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978-0-521-65958-1 - Practical Intelligence in Everyday Life

Robert J. Sternberg, George B. Forsythe, Jennifer Hedlund, Joseph A. Horvath,
Richard K. Wagner, Wendy M. Williams, Scott A. Snook and Elena L. Grigorenko
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Practical Intelligence in Everyday Life

This path-breaking book reviews psychological research on practical intelligence and describes its importance in everyday life. The authors reveal the importance of tacit knowledge – what we have learned from our own experience through action. Although it has been seen as an indispensable element of expertise, intelligence researchers have found it difficult to quantify. Based on years of research, Dr. Sternberg and his colleagues have found that tacit knowledge can be quantified and can be taught.

The data show that practical intelligence is psychologically and statistically distinct from academic intelligence and is distinct as well from personality and styles of thought. The data also indicate that practical intelligence predicts job performance and even aspects of school performance as well as or better than does academic intelligence. This volume thoroughly examines studies of practical intelligence in the United States, as well as in many other parts of the world, and for varied occupations, such as management, military leadership, teaching, research, and sales.

Robert J. Sternberg is IBM Professor of Psychology and Education at Yale University.

George B. Forsythe is Professor and Vice Dean of Education at the United States Military Academy, West Point, New York.

Jennifer Hedlund is Associate Research Scientist in the Department of Psychology, Yale University.

Joseph A. Horvath is Senior Consultant at the IBM Institute for Knowledge Management.

Richard K. Wagner is Professor of Psychology at Florida State University.

Wendy M. Williams is Associate Professor in the Department of Human Development, Cornell University.

Scott A. Snook is Academy Professor in the Department of Behavioral Sciences and Leadership, United States Military Academy.

Elena L. Grigorenko is Research Scientist at Yale University and Associate Professor in the Psychology Department, Moscow State University.

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*This book is dedicated to the memory of
David C. McClelland, the modern-day father of
research on practical intelligence.*

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Preface

Practical intelligence is what most people call common sense. It is the ability to adapt to, shape, and select everyday environments. Intelligence as conventionally defined may be useful in everyday life, but practical intelligence is indispensable. Without some measure of it, one cannot survive in a cultural milieu or even in the natural environment. In our work, we have studied many aspects of practical intelligence, although we have concentrated on one particularly important aspect of it, *tacit knowledge*, namely the procedural knowledge one learns in everyday life that usually is not taught and often is not even verbalized. Tacit knowledge includes things like knowing what to say to whom, knowing when to say it, and knowing how to say it for maximum effect. In our work, we have studied tacit knowledge in populations as diverse as business managers, military leaders, university professors, elementary school teachers, janitors, secretaries, salespeople, and American and rural Kenyan children. But when most people think of intelligence, they think neither of tacit knowledge in particular nor of practical intelligence as a whole.

An enormous literature has emerged in the field of intelligence that is compatible with the notion that intelligence is a single entity, sometimes called *g*, or the general factor. Indeed, two books have been written recently, both with the same title of *The General Factor* (Brand, 1996; Jensen, 1998). The authors of these books review a multitude of studies that purport to demonstrate a general factor of intelligence. An earlier volume by Carroll (1993) did much the same.

We challenge this view in the present book. In particular, we argue that practical intelligence is a construct that is distinct from general intelligence and that general intelligence is not even general but rather

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applies largely, although not exclusively, to academic kinds of tasks. Moreover, practical intelligence is at least as good a predictor of future success as is the academic form of intelligence that is commonly assessed by tests of so-called general intelligence. Arguably, practical intelligence is a better predictor of success than is the academic form of intelligence. We believe that previous investigators have failed to find the importance of practical intelligence simply because they have never adequately measured it or, in most cases, made any attempt to measure it. By confining their efforts to a narrow band of tests, they failed to find a class of tests that would enhance not only their predictions but their theoretical models.

Of course, there are other theorists and researchers who have made claims similar to ours. We believe that our research program is unique in several regards, however.

First, we have gone beyond armchair theorizing actually to collect data testing our theories. Some theorists arguing against general ability have gone little beyond “just so stories,” in the sense that they have not collected empirical data of their own that have been published in refereed scientific journals but rather have reviewed past data that are available and that can be interpreted in terms of their arguments. The problem is that their intellectual opponents in favor of g have an equal number of just-so stories to tell, plus empirical scientific data collected specifically to test their claims. In contrast, we have collected data testing our theories from many studies in many parts of the world with many different populations and have published most of these data (some are too recent to have been published) in refereed scientific journals.

Second, we have gone beyond demonstration studies that show that “context matters” but that provide little basis for the development of a rigorous program of measurement and research into the construct of practical intelligence. In our research we have constructed measures that we assess by the usual psychometric criteria, such as reliability, convergent validity, and discriminant validity, and show that our measures work by these customary criteria.

Third, we try to avoid contentious verbal arguments based on ideological position rather than scientific data. Opponents of g theory have a tendency to be dismissive of masses of data in support of g in much the same way that supporters of g have a tendency to be dismissive of data that tend to question g . We believe that the scientific evidence in favor of what is called the g factor is overwhelming but that this factor is not, in fact, general. Rather, it appears because of a

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restricted range of participants, tasks, and situations in which testing is conducted.

Practical Intelligence presents the data on practical intelligence collected during more than 15 years of research by the Sternberg Research Group and collaborative research groups around the world, as well as by other research groups with whom the Sternberg group has not collaborated. The studies presented herein were, for the most part, specifically designed to address the question of whether practical intelligence is psychologically distinct from academic intelligence. Our conclusion is that practical intelligence is indeed a distinct entity. We present a number of studies showing dissociations between academic and practical intelligence and even describe a study we have done (Sternberg et al., 1999) in which the correlations between a test of practical intelligence and tests of academic intelligence were significantly negative.

Our goal is not to denigrate the importance of academic intelligence. There is an overwhelming array of evidence of different types that academic intelligence, as conventionally defined, predicts a large number of criteria, both inside schools and outside them. Rather, our argument is that academic intelligence is not enough and that successful prediction and, more importantly, understanding of performance in the everyday world requires assessment of practical as well as academic intelligence.

Our book is written primarily for a scholarly audience but addresses concerns of anyone interested in practical intelligence. We believe our results will be of special interest to industrial and organizational, educational, cognitive, school, developmental, military, and social and personality psychologists. It should also be of interest to educators, anthropologists, managers, and military officers.

A book such as this one depends on the efforts of many people. Hedlund, Horvath, Wagner, Williams, and Grigorenko all are, or have been at one time or another, members of the Sternberg Research Group. Forsythe and Snook are members of a research group at the United States Military Academy at West Point, with whom the members of the Sternberg Research Group have collaborated successfully for roughly 7 years. Other members of the Sternberg research group who have worked on practical intelligence include Cynthia Berg, David Caruso, Alice Jackson, Lynn Okagaki, and Shih-ying Yang. Other members of the West Point team working on practical intelligence have included John Wattendorf, Jeff McNally (deceased), Pat Sweeney, and Craig

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Bullis. Many others have collaborated with us as well, and they are cited in the book. The members of the Sternberg Research Group are especially grateful to Sai Durvasula, our administrator, and Melissa Droller for editorial assistance. We also thank Howard Gardner and his group at Harvard for their collaborations over 6 years on the Practical Intelligence for Schools studies. Although we have not collaborated with him directly, we thank Ulric Neisser, whose conceptualizations of academic and practical intelligence have provided much of the intellectual stimulation for our work. Finally, we are grateful to Julia Hough for contracting the project and shepherding it through the publication process.

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