Internet sample	94.3	164	5.7	10	87.5	407	12.5	58	6.0	.02
10. Health-related sample	59.8	104	40.2	70	100	465	0.0	0	210.1	.0001
11. Community sample	59.0	102	41.0	71	88.2	410	11.8	55	67.9	.0001

Note. Column entries include percentages and counts. Variations in cell frequency are due to an inability to code some data.

($n = 15$ studies) reported health-relevant content (see Table 1, rows 1 and 4). Moreover, when reviewing the 467 studies in these articles, we were unable to identify even one example of a study that was conducted with a health-related sample (defined as individuals at high risk for a health problem, community residents with a specific diagnosis, medical patients, or caretakers or family members of such individuals). As a point of comparison, 12% of the articles focused on prejudice or discrimination. Altogether, only 17% of the articles centered on health, prejudice, discrimination, law, or aggression, areas that could be described as ideal test-beds for addressing social issues with social-psychological research. Thus, although health does not appear regularly in the pages of JPSP and PSPB, the same can be said of other domains typically associated with social issues.

As a basis for comparison, we conducted a similar coding exercise with two high-impact journals in the sister discipline of health psychology—*Annals of Behavioral Medicine* (ABM; the flagship journal of the Society of Behavioral Medicine [SBM]) and *Health Psychology* (HP; the flagship journal of the American Psychological Association's [APA] Division of Health Psychology). The discipline of health psychology focuses a great deal of attention on basic mechanisms, such as the etiology of stress responses and the effectiveness of coping, but also develops and tests health promotion interventions in the field. We coded all six issues of the ABM and HP bimonthly 2012 volumes; hence our decision to only code six issues of the social journals as well. The survey of health journals included 165 articles and 174 unique studies.

As one would expect (and as seen in Table 1), the coverage of health topics and the use of health-related samples in these journals was much more substantial, with 100% of the article titles including health terms, 97.7% of the studies

having health content, and 40.0% of the samples being health-related (with most remaining samples being drawn from the general community for some specific health reason). Of course, social psychologists are often authors of articles in these health journals and also in so-called "applied" social journals with lower impact (e.g., *Journal of Applied Social Psychology*). It is not clear whether these choices reflect an active commitment by authors to secure publications in health and specialty social journals, or instead reflect a response to the difficulty (real or perceived) of getting health research published in mainstream high-impact social journals such as PSPB and JPSP.

A second possible metric is the extent to which social psychologists belong to health-focused professional organizations. We obtained membership list summaries from the APA for 2002 and 2012 to identify social psychologists' affiliations with professional health-focused societies. We found that 7.8% of members of the Society for Personality and Social Psychology (SPSP, Division 8 of APA) were also members of Division 38 (HP). That number is 26% lower than 10 years earlier when 10.5% of the members of Division 38 were also members of SPSP (also note that joint members are not necessarily social psychologists). Thus, although membership in SPSP has significantly increased in the last several years, exceeding 5,500 in 2012, affiliations with Division 38 have not. Membership lists by discipline for 2012 were also available for the SBM, a professional organization that draws researchers from several health-related disciplines (e.g., psychology, medicine, public health, and nursing). Only 3% of the membership of SBM (48/2,304) overlapped with the membership of SPSP (Alicia Sukup, SBM, personal communication, October 16, 2013).² A new professional organization, the Social Personality and Health Network (see <http://sphnetwork.org/>), offers a vibrant professional home for

social psychologists doing health research but whose membership is a small fraction of the membership of SPSP.

One might also look at the involvement of social psychologists on the editorial boards of major health journals. Accordingly, we collected lists of editorial board members for HP (at 5-year intervals since 1982) and then performed an Internet search to find each person's area of PhD training. The representation of social psychologists on the HP editorial board ranged from a high of 27% (in 1992) to a low of 9% (in 2007). In 2012, only 11% of the board members were trained in social psychology. Although we cannot judge what level of representation is optimal, we can say that the growth of the discipline of social psychology has not corresponded with a growth in the number of social psychologists serving as editorial consultants for HP. A similar analysis of ABM, which has been an empirical journal for a shorter period of time, revealed that the proportion of editorial board members who are social psychologists has increased over time but is still notably low (i.e., 0% in 1992, 2% in 1997, and 10% in 2012).

Overall, these disparate data sources indicate the publication of relatively few empirical articles concerned with health in leading social psychology journals, the meager use of health-related samples, a moderate but static frequency of social psychologists' affiliation with health-related professional societies, and a proportionally small representation on the editorial boards of health-related journals. Although all of these data sources have their limitations, in the aggregate they suggest a less than desirable penetration of social psychology into health research.

Given our conviction that social psychology can accomplish more in the health domain, what factors prevent social psychologists from doing health research and playing a more central role in addressing public health problems? In our view, several barriers limit the reach and impact the discipline could have on health. Below we describe these impediments and then discuss how they can be addressed.

