Peter Y. Chen

Advances in Psychotherapy –
Evidence-Based Practice

Occupational Stress

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About the Author

Peter Y. Chen, PhD, was awarded a doctoral degree in 1991 from the University of South Florida with a major in industrial and organizational psychology. He is a professor of psychology at Auburn University, a fellow of the Society for Industrial and Organizational Psychology, past editor of the *Journal of Occupational Health Psychology*, and past president of the Society for Occupational Health Psychology. He has published more than 100 articles and two books, and his work has been cited over 10,000 times. One of his articles was deemed one of the eight most influential papers in the *Journal of Organizational Behavior*. In addition, he was ranked 29th among the most-cited authors between 2000 and 2004, in 30 management journals. The overarching aim of his research is to understand the process of change at the individual, organizational, community, and industry levels, and to develop ways to facilitate changes, with the goal of building a healthy workplace and society.

Advances in Psychotherapy – Evidence-Based Practice

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Dedication

To my wife, Minehwa, for her unconditional support and love over 40 years.

To my son, Liwei, for his understanding and acceptance of who I am.

To my granddaughter, Marisol, for the joys she has brought to my life, and the time she spent with me while I was writing this book.

Contents

Preface

I started the journey of studying occupational stress when I was a graduate student. Immersed in theories, hypotheses, data analyses, and publications, I rarely spent time worrying about the employees behind each datapoint I collected ... until 1999.

Fast forward to 2007, Prof. Irvin Schonfeld asked me, as president of the Society for Occupational Health Psychology, to write an article in its inaugural newsletter. In the article, I reflected on what I had learned that day in 1999.

It was a colorful New England fall afternoon. A colleague stopped by my office and told me he had lost his job due to company-wide layoffs. He had worked at this company for about 20 years, and it had been his first job after he graduated from university. I walked with him in the company garden, and listened to him as he expressed frantic disbelief, anger, and fear. After approximately 30 minutes had passed, he told me his stomach was starting to ache badly. His physical and emotional pain struck me hard that day!

This incident and its impact, which I witnessed more than 2 decades ago, is one of the main reasons I decided to write this book that provides scientific reviews of the evidence regarding occupational stress, and which offers practical as well as evidence-based preventive management strategies to combat different job stressors (e.g., workplace misstatement, work–family conflict) that employees inevitably face daily.

Peter Y. Chen
May 2023
Auburn, Alabama

The second study showed that an increase of daily stressful events was related to a smaller number of antibodies found in saliva (Stone et al., 1994). Middle-aged men in the study reviewed 80 events that had occurred in the past 24 hrs for up to 12 weeks. Each event was rated daily on a scale from extremely desirable to extremely undesirable. Results showed that an increase in desirable events was positively associated with an increase in antibodies. In contrast, there is a negative relationship between the number of undesirable events and antibodies. Interestingly, while the research team investigated events classified by content (e.g., work, leisure, household), they found a negative relationship between undesirable events at work and antibodies, but there was no relationship between desirable events at work and antibodies. Overall, both studies provide convincing causal evidence that stressful events likely adversely affect our well-being.

1.1.3   Job Stressors

Work conditions play a vital role in shaping people's perceptions. Yet, the same work condition (e.g., being given a lot of responsibilities to organize workflows) may be perceived as stressful by one individual but not by another. Therefore, it is important to recognize the important role of personal appraisal, perception, and/or interpretation of work conditions, and distinguish between work conditions and perceived work conditions, while studying job stressors, defined as work conditions *appraised* to be stressful, threatening, or harmful. It is *perceived* stressful work conditions (being appraised as such) that I will focus on in this book.

Chronic and Acute Job Stressors
Job stressors can be classified into two categories based on the duration and frequency of stressful events: *chronic job stressors* and *acute job stressors*. Chronic job stressors can further be classified as *chronic intermittent job stressors* and *chronic prolonged job stressors* (Chen, 1991). Chronic intermittent job stressors occur periodically – for example, having a weekly meeting with a rude colleague. In contrast, chronic prolonged job stressors persist continuously for a long period of time, such as having an abusive supervisor who often yells at their subordinates.

