Preface

Emotional intelligence (EI) has recently emerged as a key construct in modern-day psychological research, appearing as one of the most widely discussed aspects of intelligence in the current literature. EI refers to the competence to identify and express emotions, understand emotions, assimilate emotions in thought, and regulate both positive and negative emotions in oneself and others. The construct has matured and subsequently gathered international media attention ever since its inception in the 1980s. Researchers claim to have made important strides toward understanding its nature, components, determinants, effects, developmental track, and modes of modification. EI research has prospered in part because of the increasing personal importance of both intelligence and healthy emotions for people in modern society. It has even been claimed that EI predicts important educational and occupational criteria above and beyond those predicted by general intellectual ability.

Although first mentioned in the psychological literature nearly two decades ago, it is only in the past five years that emotional intelligence has received widespread public attention. Daniel Goleman's book on the topic appeared on the *New York Times* Best-Sellers List in 1996, the same year in which a *Time Magazine* article was devoted to detailed exposition of the topic. More recently, the influential e-zine *Salon* devoted a lengthy article to discussion of its application (both potential and realized) in the work force. Moreover, the last year or so has witnessed a plethora of trade texts dealing with self-help and management practices, assessment, and other practical applications implicit in the concept of emotional intelligence. Popular interest notwithstanding, scientific investigation of a clearly identified construct of emotional intelligence is sparse. Although several measures have been (or are currently being) designed for its assessment, it remains uncertain whether there is anything to emotional intelligence that psychologists working within the fields of personality, intelligence, and applied psychological research do not know already. Moreover, the media hype and vast number of trade texts devoted to the topic often subsume findings from these fields in a faddish sort of way, rather than deal directly with the topic as defined by its chief exponents.

Like many of our professional colleagues, our initial reaction to emotional intelligence was skeptical. It seemed to be a creation of the popular self-help movement, dressed up with some psychological terminology: a myth for our times rather than serious science. As differential psychologists, we found it hard to accept that a century of research on ability and personality could somehow have failed to notice such an important feature of the psychological landscape. Subsequently, we became aware that, beyond the media spotlight, cautious, systematic research was taking shape. Some researchers were developing tests for EI and attempting to validate them. Others were working with seemingly related constructs such as emotional knowledge, emotion perception, and emotional awareness. These various strands of research were reviewed in Bar-On and Parker's Handbook of emotional intelligence (2000). Like the editors of this volume, we detected a genuine sense of discovery among the researchers involved. As Bar-On and Parker (2000) also pointed out, the basic idea of emotional intelligence has been current for many years, in guises such as social intelligence. Perhaps EI was not just a popular fad, but the apotheosis of some longstanding, but hitherto poorly articulated, concerns of psychology. Because of the upsurge of interest in the topic over the past years, the time seemed ripe for a comprehensive critical review of EI.

This book sets out to examine the burgeoning research on the nature, components, determinants, and consequences of EI. It aims to shed light on the scientific status and validity of the construct of emotional intelligence by critically assessing the state of the art in EI theory, research, assessment, and applications. This book represents an even-handed attempt to disentangle factual, scientific evidence for the construct of emotional intelligence from accounts that are grounded in anecdotal evidence, hearsay, and media speculation. In doing so, we highlight the extent to which empirical evidence supports EI as a valid construct, and debunk some of the more extravagant claims appearing in the popular media. We attempt also to integrate understanding of EI with existing knowledge, theory, and practice in the areas of intelligence, emotion, personality, and applied psychology. In addition to

tackling conceptual issues, we have recently been actively involved in analyzing data on hundreds of people given prominent measures of EI, personality, and intelligence. These data, woven into our exposition, represents cutting-edge empirical research and helps bring into sharp relief the prospects and limitations of the concept of EI.

This book differs in various respects from existing volumes. The majority of books on emotional intelligence are targeted towards the general public; the few scientific books that exist are slanted towards promoting the concept of EI. There are edited books that present a variety of divergent perspectives and viewpoints, but these generally fail to present a critical and integrated exposition of the topic. Our book is the first to present a scientifically grounded critique of the basic assumptions of EI research. We point out fundamental weaknesses of the concept, as well as possibilities for developing the concept rigorously. The book will also be the first volume to challenge the current popularity of emotional intelligence in applied settings.

The target audience for this book is students and professionals in psychology, education, and the health and welfare sciences. Because EI has recently been touted as an important component of success in business, it should also find a readership with students and professionals in management, human resources, and industrial relations. Given the widespread public interest in the topic and the extensive coverage of EI by the media, the book should be of considerable interest to the lay public as well. The book hopes to make a contribution to scientific psychology, has relevance to clinical, occupational, and educational psychology, and seeks to present a distinctive and potentially controversial point of view on a topic of general public concern.

We have sought to capitalize on our joint experience of working on empirical research in many of the areas germane to EI. Gerald Matthews is a cognitive scientist who works on information-processing models of personality, stress, and mood in both theoretical and applied contexts. Moshe Zeidner is an emotions researcher who has studied cognitive-affective interaction, test anxiety, and educational applications of differential psychology. Richard Roberts is a hard-core intelligence researcher and expert in psychometrics. Although all three of us have spent considerable time researching in the United States, there is a decidedly international flavor to our current collaboration. Matthews (the United States, but formerly from Scotland), Zeidner (Israel, but formerly of the United States), and Roberts (Australia) bring some differing perspectives to a construct alleged to have universal application.