Impediments to Successful Integration

We have identified two broad (and somewhat overlapping) classes of obstacles to social psychologists doing research in the health domain. The first includes some prevailing methodological approaches (infrequent measurement of behavior and use of convenience samples), and the second involves disciplinary norms and practices (limited emphasis on interdisciplinary research, norms for article length and number of authors, focus on "basic" over "applied" research, specialization in graduate training, expectations for research productivity, taste for nonobvious phenomena, and limited attention to implementation needs).

Methodology and Approach to Research

Measurement of behavior. Many public health problems are rooted in the behavior of individuals, families, medical

teams, and organizations. The APA declared the first decade of the 21st century the "Decade of Behavior" in part to highlight to other disciplines, policy makers, and laypeople what psychology can contribute to understanding behavior. Midway through the decade, Baumeister, Vohs, and Funder (2007) surveyed JPSP studies from 1966 to 2006 to assess how frequently social psychologists were measuring observable behavior. They found that behavior served as a primary independent or dependent variable in approximately 80% of studies in the mid-1970s. However, that number dropped in 1986 and continued on a downward trajectory, with approximately 20% featuring behavior in 2006. The majority of studies they examined did not collect direct behavioral outcomes, objective outcomes, or even temporally proximal and observable outcomes.

To expand on Baumeister et al.'s (2007) findings, we searched for behavioral outcomes as part of the coding exercise described earlier with 2012 issues of JPSP and PSPB. Observable behavioral outcomes (e.g., donation of a prize, obtaining medical test results) appeared in 18.8% of the 467 studies in this analysis (see Table 1, row 5). This statistic is comparable to Baumeister et al.'s figure, although their analysis also included behavior as the independent variable. For the sake of comparison, we coded the leading two journals in health psychology (HP and ABM) and found a comparable figure of 23.0% having behavioral dependent variables (among 174 studies). Health psychology, of course, focuses on a wide range of objective measures other than behavior such as biomarkers, telomere length, cardiovascular reactivity, and immune functioning.

Although some health behaviors are difficult to measure directly (e.g., information exposure, alcohol consumption over an extended period), many can be measured fairly reliably and easily with well-validated self-reports. Indeed, 55.2% of the studies published in the two health journals we surveyed included measures of self-reported behavior (often validated by other measures, such as the use of salivary cotinine to validate claims of smoking cessation attempts). However, our survey of the two social journals revealed that even self-reported behavior was a rare outcome (appearing in a significantly lower 6.2% of studies; see Table 1, row 6).

Why was behavior assessed more frequently in the mid-1970s than it is now in social psychology? There are at least two major reasons for this state of affairs. First, social psychology has shifted its focus toward the cognitive, affective, and motivational processes that are antecedent to behavior, a shift that began with the attribution movement in the 1970s and was followed in succeeding decades by research on social cognition, the self, and decision making (all of which primarily rely on assessments of beliefs, preferences, recall, or reaction times). These research traditions do not ignore behavior; in fact, they tout the potential downstream effects of these processes on behavior. Nevertheless, examination of these downstream effects is more often fodder for discussion sections rather than the focus of systematic programs of research. The reliance on intrapsychic variables—often in

studies with clever experimental manipulations that cannot be instantiated in real-life settings—may prompt some basic and applied scientists in other disciplines (as well as clinical practitioners) to regard social psychology as irrelevant to their pursuits. Notably, even when behavior *is* measured, investigators do not often take full advantage of the wide array of new tools such as sensor technology and ambulatory monitoring that are employed in other disciplines to measure behaviors and behavioral processes (see, for example, Intille, Lester, Sallis, & Duncan, 2012).

A second factor shifting the focus away from behavior is the increase in human subject protections. Baumeister et al. (2007) suggested that Institutional Review Boards (IRB) have generally adopted more burdensome procedures and policies in recent decades that discourage the assessment of behavior. Concerns about consent and data privacy have made it increasingly more difficult to observe behavior unobtrusively and link behavioral outcomes with other data available from the same individual.

Convenience samples. As noted earlier, health-related populations rarely serve as participants in mainstream social-psychological studies. Our coding of the social journals revealed that college students were the participants in fully 76.0% of the 467 studies, although a not insubstantial number of samples were drawn from Internet-based services such as Amazon's Mechanical Turk (12.5%)—a trend that is only likely to increase. Teens and children (8.0%) and community residents (41.0%) were recruited more frequently in the 174 studies published in the two health journals than they were in the social journals (3.2% and 11.8%, respectively; see Table 1, rows 8 and 11). Studies in the health journals were less likely than studies in the social journals to rely on college student or Internet samples (7.5% and 5.7%, respectively; see Table 1, rows 7 and 9). Reliance by social psychologists on young, intelligent, and socially advantaged adults has been a long-standing concern because results may not generalize to other populations and social contexts (Henrich, Heine, & Norenzayan, 2010; Sears, 1986; Snibbe & Markus, 2005).