There are two types of acute job stressors: *acute time-limited job stressors* and *acute sequential job stressors* (Chen, 1991). Acute time-limited job stressors appear during a very short period, such as during an explosion in a factory, or the temporary closure of a restaurant due to a natural disaster. Acute sequential job stressors emerge over an extended period as the result of initial events. For example, using the example of an explosion in a factory, employees may need to work at unusually high speeds to make up for production losses, or with regard to a restaurant closure, the business may face unexpected financial challenges.

2

Theories and Models

What work conditions and organizational characteristics pose threats to or harm people's well-being? How are these conditions and characteristics perceived or appraised to be stressful? How does exposure to these conditions and characteristics adversely affect people's well-being and organizational growth? To what extent are these adverse effects attributed to work conditions and organizational characteristics, people, or interactions between situations and people? What are the scientific approaches that can reduce or amend these conditions and characteristics, or minimize the adverse effects of these conditions and characteristics? These are just a few very important questions that are explored in Chapters 3 and 4 via the lens of major occupational stress theories, including role stress theory (Kahn et al., 1964), transactional theory (Lazarus & Folkman, 1987), person–environment fit (PE fit) theory (Caplan, 1987), the effort–reward imbalance model (Siegrist, 1996), the demands–control model (Karasek, 1979), the demands–control–support model (Johnson & Hall, 1988), and the job demands–resources (JD-R) theory (Demerouti et al., 2001).

2.1   Role Stress Theory

Role stressors occur when role-related activities are disrupted

Employees hold a variety of roles where they are expected to fulfill formal job responsibilities and duties. For instance, a human resources specialist plays the role of recruiting job applicants, selecting qualified job applicants, hiring employees, maintaining and processing paperwork (e.g., hiring, termination, retirement, transfer, promotions), addressing employee relation issues (e.g., harassment complaints), or maintaining current knowledge of employment guidelines and laws. They may also be expected to play a nonprescribed role such as helping a newcomer, being a good organizational citizen, being a hard worker, maintaining strong social networks, and so on. In addition, they have other expected roles outside of the work domain, such as being a daughter, a wife, a mother, a volunteer, a friend, a political party member, or a community member, etc. These multiple roles become the core of our identities, and partially shape our values, attitudes, beliefs, and behaviors. The more diverse our roles and the more tasks that are assigned to us, the more our identities are formulated, and the greater the difficulty in being able to juggle the responsibilities of numerous roles at the same time (Stryker &

Table 3
Estimated Correlations of Workload With Individual and Organizational Outcomes

Outcome	Workload	Source
Affective commitment	−.11	Bowling et al. (2015)
Job satisfaction	−.22	Bowling et al. (2015)
Absenteeism	.07	Bowling et al. (2015)
Depression	.22	Bowling et al. (2015)
Distress	.26	Bowling et al. (2015)
Fatigue	.30	Bowling et al. (2015)
Emotional exhaustion	.49	Alarcon (2011)
	.47	Bowling et al. (2015)
Cynicism	.31	Alarcon (2011)
	.33	Bowling et al. (2015)
Reduced personal accomplishment	.11	Alarcon (2011)
	.12	Bowling et al. (2015)
Physical symptoms	.30	Bowling et al. (2015)
Physical symptoms (cross-sectional analyses)	.22	Nixon et al. (2011)
Physical symptoms (longitudinal analyses)	.16	Nixon et al. (2011)
Poor global health	.27	Bowling et al. (2015)
Poor mental well-being	.30	Bowling et al. (2015)
Strain	.36	Bowling et al. (2015)
Turnover intention	.16	Bowling et al. (2015)

