

Stereotyping Research and Employment Discrimination: Time to See the Forest for the Trees

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④ Frank J. Landy's target article offers a familiar set of arguments about the limitations of experimental science in employment discrimination litigation. We focus on the *legal* status of stereotyping research in employment discrimination litigation, which Landy misrepresents in his target article. On the basis of one state appellate decision, Landy suggests that there is such widespread public understanding of stereotypes and their "possible impact" that providing expert knowledge on stereotyping in employment discrimination cases would not have added value beyond commonsense understanding and therefore would not be helpful to fact finders. The fact of the matter is that quality science on gender prejudice and stereotyping has routinely appeared in employment discrimination litigation since the U.S. Supreme Court decision in *Price Waterhouse v. Hopkins* (1989). Since *Price Waterhouse*, there have been scores of single-plaintiff and class action cases in which the courts have admitted expert testimony on

the psychological dynamics of stereotyping and the conditions under which it is more or less likely to occur.¹ This wide acceptance of stereotyping research in the context of antidiscrimination law indicates that, in most cases to date, the science meets admissibility standards in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* (1993) and its progeny.

Thus, although Landy chooses to ignore it, this scientific testimony has not been dismissed by the courts. In fact, it has been routinely admitted in the form of a *social framework analysis* (Borgida, Hunt, & Kim, 2005; Faigman, Dasgupta, & Ridgeway, in press; Faigman & Monahan, 2005; Faigman, Saks, Sanders, & Cheng, 2007; Fiske, Bersoff, Borgida, Deaux, & Heilman, 1991;

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⑤ 1. *Butler v. Home Depot, Inc.*, 984 F. Supp. 1257, 1262–1263 (N.D. Cal. 1997); *Dukes v. Wal-Mart, Inc.*, 222 F.R.D. 189, 191–192 (N.D. Cal. 2004); *Jenson v. Eveleth Taconite Co.*, 824 F. Supp. 847, 882 (D. Minn. 1993); *Beck v. Boeing Company*, 203 F.R.D. 459, 461 (D. Wash. 2001); *Robinson v. Jacksonville Shipyards, Inc.*, 760 F. Supp. 1486, 1505 (D. Fla. 1991); *E.E.O.C. v. Morgan Stanley & Co.*, 324 F. Supp. 2d 451 (S.D.N.Y. 2004); *Hurst v. F.W. Woolworth Co.*, No. 95 Civ. 6584, 1997 WL 685341, at *2 (S.D.N.Y. November 3, 1997); *Int'l Healthcare Exch., Inc. v. Global Healthcare Exch., LLC*, 470 F. Supp. 2d 345, 355 (S.D.N.Y. 2007). To date, the appellate decision cited by Landy (*Ray v. Miller Meester Advertising, Inc.*, 664 N.W. 2d 355, 366 [Minn. Ct. App. 2003]) is an outlier opinion, one that revealed a strong preference for intuition over scientific evidence.

Hunt, Borgida, Kelly, & Burgess, 2002; Monahan & Walker, 1998; Monahan, Walker, & Mitchell, in press; Ridgeway & England, 2007). In social framework analysis, the scientific expert draws on quality, peer-reviewed science and communicates general causation findings to provide a context for fact finders' reasoning about a particular case. In medical causation and toxic tort cases, courts have often distinguished between general and specific causations (Faigman, 2008; Faigman et al., 2007). General causation concerns whether causality between two factors exists at all and in a variety of contexts. Specific causation refers to whether the phenomenon of interest occurred in a particular context. In some research domains, especially in nonmedical contexts, considerable quality research at the general level may inform the fact finder without any testimony conveying inferences about specific causation (Faigman & Monahan, 2005). This matter of applying the science that establishes the general phenomenon to a particular case represents a key (some would argue *the* key) legal issue "endemic to the science and law connection" (Faigman, 2008, p. 304).

We suggest that Landy's analysis of stereotyping research is mired in the trees and fails to take up the forest, namely, this broader, more significant distinction between general and specific causations that is so crucial to evaluating the utility of stereotyping research in the employment discrimination context. To be sure, concerns about external validity and other methodological critiques associated with the scientific data based on prejudice and stereotyping have been expressed (Copus, 2005). But legal opinions to date have typically concluded that such questions about the science go to the weight of the testimony and not to its admissibility (see *Shelley Hnot, et al. v. Willis Group Holdings, Ltd.*, Opinion and Order on motion to exclude plaintiffs' expert testimony. U.S. District Court, Southern District of New York, 01 Civ. 6558(GEL), June 1, 2007).

