

**PROMOTING CAPABILITIES TO
MANAGE POSTTRAUMATIC STRESS**

PROMOTING CAPABILITIES TO MANAGE POSTTRAUMATIC STRESS

Perspectives on Resilience

Edited by

DOUGLAS PATON, Ph.D., C. Psychol.

School of Psychology, University of Tasmania, Launceston, Tasmania, Australia

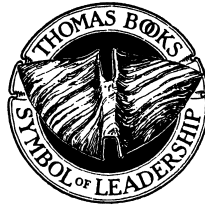
JOHN M. VIOLANTI, Ph.D.

*Department of Criminal Justice, Rochester Institute of Technology
Rochester, New York*

*Department of Social and Preventative Medicine
School of Medical and Biomedical Sciences
State University of New York at Buffalo, New York*

LEIGH M. SMITH, M.A.

School of Psychology, Curtin University of Technology, Perth, Western Australia



CHARLES C THOMAS • PUBLISHER, LTD.
Springfield • Illinois • U.S.A.

Published and Distributed Throughout the World by

CHARLES C THOMAS • PUBLISHER, LTD.
2600 South First Street
Springfield, Illinois 62704

This book is protected by copyright. No part of
it may be reproduced in any manner without
written permission from the publisher.

©2003 by CHARLES C THOMAS • PUBLISHER, LTD.

ISBN 0-398-07317-1 (hard)
ISBN 0-398-07318-X (paper)

Library of Congress Catalog Card Number: 2002022800

With THOMAS BOOKS careful attention is given to all details of manufacturing and design. It is the Publisher's desire to present books that are satisfactory as to their physical qualities and artistic possibilities and appropriate for their particular use. THOMAS BOOKS will be true to those laws of quality that assure a good name and good will.

*Printed in the United States of America
CR-R-3*

Library of Congress Cataloging-in-Publication Data

Promoting capabilities to manage posttraumatic stress : perspectives on
resilience / edited by Douglas Paton, John M. Violanti, Leigh M. Smith.
p. cm.

Includes bibliographical references and index.

ISBN 0-398-07317-1 (hard) -- ISBN 0-398-07318-X (paper)

1. Post-traumatic stress disorder--Treatment. 2. Resilience (Personality trait)
I. Paton, Douglas. II. Violanti, John M. III. Smith, Leigh M.

RC552.P67
616.85'21--dc21

2002022800

CONTRIBUTORS

Paul T. Bartone, Ph.D., received his Ph.D. in psychology/human development from the University of Chicago in 1984. Since 1985, he has served as a research psychologist for the U.S. Army, first at the Walter Reed Army Institute of Research (WRAIR) in Washington, D.C., then as director of the WRAIR psychology field unit in Heidelberg, Germany, to his current position as research scientist, Department of Behavioral Sciences and Leadership, United States Military Academy, West Point. He has conducted numerous studies of stress, health, and adaptation among military personnel and their families. He serves as member-at-large for the Military Psychology Division (19) of the American Psychological Association and also chairs that Division's Committee on International Military Psychology.

Lawrence G. Calhoun, Ph.D., is a professor of psychology at the University of North Carolina at Charlotte. He is a clinical psychologist whose work focuses on trauma, posttraumatic growth, and the aftermath of suicide. He is coauthor of *Dealing with Crisis* (1976), *Trauma and Transformation: Growing in the Aftermath of Suffering* (1995), *Facilitating Posttraumatic Growth: A Clinician's Guide* (1999), and coeditor of *Posttraumatic Growth: Positive Changes in the Aftermath of Crisis* (1998).

Murray Clark, Ph.D., is a senior lecturer in organizational behavior at Sheffield Business School, Sheffield Hallam University, UK. Before his move to academia, after completing a Ph.D. in OB at Manchester Business School, he spent ten years as a mining engineer working in a number of line management roles. He has researched and published on the topic of trust and its development in work relationships. Current research interests focus on building effective organizational relationships and the role of trust in leadership.

