TABLE OF CONTENTS

Part 1: Stress and Anxiety – Application to Health

Stress lowers resistance and makes people more vulnerable. It can cause physical and psychological *health* resulting in a variety of serious problems. In the first part of this volume cutting edge research wants to focus on stress and emotions in the context of severe illnesses.

Part 2: Stress and Anxiety – Application to Work Place

This part of the book sheds some light on the exposure to stressful working conditions that can have a direct influence on health and well being. Various new and most interesting studies show how individual and situational factors can intervene to strengthen or weaken this influence and can lead, for example, to burnout.

Part 3: Stress and Anxiety – Application to Community

Here we focus on stress and coping within the community. This part is concerned with stressful person-environment interactions and the ways society impact upon individual and community functioning. Outstanding research that has systematically examined social issues including terrorism and violence will be part of that section.

Part 4: Stress and Anxiety – Application to Education

Stress keeps learners motivated but excessive pressure can lead to stress which undermines performance in *educational settings*. Many children or adolescents at certain times during their educational career are challenged by stress and anxiety. Sources of stress in educational settings might include school demands and frustrations due to too high expectations, negative thoughts and feelings about themselves, bullying, moving or changing institutions. The book wants to highlight in its fourth part new understandings of stress and emotion in this domain.

Introduction	ix
Part One: Stress and Anxiety – Application to Health	
Chapter One	2
Petra Buchwald and Sarah Perez	
Chapter Two	36
Chapter Three	52
Chapter FourVitality and Vigor: Implications for Healthy Functioning Esther R. Greenglass	64
Chapter Five	86
Chapter Six The Measurement of State and Trait Anxiety in Surgical Patients Heinz Walter Krohne and Stefan C. Schmukle	106
Chapter Seven	119
Aleksandra Luszczynska, Sonja Boehmer, and Yagnaseni Sarkar	137
Urte Scholz, Falko F. Sniehotta, Nina Knoll, and Ralf Schwarzer	154
Chanter Nine	151

Spousal Support: Three Studies on the Supportive Role of Partners in Times of Stress Ralf Schwarzer, Aleksandra Luszczynska, Nina Knoll, Kerstin Schröder, and Benicio Gutiérrez-Doña ⁵
Part Two: Stress and Anxiety – Application to Work Place
Chapter Ten
Chapter Eleven
Chapter Twelve
Chapter Thirteen
Part Three: Stress and Anxiety – Application to Community
Chapter Fourteen
Conservation of Resources Theory and Trauma: An Evaluation of New and Existing Principles Brian J. Hall, Susaye Rattigan, Kristen H. Walter, and Stevan E. Hobfoll
Chapter Fifteen
and Iciar Iruarrizaga Chapter Sixteen
Stress, Anxiety, and Coping with Terror: The Israeli Experience

Moshe Zeidner

Part Four: Stress and Anxiety – Application to Education
Chapter Seventeen292
Perfectionism in Competitive Sport
Mark H. Anshel
Chapter Eighteen307
Emotion and Coping in Young Victims of Peer-Aggression
Simon Hunter, James M. E. Boyle, and David Warden
Chapter Nineteen
The School-to-Army Transition: Interventions for High-School Students
and Their Families
Moshe Israelashvili
Chapter Twenty
Verbal Insults: Experiences, Responses, and Factors Associated with
Victimization in the School Setting
Jodie Lodge and Erica Frydenberg
Chapter Twenty-One
Better Take Three Than Two: The Tripartite Model of Self Construal
and Exam-Related Coping
Tobias Ringeisen and Petra Buchwald
Chapter Twenty-Two388
The Influence of a Vigilant Coping Style and the Experimental Induction
of Vigilance by Self-Monitoring on Psychophysiological Stress Responses
Sonja Rohrmann and Augustin Kelava
Chapter Twenty-Three
Anxiety and Cognitive Functioning in Primary and High School Students

Introduction

PETRA BUCHWALD, HEINRICH HEINE-UNIVERSITY OF DUESSELDORF

It gives me a great deal of pleasure to present the volume *Stress and Anxiety – Application to Health, Work Place, Community, and Education.* We intended to publish research produced by members of the Stress and Anxiety Research Society (STAR) to communicate, develop and enhance the understandings of the experiences and consequences of stress, coping, and anxiety.

