

tor, ultimatum, or various other social dilemma games, and how it can be systematically affected by social distance (e.g., Hoffman et al. 1996), or think of the dramatic effects that real versus hypothetical payoffs (e.g., Holt & Laury 2002) can have on choice behavior. Or, take the false consensus effect (FCE) that figures prominently in the K&F narrative. Mullen et al. (1985) argued that there was overwhelming evidence in the psychology literature that such an effect existed and that it was rather robust. Dawes (1989; 1990) already questioned the meaning of the FCE as defined then. Interestingly, he found that a more appropriate definition (one which calls a consensus effect false only if one's own decision is weighed more heavily than that of a randomly selected person from the same population) often (but not always) shows just the opposite of what the old definition led to.

Most recently, Engelmann and Strobel (2000) tested the false consensus effect in the way it arguably should be done – with representative information and monetary incentives – and found that it disappears. Similar issues of representativeness of information and selected sampling of problems (as in the context of overconfidence), as well as more fundamental issues of the benefits and costs of certain experimental practices, are at the heart of the controversy surrounding the question of the reality of cognitive illusions (e.g., Gigerenzer 1996b; Gigerenzer et al., in press; Hertwig & Ortmann 2001; Kahneman & Tversky 1996) and, more generally, the negative research emphasis that K&F persuasively attack.

An acknowledgment of the central role of experimental practices for the move towards a balanced social psychology, is curiously absent in K&F's list of suggestions that might get us back to balance. We therefore propose that thinking about methodological issues would be an appropriate addition, for both economists and psychologists, to their two empirical suggestions to de-emphasize negative studies and to study the range of behavior and cognitive performance.

We fully agree with the authors' critique of NHST (see also, Gigerenzer et al. 2004) and find promising the authors' suggestion of integrating NHST with Bayesian concepts of hypothesis evaluation. We caution, however, that the success of such a strategy is crucially dependent on aspects of proper experimental design and implementation, such as the proper construction of the experimental (learning) environment (e.g., appropriate control of the social distance between experimenter and subjects, representativeness of information, and learning opportunities), proper financial incentives, and unambiguous and comprehensive instructions that facilitate systematic replication, among others (Hertwig & Ortmann 2001; 2003; Ortmann & Hertwig 2002).

NOTE

1. The fact that pretty much each and every bias enumerated in Table 1 has a contradictory sibling has escaped the attention of almost all economists.

Multi-process models in social psychology provide a more balanced view of social thought and action

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Abstract: Krueger & Funder (K&F) describe social psychology as overly consumed with maladaptive heuristics and biases. This characterization fails to consider multi-process models of social thought and action. Such models, especially with respect to attitudes, have outlined the situational and individual difference variables responsible for determining when thoughts and actions are relatively thoughtful versus when they are more reliant on mental shortcuts.

In a provocative article, Krueger & Funder (K&F) have outlined what they think is wrong with contemporary social psychology. In

their view, the field is too focused on the maladaptive aspects of human thought and action. Among other evidence, they characterize social psychological work as overly focused on the use of mental shortcuts (heuristics and biases) to the exclusion of rational and adaptive thought and action. In this sentiment, they join the positive psychology movement, which aims to focus on human capabilities and talents. Notably, and appropriately, however, the authors caution that an exclusive focus on either the adaptive or the maladaptive is limiting. Thus, they join Spinoza in calling for research on the full range of human thought and action. This is an important point, and one with which I agree. However, the authors have downplayed research traditions within social psychology where such balance is present – at least more present than readers of this target article might suspect.

In making their critique, the authors have captured mainstream work on heuristics and biases fairly well. But, social psychology is more than social cognition, and social cognition is more than work on heuristics and biases (e.g., see the burgeoning work on implicit processes). The authors are aware of this, as they describe numerous “behavioral” effects to help make their point. But, they have largely excluded work that seems inconsistent with their relatively narrow characterization of the field. For example, they imply that the dominant view in work on attitudes and social influence is that attitudes are rationalized after the fact, rather than based on careful thought, and that people often mindlessly go along with the majority view (conformity).