Christine Dunning, Ph.D., is a professor and chair of the Department of Governmental Affairs at the University of Wisconsin-Milwaukee. She

received her Ph.D. in criminal justice/social science from Michigan State University. In addition, she attended Marquette University Law School. She formerly served as associate director-police at the Des Moines, Iowa, Criminal Justice Center and as director of In-Service Police Training for Southeastern Wisconsin Police Academy. She has published extensively on police stress and trauma, disaster stress management, and in numerous areas of police administration. She consults with officials responsible for mitigation in a large number of catastrophic events annually.

Merle Friedman, Ph.D., is a clinical psychologist, and a certified trauma specialist. She is on the board of the International Society for Traumatic Stress Studies, a cofounder and director of the South African Institutes of Traumatic Stress, and a board member of Business Against Crime, Gauteng. She is director of a consultancy, Psych-Action, which specializes in assisting employees who are the victims of violent crimes. Her research interests include reconciliation and healing, traumatic stress and resilience in the police service, and the impact of resilience on well-being. She has addressed national and international conferences and symposia and has published numerous articles and book chapters on aspects of traumatic stress.

Craig Higson-Smith's experience in traumatic stress and resilience work is derived in large part from his time as director of the KwaZulu-Natal Programme for Survivors of Violence, an agency caring for people, families, and communities affected by civil conflict in South Africa. Currently he works with Psych-Action assisting South African businesses to protect their employees from traumatic stress in the workplace, and to care for those employees involved in robberies and other violent incidents. Higson-Smith is a director and founding member of the South African Institute for Traumatic Stress and is deeply involved in a study of psychological resilience within the South African Police Service. His other research interests include cross-cultural aspects of traumatic stress and the development of community-level response to civil violence.

Peter Johnston, M.A., completed his Master of Arts Degree in industrial and organizational psychology at Massey University, Auckland, New Zealand. He is currently working as a consultant within an organizational development and psychological assessment consulting firm based in Auckland. He has had the opportunity to assist in a variety of organizational development projects in addition to researching, developing, and maintaining best human relations practices. His current research involves investigating of the psychological empowerment and motivation of employees at work, work-related resilience, organizational climate and culture, and the role of personality questionnaires and cognitive ability tests in selection.

Deborah M. Khoshaba, Ph.D., received her Ph.D. from the Illinois School of Professional Psychology in 1990 in clinical and health psychology. She then joined the Hardiness Institute, becoming its vice president and director of Program and Training. She has been central in developing its services and products, and in training others to implement them. Having maintained an active consulting and psychotherapy practice, she has taught as adjunct faculty at the graduate psychology program at Pepperdine University and the undergraduate program at University of California, Irvine, where, in 2001, she accepted a regular faculty position. She has published several books and research papers on hardiness and related topics. She is first author on the *HardiTraining*(books.

Salvatore R. Maddi, Ph.D. received his Ph.D. in clinical psychology from Harvard University in 1960. He has taught at the University of Chicago and the University of California, Irvine. He has published many books and papers on stress mastery, performance, and health. He founded the Hardiness Institute in 1984. He is a fellow of the American Psychological Association, who also conferred on him an International Award for lifetime contributions to consulting psychology. Wiley's *Encyclopedia of Psychology* includes his biography as among the memorable psychologists and psychiatrists. The recipient of a Fulbright Fellowship and several visiting professorships, he was designated Distinguished Wellness Lecturer in 1994 by the University of California and HealthNet and given an lifetime achievement award in 2000 by the International Network on Personal Meaning for his work on hardiness and positive meaning.

Carmen Moran, Ph.D., is a registered psychologist and currently head of school in Social Work at the University of New South Wales, Sydney, Australia. She has held a variety of academic positions and has worked a psychologist treating anxiety disorders. Her research interests are based around stress, and coping, and within this framework she has studied and published in the areas of anxiety disorders, stress and coping in the emergency services, and humor as a coping strategy in extreme environments. Her interest in humor as a coping strategy arose from both her observations and applications in clinical practice and her concern that research on stress often looked at poor coping rather than good coping. It has been a natural progression from research on humor and coping to the study of resilience.

Douglas Paton, Ph.D., is an associate professor in the School of Psychology at Massey University, New Zealand. He is the founding editor of the *Australasian Journal of Disaster and Trauma Studies*. He has written extensively on stress and traumatic stress in emergency services and emergency management groups and consults on staff and organizational development to

emergency organizations. His current research is concerned with the longitudinal analysis of stress in police services and on stress in incident commanders and other disaster response personnel, and in urban search-and-rescue groups.