The book reflects the broad range and high quality of the STAR society and consists of more than twenty contributions, covering cutting-edge developments in both experimental and theoretical aspects. The book comprises four major areas in the context of stress that is health, job stress, community, and stress and anxiety in educational settings. The sections serve as selection aids for the reader. Also, organizing the chapters in this way emphasizes the evolving nature of research in this field.

Nine chapters form **part 1** of the volume discuss issues of stress and health. It is a major section of the book as research now indicates that between 70 and 80 percent of all disease is associated with stress. Stress is known to contribute to heart disease, cancer, causes hypertension, and impairs the immune system. Stress has physical and emotional effects and mostly creates negative feelings of anxiety and depression, which in turn can lead to significant health problems. As psychology most recently began to focus on mental wellness rather than illness (Seligman, 2002), many of the chapters in part 1 underscore the importance of positive individual traits, positive resources for improving wellbeing, happiness and healthy functioning.

Chapter one, "Coping, Personality and Sexual Behavior of HIV+ Men Who Have Sex with Men," by Buchwald and Perez deepens the understanding of the unique challenges in coping with stress faced by HIV+ men who have sex with men. Employing COR theory (Hobfoll, 1998), the authors examine the impact of loss in multiple domains often faced by members of this community, also highlighting the unique intersections of gender, sexuality, and health status on this coping process. Finally, this chapter summarizes recent empirical research

x Introduction

in the area of stress and coping within this understudied and underserved population.

Two chapters offer a thorough discussion of positive and negative effects of support transactions between spouses. Burkert, Knoll and Gralla's chapter titled "Social Support and Stress in Prostatectomy Patients and their Spouses" (see Chapter 2) emphasize the importance of the *match/mismatch* of mobilized and enacted social support and conclude that received or provided social support in times of stress may not be consistently related to the recipients' well-being. Schwarzer, Luszczynska, Knoll, Schröder, and Gutiérrez-Doña's chapter titled "Spousal Support: Three Studies on the Supportive Role of Partners in Times of Stress" (see Chapter 9) provides further explanation for understanding the transaction of social support as a dyadic rather than an individualistic act and takes gender differences as well as time-lagged effects into account.

Carver, Wimberly, Kazi, and Antoni's "Some Influences on Psychosocial Well-Being After Treatment for Breast Cancer" (Chapter 3 in part 1) reports on findings from their research on quality of life among medical patients. They introduce a conceptual model that accounts for the internal dynamics of life and individual differences, which reflect the nature of human resilience. In this framework Carver and his colleagues developed a cognitive-behavioral stress management training aimed at fostering patients' life-engagement.

Greenglass' "Vitality and Vigor: Implications for Healthy Functioning" follows next (see Chapter 4) and offers the reader an extensive and well-presented synthesis of the literature on positive moods and their precursors. Greenglass developed a theoretical model that links social support, proactive coping, vitality, and positive and negative outcomes. The chapter provides examples of how this model can be applied to different contexts, including the occupational stress field, and the physical rehabilitation field.

The chapters that follows is by Hodapp, Kelava, Rohrmann, and Bongard, titled "Heartbeat Perception, Self-Attention, and Emotional Experience: An Experimental Study" (see Chapter 5). The thrust of this research is to broaden understanding of the relationship between perception of autonomic activity and emotional experience. In an experimental study Hodapp and his colleagues examined the interaction between good and poor heartbeat perceivers and specific stress conditions relating to anxiety. The work connects its findings to interoception as a highly relevant psychophysiological variable which deserves more attention in stress and anxiety research.

Krohne and Schmukle's "The Measurement of State and Trait Anxiety in Surgical Patients" (see Chapter 6) continues discussion of perioperative surgery-related anxiety through offering a comprehensive overview of research pertaining to the resulting inventory State-Trait Operation Anxiety (STOA). The text reports evidence of the psychometric quality of the instrument, which

assesses, different from other anxiety scales, area-specific anxiety, contains only "anxiety-positive" items, and differentiates between a cognitive and an affective-somatic state-anxiety component.

The next chapter is by Luszczynska, Boehmer and Sarkar, titled "Self-Efficacy, Aggressive Treatment and Quality of Life Among Patients with Cancer or HIV Infections" (see Chapter 7). The authors account on findings from their research that is concentrated on identifying psychosocial variables that contributes to the adaptation to cancer or HIV and raise patients' health-related quality of life. As with most of the previous chapters, this work reveals again positive personal resources (self-efficacy) that promote the adaptation to stress and better quality of life among patients with chronic diseases.