3.3.1 Workplace Telepressure

A new form of workload – *workplace telepressure* – results from advancement of information and communication technologies. It arises when using asynchronous communications, such as voice mails, emails, and texts, which are supposed to offer flexibility and convenience, but instead often require immediate attention and responses. This type of pressure can also result from synchronous communications, such as via Zoom or Microsoft Teams, occurring in different time zones. People are often expected to quickly make decisions and respond to inquiries and requests from clients, coworkers, or supe-

3.8   Workplace Mistreatment

Being *mistreated at work* by others, including coworkers, customers, subordinates, or supervisors, is considered a major job stressor that disrupts an individual's capacity to regulate their actions. People experiencing mistreatment are uncertain if their work activities matter to their jobs. Mistreatments themselves are clearly obstacles that prevent people from engaging in their daily work activities and maximizing their talents to excel, and often lead to anxiety, frustration, resentment, depression, low self-esteem, burnout, negative reactions, withdrawal behaviors, or even hopelessness. Being exposed to mistreatments further drain individuals' energies and resources and overtaxes their capacities to deal with mistreatment incidents and sources of mistreatment incidents while engaging in work activities at the same time.

Workplace mistreatment reflects the dark side of human behaviors in organizations. Prevalence of workplace mistreatment is often shaped by an organizational climate – *mistreatment climate* – which refers to organizational policies, procedures, and practices that either encourage, ignore, or deter mistreatment behaviors (Yang et al., 2014). A meta-analysis by Yang et al. (2014) has shown that a climate that deters workplace mistreatment is strongly associated with increased job satisfaction and organizational commitment, and a decrease in turnover intention, emotional strains, physical strains, and physical and nonphysical aggression, as well as incidents of incivility.

There are different types of workplace mistreatment, such as social undermining, incivility, workplace ostracism, bullying, mobbing, workplace aggression, interpersonal conflict, deviance, antisocial behavior, emotional abuse, abusive supervision, harassment, and discrimination. Hershcovis (2011) suggested that the above mistreatment behaviors can generally be classified via one or more dimensions: intensity (minor to severe), frequency, types of perpetrators (e.g., abusive supervisor or bullying coworkers), intention attribution (e.g., nonintentional acts, ambiguous intent, or intentional acts), as well as outcomes to be affected (e.g., relationship, reputation, or success).

For instance, *social undermining* occurs when individuals' abilities to pursue success are intentionally hindered by others; *workplace ostracism* occurs when individuals are inappropriately ignored, rejected, or excluded by others; *uncivil behaviors* are low-intensity verbal or nonverbal deviant behaviors with an ambiguous intent to hurt people; and *bullying* involves negative acts directed at targeted individuals repeatedly and regularly over time. Regardless of the type of workplace mistreatment, being mistreated at work is a risk to individuals' psychological and physical well-being, and tends to lead to job dissatisfaction, poor job performance, frequent absence, high turnover intention, low commitment to the organization (Hershcovis, 2011; Nielsen & Einarsen, 2012), and even retaliatory behaviors to reduce the harmful effects of mistreatment (Liang et al., 2022).

Hassard et al. (2018b) estimated that annual costs attributed to workplace aggression range from US $114.64 million to $35.9 billion (adjusted to 2014

There are four different but essential recovery experiences that employees can practice during off-job time or breaks at work through a variety of activities (Sonnentag & Fritz, 2007) to increase psychological detachment, relaxation, mastery, and control. *Psychological detachment* refers to a person's ability to physically or mentally distance and disengage themselves from their jobs. People with a high level of psychological detachment tend not to be occupied by work duties, do not think about work-related problems or challenges, and do not engage in job related activities. *Relaxation* is a mental state characterized by ease, calm, and low sympathetic activation. This state tends to reduce physical and mental arousal or activation of the psychophysiological system, increase positive affect, and reduce job strain experiences.

