



# *the* Occupational Health Psychologist

Newsletter of the European Academy of Occupational Health Psychology

Supporting research, practice and education in occupational health psychology Volume 5 Issue 2, July 2008



## EA-OHP conference Valencia 2008

Preparations are stepping up a gear as the Academy's 2008 conference draws near. Hosted by the University of Valencia, Spain, the conference is the Academy's eighth international meeting that brings together researchers, educators and practitioners from around the world to share cutting-edge developments in occupational health psychology.

Valencia 2008, which takes place on 12th to 14th November, promises to be an exciting and innovative conference. Submissions have been received from 33 countries and, for the first time, a local-language activity stream will be held (see next page for details of Spanish-language conference activities).

Delegates can look forward to keynote presentations by Arnold Bakker (Erasmus

*Jonathan Houdmont, the Academy's Executive Officer, writes about the forthcoming conference in Valencia, November 12th -14th*

University Rotterdam, the Netherlands), Dolores Díaz Cabrera (La Laguna University, Tererife, Spain) and Töres Theorell (Karolinska Institute, Sweden). There will also be an invited presentation by Eusebio Rial-González, Head of the Risk Observatory Unit of the European Agency for Occupational Safety and Health, which is based in Bilbao, Spain. In addition, over the course of three days delegates may choose from 17 symposia

### ***In this issue:***

- Spanish stream for conference, page 2
- News from SOHP, page 4
- Work & Stress news, page 5
- Töres Theorell feature, page 7
- Research report on PTSD, page 9
- Guidelines for contributors, page 13



and workshops, some 150 paper presentations, and view ninety posters.

An exciting social programme is being prepared in the beautiful city of Valencia, so please come and join us for what promises to be a landmark conference.

**Registration deadline: 17<sup>th</sup> October**  
**Register at [www.ea-ohp.org](http://www.ea-ohp.org)**

## Joining the EA-OHP

For information on EA-OHP activities and the benefits of joining the Academy go to:  
[ea-ohp.org](http://ea-ohp.org)

For Spanish tourist information go to:  
[www.spain.info](http://www.spain.info)



# Spanish-language activity stream for Valencia conference

The Academy's 2008 conference is set to break new ground with the introduction of an activity stream in the language of the host country. Throughout the third day of the conference, Friday 14<sup>th</sup> November, one stream of activity will be dedicated to Spanish-language presentations.

Starting at 08:00, the Conference Chair, Pedro Gil-Monte (Associate Professor of Work and Organisational Psychology at the University of Valencia), will take to the floor to introduce this innovative development that is expected to attract researchers, educators and practitioners from throughout Spain as well as other Spanish-speaking countries. This will be followed by an invited presentation by Eusebio Rial-González, Head of the Risk Observatory Unit of the



**Pedro Gil-Monte**

European Agency for Safety and Health at Work, which is based in Bilbao. The remainder of the day will be dedicated to the presentation of papers and posters on a wealth of topics associated with current issues in occupational health psychology.

It is anticipated that the Spanish-language activity stream will provide encouragement to the ongoing development of the discipline of occupational health psychology in Spanish-speaking countries and set in motion activities towards the establishment of a Spanish Chapter of the European Academy.

Register to attend this landmark conference at [www.ea-ohp.org](http://www.ea-ohp.org)

Registration deadline: 17<sup>th</sup> October 2008.



**Eusebio Rial González**

## CONTENTS

- 1 EA-OHP CONFERENCE, VALENCIA 2008**, by Jonathan Houdmont
- 2 SPANISH LANGUAGE STREAM**
- 4 "ACROSS THE POND": A MESSAGE FROM THE SOHP PRESIDENT**, by Robert R Sinclair
- 5 WORK & STRESS NEWS**
- 7 TORES THEORELL: Feature**, by Kate Sang
- 9 RESEARCH REPORT: THE PREVALENCE OF SECONDARY PTSD SYMPTOMS IN ITALIAN RESCUE WORKERS**, by Ilaria Setti, Bianca Dell'Olivo and Piergiorgio Argentero
- 12 ACADEMY INFORMATION**
- 13 GUIDELINES ON SUBMITTING CONTRIBUTIONS TO THE NEWSLETTER**

The views expressed herein are those of the authors and do not necessarily represent those of any other person or organisation. The *Occupational Health Psychologist* does not in any way endorse the views expressed.