College student participants may be quite appropriate for social-psychological research protocols and measures that depend on individuals who are highly literate and able to think abstractly and process messages deliberatively. However, the materials and measures used with college students may not transfer easily to medical patients, who are already challenged by their circumstances, or often by low socioeconomic status (SES; Shepperd, Emanuel, Dodd, & Logan, 2014). Procedures used in student samples may require modification and some may be entirely unfeasible because they conflict with medical protocol, are logistically impossible, or are unethical. Consequently, social psychologists' training with and reliance on college student samples may leave them unprepared to work in health or community settings, and researchers from other disciplines working in those settings may be skeptical about what the discipline has to offer. That said, college students are sometimes the

population of greatest relevance when the research question concerns risky health behaviors common in that group (e.g., use of tanning beds, alcohol abuse, hookah smoking).

Disciplinary Norms and Practices

Reliance on nonbehavioral outcomes and college student convenience samples may place social psychologists at a disadvantage relative to other disciplines with different practices, and may dissuade them from engaging with health issues. However, even research that does not adopt these methodological conventions may still fail to gain traction due to a constellation of disciplinary practices.

Limited emphasis on interdisciplinary research. Although there will always be an important place for research conceived and conducted by individual researchers in the intimate contexts of their laboratories, the reality is that addressing emerging health issues often requires substantial interdisciplinary collaboration. In the current Zeitgeist of fostering a Big Science and Big Data approach to research (Hesse, Croyle, & Buetow, 2011; Mabry, Olster, Morgan, & Abrams, 2008), addressing difficult research questions is likely to be easier when considering multiple levels and perspectives. This need for common ground is certainly the case for health problems like the spread of AIDS (e.g., Johnson et al., 2010). Many research teams working on health problems related to behavioral processes include individuals with backgrounds in clinical health psychology, public health, nursing, and epidemiology.

Researchers have identified psychology as a “hub science” (Cacioppo, 2007; see also Boyack, Klavans, & Borner, 2005)—one poised for collaboration with colleagues working at different levels of analysis. With this in mind, we examined the degree to which articles in the social psychology journals we coded included a multidisciplinary team of authors. We found that 21.2% of the articles included authors outside psychology. By way of comparison, 66.9% of the articles in the two health journals did so. Not surprisingly, a high proportion of articles in the health journals had coauthors affiliated with medical or health institutions (81.0% in the health journals vs. 6.1% in the social journals; see Table 1, rows 2 and 3).

Why is multidisciplinary collaboration so rare in social psychology? As noted earlier, social psychologists are trained to develop models that transcend domains, a laudable attribute from a theoretical perspective. The flip side, however, is that social psychologists may have less knowledge about the domains in which they test their theories (e.g., facts about specific diseases such as risk factors, time course, symptoms, and treatment). The consequence is that collaboration with researchers who hold a disease-specific focus may be hindered, which is particularly important given the focus in the traditional health sciences on specific illnesses.

The incentive structure of the discipline also may prove an obstacle to interdisciplinary research. In our experience,

graduate students and beginning faculty in social psychology are strongly encouraged to pursue sole-authored or first-authored publications with a limited number of coauthors to make a strong case for obtaining a faculty position and, later on, tenure and promotion. Indeed, social psychologists are traditionally evaluated based on their unique contributions to the discipline, which may constrain their ability and willingness to have other researchers as collaborators or coauthors. When they do have coauthors, those coauthors are often current or former graduate students. In medicine, public health and health psychology, there is a strong tendency to conduct large research projects in study teams that yield papers with multiple authors. Support for these observations is evident in part in our journal coding, which revealed significantly more authors per article in the health journals ($M = 5.07$, $SD = 2.43$, $n = 165$) than in the social journals ($M = 3.25$, $SD = 1.34$, $n = 133$), $t(296) = 8.17$, $p < .0001$.

Journal policies. There are some important differences in journal policies between social and health journals that could make it more challenging for social psychologists to publish their work in the health journals. Whereas JPSP has no word limit on submissions and PSPB has a 10,000 word limit, health journal articles are often limited to approximately 4,000 to 8,000 words; medical and public health research journals tend to have even more restrictive policies about article length, with 3,000 to 5,000 words being the norm. This difference in word limit creates four potential problems. First, social psychologists may construe the shorter article as a sign that the readership of the journal is not interested in the full range of issues that they are focused on such as the inclusion of multiple measures or the interest in both outcome and mediational analyses. Second, social psychologists endeavoring to publish in health outlets may have less experience writing brief papers. Recognizing that many of the other sciences prefer shorter and tighter papers (e.g., Taylor, 2009), two journals in social psychology (*Social Psychological and Personality Science* and the flash report section in the *Journal of Experimental Social Psychology*) now cater to this demand, a promising step. A third challenge is that researchers from other health disciplines may be disinclined to read (or read carefully) health-related papers that appear in social journals because they may appear unnecessarily long. And fourth, writing shorter articles seems to contradict current efforts in the field to increase transparency in empirical reports.

For the purposes of completeness (although article length and number of studies per article are obviously confounded), it is worth noting that articles reporting multiple studies are encouraged in social psychology, but not in the medical or health sciences. Our coding of number of studies per article in the social and health psychology journals documents this pattern. The health journals averaged fewer studies per article ($M = 1.05$, $SD = .22$, $n = 165$) than did the social journals ($M = 3.51$, $SD = 2.04$, $n = 133$), $t(296) = 13.79$, $p < .0001$.