Chapter 8, Scholz, Sniehotta, Knoll, and Schwarzer's "On the Interplay of Physical Activity, Depressive Symptoms, and Self-Regulation in Cardiac Patients," focuses on two mostly interrelated risk factors for Coronary Heart Disease: physical inactivity and depressive symptoms. Although depressive symptoms and physical exercise were not related in this study, their research underscores the importance of a self-regulatory intervention including action planning, coping planning, and feedback of plans in fostering maintenance of physical activity levels after cardiac rehabilitation and lowering depressive symptoms.

Part 2 of the book provides a more eclectic review of what is currently known about the costs of occupational stress. Pressure is part and parcel of all work but excessive pressure can lead to stress, which undermines performance and can make people ill. In four chapters, this section of the book covers the role of personality in the occupational context, a biopsychosocial approach to assessment and formulation, and the importance of respite from work as a means of recovery from burnout.

The first chapter in this section is Chapter 10 written by Cieslak, titled "Work Stress and Social Support. Does Personality Matter?" In order to further disentangle the complex relation of social support, work stress, and well-being, Cieslak applied the Demands-Control-Support model. Analyzing the role of personality, the author argues, possesses relevance for evidence-based modifications in this most frequently cited work-related stress model.

Chapter 11, by Etzion titled "Respite from Work as Means of Recovery from Occupational Stress and Burnout," aims to give more insight in the effect of respite from work experienced by people upon returning to work. It is clear from this chapter that the question of how the kind of respite is related to specific characteristics of working people is still unanswered. Still, Etzion offers a more than interesting list of variables relating to respite that emerged from her comprehensive review of empirical studies.

xii Introduction

Hughes's "Workaholism, the Work Environment, and Occupational Stress: A Biopsychosocial Perspective" (Chapter 12 in part 2) presents to the reader an extensive and very readable synthesis of the literature on workaholism and work stress. Recommendations are offered in the area of conceptual and methodological refinement. While considering workaholism from a biopsychosocial perspective the author sparks an interesting discussion of the causes, influences, and consequences of workaholism in relation to personality, environmental factors, coping, stress, and well-being.

The last chapter in this section is Chapter 13 by Ieropoli and Moore titled "Stressors among Psychiatric Nurses: The common and the not so common." With their work the authors seek to understand the ways differences in the jobrelated demands of special mental health nurses result in differences in burnout levels. Their work exposes the implication and value of this research for those involved in making policy and promoting both staff and patient wellbeing.

The **third part** of the volume contains work that focuses on issues of stress, anxiety, and coping in the community and, in particular, of stress related to terror attacks. The threat of terrorist attacks leaves people in an insecure position and feeling anxious about the future. Research presented in this part of the book helps to identify components of resilience to enable people in managing major stressors and to promote positive adaptation. How an individual's adaptation to stressful events occurs in the context of specific community settings can be explained within the framework of the Conservation of Resources theory (COR theory). Hall, Rattigan, Walter and Hobfoll's "Conservation of Resources Theory and Trauma: An Evaluation of New and Existing Principles" is Chapter 14 in the third part and focuses on the principals of COR theory in detail. The authors provide new theoretical explanations for understanding how resource loss impacts both individuals and the larger community. The area of posttraumatic growth and related paradoxical effects are also thoroughly discussed in this chapter by implying that it makes a difference whether resource gains are related or unrelated to traumatic events and that tangible resources, rather than feelings of mastery, may assist individuals' coping efforts in times of crises.

Miguel Tobal, Cano Vindel, González Ordi, and Iruarrizaga's Chapter 15 titled "Consequences of Terror Attacks in Madrid after 3/11" follows and reports on findings from their research that is concentrated on traumatic effects of terrorism. Their research offers unique information of great interest about the vulnerability and resilience gained from a representative sample of Madrid's inhabitants. As with the previous chapter, this work reveals that the traumatic effects are not limited to the direct victims but extend like a shock wave reaching families, emergency, and other personnel, communities, and even regions far from the affected site.

Chapter 16 by Zeidner titled "Stress, Anxiety, and Coping with Terror: The Israeli Experience" extends the topic by looking at political violence in the Israeli population, which is threatened by an unbearably prolonged series of terror attacks constituting a community crisis. Zeidner does not only provide a comprehensive and instructive conceptual overview of terror, its psychological antecedents and consequences, but also reports on findings from his research that investigated the coping process during a period of political violence of the El-Aqsa Intifada. Again, in line with the previous chapters of part 3, terror-related stress, on a community level, lead to negative emotional reactions even among those not directly impacted by terror attack. Moreover, coping during an ongoing disaster situation seems to differ from that reported in reaction to more normal events.

