

The Persistent Myth of Stability

On the Chronic Underestimation of the Role of Context in Behavior

The data are overwhelming and the evidence is clear: the behavior of individuals from situation to situation is substantially less stable than intuition would lead us to believe. In the social cognition literature, the human tendency to overestimate the stability of other people's behavior has been shown to be so powerful that the phenomenon has been dubbed "the fundamental attribution error."¹ That is, human beings consistently (erroneously) attribute causes of behavior to characteristics of the person rather than characteristics of the situation. By contrast, scientific demonstrations of the power of situational factors to influence behavior are everywhere in the social psychology literature: people are less likely to come to someone's aid if there are many other people around (the diffusion of responsibility phenomenon)²; children will become more aggressive around an aggressive role model³; and adults will agree with blatantly wrong information as basic as which of 3 lines is shortest if those around them all confidently agree on the wrong answer.⁴ Despite the consistent evidence, even researchers are often caught off guard by the power of situations to affect behavior, as was the case with the famous Zimbardo prison experiment (in which college students who were randomly assigned to be prison guards in a role play began physically abusing and degrading the college students who were randomly assigned to be prisoners)⁵ or the infamous Milgram experiments (in which 65% of subjects recruited off the street were willing to administer electrical shocks of deadly voltages to another study participant because the experimenter told them to do it).⁶ Everyone would like to think that they would not be the one to ignore the individual in need, to conform to popular opinion, to shock another human being because someone in authority told them to. And so we all like to assume that such behavior is a flaw in the individual's character. But the evidence suggests that most of us will act in these conformist ways. Over and over the same conclusion must be drawn: situation trumps personality. Context matters.

Slowly we as a medical education community are starting to realize that we have been making the same error ourselves. People are starting to notice that studies using paper and pencil tests to measure "stable" individual characteristics of individuals (such as personality or learning style indices) consistently fail to predict much of the variance in real life performance. As one very enlightening but little recognized finding, Bebeau et al.⁷ found that a paper and pencil test of ethical reasoning did predict students' descriptions of how they would handle an ethical dilemma in practice . . . unless the student had actually experienced that situation in practice, at which point the predictive power dropped dramatically. One might speculate that the reason for this loss of predictive power is that the student who had not had the experience had only abstract ethics to predict her behavior, but the student who had experienced it knew what she did in the situation. And the situation always has more capacity to pressure one to conform than we ever predict in the abstract.

Small shifts in the medical education literature can be seen in select domains. Repeated evidence of "case specificity" has led some of the strongest early proponents of teaching "problem solving ability"^{8,9} to come around to the conclusion that general problem solving ability is not a particularly valuable construct^{10,11} (although many still want to teach it). Similarly, the lack of transfer from situation to situation is repeatedly recognized as a phenomenon in our teaching¹² (albeit often with dismay and confusion). Excitingly, several of the papers in this issue have begun to address the role of context in student behavior more explicitly. The work by Fischer et al., for example, repeatedly identifies the role of context in affecting how students responded to and learned from errors. As the authors note explicitly, "Most learners felt that the influence of this 'adopted' medical culture superseded their individual ethic." And the study by Haidet et al. was an explicit effort to begin to study the context of different medical schools. The first 2 sentences in their discussion speak of a story that must be acknowledged and pursued: "We conducted this study to ask whether patient-centered learning environments at 9 schools were substantially similar or different, both in strength and character. Our results indicate a more complex reality than the question would suggest."

The time has come to follow the trail that these pioneer researchers are blazing with their explicit effort to address and confront the context of our learning and practice environments. As a community, we must cease to be surprised by the lack of stability in individuals' behaviors across different situations. There is plenty of evidence to support the generalizability of Fischer et al.'s findings: the power of the context regularly supersedes any stable characteristics of the person. And there is plenty of reason to believe the generalizability of Haidet et al.'s finding that descriptions of context are more complex than we might initially believe. I am enough of a cognitive psychologist to not want an abandonment of efforts to study the person. But I am enough of a realist to recognize that it will only take us so far. If we wish to really understand the behavior of our students (and our faculty and ourselves) we must attend more heavily and more systematically to the study of the environments in which they behave.—**Glenn Regehr, PhD**, *The Wilson Centre, Toronto, ON, Canada*.

REFERENCES

1. **Ross L.** The intuitive psychologist and his shortcomings: distortions in the attribution process. *AdvExp Social Psychol.* 1977;10:174-220.
2. **Darley JM, Latane B.** Bystander intervention in emergencies: diffusion of responsibility. *J Pers Social Psychol.* 1968;8:377-83.
3. **Bandura A, Ross D, Ross SA.** Transmission of aggression through imitation of aggressive models. *J Abnormal Social Psychol.* 1961;63:575-82.
4. **Asch SE.** Studies of independence and conformity: a minority of one against a unanimous majority. *Psychol Monogr.* 1956;70:(Whole no. 416).
5. **Zimbardo PG, Haney C, Banks WC, Jaffe D.** The mind is a formidable jailer: a Pirandellian prison. *New York Times Magazine.* 1973;36ff.
6. **Milgram S.** Behavioral study of obedience. *J Abnorm Social Psychol.* 1963;67:371-8.
7. **Bebeau MJ, Thomas SJ.** Designing and testing a measure of intermediate level ethical concepts. Paper presented at the Annual Meeting of the

-
- American Educational Research Association, San Diego, CA, April 13–17, 1998.
8. **Neufeld VR, Norman GR, Feightner JW, Barrows HS.** Clinical problem-solving by medical students: a cross-sectional and longitudinal analysis. *Med Edu.* 1981;15:315–22.
 9. **Elstein AS, Shulman LS, Sprafka SA.** *Medical Problem Solving: An Analysis of Clinical Reasoning.* Cambridge, MA: Harvard University Press; 1978.
 10. **Norman GR.** Problem-solving skills, solving problems and problem-based learning. *Med Edu.* 1988;22:279–86.
 11. **Elstein AS, Schwarz A.** Clinical problem solving and diagnostic decision making: selective review of the cognitive literature. *BMJ.* 2002;324:729–32.
 12. **Norman G.** Research in clinical reasoning: past history and current trends. *Med Edu.* 2005;39:418–27.