We note that it is entirely possible to publish impactful multistudy papers in health journals (see, for example, Fuglestad, Rothman, & Jeffery, 2008). Among the articles evaluated in our coding exercise, 8 of the 165 (5%) articles in the two health journals reported the results of more than one study. Health psychology as a discipline might itself benefit from more multistudy articles that build convergent evidence for a research question, following the lead of social psychology.

“Basic” research is favored over “applied” research. A common view is that basic research is thought to involve the development of increasingly powerful general theories and abstract statements of lawful relationships that are tested by means of experimental manipulation of variables and measurement of outcome variables under laboratory conditions that control or reduce extraneous influences. In contrast, applied research ostensibly uses these powerful theories and results to solve social problems. In the early days of social psychology, laboratory experiments, practical applications, and real-world problems were all concurrent and complementary preoccupations of researchers, perhaps exemplified by Lewin and colleagues’ seminal efforts to pursue an action research agenda to produce positive social change (Lewin, 1946). The sentiment that both basic research and applied research are valued, if not intimately connected, is still often expressed. For example, the first tenet of the SPSP mission statement is that the discipline should “produce and disseminate knowledge to the profession *and the public for the public good* through personality and social-psychological science” (emphasis added; see <http://www.spsp.org/?page=AboutIndex>).

Nevertheless, our impression is that “basic research” is the more respected and honored route to academic career advancement in social psychology. To the extent that this norm pervades graduate training, students may face explicit or implicit pressure to focus on “basic” areas of research such as persuasion, social cognition, social influence, and interpersonal relationships. Although these basic areas all offer fruitful opportunities to engage with health, the impediments described earlier might discourage students from pursuing research areas from a health perspective.

Specialization. In recent decades, psychology seems to have moved toward a specialization in graduate training that parallels the proliferation of specialized professional societies. When we reviewed several Internet sites of graduate training programs in social psychology, we observed that most no longer offer or require courses in “history and systems” that survey the entire discipline of psychology. Perhaps this specialization is an unavoidable product of the demise of grand theories and the greater appetite for mid-range theories, as well as advances in complex methods and statistics and greater specificity in measurement—frequently essential for particular subdisciplines. However, the current expectation for students appears to be that they investigate deeper and

not broader in their “basic” area. There appears to be only limited time to pursue connections outside the discipline, which reduces the potential for interdisciplinary collaboration (and team science), and also for the kind of crosstalk between areas of science that are interested in similar questions but in different domains (with the notable exception of the brain sciences).

Research speed and productivity. Colleagues who have served on social psychology search committees for new faculty over the last two to three decades have likely noticed an increasing trend for applicants to have many more publications than in the past, representing a strong emphasis on quantity that could potentially undermine quality (see Funder et al., 2014). This trend probably reflects several factors, including increased pressures to compete successfully with other applicants in a difficult job market. However, access to research participants and the speed with which research protocols can be completed are a very important factor. Since the 1950s, when subject pools at colleges and universities became popular (Sears, 1986), social psychologists in many departments have been able to recruit large numbers of students who fulfill part of their course requirements by serving as research participants. At large universities, these convenience samples make it possible to conduct several studies with no or low participant costs over the course of a semester or a year.

To the extent that lab studies involve a single session, no longer than an hour, with brief experimental manipulations and outcomes measured at the conclusion of the session, and rely on small samples, the speed with which studies can be completed only increases. In fact, investigators who conduct studies that require long-term follow-up (which are necessary to test many hypotheses) are at a distinct disadvantage because they must wait until all of the data are collected to write up and submit the results for publication. Students and junior faculty who conduct research with college students in “one-shot” studies—if they are clever, efficient, and lucky—can assemble an impressive curriculum vitae in a few years.

By contrast, a researcher wishing to test a health-related hypothesis may need to identify and recruit a targeted subject population, such as medical patients or a community sample (frequently necessitating an outside collaborator), provide remuneration, assemble a multidisciplinary team, and receive IRB approval, which may prove to be more cumbersome. Funding for such research is more of an imperative given the costs of the research. In light of these considerations, a researcher is often fortunate if a single study is completed in a year. Delays in productivity and publication are common. It is no wonder that graduate students and young investigators may conclude they cannot risk falling behind their peers and instead opt for testing mainstream empirical questions in the laboratory with college students.³

Taste for the nonobvious. Still another norm concerns a historical emphasis on non-obvious experimental demonstrations (Ross et al., 2010). In earlier years, the discipline of

social psychology seemed motivated to counter initial impressions that its research was only confirming observations that laypeople already knew (referred to as “bubba-psychology”). Indeed, the fact that people would grow to like something they suffered through (Aronson & Mills, 1959) or submit to an authority’s commands even if it meant harming another person (Milgram, 1963) sparked broad interest because the findings were counterintuitive. In most cases, obtaining nonobvious effects was synonymous with lab studies employing elaborate cover stories and complicated deceptions. Regardless of whether one concurs with McGuire’s (2013) characterization of this trend as “fun-and-games work on nonobvious hypotheses,” there is no doubt that it is part of the research tradition that has contributed to the success and appeal of social psychology (e.g., Aron & Aron, 1989).