Roy L. Payne, Ph.D., graduated in psychology at Liverpool University. Prior to taking up the position as professor of organizational psychology at Curtin University of Technology, Perth, W. Australia in 1997, he was professor of organizational behavior at Manchester Business School. He has publications in major international journals on organizational structure and climate/culture in particular, and he has also published extensively in the occupational stress area. The latter include four books coedited with Cary L. Cooper that are widely cited in the occupational stress literature. These remain active interests as well as more recent work on trust in organizations. He has done research and consulting for major organizations in both the public and the private sector.

Clare Pollock, Ph.D., received her Ph.D. in psychology from the University of London and is currently a senior lecturer in psychology at Curtin University of Technology in Perth, Western Australia. Her research interests include cognitive ergonomics, human-computer interaction, human error, shift work, and computer-supported cooperative work. More recently she has been applying this expertise to human factors problems arising in response to crises and emergency situations and has been involved in the analyses of several natural and technological crisis events. She has published numerous book chapters and articles in these areas.

Jane Shakespeare-Finch, Ph.D., is on the faculty at the Queensland University of Technology in Brisbane, Australia. She teaches in the areas of trauma and personality and is a researcher within the Center for Accident Research and Road Safety-Queensland (CARRS-Q). Previous experience in caring for children in crisis and a lengthy association with the Queensland Ambulance Service have provided the impetus for her research on positive change resulting from experiencing traumatic events, and the role of personality and coping factors in predicting posttrauma outcomes.

Leigh M. Smith M.A., is head of the School of Psychology at Curtin University of Technology in Perth, Western Australia. His main research foci are the development and application of research techniques and data analysis in applied settings, measurement theory, and the construction of psychological response scales. He is interested in psychological well being at work, and in particular the relation between organizational practices and the mental health of workers.

Richard G. Tedeschi, Ph.D., is a professor of psychology at the University of North Carolina and Charlotte. He is a clinical psychologist whose work focuses on traumatic loss, bereavement and posttraumatic growth. He is co-author of *Trauma and Transformation: Growing in the Aftermath of Suffering* (1995), *Facilitating Posttraumatic Growth: A Clinician's Guide* (1999), and coeditor of *Posttraumatic Growth: Positive Changes in the Aftermath of Crisis* (1998).

John M. Violanti, Ph.D., is a full professor at the Rochester Institute of Technology (RIT) Rochester, New York, and an associate clinical professor at the University of Buffalo School of Medicine and Biomedical Sciences, Department of Social and Preventative Medicine. He has focused the majority of his work on police trauma and suicide. He is the author and coauthor of numerous journal articles and five other books on those topics.

We dedicate this book to the police officers, firefighters, rescue workers, and emergency personnel who without regard for their own safety faced the brutal terrorist attack on New York City and Washington, D.C. We owe a debt of gratitude for the service of these brave men and women. Our sincere condolences to the survivors of those who perished as a result of their bravery. We sincerely hope that the sacrifices made will ensure the future of freedom throughout the world.

FOREWORD

“*The Real Professionals Are Just Fine.*” That is what Police Lieutenant John P. King tells us. Lt. King has been a police officer for many years and has experienced many traumatic incidents.

Following is Lt. King’s analysis of police and emergency worker resiliency:

In watching the television news one day, I observed an interview with a person offering his services to the Police and Fire departments to “debrief” our personnel regarding a fatal auto accident that occurred in the early morning hours on that day. I don’t *know* this person, nor have I had any contact with him, nor will I have any contact with him. The officers who experience disturbing incidents almost every day at work are just fine, and if anyone of us did want or need some type of stress counseling or “debriefing” we have our own Employee Assistance Program available to us. I have no problem letting people *know* that in the past I have utilized our EAP and it is nothing short of extraordinary.