First, consider whether attitudes are invariably rationalized, rather than based on thought. Ever since Gordon Allport (1935) called attitudes the single most indispensable construct in social psychology, researchers have considered both relatively thoughtful and non-thoughtful processes of influence (e.g., see Kelman & Hovland 1953). Indeed, one of the most prominent models of attitudes and behavior is Fishbein and Ajzen's (1975) theory of *reasoned* action. This model, based on subjective utility theory, holds that people's evaluations are determined by the underlying information people have regarding those objects. The popularity of this “reasoned” approach is evident in the fact that Fishbein and Ajzen's 1975 text has been cited over 3,500 times since its publication (similar to the over 3,000 times that the Kahneman et al. [1982] edited reader on heuristics and biases has been cited).

Second, consider whether social influence research has emphasized mindless conformity to the will of the majority. In fact, research has demonstrated that majority influence is not necessarily a mindless endeavor. Rather, hearing what others think can motivate issue-relevant thought that results in changed opinions (e.g., see Burnstein & Vinokur 1975; Harkins & Petty 1987). Thus, conformity to a majority sometimes represents a simple heuristic process, but can also represent an effortful and more reasoned cognitive process. Furthermore, there is a rather large literature documenting the sometimes powerful effects that *minorities* have (e.g., see Wood et al. 1994). Researchers in this area have celebrated the benefits of the divergent thinking that is inspired by minorities, rather than the convergent thinking induced by majorities (Nemeth 1986).

Of course, not all behavior is thoughtful or rational. Sometimes people rely on mental shortcuts and merely conform to majorities. This flexibility is recognized in many contemporary social psychological theories, which postulate that different psychological mechanisms determine judgments and behavior in different situations (moderated mediation). As Fiske and Taylor noted in their 1991 *Social Cognition* text, the field has moved beyond viewing individuals as “cognitive misers,” who are inevitably prone to various errors and biases that stem from their limited cognitive capacity, to a model of the individual as a “motivated tactician,” who is a “fully engaged thinker who has multiple cognitive strategies available” (Fiske & Taylor 1991, p. 13).

In fact, current multi-process models in social psychology emphasize that behavior and judgment are sometimes based on relatively simple cues and heuristics, but at other times result from an effortful evaluation process.¹ For example, in one study (Petty

& Cacioppo 1984), when students read about a proposed policy that did not affect them personally, they were influenced by the mere number of arguments presented but not by the quality of the arguments. Reliance on a numerosity heuristic led to maladaptive evaluations when the arguments were weak – the more weak arguments there were, the more the students favored the proposal. However, when the same proposal was characterized as impacting the students directly (i.e., of high personal relevance), the process of evaluation changed. Now, increasing the number of arguments was effective only when the arguments were strong. When the arguments were weak, presenting more arguments led to less favorable evaluations – a more rational reaction. Numerous situational and individual difference variables have been shown to moderate the extent of information processing activity in this manner (Petty & Wegener 1998).

These multi-process models (e.g., ELM, HSM, MODE, etc.) were recently compiled in one volume by Chaiken and Trope (1999), but *none* of these more “balanced” approaches is mentioned by K&F. These models are of interest because they can account for seeming paradoxes in the literature. As one example, K&F note that some researchers have demonstrated that judgments can be flawed when people rely too much on individuating information at the expense of useful category information, whereas other researchers have shown that people can be overly reliant on category information. The multi-process models provide an integration of these perspectives by identifying conditions under which people rely on each type of information (e.g., see Fiske et al. 1999).

In sum, K&F have presented an accurate, but incomplete, snapshot of work in social psychology. To be sure, there are numerous studies that point to humans as fallible – especially within the heuristics and biases tradition. But there are other longstanding literatures in the field that present a more complex picture of human thought and action. Consideration of these areas will lead to a more balanced view of the current state of social psychology.

NOTE

1. It is important to note that just because a judgment is thoughtful, it does not mean that it is rational or accurate. Just as mental shortcuts can provide adaptive responses in some situations, so too can thoughtful decisions be tainted with bias.

Social psychological research isn't negative, and its message fosters compassion, not cynicism

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Abstract: Krueger & Funder (K&F) correctly identify work on conformity, obedience, bystander (non)intervention, and social cognition as among social psychology's most memorable contributions, but they incorrectly portray that work as stemming from a “negative research orientation.” Instead, the work they cite stimulates compassion for the human actor by revealing the enormous complexity involved in deciding what to think and do in difficult, uncertain situations.