## Editorial

Welcome to the Summer 2008 issue of the *Occupational Health Psychologist*. I hope that you are enjoying the summer and that you are looking forward to the Valencia conference!

We begin this issue with news from the Academy. We are happy to provide further details on the conference in Valencia (12<sup>th</sup> to the 14<sup>th</sup> November, 2008) and in particular, the launch of the Spanish language activity stream. We extend our thanks to Jonathan Houdmont for keeping us informed of conference updates.

It has become a traditional for the newsletter to include a feature on a prominent figure in the world of Occupational Health Psychology. This issue is no exception and we are very pleased to present a feature on Töres Theorell. In tribute to his distinguished career, Töres will be made a Fellow of the Academy and will give a keynote address in Valencia. To commemorate this we are presenting an article on Töres.

We are also very pleased in this edition to present a report of research by Bianca Dell'Olivo and colleagues. This work explores the relationship between secondary traumatic stress and Post Traumatic Stress Disorder amongst emergency professional helpers. We hope you find this article interesting and we thank Bianca and her colleagues for submitting this article to the OHPist.

Bob Sinclair, the President of the Society of Occupational Health Psychology (SOHP) in the USA has very kindly provided us with our new regular piece from 'Across the Pond'. In this issue he tells us of the work of the SOHP in improving the links between research and practice and a survey conducted by the SOHP and the EA-OHP. We would like to thank Bob for writing this piece.

Finally I would like to remind you all that we are always looking for contributions to the newsletter. These could present research, news from your organisation, conference and workshop reports, discussion pieces or anything you think might be of interest to OHP practitioners, academics and students. Please see the 'Call for submissions' for further details.

I would like to thank the editorial team for all their work in producing this issue. Thanks must also go to the contributors! Happy reading and please come and say hello if you see any of us in Valencia!

**Kate Sang, Editor**

On behalf of the Editorial Team.

email: [k.j.c.sang@lboro.ac.uk](mailto:k.j.c.sang@lboro.ac.uk)

# A message from the SOHP President

By Robert R. Sinclair, Portland State University. President, Society for Occupational Health Psychology

**G**reetings! I am thrilled to have the opportunity to contribute an "Across the Pond" article for the EA-OHP newsletter. The fact that I am writing such a column reflects significant progress in our on-going efforts to foster increased collaboration between EA-OHP and SOHP. In fact, the best indicator of our success may be the number of members of EA-OHP for whom my SOHP updates are old news, because many of you already are members of SOHP. Surely, everyone involved should be proud of that.

It is, of course, cliché to say that change is the only sure thing in 21<sup>st</sup> century organizations. However, it is particular true for me now, as I am about to move to a new position at Clemson University in South Carolina (about 2 hours from Atlanta, Georgia). In about a week, my family and I will drive approximately 2,500 miles across the United States, leaving many good friends, close colleagues, and fond memories behind in Portland. In fact, this article is one of the last pieces of work I will complete before I leave.

In one sense, leaving Portland represents a perfect ending to a great story as I have completed over eight years of OHP work with my close friend and colleague Leslie Hammer. When I arrived in Portland, we had no OHP graduate training program, there was no Society for Occupational Health Psychology, and our OHP-related connections in our local and national community were limited at best. So much has changed since then! I leave Portland having helped establish an OHP graduate training program that remains safely under Leslie's watchful eye, we are members of a formal professional organization that both she and I have presided over, and we have established a strong track record of local, national, and international collaborative efforts, as well as a growing list of doctoral students who have graduated

***In alternate editions the newsletters of SOHP and EA-OHP carry a report from the other organisation, called 'Across the Pond'. This is the second of those articles.***

with a specialty in OHP. While I am leaving much behind, I hope to bring the same energy and a similar pattern of growth to my new department at Clemson.