At first glance, the health domain may seem like the wrong place to search for a counterintuitive phenomenon. Questions about health can seem obvious because they are elicited by salient health problems (e.g., How can we get people to stop smoking or overeating?). Students with a “taste for the nonobvious” may not perceive that the health domain is an appropriate research territory for them. However, as noted at the outset of this article, many seemingly “obvious” questions are not so obvious when one looks more deeply. For example, consider the work of several social psychologists who were pioneers in the area of health psychology. Schachter et al. (1977) demonstrated that although smokers believe that cigarettes help them relax, in fact smoking only reduces the symptoms of nicotine withdrawal caused by their addiction. Langer and Rodin (1976) demonstrated that having nursing home residents take care of a plant improved their quality of life and survival. Meyer, Leventhal, and Gutmann (1985) demonstrated that hypertensive patients’ commonsense models for their illness explained why a substantial portion of patients failed to adhere to their prescribed medication regimen. All of these research pursuits asked not only fundamentally important questions—but also interesting and provocative ones.

Of course, there are interesting questions in health that do not lend themselves to study designs involving tight experimental control, cover stories, and deception. From a public health perspective, long-term effects are often of greater interest than short-term effects. Therefore, it may help for social psychologists to consider, perhaps in collaboration with health scientists, conceptual replications that examine the effects of nonrandomized independent variables in natural settings through the use of quasi-experimental designs such as interrupted time-series (Cook & Campbell, 1979).

Implementation aversion. Social psychology has produced a substantial evidence base for several theoretically driven manipulations that can produce beneficial consequences such as health behavior change. Examples include the hypocrisy-driven dissonance phenomenon (Stone et al., 1994), self-affirmation (Epton, Harris, Kane, van Koningsbruggen,

& Sheeran, in press) and descriptive/injunctive norm salience (Cialdini, Reno, & Kallgren, 1990). Our impression, however, is that unlike the early pioneers who were as motivated about practical applications and real-world problems as they were about laboratory experiments, the norm in contemporary social psychology is not to think “down the road” about how the manipulation or intervention can be successfully implemented to effect social change.

Consider a relay race as an apt metaphor. Social psychology dashes from the starting line with the baton (a potentially interesting idea to promote change) and midway through the race, extends the baton to the next runner. The problem, however, is that the next runner remains another 100 yards down the track and the baton drops to the ground. The baton remains on the ground until an investigator testing an applied question happens to find it lying there. Our message is *not* that social psychologists should conduct translational research (and perhaps run too far with the baton), but that they could be more mindful of what it would take to translate their findings or theories into efforts that might address social problems. Social psychologists may find that actively engaging with experts in implementation would afford interesting insights into the strengths and weaknesses of their efforts and enable them to assess the scalability of their findings earlier in the research development process (see also Glasgow, Magid, Beck, Ritzwoller, & Estabrooks, 2005).

Strategies for Moving Forward

The current interplay between social psychology and health is characterized by some innovative contributions that provide insights into both theory and practice. Nonetheless, we contend that these contributions fail to capture the full potential of social psychology to improve public health due to the many obstacles described above. To date, social psychology has relied on an ecosystem in which collaborations among investigators have emerged idiosyncratically, a process resulting in missed opportunities that, in turn, have limited advances in public health as well as recognition of the contributions that can come from social psychology. A more active, focused effort is needed to engage factors that constrain the interplay between social psychology and health and to nurture opportunities to foster innovation. To do so will involve initiatives designed to (a) reframe how the discipline of social psychology views the link between theory and practice, (b) enhance the accessibility and applicability of social-psychological research, (c) modify the discipline’s training model, and (d) nurture the discipline at a vulnerable time in its history and development. We consider each strategy in turn.

Reframing How Social Psychology Construes the Relationship between Theory and Practice

The manner in which social psychology has engaged with health is shaped, to a large extent, by how the discipline

construes the interface between theory and practice (Rothman, Klein, & Cameron, 2013). The dominant framework for conceptualizing this interface is to consider theory and practice as two approaches and to advocate for feedback between them—a perspective best exemplified by Kurt Lewin’s (1951) oft-cited call that “the theorist does not look toward applied problems with highbrow aversion or with a fear of social problems, and the applied psychologist realizes that there is nothing so practical as a good theory” (p. 169). Although this perspective advocated for seamless cooperation between theoretical and applied psychology, it also reinforced the construal that engagement with theory and engagement with practice were distinct activities (Johnson, Dove, & Boynton, 2011). What has emerged is the development of two distinct professional identities—the basic or applied behavioral scientist, and, in turn, two professional communities. Young investigators may find they have to decide which aspect of their identity to prioritize, and more established investigators like ourselves who pursue engagement with both theory and practice may find it easiest to bifurcate their professional identity and their research programs into separate, distinct areas—basic and applied.