In our job as professional law enforcement officers, we are confronted with frightening sights and terrifying incidents on a regular basis. That is why this job is not for everyone. In this job you must have the dedication, sincerity, integrity, compassion, and professionalism to get the job done, no matter what the circumstances. “The Job,” that is what we term what we as police do, entails many things. Sometimes we are called upon to give aid to citizens, sometimes we are called upon to settle disputes, and sometimes we are called upon to break up fights. There are times we are involved in high-speed pursuits, and there are times we are attacked and beaten. Then there are times when we are in dark yards, alleys, or buildings, searching for drug dealers, persons with guns, rapists, robbers, felons wanted on warrants, the list goes on and on. Whatever the circumstances or the conditions, you must do the job and keep your wits about you, or you become a liability, or a victim yourself. Then one of the true professionals will have to be taken away from the task at hand in order to assist you.

That is why police officers become the professionals that they are. They have been well trained and have developed their skills through practical use of their training. Also, they have experienced all types of tragedy, catastrophe,

violence and witnessed untold horrors throughout their careers. In so doing, these officers have developed the skills and fortitude that it takes to handle the extremely varied incidents that they are put into on a day-to-day basis.

I assume that most mental health professionals are sincere in offering their services to emergency workers. I would not fault anyone for that. But in the future, it would be better to check with the people in question to see if they want or need that service. I believe that unnecessary and sometimes unwanted “debriefings” could lead the public to believe that the men and women police officers might not be up to doing their jobs. This is simply not the case. I have been a senior supervisor at many incidents, and I can tell you first-hand that all personnel from all agencies conduct themselves with the utmost professionalism. I am proud of them all and I generally tell them that at the time.

In closing, it must always be necessary to check with those involved before you “debrief” or speak for them or on their behalf. They may not need such services. Finally, let me reiterate. The police are just fine, thank you.

Lt. John P. King, “E” District,
Buffalo, NY Police Department¹

Lt. King’s remarks echo the theme of this book: resiliency . Resiliency is the basis of keeping emergency, disaster workers, and others exposed to trauma “protected” from posttraumatic stress disorder (PTSD). Attention in this regard has focused on how some people and even entire groups or organizations, can “bounce back” from trauma, and in some cases, experience growth. As described in Lt. King’s comments, there should be a realization that professionals such as police officers, firefighters, and emergency services personnel handle such events very well. We have only to look to the recent New York City and Pentagon terrorist disasters as an example. Emergency personnel reacted in a professional manner and helped to keep order in one of the most horrible incidents to ever have occurred in the United States. It is to them that we owe a debt of gratitude, and a commitment to understand the amazing resilient nature of their responses to the tragedies of life. This book may help to open the door to such understanding.

John M. Violanti
Douglas Paton
Leigh M. Smith

1. Used with permission.

PREFACE

Assumptions of an automatic link between exposure to adverse events such as traumatic incidents and disasters and the development of dysfunctional or pathological traumatic stress reactions are being increasingly challenged. Such suppositions are being replaced by the belief that many people and groups can, following exposure to hazardous or adverse situations, display remarkable levels of resilience. That is, they can readily regain prior levels of functioning, “bounce back” or adapt, and in some cases experience personal growth, as a consequence of their adverse experience.

Despite growing empirical support for this reality, this paradigm has yet to be fully assimilated within the fabric of mainstream mental health research and practice. Nor has it been encapsulated within the culture or staff and organizational development strategies within “high risk” (e.g., law enforcement, fire service, health care, emergency management) professions. One reason for this has been the lack of a comprehensive source that presents relevant research findings and practices in a form that assists understanding this complex phenomenon and that provides direction for the practical application of the ensuing recommendations.

This book provides a systematic review of the variables and mechanisms that underpin resilience and growth in professions who face a high risk of regular and repetitive exposure to adverse or hazardous events. Given the inevitability of this exposure, promoting the acceptance and practice of this paradigm is essential for facilitating the capability of emergency responders to adapt to, and if possible to grow from, adverse and hazardous experience.