### **SOHP**

The emergence of SOHP has been an important catalyst of the corresponding changes in our program at Portland State. The most recent Work Stress and Health conference was the first in which SOHP formally partnered with the American Psychological Association (APA) and the National Institute for Occupational Safety and Health (NIOSH) to plan the 2008 Work Stress and Health conference in Washington. Although sharing the stage at that conference marked our arrival at a destination we have sought for several years, it is, of course, only the beginning of another journey. Now we, together with you, have to live up to the promise of our field to help people have safer and healthier work lives.

So, what has been going on at SOHP? Well, with the post-conference membership boost, in the last year, we have doubled our membership, including new members from several disciplines and from across the world. With the help of Lisa Kath and Mo Wang we have created a social networking group for SOHP members on LinkedIn. Like many of you, I suspect, I am concerned about the potential for a schism between OHP research and practice. I also feel that research-to-practice initiatives need to form the foundation upon which our future field will be constructed. I hope that we can head off some of those concerns by working to ensure that practitioners have a strong voice in SOHP and that we continue to

---

foster collaboration among both scientists and practitioners working in the many disciplines that comprise OHP. This will be a considerable and continual challenge. As a first step in that process, I have asked SOHP Member at Large Lori Snyder to lead a small task force that will explore ways to better serve our practitioner members. Hopefully this too can evolve into another SOHP – EA-OHP collaboration.

### **Collaboration with EA-OHP**

One of the things I have really enjoyed about working with EA-OHP members is the feeling that together we are all part of a world-wide movement to promote safer and healthier work. Our efforts produce routine outcomes such as the creation of mutual benefits for our members as well as the benefits we all share from professional networks that span across many national boundaries. I also am particularly looking forward to seeing the results of the OHP training needs and competencies survey that many members of both of our organizations recently completed, thanks to efforts of many colleagues including Stavroula Leka, Carrie Bulger and Jonathan Houdmont. Moreover, at the upcoming Valencia conference, representatives of

both of our organizations will participate in another meeting of the International Coordinating Group for Occupational Health Psychology. We have much to feel proud about!

### **Next conference**

Finally, SOHP is hard at work with APA and NIOSH planning our next conference, which is to be held in Puerto Rico in 2009. The call for papers for that conference will be out shortly and the theme will be "Global Concerns and Approaches." One of our goals with that theme is to encourage involvement from people who have traditionally not attended OHP conferences to get involved. This includes scientists seeking a receptive outlet for their research to students and practitioners interested in learning more about OHP. Of course, no global effort in OHP would be valid without participation from EA-OHP members. So, I hope that many of you will come 'across the pond' to join us in Puerto Rico!

---

*The next SOHP - EA-OHP summit meeting will be at the EA-OHP conference in Valencia in November 2008.*

---

## **News**

## **Work & Stress**

# **Work & Stress maintains high impact factor**

**By the Work & Stress editorial team**

**F**or a second year in succession the journal *Work & Stress* has an impact factor of over 2.00 (2.089, to be precise). The journal therefore maintains its place as having the highest impact factor among the journals in occupational health psychology. It now ranks 7th out of 57 journals in the category of Applied Psychology. We are indebted to our contributors, to many reviewers, to colleagues and to the members of our Board for helping us to maintain *Work & Stress* as an effective journal.

### **Suitability of submissions**

Inevitably the journal attracts a large number of

submissions, and we are receiving many interesting papers. We do, however, also receive submissions that are not appropriate – some failing to meet our standards for various reasons, and others being off scope and therefore better submitted to a different journal.

Every journal has its own aims, and we have taken a bold step in attempting to provide a detailed clarification of aspects of our section criteria in new guidelines that are now available on the journal's website. These can be accessed directly from the *Work & Stress* home page from within the Instructions

---

for Authors. For want of a better name we are calling them "Suitability guidelines". We encourage all potential contributors to read these. At the same time,

we hope that the guidelines will not discourage authors who have something relevant and useful to contribute.

---

## ***Special edition of Work & Stress on engagement***

Organizations are striving to improve the quality of their products or services, while trying to keep down costs and prices. In doing so they often take primarily economic measures, such as redesigning business processes and reducing the number of employees. However, there is a limit to the effects of such strategies, meaning that new approaches have become necessary. Work engagement, in which there is a focus on the improvement of well-being and performance of employees, is one such approach.