Mastery generally occurs when people engage in non-job-related activities that provide intellectual challenges or learning opportunities. Although activities that foster mastery may put additional demands on people, these activities do not necessarily overtax their capabilities or become burdens. Instead, these activities help people acquire news skills, increase their sense of competency, and distract them from any negative experience attributed to work. Finally, *control* refers to a sense of autonomy – people can decide for themselves when and how to spend their time, and engage in off-work activities that meet their needs.

Two meta-analyses highlight the important role of recovery experiences in relation to increased mental well-being, positive affect, life satisfaction, vigor, and decreased negative affect and fatigue (Bennett et al., 2018; Steed et al., 2021). For readers' convenience, key strategies applicable to fostering psychological detachment, relaxation, mastery, and control experiences are summarized in Box 1.

> **Recovery experiences replenish depleted resources, gain new resources, or stop resources loss**

Box 1
Strategies to Foster Four Different Recovery Experiences

Detachment Experiences

- Triage and prioritize urgent and important work and home demands.
- Use skills and availability of other people to help maintain work and home boundary.
- Use technology to facilitate boundary between work and home domain.
- Leave office materials at work.
- Get away from home (e.g., retreat to a remote area).
- Block off segments of time.
- Erect physical borders or physical distance between work and nonwork domains.
- Separate work artifacts from home artifacts (e.g., home calendars, keys, photos, mail).
- Set up expectations in advance of off-job hours (e.g., no email or voice mail contact).
- Engage in physical activities (dancing, jogging, swimming, etc.).
- Socialize with friends.
- Use Ellis's ABC thought awareness exercise to regulate emotions (Ellis, 1977).

Table 10
Samples of Family Supportive Supervisor Behaviors

Support behavior	Examples
Emotional support	Empathically listen to subordinates' problems in juggling work and nonwork life.
	Take the time to learn about subordinates' personal needs.
	Make subordinates feel comfortable talking about their conflicts between work and nonwork.
	Talk to subordinates effectively to solve conflicts between work and nonwork issues.
Instrumental support	Help subordinates resolve scheduling conflicts (e.g., give them time off).
	Make sure subordinates' work responsibilities can be handled when they have unanticipated nonwork demands.
	Work with subordinates to creatively solve conflicts between work and nonwork.
Role model	Be a good role model for maintaining a work and nonwork balance (e.g., take a day off to meet a personal need).
	Demonstrate and share effective behaviors in how to juggle between work and nonwork demands.
	Demonstrate how a person can be successful on and off the job.
Creative work–family management	Think about how the work can be organized to benefit both subordinates and organizations.
	Ask for suggestions to make it easier for subordinates to balance work and nonwork demands.
	Creatively reallocate job duties to help subordinates work better as a team.
	Manage all subordinates as a whole team to enable everyone's needs to be met.

Adapted from Hammer et al., 2009.

3-hr face-to-face training session, a trainer provides educational information about the individual and organizational benefits of reducing work–family conflict (e.g., well-being and job performance); ways of reducing workfamily conflict by utilizing organizational resources, such as increasing family-supportive supervisor behaviors and worklife policies; levels of family supportive supervisor behaviors perceived by participants' subordinates; and definitions and examples of the four types of family-supportive supervisor behaviors (Hammer et al., 2009).

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Appendix: Tools and Resources

The following materials for your book can be downloaded free of charge once you register on the Hogrefe website:

Appendix 1: Self-Report Outcome Measures
Appendix 2: Self-Report Resource Measures
Appendix 3: Self-Report Job Stressor Measures

Appendix 1: Self-Report Outcome Measures

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Physical Self-Report Outcome Measures

Physical and Mental Health

Frone, M. R. (2007). Obesity and absenteeism among U.S. workers: Do physical health and mental health explain the relation? *Journal of Workplace Behavioral Health, 22,* 65–79. https://doi.org/10.1080/15555240802157403

Veit, C. T., & Ware, J. E., Jr. (1983). The structure of psychological distress and well-being in general populations. *Journal of Counseling and Clinical Psychology, 51,* 730–742. https://doi.org/10.1037/0022-006X.51.5.730