So the issue—unaddressed by Landy—is not whether to apprise fact finders of the science but what type of causation the science

should address. In social framework analysis, the scientific expert typically communicates general causation findings to provide a context for fact finders' reasoning about a particular case. This approach has been widely accepted in discrimination cases (Faigman et al., in press; Monahan et al., in press). The issue of whether to allow experts to comment on specific causation, however, has generated a considerable amount of commentary and a lively discussion among law and social science scholars. Monahan et al., for example, suggest that experts should focus exclusively on general causation and avoid any attempts to "speculate" about specific causation in employment discrimination cases; only lawyers, as far as they are concerned, should attempt to link the science to the "social facts" in a given case. They suggest that jurors are able to consider the evidence and apply the social framework in light of the evidence as capably as the scientific expert. Whether jurors have the necessary scientific background to understand the research or to rule out alternative explanations is debatable.

By contrast, Borgida, Eagly, and Deason (2008; Eagly, Deason, & Borgida, 2008) have proposed an alternative framework for thinking about the translation of scientific findings into information that will be helpful to fact finders. Their approach conceptualizes general and specific causations as two endpoints of a *continuum* rather than mutually exclusive categories. This perspective on general and specific causations is more familiar to scientists, who view their capacity to make claims about a specific case as probabilistic rather than absolute and as dependent on the extensiveness and quality of the science in a particular domain. Meta-analyses of existing scientific findings play a pivotal role in evaluating the transportability of findings between lab and applied settings and identifying moderator variables that can help make the connection between general science and the specific case.

Borgida et al. (2008; Eagly et al., 2008) argue that applications of social science research in court are similar to the application of scientific knowledge in other

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3 contexts; for example, a physician uses general scientific knowledge to rule in and rule out possible disease states based on a set of symptoms and is able to express a degree of confidence in his or her final diagnosis. Similarly, as a result of their research training, psychological scientists are well equipped to assess the reliability and internal and external validity of a given scientific body of knowledge. All scientists agree that these scientific issues are critical to making generalizations to particular individuals and will have more or less confidence about generalizing to a specific case as a result of the quality of the science in the domain. And despite Landy's claims about their limitations, meta-analyses of existing scientific findings play a pivotal role in evaluating the transportability of findings between lab and applied settings and identifying moderator variables that can help make the connection between general science and the specific case.

25 The procedure an expert can follow to progress along the continuum from general to specific causation can be characterized as a process of ruling out and ruling in possible causal alternatives for a given outcome. In typical workplace discrimination cases, multiple causes for a particular outcome are present (e.g., social capital, previous work experience, job performance) in addition to the main cause of interest to the case (discrimination). An expert with working knowledge of the details of the case is best equipped to evaluate the plausibility of these other likely causes. To the extent that he or she is more knowledgeable about the actual determinants of workplace success than the typical fact finder or attorney, the expert would be able to educate the court with a detailed examination of these nondiscriminatory causes.

45 Experts can also assist the court by offering an opinion and a degree of confidence as to whether discrimination can be ruled in as a possible cause based on the quality of the science. Ruling in discrimination may be possible because of a lack of other plausible causes or because of explicit discriminatory statements in the court record. Discrimination may also be more likely to be a cause when

particular conditions are present. Moderator variables specified in research and replicated in multiple studies specify many of these conditions and indicate when the critical cause is likely to play more or less of a causal role. Contrary to Landy's position, when compared to the facts of a particular case, well-established moderator variables can help the expert move along the continuum toward specific causation with more confidence.

6 The quality of an expert's assessment is always dependent on the quality of the science used in the analysis (Fiske & Borgida, 2008). Peer review, replication, and the robustness of findings as established through meta-analysis all are important qualities the science must have. By these stringent criteria, social science findings perform surprisingly well. In a comparison of generalizability in psychology and physics research, Hedges (1987) found that social science findings were slightly more consistent than physics findings across studies, although both fields showed inconsistencies. Psychological findings in many areas have reached a level of replicability and robustness that meets basic legal standards, and meta-analyses in many areas have identified key moderator variables that allow for a nuanced understanding of the causal influence of stereotyping. Thus, in at least some domains, social scientists are well equipped to offer, probabilistically, opinions about the specific case with some degree of confidence.

In sum, the expert's role, from this perspective, is to analyze the case in relation to his or her wealth of knowledge as a social scientist (e.g., about moderators). In the debate over the appropriateness of expert testimony on specific causation, the quality of social science research is often underestimated because of the same misunderstanding of the relevant research that Landy demonstrates. It has been suggested that this dismissal of the science is unwarranted because a qualified expert is best equipped to interpret and apply scientific research appropriately for the benefit of the fact finder (Borgida et al., 2008; Eagly et al., 2008). Moreover, the courts have repeatedly accepted the quality of the social science and

the propriety of the expert to play this role. Thus, flimsy findings from “bad science” are unlikely to be influential, but quality science has the potential to offer fresh insight in the courtroom (Fiske & Borgida, 2008). To fail to see the forest for the trees in this instance is to miss an opportunity for social science to serve a valuable educational and policy-relevant role.

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