We do not recognize current social psychology in Krueger & Funder's (K&F) indictment. For many years we have taught a “mainstream” introductory social psychology course, and we cover the topics to which K&F devote most of their energies. We begin the course with work on social facilitation, which asks the most basic of all “social” questions: What effect does the presence of others have on behavior? We then move on to social comparison, which addresses the impact of others' opinions, abilities, and emotions, on self-assessments. We also discuss persuasion, compliance, interpersonal attraction, altruism and prosocial behavior, prejudice and racism – the usual list. Although the content of a few of these

topics might be considered “negative” (particularly, prejudice), most are not.

We also teach the “big three” on K&F's list of “disproportionately negative” behavioral topics, but even these are “negative” only in the narrow sense that the behavior of some participants would be criticized by naïve observers. Some people conform in the Asch situation (Asch 1956), and obey orders in Milgram's paradigm (Milgram 1963). At first, this seems very surprising; we agree with K&F that part of the fame of these demonstrations stems from their counterintuitiveness. But what are we to make of these surprising results? No social psychologist of our acquaintance, and certainly neither Asch nor Milgram themselves, drew the “negative” conclusion that people behave badly, and left it at that. Instead, most analysts have tried hard to understand the predicament that the experimental participants experienced, and the conflicting forces operating on them.

Understanding the pressures in the Asch situation as deriving from “normative social influence” (Deutsch & Gerard 1955) in a situation fraught with ambiguity (Ross et al. 1976) makes sense of and humanizes behavior that initially seemed bizarre. Similarly, Milgram's extensive experimental variations (Milgram 1974) lead to a very Lewinian take, one that renders his participants' behavior understandable and not simply “maladaptive.” Personally, we favor an account that focuses less than Milgram's on the obedience manifested by participants and more on their difficulty in finding a way to disobey effectively. But the bottom line is the same: Participants were in a very difficult predicament with powerful situational and dispositional forces in play. We do not see here a “negative” view of human nature, but, instead, a nuanced, compassionate one that pays serious attention to both people and their situations.

The work on bystander nonintervention, research conducted with the express purpose of casting doubt on the negative portrayal of bystanders as “apathetic” (Latané & Darley 1970), is caricatured in the target article. Darley and Latané show that the probability that a research participant will intervene to help another is sensitively attuned to a variety of situational variables, all of which make sense. In particular, a person is relatively unlikely to intervene unless the situation is actually defined as an emergency (passive onlookers diminish this likelihood), and the person feels responsible for the outcome (less likely as the number of potential helpers increases). What is “negative” about any of this? Late in the target article, K&F claim that “no theoretical account of a range of behavior is complete without a cost-benefit analysis.” But as a direct result of the bystander intervention experiments, most analysts portray the potential helper as facing a sequence of decisions, very much including a calculation of the costs and benefits of intervening or not (Aronson et al. 2002; Brown 1986).

When we turn to K&F's characterization of social cognition work as showing “a focus on inferential shortcomings and errors” (sect. 2.3, para. 1), we can agree that this is descriptively correct. But what is the point of this work, and what conclusions are to be drawn from it? Kahneman (2000) puts it succinctly: “Contrary to a common perception, researchers working in the heuristics and biases mode are less interested in demonstrating irrationality than in understanding the psychology of human judgment and choice” (p. 682). Exactly by analogy with research on visual illusions (as advocated by K&F themselves) so-called errors and biases are regarded as phenomena that yield particularly rich insight into the basic processes of intuitive judgment. In our view, any analysis (Kahneman & Frederick 2002) that finds unity in such diverse phenomena as the conjunction fallacy, duration neglect, and what legal scholars regard as problematic punitive damage awards, is a truly positive contribution indeed.

K&F claim that Tversky and Kahneman “characterized human judgment as ‘ludicrous,’ ‘indefensible,’ ‘self-defeating’” (sect. 2.4, para. 2). This would be seriously “negative,” if true. But a look at the paper in which these “characterizations” appear shows a very different state of affairs (Tversky & Kahneman 1971). What is characterized as “ludicrous” is an “extension of the representation