Banks, M. H., Clegg, C. W., Jackson, P. R., Kemp, N. J., Stafford, E. M., & Wall, T. D. (1980). The use of the General Health Questionnaire as an indicator of mental health in occupational studies. *Journal of Occupational Psychology, 53,* 187–194. https://doi.org/10.1111/j.2044-8325.1980.tb00024.x

Physical Symptoms

Schat, A. C., Kelloway, E. K., & Desmarais, S. (2005). The Physical Health Questionnaire (PHQ): Construct validation of a self-report scale of somatic symptoms. *Journal of Occupational Health Psychology, 10,* 363–381. https://doi.org/10.1037/1076-8998.10.4.363

Spector, P. E., & Jex, S. M. (1998). Developmental of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *Journal of Occupational Health Psychology, 3,* 356–367. https://doi.org/10.1037//1076-8998.3.4.356

Sleep (Quantity, Quality, Inconsistency)

Flo, E., Bjorvatn, B., Folkard, S., Moen, B. E., Grønli, J., Nordhus, I. H., & Pallesen, S. (2012). A reliability and validity study of the Bergen Shift Work Sleep Questionnaire in nurses working three-shift rotations. *Chronobiology International, 29,* 937–946. https://doi.org/10.3109/07420528.2012.699120

Hoddes, E., Zarcone, V., Smythe, H., Phillips, R., & Dement, W. C. (1973). Quantification of sleepiness: A new approach. *Psychophysiology, 10,* 431–436. https://doi.org/10.1111/j.1469-8986.1973.tb00801.x

Jenkins, C. D., Stanton, B.-A., Niemcryk, S. J., & Rose, R. M. (1988). A scale for the estimation of sleep problems in clinical research. *Journal of Clinical Epidemiology, 41,* 313–321. https://doi.org/10.1016/0895-4356(88)90138-2

Johns, M. W. (1991). A new method for measuring daytime sleepiness: The Epworth Sleepiness Scale. *Sleep, 14,* 540–545. https://doi.org/10.1093/sleep/14.6.540

Mastin, D. F., Bryson, J., & Corwyn, R. (2006). Assessment of sleep hygiene using the Sleep Hygiene Index. *Journal of Behavioral Medicine, 29,* 223–227. https://doi.org/10.1007/s10865-006-9047-6

Psychological Self-Report Outcome Measures

Affect or Mood

Scollon, C., Diener, E., Oishi, S., & Biswas-Diener, R. (2005). An experience sampling and cross-cultural investigation of the relation between pleasant and unpleasant affect. *Cognition & Emotion, 19,* 27–52. https://doi.org/10.1080/02699930441000076

Watson, D., Clark. L. A., & Tellegan, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality & Social Psychology, 54,* 1063–1070. https://doi.org/doi: 10.1037//0022-3514.54.6.1063

Burnout and Engagement

Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H. (2015). Collective organizational engagement: Linking motivational antecedents, strategic implementation, and firm performance. *Academy of Management Journal, 58,* 111–135. https://doi.org/10.5465/amj.2013.0227

Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology, 93,* 498–512. https://doi.org/10.1037/0021-9010.93.3.498

Schaufeli, W., & Bakker, A. (2004). Utrecht Work Engagement Scale (UWES). https://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test_manual_UWES_English.pdf

Shirom, A., & Melamed, S. (2006). A comparison of the construct validity of two burnout measures in two groups of professionals. *International Journal of Stress Management, 13,* 176–200. https://doi.org/10.1037/1072-5245.13.2.176

Boredom

Melamed, S., Ben-Avi, I., Luz, J., Green, M. S. (1995). Objective and subjective work monotony: Effects on job satisfaction, psychological distress, and absenteeism in blue-collar workers. *Journal of Applied Psychology, 80,* 29–42. https://doi.org/10.1037/0021-9010.80.1.29

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