By identifying salient dispositional, cognitive, group, organizational, and environmental predictors of resilience and articulating the mechanisms that link them to adaptive and growth outcomes, emergency organizations will have the capacity to intervene prior to exposure to adverse events, rather than waiting until after the event, as is currently the norm. This book thus adopts an approach that is fundamentally preventative in nature and offers practical suggestions to support the development of resilient capabilities. By describing influences on this capability that cover the person, the organization, and factors external to the workplace, it offers a more ecologically com-

prehensive approach to those working in this area. In addition, it offers a more comprehensive framework for this work by drawing on constructs (e.g., trust, empowerment) that would ordinarily lie outside mainstream traumatic stress research.

The contents of this book provide a theoretically and empirically rigorous knowledge base and intervention framework capable of mitigating negative reactions, facilitating adaptation in the face of adversity, and enhancing the likelihood that adverse and traumatic work experiences will enrich the personal and professional lives of those who dedicate themselves to protecting and safeguarding others. When this happens, their capability for dealing with hazardous and adverse work experiences will increase substantially, as will confidence in the planning that precedes their deployment to deal with the emergencies and disasters that are all too frequent facets of the working lives of emergency, law enforcement, and helping professionals.

Douglas Paton
John M. Violanti
Leigh M. Smith

CONTENTS

	<i>Page</i>
<i>Foreword</i>	xiii
<i>Chapter</i>	
1. POSTTRAUMATIC PSYCHOLOGICAL STRESS: INDIVIDUAL, GROUP, AND ORGANIZATIONAL PERSPECTIVES ON RESILIENCE AND GROWTH	3
<i>Douglas Paton, John M. Violanti, and Leigh M. Smith</i>	
Introduction	3
Resilience and Growth	4
The Nature of Resilience	5
Predictors of Resilience	7
References	10
2. ROUTES TO POSTTRAUMATIC GROWTH THROUGH COGNITIVE PROCESSING	12
<i>Richard G. Tedeschi and Lawrence G. Calhoun</i>	
Introduction	12
Terms and Constructs Related to Posttraumatic Growth	13
Events Preceding Posttraumatic Growth	15
Domains of Posttraumatic Growth, and Their Paradoxes	15
Models of Posttraumatic Growth	16
Rumination and Posttraumatic Growth	17
Negative Patterns of Rumination	18
Moving from Negative to Positive Processing	18
Positive Patterns of Rumination	19
Talking About the Ruminations	19
Some Empirical Evidence for Rumination-Growth Relationships ..	20
Implications for Helpers	21
References	22

3. A TRAIT APPROACH TO POSTTRAUMA VULNERABILITY AND GROWTH	27
<i>Carmen Moran and Jane Shakespeare-Finch</i>	
Introduction	27
The Five-Factor Model (FFM)	28
Neuroticism	28
Extraversion	28
Openness to Experience	29
Agreeableness	29
Conscientiousness	29
An Integrative Approach to the FFM	30
Optimism	31
Hope	31
An Indirect Pathway?	32
Humor	32
Defining Humor in the Context of Coping	33
Humor Theories	33
Sense of Humor	35
Humor and Coping	36
Humor and Personality	36
Humor and the FFM	37
Relevance of Humor Theories to Understanding Coping	37
Conclusion	39
References	39
4. HARDINESS TRAINING FOR RESILIENCY AND LEADERSHIP	43
<i>Salvatore R. Maddi and Deborah M. Khoshaba</i>	
Introduction	43
What is Hardiness?	43
How was Hardiness Discovered?	45
Hardiness Assessment	47
Answering Methodological Criticism	47
Further Studies on Performance, Conduct, and Health	49
Construct Validity Studies	49
Hardiness Training	51
The Evolution of Hardiness Training	53
Hardiness in Military and Safety Organizations	54
Conclusions	55
References	55