One response to this state of affairs has been statements exhorting the value of moving from the lab to the field and back (e.g., Cialdini, 2009). This approach is useful and important given evidence that lab-based findings can look quite different when examined in field settings (Mitchell, 2012). A second response is the implementation of initiatives to promote communication between investigators engaged in advancing theory and investigators engaged in advancing practice. These initiatives have taken a number of different forms including the provision of targeted federal funding initiatives that explicitly require collaboration among basic and applied behavioral scientists (e.g., NIH PA-05-017 on basic and applied research in decision making and cancer control), and the publication of special journal issues that highlight examples of and opportunities for collaboration (e.g., Klein et al., 2013; Nelson, Stefanek, Peters, & McCaul, 2005). Taken together, these efforts strive to nurture among basic behavioral scientists an awareness of the broader context in which they hope their theoretical principles will operate, and among applied behavioral scientists, an awareness of potential links between basic principles and the design of new intervention strategies. Have these strategies been effective? Although we know of no formal evaluation, the repeated use of this approach may suggest that the impact is, at best, modest and of limited duration.

One reason for the lack of sustained influence is that these approaches are designed to alleviate concerns that have emerged rather than to address the underlying source of these concerns—the construal of engagement with theory and practice as distinct areas of activity. It might be more effective to promote an alternative construal of the relationship between theory and practice by recognizing that the pursuit of innovation in theory and practice can be done in tandem, undertaken by the same investigator or research program.

This alternative construal is grounded in a framework described by Donald Stokes (1997), which transforms the distinction of basic to applied research as two ends of a single continuum into a two-dimensional space in which research can vary both in its focus on pursuing advances in understanding (basic research) and in its focus on pursuing advances in use (applied research). This two-dimensional space recognizes that some investigators are motivated primarily by the goal of understanding and some by the goal of use. It also recognizes the existence of investigators whose work is guided by a commitment to both advancing practice (i.e., use) and revealing insights into basic mechanisms (i.e., understanding). Stokes labeled the latter conceptualization “Pasteur’s quadrant” in recognition of the use-inspired food safety research of Louis Pasteur.

The provision of a new construal regarding the relationship between theory and practice does not preclude nor undervalue research focused primarily on theory or on practice. However, we find it important to hold in equally high regard research focused on the simultaneous pursuit of advances in theory and practice. To the extent that investigators choose to pursue this kind of research, we may observe shifts in training activities they find most appealing (e.g., Advanced Training Institute on Health Behavior Theory [<http://cancercontrol.cancer.gov/workshop/>]; Institute on Randomized Behavioral Clinical Trials [http://obssr.od.nih.gov/training_and_education/annual_Randomized_Clinical_Trials_course/RCT_info.aspx]), the type of collaborators they seek, and the context in which they explore their research interests.

This new construal also has the potential to alter how investigators manage their programs of research. In doing so, it can facilitate engagement with efforts such as the pursuit of full-cycle research, in which investigators move back and forth between “bench” and “bedside”—from carefully controlled manipulations in laboratory settings to multiple real-world observations (Chatman & Flynn, 2005; Cialdini, 1980; Mortensen & Cialdini, 2010; Rothman, 2004). With a greater appreciation of the use that can be derived from one’s work, investigators may be more open to opportunities for dissemination and implementation. In addition, although some investigators will choose to operate in “Pasteur’s quadrant,” tighter links between theory and practice need not be forged within a single research program. The formal labeling of different communities of investigators provides opportunities for investigators to deliberately hand off to each other the informational baton generated by their efforts and to encourage the development of tools and strategies that facilitate these transitions.

Although engaging with a health issue provides investigators with the opportunity to demonstrate the robust nature of the phenomena in which they are interested, investigators may find that what *can* happen in the laboratory *does not* occur in the field (cf. Mook, 1983). We think it important to embrace this kind of risk and to recognize that demonstrating

limitations in the applicability of a theoretical principle is as, if not more, important as demonstrating that it is robust. As Paul Rozin (2001) noted in his reflections on lessons from Solomon Asch, research in social psychology has for too long relied on the premise that “better a minute truth than a grand half-truth” (Asch, 1959, p. 367).

Enhancing the Accessibility and Applicability of Social-Psychological Research

The substantive strengths at the core of social psychology are relevant to a broad array of health issues and provide rich opportunities for application and cooperation. However, to facilitate broader and deeper engagement, it helps for basic researchers to be cognizant of the features of empirical evidence that other investigators, especially investigators working in other disciplines, find compelling. Investigators grappling with a specific health concern (e.g., uptake of new recommendations for breast cancer screening) find themselves working in a context that is characterized by a range of attributes such as gender, age, health status, genetics, literacy, and SES, to name but a few. These attributes provide a frame for evaluating theoretical principles and their underlying evidence. As Ross et al. (2010) observed, “in social psychology, theories, empirical generalizations, and even accounts of phenomena, are always underspecified with regard to domain of applicability and stipulation of necessary and sufficient conditions” (p. 12). It may be that many social-psychological principles have a broad domain of applicability and are not constrained by aspects of the situation or person, but this question remains worthy of reflection and empirical scrutiny. The perspectivist approach to research outlined by McGuire (1983, 1989) highlights the importance of specifying the conditions under which investigators obtain theoretical predictions and provides a superb framework for pursuing this manner of thinking and doing.