Organization and Structure of the Book

A scientific account of emotional intelligence requires the following. First, it is necessary to have a clear conceptualization of what emotional intelligence means, and this leads to having an adequate methodology for assessment of the construct that discriminates EI from other, seemingly analogous, concepts. Second, we require a theoretical account of EI that grounds the construct in psychological processes and parsimoniously explains how EI may influence adaptive functioning in the real world. Third, we must explore its use (and potential abuse) in a variety of applied settings. Applied utility is not necessarily a defining quality of EI, but if the construct is as far-reaching as claimed, it should have significant ramifications for psychological practitioners. To address the foregoing issues systematically, the chapters are arranged to reflect four broad but overlapping issues.

Part I, "Conceptualizations and Measurement," surveys some basic issues in research on EI and provides a conceptual framework for reviewing the evidence interrelating emotion and ability constructs. Chapter 1 provides a broad overview of the construct of emotional intelligence. More specifically, this chapter delineates the historical and sociocultural backdrop for the emergence of EI, highlights reasons for the salience and recent widespread interest in the construct of EI, and surveys early and contemporary conceptions of EI. In addition, this chapter provides a research agenda for a science of EI based on the three pillars of measurement (psychometrics), theory development, and practical applications. Chapter 2 lays out a chart for this scientific enterprise, reviewing the psychometric and theoretical principles to be followed and setting out a cognitive science framework for understanding emotional function. The chapter also differentiates personality and ability models of EI and raises the key issue of how EI should be located within the existing science of differential psychology. Its final part reviews some of the practical benefits that may ensue from a valid theory of EI. Chapters 3 and 4 respectively provide the conceptual framework for understanding the two grand constructs that serve as building blocks for the hybrid concept of emotional intelligence: emotion and intelligence. Chapter 3 reviews a number of definitions of intelligence and presents the key issues, concepts, and controversies that a century of research on intelligence has given us. We present a number of formal structural models of intelligence and discuss the implications that emerge from these models for the concept of EI. Chapter 4 discusses ways of understanding emotion that might provide a basis for understanding EI. This chapter presents a number of conceptual issues generated by a century of scientific attempts to understand emotion. Historical perspectives on emotions (e.g., centralist versus peripheralist theories) lead into an account of possible sources and functions of emotions. Here we also review empirical studies using measures of emotional state to investigate the causes and consequences of emotion. Chapter 5 delineates major issues in defining and assessing EI. The chapter summarizes the criteria that the concept of EI should satisfy (construct validity, reliability, etc.) and critically assesses the success of self-report and performance-based tests in meeting these criteria. It provides a comprehensive review of contemporary assessment procedures and their limitations. A major limitation is the overlap of selfreport tests with existent personality constructs.

Part II, "Individual Differences in Emotion and Adaptation," discusses the theoretical basis for attempting to classify people in terms of competence in handling emotional events. Chapter 6 discusses the biological substrata for adaptation and EI. This chapter discusses various facets of the biology of emotion, including animal models, neuropsychology, and evolutionary biology. Both subcortical and cortical emotion systems of the brain may provide a physical substrate for EI. However, biological models are limited by their lack of engagement with real-world human behavior and by their neglect of cognitive control. In chapter 7 we present the implications for EI of key cognitive models of emotion (appraisal theory, network, attentional, and self-regulatory models of emotion). We argue that the cognitive approach is more successful than biological models of emotion in explaining emotion-behavior links. However, there are difficulties in linking EI either to individual differences in information processing or to self-regulation. We conclude that, despite various difficulties, it is possible that EI relates to an emotional executive system that may have a neurological basis in the frontal lobes. However, much work remains to be done before such a view is credible. The next two chapters focus on the adaptive benefits that might result from individual differences in emotion-regulation processes. Chapter 8 focuses on emotional intelligence and the psychological theory of stress. We present and review various hypothesis regarding the causal mechanisms relating EI to adaptive coping. Chapter 9 discusses personality traits as adaptive specializations and uses the cognitive-adaptational framework as a basis for reviewing key dimensions of personality, with focus on the Five-Factor model.

Part III, "Applications," is devoted to examining the value of using notions of EI to guide practical interventions in various applied settings. Chapters 10, 11, and 12 discuss the potential importance of EI in clinical, occupational, and educational settings, and examine evidence on applications purporting to be based on EI. Chapter 10 discusses the nature and origin of clinical disorders related to dysfunction of negative emotions (anxiety, depression, and anger) and links EI to the extensively researched construct of alexithymia. It also looks at the potential for targeting therapeutic techniques at EI. Chapter 11 discusses major sources of emotion and stress at the workplace and reviews the empirical research on ways of coping with stress at the workplace. In addition, we examine the role of EI in three major applied areas: occupational assessment, prediction and selection, and coping with stress. We also present empirical evidence on the effectiveness of EI interventions. Chapter 12 begins with an account of factors contributing to the origins and development of emotional competence during childhood, including biology, primary socialization, and related factors (personal experience, peers, teachers, media, etc.). It then discusses current attempts to cultivate and school EI in educational settings. We describe and critically evaluate selected educational programs for affective education and present criteria for the development of EI intervention programs. Together, the three chapters provide a critical perspective on whether the concept of EI provides for coherent, theory-driven interventions, or whether it simply relabels practices that are already well-established.

Part IV, "Conclusions," summarizes the implications of our review for the role of EI as a scientific construct. The concluding chapter attempts to present a balanced discussion of the unique strengths and weaknesses of the EI construct, shedding light on both the scientific and mythical facets of the construct. The chapter also delineates priorities and directions for future research.

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This has been a challenging, thought provoking, and rewarding collaborative experience, and we hope readers will find it helps to better integrate current EI theory, research, and interventions. We will be rewarded if this book advances our psychological knowledge of emotional intelligence and assists in understanding adaptive coping in circumstances that provoke emotion.