

#### THE MALLEABILITY OF INTELLECTUAL STYLES

Intellectual styles are individuals' preferred ways of using the abilities that they possess. The extent to which one can change his or her intellectual style is a question of interest to both researchers and the general public. This book presents the first comprehensive and systematic review of existing research on the malleability of intellectual styles. By critically analyzing research findings derived from both cross-sectional and longitudinal investigations performed over the past seven decades, Li-fang Zhang demonstrates that intellectual styles can be modified through both socialization and purposeful training. Professor Zhang elucidates the heuristic value of these findings for the development of adaptive intellectual styles in both academic and nonacademic settings. She proposes further avenues of research that might advance scholarly understanding of the nature of and the potential for modifying intellectual styles.

Li-fang Zhang is Professor of Psychology and Education in the Faculty of Education at The University of Hong Kong. She is the coauthor of five books, including the award-winning monograph *The Nature of Intellectual Styles* (2006). Professor Zhang has also published works on such diverse research areas as creativity, giftedness, personality, student development, teacher education, higher education, multicultural education, and the academic profession.





# The Malleability of Intellectual Styles

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To Ashley, my beloved daughter





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#### Preface

Why is it that a student can be considered dumb by one teacher but smart by another? How is it possible that a student can fail a multiple-choice test but excel at an individual project? How can one explain the fact that a teacher can be evaluated very highly by one group of students but very poorly by another? How could an individual be considered mediocre in one organization but a great asset in another?

There are a number of possible explanations for these and many other similar situations. One is that people have different intellectual styles, and the same individual may deploy different intellectual styles in different environments. Intellectual styles – an umbrella term for such constructs as cognitive styles, learning styles, teaching styles, and thinking styles – refer to people's preferred ways of processing information and dealing with tasks. Like abilities and personalities, styles significantly affect human performance. However, styles are neither abilities nor personalities; rather, they are at the interface between abilities and personalities (Sternberg, 1997). Styles can be ability-based and personality-based (Sternberg, Grigorenko, & Zhang, 2008), but they are still styles.

The purpose of this book is to address the nature of intellectual styles, particularly as it relates to the issue of style malleability, through delineating and integrating major relevant conceptual and empirical work. Research findings obtained from longitudinal and experimental investigations along with those derived from cross-sectional studies are systematically presented and critically analyzed. The thrust of this book is that people's intellectual styles can change – both as a function of socialization and as a result of training. Specifically, this book has three objectives. The first is to facilitate a good understanding of how the major bodies of literature documented in the past seven decades converge to support the argument that people's intellectual styles are more dynamic than static. The second is to discuss the implications



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of the research findings for both academic (e.g., schools and universities) and nonacademic settings (e.g., government and industry). The third objective of this book is to stimulate further research on the malleability of intellectual styles through suggesting ideas for future research programs.

This book is aimed at graduate students and upper-division undergraduate students as well as academics who wish to do research in the field of intellectual styles and its related academic fields. These related fields of inquiry include the following: applied psychology, clinical psychology, cognitive psychology, consulting psychology, cross-cultural psychology, developmental psychology, differential psychology, educational psychology, industrial/organizational psychology, educational administration and policy making, general education, teacher education, higher education, multicultural education, institutional administration and management, curriculum design and instruction, business management, health sciences, student development, career counseling, marriage counseling, school counseling, anthropology, cultural and ethnic studies, sociology, information technology, and liberal studies.

Although this book is intended for the audiences mentioned in the preceding paragraph, practitioners, educational and noneducational, should also be interested in reading this book not only because they will find the research evidence for style modifiability intriguing, but also because they will find the discussion on the practical implications of the research findings for education and beyond useful. Indeed, anyone who is interested in understanding how to develop effective intellectual styles should find this book helpful.

Finally, four technical aspects of the book should be noted. First, the literature search for this book was conducted using the PsycINFO Database (1940 to 2011). Second, in the case of several style constructs, the same style construct has historically been assigned different names, so these names are used interchangeably in this book to refer to the same style construct. For example, Holland's (1973) construct of personality-based style is referred to as career interest type, career interest style, career personality type, and career personality style. Another example is that both "personality style" and "personality type" are used to refer to Jung's (1923) concept of personality-based style. Third, the studies reviewed in Part II of this book are broadly referred to as "cross-sectional studies"; some are actually "one-shot" investigations. Fourth and lastly, the expressions "college" and "university" carry the same meaning, both referring to higher educational institutions, and the phrases "business world," "business settings," and "nonacademic settings" are used interchangeably.



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