With the appropriate empirical evidence in hand, practice-oriented investigators can work to discern how, where, and when emerging principles in social psychology can be leveraged to address particular health problems. The systematic application of social-psychological principles to health issues is one of the most effective ways to determine whether an underlying principle identified within a controlled laboratory environment holds true when examined in a more complex social environment (Rothman, 2004). Investigators have begun to describe procedures that can facilitate this kind of translation. For example, EVOLVE is a mixed methods approach developed by a multidisciplinary team to guide tests of the strategies to induce beneficial effects of positive emotion and self-affirmation on behavior in clinical samples (Peterson et al., 2013). Particularly noteworthy about this approach is the systematic steps taken to ensure that the strategies developed were both appropriate for the context (e.g., adults with asthma) and able to alter key constructs (e.g.,

positive affect). Another example is the recent attempt to understand how stereotype threat and self-regulatory resources underlie unintended pharmacologically induced deficits in cognitive functioning (Arndt et al., 2014).

Working in more complex social environments also brings to the fore questions regarding the durability and time course of the phenomena observed in the laboratory. For instance, the consideration of settings and outcomes that unfold over extended periods of time prompts the consideration of new questions such as whether the parameters that guide decisions regarding *initial* patterns of behavior are distinct from the parameters that guide decisions about *maintenance* of those behaviors (Rothman, Baldwin, Hertel, & Fuglestad, 2011). Understanding the durability of prevailing manipulations of social-psychological constructs can also inform discussions about when it would be more productive to pursue strategies that target changes at the individual, intrapsychic level and when it would be more productive to pursue strategies that target structural changes at the community-level (e.g., changes in policies such as the minimum age to buy cigarettes; tax policy; see Sussman et al., 2013).

We note here that the field of health psychology itself faces similar challenges in directly addressing public health outcomes. Lawrence and Barker (in press) argue that health psychology must move away from small-scale interventions that target the individual and move toward the design of sustainable population-level interventions that incorporate training of a workforce in behavior change skills. Such interventions are certain to leverage the role of the social and environmental context, opening the door for effective collaboration with investigators in social psychology.

Training Investigators for the 21st Century

Increasing evidence suggests that for at least some research questions, team-based research produces superior outcomes (Hall et al., 2012). As interdisciplinary and team science become more accepted (and, in some contexts, expected), our training models will need to adapt. Investigators need to be able to manage delegation of responsibilities, develop systems for making decisions, and formalize agreements around issues such as how to manage and analyze data and how and where to present and publish findings. Opportunities to participate in a multidisciplinary research team provide valuable experiences that can inform the development and management of future research teams. In addition, a large body of resources, including online tutorials, exists to support investigators who conduct research as part of a collaborative team (see Vogel et al., 2013, and <https://www.teamsciencetoolkit.cancer.gov>). Of course, the social-psychological study of group processes can certainly help inform the development of strategies to maximize team-based research (Salazar, Lant, Fiore, & Salas, 2012).

Young investigators can also be trained to recognize that, despite their very formal title, randomized controlled trials

(RCTs) are merely experiments. The skills that social psychologists have regarding how to manipulate independent variables and how and when to measure mediating and dependent variables can serve them well as they engage in this collaborative environment. Social psychologists will also find that recent methodological innovations offer opportunities to connect with prevailing features of social-psychological theory. Sequential multiple assignment randomized trials (SMART) provide a framework to address strategically the premise that different strategies should be provided to people based on individual differences (Lei, Nahum-Shani, Lynch, Oslin, & Murphy, 2012). This approach echoes the long tradition of research and theory in social psychology regarding the interplay between the person and the situation (Deaux & Snyder, 2012). The multiphase optimization strategy (MOST) provides a framework for managing the multiple, independent components that are typically brought together to form an intervention (Collins, Murphy, Nair, & Strecher, 2005; Collins, Murphy, & Strecher, 2007). In particular, MOST enables investigators to optimize the number of comparisons one has to make and the conditions one has to include in a study to assess the relative contributions of different intervention components.

Junior investigators will also benefit from greater awareness of and comfort in working with resources that can provide access to more diverse populations, especially populations tied to a particular health problem. Access to such populations is often difficult, thereby slowing down research progress. Fortunately, the increasing presence of “citizen science” initiatives—that is, voluntary public participation in research—can help address this recalcitrant problem. For example, there is a growing collection of national volunteer research panels such as the Susan Love Foundation’s Army of Women, a consortium of thousands of women who have volunteered to participate in research relevant to breast cancer (see <http://www.armyofwomen.org/>).

Researchers also have access to an impressive array of publicly available national data sets (often at no cost to the user) that include measures of constructs traditionally of interest to social psychologists. These include, among many others, the Midlife in the United States longitudinal study of health and well-being (MIDUS; see www.midus.wisc.edu) and the Health Information National Trends Survey (HINTS; see hints.cancer.gov). A directory of more than 88,000 data sets sponsored by the Federal government can be found at the website data.gov. These resources could provide expedited publication opportunities for young social psychologists while also supporting research activity that complements studies conducted with more traditional, laboratory-based samples and methods.

