

Glass D C. *Behavior patterns, stress, and coronary disease*. Hillsdale, NJ: Lawrence Erlbaum Associates, 1977. 240 p. [Graduate School and University Center, City University of New York, NY]

This book reports research on the Type A coronary-prone behavior pattern as a style of coping with threats to the individual's sense of control. It also presents a biobehavioral model of the processes whereby the pattern is translated into cardiovascular disease. [The *SCI*® and the *SSCI*® indicate that this book has been cited in over 555 publications.]

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The period from the 1960s through the 1970s was a time of burgeoning interest in the biological bases of individual and social behavior. The impetus for this trend derived from several sources, including the Social Biology Program at the Russell Sage Foundation, the activities of the Committee on Biological Bases of Social Behavior of the Social Science Research Council, and the Psychology Laboratories at Rockefeller University. I was fortunate to have been a member of all three institutions from 1966 through 1971. I was, therefore, very much a part of an intellectual ferment that was both exciting and innovative. It was in this context that I became interested in the impact of environmental stressors on behavioral and biological systems.

In 1966 Jerome E. Singer and I initiated a program of research on this general problem. It culminated in the publication of *Urban Stress*,¹ a widely cited work that won the American Association for the Advancement of Science Socio-Psychological Prize in 1971. At about that time, I relocated to the University of Texas at Austin where I began experiments aimed at pursuing theoretical ideas suggested in the book. At the suggestion of my graduate student, David Krantz, one of these studies on human helplessness included a measure of Type A behavior. Analysis of our data revealed an unexpected result involving the Type A variable. It was both baffling and intriguing. After much rumination, I decided to direct the at-

tion of my laboratory entirely to an analysis of Type A behavior. The book commented on here is an outgrowth of this research.

With the assistance of several graduate students and postdoctoral fellows, I was able to establish the behavioral validity of the Type A construct in a systematic series of laboratory experiments. Subsequent research produced data leading to the notion that Type A behavior is a style of coping with threats to the individual's sense of control over stressors and challenges. I proposed that Type A's, when faced with uncontrollable stressors, first try very hard to cope, manifesting the characteristic behaviors of competitiveness, excessive achievement-striving, impatience, and hostility. If, however, their efforts at control meet with repeated failure, they give up and lapse into helplessness. Cardiovascular damage, I suggested, results from the attendant abrupt shifts between sympathetic and parasympathetic activity. This theory has been described as the most systematic attempt to understand coronary-prone behavior as well as the one that has the best experimental support.²

Soon after performing this work, I relocated to the Graduate Center of the City University of New York. It was there that I conducted experiments aimed at determining some of the processes whereby the pattern is translated into cardiovascular disease. This research, conducted between 1978 and 1984, documented greater catecholaminergic reactivity to psychological stressors and challenges in Type A as compared to Type B men.^{3,4} Excessive changes in catecholamine elevations, over time, are implicated in atheromatic plaque formation and coronary artery disease.

My research on behavior pattern A has given rise to extensive research on physiological reactivity to stress and cardiovascular disease.⁵ The impact of my research is also seen in current trends aimed at fractionating components of the behavior pattern, including studies that implicate certain types of hostility as the most important factor enhancing risk of cardiovascular disease. Of even greater significance is the role that my Type A studies have played in stimulating and reinforcing interest in the rapidly emerging fields of health psychology and behavioral medicine.⁶

1. Glass D C & Singer J E. *Urban stress: experiments on noise and social stressors*. New York: Academic Press, 1972. 182 p. (Cited 485 times.)
2. Brown R W. *Social psychology, the second edition*. New York: Free Press, 1986. p. 671.
3. Glass D C, Krakoff L R, Contrada R, Hilton W F, Kehoe K, Mannucci E, Collins C, Snow B & Elting E. Effect of harassment and competition upon cardiovascular and plasma catecholamine responses in Type A and Type B individuals. *Psychophysiology* 17:453-63, 1980. (Cited 110 times.)
4. Glass D C & Contrada R. Type A behavior and catecholamines: a critical review. (Ziegler M G & Lake C R, eds.) *Frontiers of clinical neuroscience: norepinephrine*. Baltimore, MD: Williams & Wilkins, 1984. p. 346-67.
5. Matthews K A, Weiss S M, Detre T, Dembroski T M, Falkner B, Manuck S B & Williams R B. *Handbook of stress, reactivity, and cardiovascular disease*. New York: Wiley, 1986. 327 p.
6. Krantz D S, Grunberg N E & Baum A. Health psychology. *Annu. Rev. Psychol.* 36:349-83, 1985.