The next edition of *Work & Stress* (Volume 22 part 3), guest edited by Arnold Bakker, Wilmar Schaufeli, Michael Leiter and Toon Taris, will be a special issue on engagement. Work engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption. Engaged employees have high levels of energy, are enthusiastic about their work and are often immersed in it. They are proactive, show initiative, take responsibility for their own professional development, and are committed to high quality performance standards. Thus, a high level of engagement among their employees may offer organizations a distinct advantage. This benefits both the individual and the organization.

The first paper in the special edition (authored by the guest editors) sets the stage, presenting an overview of work engagement research and concluding with a research agenda. Then two longitudinal studies (one by Annet de Lange, Hans de Witte and Guy Notelaers, and the other by Jari Hakanen, Wilmar Schaufeli and Kirsi Ahola) focus on the predictors of work engagement, and analyze whether these differentially predict engagement for those who stay and those who leave the organization. The third study (by Anja Van den Broeck, Maarten Vansteenkiste, Hans de Witte and Willy Lens) addresses the question *why* job resources translate into engagement, whereas the fourth contribution (by Sabine Sonnentag, Eva

Mojza, Carmen Binnewies and Annika Scholl) examines whether those who are engaged at work detach at home on a weekly basis. Finally, Jonathon Halbesleben and Anthony Wheeler investigate the differences between two related concepts, namely engagement and job embeddedness (a form of attachment to one's job).

Together, these papers present a broad overview of state-of-the-art research into work engagement, building on strong designs as well as showing thorough knowledge of the subject matter. We therefore believe that this issue will be a significant contribution to the emerging field of engagement.

***The special edition, Work & Stress volume 22 part 3, 2008, is expected to be published in September. It will comprise the following papers:***

**Bakker, A.B., Schaufeli, W.B., Leiter, M.P., & Taris, T.W.** Work engagement: An emerging concept in occupational health psychology.

**De Lange, A.H., De Witte, H., & Notelaers, G.** Should I stay or should I go? Examining the longitudinal relation between job resources and work engagement for stayers versus movers.

**Hakanen, J.J., Schaufeli, W.B., & Ahola, K.** The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement.

**Halbesleben, J., R.B., & Wheeler, A.R.** The relative roles of engagement and embeddedness in predicting job performance and turnover intention.

**Sonnentag, S., Mojza, E.J., Binnewies, C., & Scholl, A.** Being engaged at work and detached at home: A week-level study on work engagement, psychological detachment and affect.

**Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W.** Explaining the relationships between job characteristics, burnout and engagement: The role of basic psychological needs satisfaction.

# Töres Theorell

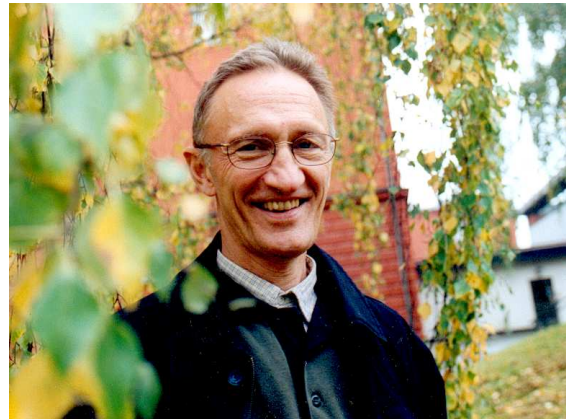
By Kate Sang, editor of the Newsletter

In this issue of the newsletter we are very pleased to present a feature on Töres Theorell, who will be best known to many of you as having co-developed the Job Demand-Control Model. Töres will be currently Professor Emeritus at the Karolinska Institute in Sweden. At the forthcoming EA-OHP conference in Valencia he will not only be a keynote speaker, but will also be awarded a Lifetime Fellowship of the Academy. To celebrate his achievements we present here some biographical information on Töres and details of his professional interests and achievements. We thank Töres for his help in putting this piece together.

## Biography

Töres was born in Stockholm in 1942. His parents were Hugo, a professor of Biochemistry at the Karolinska Institute (and Nobel laureate in 1955) and an amateur violinist, and Margit, a concert pianist and harpsichord teacher at the Royal College of Music in Stockholm. Töres was licensed as a physician in 1967 (working clinically from 1967 to 1978) in internal medicine and cardiology at the Seraphimer Hospital in Stockholm and the Karolinska Institute. In 1971 he completed his PhD dissertation, which was on myocardial infarction and the examination of critical life events. His supervisor was American psychiatrist and stress researcher Richard H. Rahe.

