

Tribute to Arie Shirom

Sharon Toker, Mina Westman, Samuel Melamed (Tel-Aviv University) and Itzhak Fried (Syracuse University)

Arie Shirom, professor emeritus at Tel Aviv University, died after a long battle with cancer in Jerusalem, Israel, on April 13th, 2012, at the age of 75. "Arie" means "lion" in Hebrew, and indeed, the way Arie fought cancer during the last three years, working until his last day, and defeating the expectancy statistics, is reflected truly in his name.

Arie received his Bachelor's and Master's degrees in Social Science from the Hebrew University of Jerusalem (1965), and a doctorate in Industrial Relations from the University of Wisconsin (1968). He was affiliated with Tel Aviv University's department of Labor Studies (1968-1992) where he served as department chair, and later with the Faculty of Management (1993-2007) until his retirement as professor emeritus.

Arie was an extraordinary scholar—dedicated to advancing the field of occupational health psychology as a researcher, teacher, and leader in a career that spanned over four decades, and resulted in more than 200 peer reviewed journal articles and book chapters. In the first 20 years of his career, Arie focused on labor relations and organizational development. During the next 30 years, he continued to pursue questions related to work organizations but this time from the perspective of work related stress and health. His research resulted in a much deeper understanding and a broader conceptualization of the effects of chronic work related stressors on emotional, physical and cognitive well-being.

Arie developed a new conceptualization of job related burnout and its various facets and presented it in 1989, in a highly cited theoretical book chapter (Shirom, 1989). Burnout conceived to be the outcome of depletion of energetic resources was grounded in the conservation of resources (COR) theory (Hobfoll & Shirom, 2000). Working with his collaborator over the past 25 years, Samuel Melamed, they devised the Shirom- Melamed

Burnout Measure (SMBM). This measure was translated into several languages and is currently used in many countries as a basis for studying the association between burnout and health. In order to drill down into the mechanisms that underlie the burnout-health associations, Arie and Samuel joined hands in 2002, with a large interdisciplinary group of psychologists, physicians, and epidemiologists, initiating the largest medical and occupational longitudinal study of employees in Israel. So far, more than 20,000 employees have participated in this study. This has enabled Arie and his team to demonstrate the effects of job burnout on various health outcomes, including cardiovascular diseases and related risk factors, health behaviors, metabolic and inflammation biomarkers and sleep patterns. Their 2006 paper, published in *Psychological Bulletin* (Melamed, Shirom, Toker, Berliner, & Shapira, 2006), provides an excellent review of job burnout and its' health correlates. Access to the SMBM job burnout measure as well as to Arie's numerous publications on job burnout can be found at www.shirom.org/arie.

During the past decade Arie heeded the call from psychology, occupational health psychology and organizational behavior, to accentuate the positive aspects, including in research on the effects of work on individuals' health. Arie focused on the positive affective state of vigor, and developed a theoretical model of vigor at work as well as a measure of vigor (Shirom-Melamed Vigor Measure). Vigor at work represents how people feel about their levels of physical, cognitive, and interpersonal energy (Shirom, 2011) and has been shown to be related with longevity as well as with lower risk of diabetes, lower levels of inflammation, and with overall higher levels of self-rated health (see www.shirom.org/arie). As people are generally advised to practice what they preach, Arie's last three years serve as a perfect example of the effects of vigor at work on longevity. He kept saying that his work invigorates him, and gives him a reason to fight for his life. Although diagnosed with stage four cancer, Arie kept his work schedules, published more than 15 papers after he was diagnosed and invested time and energy in acquiring new statistical skills (teaching himself M-plus and

STATA). Several days before he died Arie was still busy promoting new research initiatives, serving as role model and an inspiration for each of his colleagues.

Arie coupled his research interests with a commitment to issues of medical justice and equality and to the advancement of public health systems. He was a member of the State Commission of Inquiry into the Israeli Health Care System, appointed by the Government of Israel in June 1988, where he was the single author of the Commission's Minority Report, which had a major influence on the committee's legislation. He served as board member and as well as chair in several Israeli health, labor and military institutions. In addition, he served as an associate editor of *Work & Stress* and on the editorial boards of *Journal of Occupational Health Psychology*, *Journal of Organizational Behavior* and *Journal of Applied Behavioral Science*. He received numerous research grants from Israeli and American institutes as well as awards for his unique contributions to the field.

Arie was strongly devoted to mentoring more than 130 students, both graduate and undergraduate, many of whom have become leaders in occupational health psychology and public health. Drawing on the leadership literature, Arie can be truly described as a transformational leader. He was always kind and attentive, answered every question patiently and thoroughly, intellectually challenged students while setting high goals for them. He was confident in his students' abilities to flourish in the academic world and helped them achieve their career goals.

In May 2011, Arie received a lifetime career achievement award from APA/NIOSH and was deeply touched by the honor bestowed upon him. Although he was aware of the worldwide recognition his research had gained he kept his modesty and humility. Indeed, Arie is best described by his acquaintances as a warm and gentle person, with unlimited generosity and a strong urge to help those in need. Each of his acquaintances cites various occasions where Arie stood for them and helped them spread their wings and overcome personal and academic obstacles.

When a person dies, his absence is reflected in the emptiness that surrounds those who were closest to him. Arie was a loving and caring husband, father, and grandfather and his family will miss him dearly. The emptiness that results from Arie's death is also acknowledged by many close colleagues and friends. Each of them describes the experience of interacting with Arie as stimulating, enriching and productive. We will all miss him and try to keep his flame burning.

Hobfoll, S. E., & Shirom, A. (2000). Conservation of resources theory: Applications to stress and management in the workplace. In R. T. Golembiewski (Ed.), *Handbook of organization behavior* (2nd Revised ed., pp. 57-81). New York: Dekker.

Melamed, S., Shirom, A., Toker, S., Berliner, S., & Shapira, I. (2006). Burnout and risk of cardiovascular disease: evidence, possible causal paths, and promising research directions. *Psychological Bulletin*, *132*(3), 327-353.

Shirom, A. (1989). Burnout in work organizations. In C. L. Cooper & I. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 25-48). N.Y.: Wiley.

Shirom, A. (2011). Vigor as a positive affect at work: Conceptualizing vigor, its relations with related constructs, and its antecedents and consequences. [doi:10.1037/a0021853]. *Review of General Psychology*, *15*(1), 50-64.

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