5. HARDINESS AS A RESILIENCY RESOURCE UNDER HIGH STRESS CONDITIONS	59
<i>Paul T. Bartone</i>	
Introduction	59
What is Hardiness?	60
Stressors in Modern Military Operations	61
Hardiness: A Resiliency Factor in Military Groups	63
How Hardiness Works, and How it Develops	64
Leaders Can Apply the Power of Hardiness	67
The Hardy Transformational Leader	68
A Case Study on Hardy Leader Influence	69
Conclusion	70
References	71
6. TEAM RESILIENCE	74
<i>Clare Pollock, Douglas Paton, Leigh M. Smith, and John M. Violanti</i>	
Introduction	74
The Nature of Emergency Teams	75
Preparation for Resilience	76
Sense of Identity	76
Team Structure and Management	77
Resilience During an Emergency	78
Team Mental Models	79
Situational Awareness	81
Post-emergency Resilience	82
Group Cohesion	82
Social and Peer Support	83
Communal Coping	83
Postevent Thriving	84
Conclusions	84
References	85
7. TRAINING FOR RESILIENCE	89
<i>Clare Pollock, Douglas Paton, Leigh M. Smith, and John M. Violanti</i>	
Introduction	89
Training to Cope	90
Training for Communication and Decision Making	91
Crew Resource Management	91
Team Mental Model Training	93
Communication Training	94

Organizational Training	94
Emergency-Specific Training	96
Putting Ideas into Practice	96
Training Needs Analysis and Simulation	98
Simulation and Mental Models	99
Conclusion	100
References	101
8. BUILDING PSYCHOLOGICAL RESILIENCE: LEARNING FROM THE SOUTH AFRICAN POLICE SERVICE	103
<i>Merle Friedman and Craig Higson-Smith</i>	
Introduction	103
Challenges to Policing in South Africa	104
The search for solutions	106
Hardiness and Sense of Coherence	106
Denial	107
Dissociation and Psychic Numbing	107
Social Support	108
Resilience in the South African Police Services	108
Understanding Psychological Resilience	110
Negative Resilience	112
Disenfranchised Distress	112
Positive Resilience	114
References	115
9. SENSE OF COHERENCE IN MANAGING TRAUMA WORKERS	119
<i>Christine Dunning</i>	
Introduction	119
Prevailing intervention modes: Pre- and Postevent	120
What Else Might Work?	121
Empathy	121
Sense of Coherence	124
Organizational Sense of Coherence	125
Conclusion	132
References	133

10. ENVIRONMENTAL RESILIENCE: PSYCHOLOGICAL EMPOWERMENT IN HIGH-RISK PROFESSIONS	136
<i>Peter Johnston and Douglas Paton</i>	
Introduction	136
Sustaining Individual Resilience	136
Empowerment	137
Relational Approach to Empowerment	138
Motivational Approach to Empowerment	139
Modeling Empowerment	143
Assessing Empowerment	144
Conclusion	146
References	148
11. THE PROCESS OF TRUSTING: ITS RELEVANCE TO VULNERABILITY AND RESILIENCE IN TRAUMATIC SITUATIONS	152
<i>Roy L. Payne and Murray Clark</i>	
Introduction	152
An Elaborated Conceptual Framework	153
General Orientation	156
Specific Orientation	157
Environmental Influences on Subjective Trust	159
Familiarity	159
Situational Cues	160
A Typology of Intentional Trust	160
Dependency	161
Reliance	161
Confidence	162
Faith	162
Linking Intention To Trust and Behavioral Trust	164
Conclusions	166
References	167
12. THE FAMILY: RESILIENCE RESOURCE AND RESILIENCE NEEDS	170
<i>Jane Shakespeare-Finch, Douglas Paton, and John M. Violanti</i>	
Introduction	170
The Work-Family interface	170

Operational Demands and Family Functioning	172
Implications and Future Research	174
Family Separation	175
Predeployment	175
Deployment	176
Return and Reintegration	177
The Police Culture and Surviving Spouses	178
Implications for Intervention and Treatment	181
References	182
13. RISK RESPONSE MODEL	186
<i>Leigh M. Smith and John M. Violanti</i>	
Introduction	186
Modeling Resilience	187
Factors Influencing Outcome	190
Outcomes	195
Methodological Considerations	199
Conclusion	201
References	201
14. RESILIENCE AND GROWTH IN HIGH-RISK PROFESSIONS: REFLECTIONS AND FUTURE DIRECTIONS	204
<i>Douglas Paton, John M. Violanti, and Leigh M. Smith</i>	
Introduction	204
Resilience and Growth	205
Future Research Issues	206
Resilience Intervention	207
Conclusion	208
References	209
<i>Name Index</i>	211
<i>Subject Index</i>	219

**PROMOTING CAPABILITIES TO
MANAGE POSTTRAUMATIC STRESS**

Chapter 1

POSTTRAUMATIC PSYCHOLOGICAL STRESS: INDIVIDUAL, GROUP, AND ORGANIZATIONAL PERSPECTIVES ON RESILIENCE AND GROWTH

DOUGLAS PATON, JOHN M. VOILANTI, AND LEIGH M. SMITH

*On the occasion of every accident that befalls you, remember
to turn to yourself and inquire what power
you have to turn it to use.*

Epictetus 60–120A.D.