A useful skill is to learn how to write the kind of tight, carefully worded articles that are published in journals with restrictive page limits—the kinds of journals one sees in health and medicine but also increasingly within psychology. Development of this skill is helped by the trend for more

open access journals that encourage supplementary material to be placed online. Nevertheless, it is still necessary to learn how to convey important ideas succinctly and in a way that does not sacrifice attention to essential detail. Condensed writing does not necessarily mean having to skimp in descriptions of one's methodology; consider that beginning in 2014 the journal *Psychological Science* began imposing word limits only on the introduction and discussion sections of submitted articles, not on the method and results sections, representing appreciation of the concern about sacrificing methodological detail.

Nurturing a Stronger Social Psychology

With the emergence of the challenges posed by data fraud and replication (e.g., Pashler & Wagenmakers, 2012), many disciplines including social psychology have had to grapple with questions about the validity and utility of their theoretical principles and their underlying evidence base (see, for example, Ioannidis, 2012). Within social psychology, two dominant responses to this state of affairs have emerged. The first is an emphasis on a more rigorous and appropriate use of statistical tests, more comprehensive reporting of research methods and findings, and greater accessibility to materials and data (e.g., Funder et al., 2014; Suls, 2013). The second is a systematic effort to assess the rate and predictors of reproducibility in psychological science (Open Science Collaboration, 2012). In each case, the response has focused primarily on strategies that will reinforce the academy's and the public's confidence in laboratory-based research.

Although this focus is understandable and appropriate, it may be insufficient if the broader goal is to ensure that the discipline that emerges out of these challenges is stronger and more valued. To meet this goal, we believe the discipline needs a complementary approach that focuses on assessing the degree and manner to which social-psychological principles identified in the laboratory are robust or constrained when examined in more complex and varied social environments. The present call to enhance the interface between social psychology and health offers an invaluable opportunity to work toward this goal. It will enable the discipline to demonstrate that the interesting findings obtained in the lab are not only valid but also important in that they serve to enhance efforts to improve public health.

Together, these efforts will serve to provide a more diversified evidence base on which social-psychological principles can stand. In doing so, it may serve to remind investigators, especially those ready to launch their careers, the value of conducting studies that have complementary strengths and weaknesses (McGrath, Martin, & Kulka, 1982). A large set of studies conducted using the same participant population, the same methods, and the same measure may prove to be less compelling than a small set of studies that varies strategically in sample populations, methodology, and the timing and content of their measures. Thus, in the

end, the additional time and effort sometimes required when one studies an issue in the health domain may prove to be a wise investment—both for the individual investigator and for the discipline more broadly.

As social psychologists, if we collectively work to address the barriers and embrace some of the solutions identified herein, the discipline will be all the richer. Journal editors can implement processes that support the publication of high-quality manuscripts with single resource-intensive studies, diverse samples, behavioral measures, and attempts to refine well-accepted theories based on data collected in new settings. They can also resist the temptation to triage high-quality papers with health outcomes to specialized second-tier journals. Textbook authors can integrate health research into multiple chapters rather than relegating it to a special “applied” chapter at the end of the book. Officers of our key professional associations, along with senior members of the field, can nudge colleagues to step back and consider how well the field is addressing significant problems. Social psychologists at all levels can continue to knock on the doors of potential collaborators in public health, nursing, and medicine—as a small minority have done for years—to widen the reach of the many intellectual contributions that social psychology has to offer. They can also join other organizations such as the SBM and attend their meetings, review articles for their journals, serve on their editorial boards, and mentor their junior investigators about the value of incorporating social psychology into their work.

Evidence from several corners suggests that the kind of paradigmatic shift we are espousing is possible. Social psychology was open to the profound influence of cognitive processes in the 1970s, neuroscience in the 1990s, and behavioral economics in the 2000s, representing a high degree of receptivity to new priorities and new applications. Moreover, our impression is that European social psychology has been particularly successful at integrating social and health psychology, perhaps offering a successful model from which to build. We contend that the field as a whole is well-poised to take on the challenge of addressing public health problems in ways that are at least as creative and promising as attempts made by other disciplines. Given that health problems account for a substantial portion of the global economic burden and that health behaviors are now the predominant cause of mortality throughout the world, research attention to health outcomes deserves more attention and consideration. Taking up this challenge would follow Kurt Lewin's grand vision for the field of social psychology—and reinforce Kottke's (2011) contention that medicine truly *is* a social science in its bone and marrow.

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Notes

1. A close cousin of social psychology is personality psychology; it shares many of the same journals and is conjoined both intellectually and systemically in academic environments. Many of the points we make here are relevant to the discipline of personality psychology as well.
2. Note that these counts only represent people who completed information about joint society membership. Associate, student, and full memberships were used to compute the totals.
3. As all of the authors conduct some of their research with college student samples, we are not suggesting that research with them is easy or unimportant. Indeed, one of us (J.S.) is fond of warning graduate students that “there is no such thing as a simple experiment.” Conducting sound research in academic departments has its own challenges and frustrations, but generally speaking, sound research in health-related and other real-world domains is more challenging and time- and labor-intensive.

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