media, law enforcement agencies, various crime victim rights groups, etc. These potential sources of fear are not in the model. Neither does the study consider other effective responses to crime such as the politically explosive reaction of anger about crime. These omissions limit the book's intended audience.

Lost Talent: Women in the Sciences.
By Sandra L. Hanson. Temple University Press, 1996. 220 pp. Cloth, $39.95.

Reviewer: JOYCE TANG, *Queens College of the City University of New York.*

Scientists in general enjoy fairly high occupational prestige in American society. Why do women have a higher departure rate from the sciences? In *Lost Talent*, Hanson has gone beyond pointing out the obvious — that women have a much higher attrition rate in science and mathematics. She examines a broad spectrum of individual, sociocultural, and structural factors contributing to a continuous exodus of women from these fields. Her findings are revealing. The conclusions she draws from detailed analyses may be useful to educators and policy makers for developing programs of rectification.

   Lost Talent offers a balanced analysis of the multiple forces that pull women away from these high-paying, high-status fields. Hanson's approach is broad and informative as she reviews the shortcomings of current research on science education. For instance, she notes that "some researchers . . . have typically [examined women's science experience] in a relatively static way." Others employ cross-sectional data to make causal inferences. Even when longitudinal data are used, Hanson contends that their results merely provide "snapshots" of students' experiences at different points in time. She adds that the unidimensional approach has allowed us to "know much more about women's experiences than we know about the causes of these experiences." Researchers, she argues, have overlooked the fact that individuals do drop out of the sciences during and after the formal training process. As a result, policy changes based on the static and short-term nature of their experiences are problematic. Her critique in the first chapter explains why she uses a dynamic multidimensional model to mine three nationally representative longitudinal data sets: the High School and Beyond (HSB), the National Educational Longitudinal Study (NELS), and the Longitudinal Study of American Youth (LSAY).

   To help us make sense of the "lost talents," Hanson focuses on three factors that impinge on the experiences of women in scientific training: gender, family, and school. The diagram provided in the first chapter offers a clear and simple logic behind the causal model. It helps us understand when, what, where, and why women may get shortchanged in the pipeline. Perhaps what is most compelling about Hanson's model is that it underscores both the reciprocal and causal influence of these factors on women's persistence in the sciences.

One of the major contributions of this study is to reconceptualize the pipeline as a "permeable funnel": "early success and training certainly do not guarantee ultimate success [of women and men] in this science training process." We should realize that factors such as gender, family, and school have differential impact on their experiences at all points in the process. There are also tremendous intragroup differences in experiences. *Lost Talent* captures the central role that socioeconomic (family) background plays in pushing and pulling individuals along the pipeline.

Hanson gives both insiders and outsiders a unique view of the world for young women in the sciences. Her analysis unravels the complex and long process of becoming a scientist. By the time readers turn to the last page of the book, some might have wondered how women scientists have overcome the social and structural hurdles, perhaps a lasting, but unintended, impact of this study.

Those who are curious to see what we can do to improve the chances of women to succeed in science may find the proposals discussed in the concluding chapter dissatisfying. The "leaky" pipeline has been a national and educational issue. It is somewhat surprising that Hanson has merely devoted the last six pages of the book to discuss the implications of the findings.

Finally, since so many different factors have affected the entry and survival of women in the sciences, how realistically can we expect the family, school, and society to work together effectively to bring about long-term positive changes? This is a tremendous challenge that *Lost Talent* poses to researchers and policy makers.

LISREL: Issues, Debates, and Strategies.
By Leslie A. Hayduk. Johns Hopkins University Press, 1996. $39.95.

Reviewer: KENNETH BOLLEN, *University of North Carolina at Chapel Hill*

Hayduk's *LISREL: Issues, Debates, and Strategies* focuses on the application and interpretation of structural equation models (SEMs). The book assumes that the reader is familiar with SEMs and the LISREL notation. However, it does not emphasize statistical estimation. The audiences for the book are sociologists and the numerous other social scientists who are using SEMs in their substantive research.

The manuscript has six chapters. The tone of the writing is informal by the standards of most statistical texts. The lead chapter examines factor analysis models. Hayduk expresses admiration for the flexibility of SEMs in accommodating the complex substantive arguments in a field. But at the same time he looks for models that imply testable constraints on the covariances of the observed variables. These constraints provide the ability to assess the plausibility of a model. Readers will be familiar with the idea of a structural model implying a covariance matrix that is a function of the model parameters. The value of this chapter is that it gives more