INTRODUCTION

Despite a long history of focusing on the pathological outcomes that can accompany exposure to adverse events such as traumatic incidents and disasters, recent decades have witnessed a progressive realization that such outcomes are not inevitable. Attention in this regard has focused on why and how some people and groups, following exposure to hazardous or adverse situations, can regain prior levels of functioning, “bounce back” or adapt, and in some cases experience personal growth. In this text we use the term “resilience” to refer to the former and “growth” to describe the latter.

What is surprising about the revelations emerging from these more searching analyses of how people experience their encounters with adversity is not that psychological resilience and growth can result from exposure to even extreme adversity, but that, as evinced by the quote from Epictetus, it has taken so long for these possibilities to become subjects for rigorous scientific study. It would appear that this lesson of history has been neither learned

nor accommodated within the fabric of mainstream mental health research and practice.

The objective of this book is to begin the systematic analysis of variables and mechanisms that underpin resilience and growth in professions (e.g., law enforcement, fire service, health care, and emergency management) who face a high risk of regular and repetitive exposure to adverse or hazardous events (Paton & Violanti, 1996; Violanti & Paton, 1999; Violanti, Paton & Dunning, 2000). Given the inevitability of this exposure, we owe it to those who dedicate their lives to protecting and safeguarding others to facilitate, as far as possible, their capability to adapt to, or bounce back from, adverse experience and to maximize the likelihood that such exposure contributes to enriching their personal and professional lives. The first step in this process involves defining the core constructs.

RESILIENCE AND GROWTH

Resilience we define as the capacity of individuals, communities and organizations, and the systems that facilitate their performance to maintain relationships and balance between elements in the presence of significant disturbances because of a capability to draw on their resources and competencies to manage the demands, challenges, and changes encountered. Resilience describes a capability for “bouncing back” following exposure to adversity. Implicit within this definition is the notion that individuals, groups, and organizations can return to prior levels of functioning. We are also interested in adaptative processes that are marked by growth. Here we adopt Tedeschi and Calhoun’s (Ch. 2) definition of posttraumatic growth (PTG) as a significant beneficial change in cognitive and emotional life beyond previous levels of adaptation, psychological functioning, or life awareness that occur in the aftermath of psychological traumas that challenge previously existing assumptions about self, others, and the future.

Although conceptually distinct, a relationship between resilience and growth can be envisaged. For example, Kumpfer (1999) described a resilience process model that links diverse personal, group, and environmental resources with the following outcomes: resilient reintegration (which corresponds to the definition of growth used earlier); homeostatic reintegration (which corresponds to the definition of resilience presented previously); maladaptive reintegration (which represents increased vulnerability); and dysfunctional reintegration. This suggests that, in addition to identifying resilience factors, we must also consider their relationship with adaptational and growth outcomes. Where possible, authors allude to this relationship in

their respective chapters, with the issue being dealt with in detail by Smith and Violanti (Ch. 13).

The need to distinguish between growth and distress outcomes represents another theme emerging from more critical analyses of how adverse events are experienced. For example, Hart and Wearing (1995) demonstrated that, following a review of their work on stress in police officers, that distress and well-being were separate, orthogonal constructs, each influenced by discrete sets of factors. While considerable effort has been expended on investigating the precursors of loss and pathological outcomes, less emphasis has been placed on resilience and growth in those regularly exposed, in a professional capacity, to adverse events. It is the predictable, regular, and repetitive aspect of the work experience of high-risk professions that makes understanding resilience and growth so important. If we can identify salient predictors of resilience and can articulate the mechanisms that link them to adaptive and growth outcomes, we will be in a better position to intervene to enhance this capacity prior to exposure to adverse events.