Seven chapters form the **fourth** and last **part** of the book refer to stress and anxiety in educational settings. All seven chapters develop understandings of the sources, experiences, and consequences of stress, anxiety, and coping in education.

Perfectionism as a topic of study in educational settings has only recently received more attention and seems to be associated with coping and affect. Anshel's Chapter 17 titled "Perfectionism in Competitive Sport" points out that on the one hand extreme perfectionism may create intense stress due to harsh self-criticism, difficulty in feeling gratification from performance improvement, and meeting realistic expectations, and on the other hand include positive forms such as setting and attempting to achieve high personal standards, self-confidence, and success. The author offers an interesting discussion of the dimensions of perfectionism with relevance to competitive sport and also makes clear that perfectionism is a promising area of future inquiry in other educational contexts.

Chapter 18 is by Hunter, Boyle, and Warden titled "Emotion and Coping in Young Victims of Peer-Aggressions." Hunter and his colleagues, in offering a rationale for teaching young people resilience and practical coping skills to deal with peer-aggression, take the reader through a concise development of the field focusing on understanding how young people experience stress by studying their individual coping, rather than coping scale-based strategies. Further, the authors present their own revealing study and it is clear from their findings that research that seeks to understand stress, coping, and emotions in childhood cannot be abandoned.

Israelashvili's "The School-to-Army Transition: Intervention for High-School Students and their Families" (Chapter 19) continues discussion of students coping through offering an interesting insight in theoretical models of coping and adjustment to transition. By introducing a Stress Inoculation Training which supports high-school graduates' transition to the Israeli Defense

xiv Introduction

Forces the author offers valuable advice not only to counselors and educators, but also to parents.

The following Chapter 20 by Lodge and Frydenberg titled "Verbal Insults: Experiences, Responses, and Factors Associated with Victimization in the School Setting" highlights the cumbering experience of bullying in school-children with their quantitative and qualitative investigation of verbal insults. The authors enliven the discussion of tailored victim-interventions expounding useful strategies for educators and administrators interested in improving the school environment for teachers and students alike.

Ringeisen and Buchwald's "Better take Three than Two: The Tripartite Model of Self Construal and Exam-Related Coping" is Chapter 21 in part 4. This chapter places a strong emphasis on the role of the self as being separate from or connected with others in stressful situations and discusses the tripartite model of self construal in the context of individual and communal coping. The authors report on interesting findings from their research that confirms differential promotion of coping styles across the three self construals and provide explanations for understanding major motives for social interaction with others in stressful learning situations.

Chapter 22 is written by Rohrmann and Kevala and titled "The Influence of a Vigilant Coping Style and the Experimental Induction of Vigilance by Self-Monitoring on Psychophysiological Stress Responses." The authors report on findings from an experimental study. By using the public speaking paradigm as stress induction they found that a vigilant coping style increases subjective and physiological stress responses. Their findings support the relevance of self-awareness by showing that an increase in self-monitoring causes discrepancies between real and ideal self-aspects combined with anxiety – a finding that might in part be an explanation for a result in Vassilaki's study (see Chapter 23) where metacognitive cueing influenced performance negatively by increasing the anxiety level. As public speaking is common in many educational settings, this study offers practical implications for those who work with learners.

The last Chapter 23 by Vassilaki is titled "Anxiety and Cognitive Functioning in Primary and High School Students" offers expanded coverage of the inverse relationship between anxiety and performance as well as how learning can be distracted through worry, emotionality, and interference. Vassilika introduces three projects which all prove the continuing destructive effect of anxiety on cognitive functioning. The author argues that educators who understand the relationship of stress, anxiety, coping, and performance can assist students to effectively deal with cognitive tasks.

Anxiety, stress, and coping are important to understand if we want to have meaningful descriptions of individuals. These variables are discussed as relevant to health, work place, community, and education and all contributions in this book demonstrate the development of research in this field and how important a continuing investigation and refinement in this complex area is. We wish to encourage academic researchers, students, service providers, policy makers, community members, and anyone else involved in treating stress to join with us in understanding individuals in the context of stress, coping, and emotions and how this effects their well-being, functioning and resilience. Last but not least, we thank the chapter authors of *Stress and Anxiety – Application to Health, Work Place, Community, and Education* for joining with us in this effort.