The Nature of Resilience

The first stage in this process involves describing the variables that have been demonstrated, or hypothesized, to facilitate resilience and growth, and evaluating their actual or potential contribution in this regard. In this book we consider this issue from dispositional, cognitive, group, and environmental perspectives (Fig. 1.1). Dispositional resilience reflects how personal characteristics (e.g., hardiness) affect adjustment. This concept is amenable to application in organizational contexts through selection and assessment. The cognitive component is concerned with the individual's sense of coherence and meaning. In organizations, training and development strategies, and the overarching culture of the organization, represent means for facilitating a capability to impose coherence and meaning on atypical, adverse experiences. Although emergency workers may work on their own, it is more likely that they will find themselves working in teams, usually with members of their own profession, but often with members of other professions. Consequently, we must examine the factors that influence group or team resilience. The final element, the environmental characteristics and practices required to foster and sustain resilience, can be cultivated through, for example, organizational design and management development strategies that create practices, procedures, and a culture that mitigate adverse consequences and maximize potential for adaptation and posttraumatic growth.

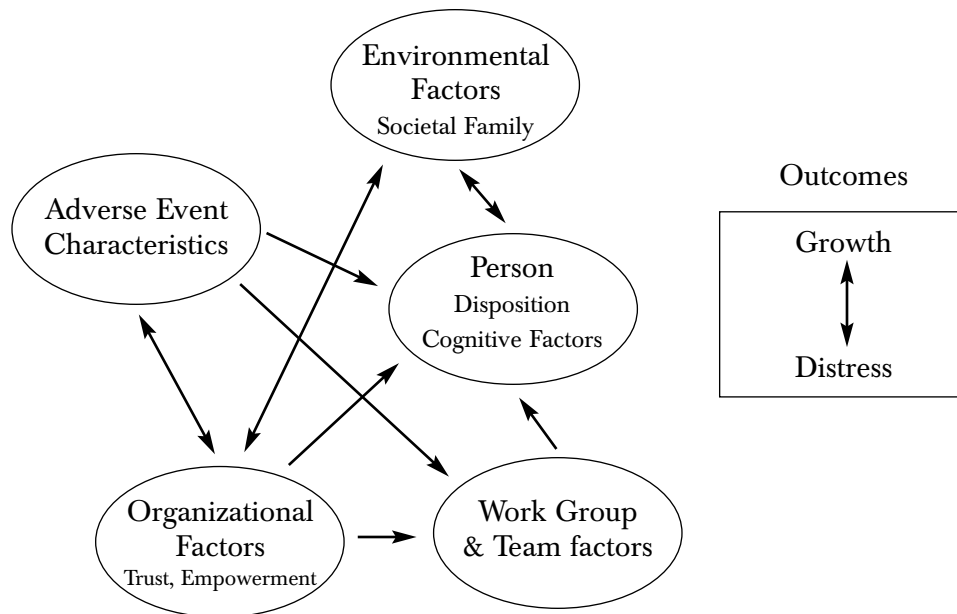


Figure 1.1. Adverse event characteristics interact with personal, group, and environmental resilience and vulnerability factors to influence growth and distress outcomes.

Although personality and cognitive factors have been readily accommodated within clinical models that tend to define traumatic stress reactions as resulting from the interaction between person and event, the possibility of organizational-level factors acting in a causal capacity has not enjoyed similar levels of attention in clinical models.

Recent work, however, is increasingly suggesting not only that the organizational environment can exercise a powerful influence on the manner in which emergencies and disasters are experienced, but it may be the most important. For example, Eränen, Millar, and Paton (1999) demonstrated that “perceptions of organizational climate” was the most important predictor of stress responses in search-and-rescue workers following the sinking of the Estonia ferry. Paton, Smith, Ramsay, and Akande (1999), following a multi-dimensional scaling analysis of the structural relationships between Impact of Event Scale items in firefighters, demonstrated that organizational characteristics superseded event characteristics as determinants of traumatic stress reactions. Paton (1994) described how workplace procedures affected resilience to adverse events in firefighters. Alexander and Wells (1991) concluded that a supportive managerial culture played a prominent role in facilitating resilience in police officers performing body recovery duties. Finally,