In 1973, after a year of postdoctoral study in Galveston, Texas with Stewart Wolf, Töres became assistant professor at the Karolinska Institute. There he began working in social medicine and in stress research with Lennart Levi. In 1981 he became a professor of clinical stress research at the National Institute for Psychosocial Factors and Health (IPM) and was appointed professor at the Karolinska Institute as well as director of the IPM in 1995, a position which he held until retirement from the post



in 2006. He is at present Professor Emeritus at the Karolinska Institute and a scientific consultant to the Institute for Stress Research (previously IPM) at Stockholm University.

During the late 1970's Töres started to collaborate with the American sociologist Robert Karasek, and in the early 1980's with sociologist Jeffery Johnson. Töres has published mainly on the mechanisms behind the relationships between psychosocial stress (life events and job stress) and cardiovascular disease and other outcomes such as mental illness and psychosomatic gastrointestinal disorders. He is the main author or co-author of several books and of more than 300 articles in international peer reviewed journals. The best-known book is *Healthy Work*, by Karasek and Theorell, published in 1990.

## OHP activities

We asked Töres how he first became interested in Occupational Health Psychology, and he explained that the concept of lacking control was important in his life events research, and became operationalised in an interesting way in job research. His main interest is the physiological links between psychosocial working conditions and health.

Regarding his recent OHP activities, Töres gave a presentation at the end of the 2008 Washington Meeting, "Work, Stress and Health", about anabolic / regenerative processes stimulated by working conditions. This is a subject that has interested him for a long time. Recently he and his colleagues have looked at the relationship between the Job Demand-Control Model and cultural activities organised through a person's job. Not surprisingly, in a study of 5,000 working Swedes it turned out that men, and even more so women, in high strain jobs have very little cultural stimulation organised by their work sites. This

---

is something that Töres believes we should start looking into. There is growing research showing that cultural activities can simulate anabolic processes.

Töres believes that in order to raise the profile of OHP we need better studies and more dialogue with policy makers and high level administrators.

---

Töres Theorell will be giving a keynote address at the Academy's 2008 conference in Valencia on the morning of Wednesday 12<sup>th</sup> November.

## Thinking of contributing to the Newsletter?

Contributions of all kinds are welcome! See last page of this Newsletter for details.

## Book review

### Introduction to Work and Organizational Psychology

**An Introduction to Work and Organizational Psychology. A European Perspective.** Second edition, 2008. Edited by Nick Chmiel. Oxford: Blackwell. Pp x + 566. £29.99. ISBN 798-1-4051-3276-3.

This book takes a European perspective in that all the authors are based in Europe, and their contributions reflect a European context. It has been completely updated to take into account developments since the first edition, published in 2000. New topics have also been introduced, and there is now much more emphasis on the organization of work. This edition also gives added recognition to the applied nature of the subject, by including a separate section on theory and application.

The book is in four sections. Part I, "*People at work*", includes "Learning and training at Work, by Sonnentag Niessen and Ohly, and "Job Stress" and Occupational health" by Le Blanc, de Jonge and Schaufei. Part II, "*Working with Technology*", includes "Telework", by

Noel Sheeby, "Virtual Teamworking and Collaboration Technology", by Vartiainen and Andriessen, and "Organizations, Technology and Safety", by Chmiel.

Contributions to Part III, "*Organizations at Work*", include chapters on Effective teams in Organizations, by West, and Organizational Development and Change, by Peiró and Martínez-Tur. The final section is devoted to "*Theory and Application*". Here, for instance, Michael Frese contributes a chapter on The Changing Nature of Work. The section ends with three case studies that present practical solutions to problems. These involve law enforcement, designing technology for work and home applications, and monitoring the perceptions of recruits to the police service.

This book is not primarily aimed at the occupational health psychologist. It does, however, provide an up-to-date overview of organizational psychology that will be an interesting introduction for students. Just one criticism. The general index is almost entirely devoted to authors; subjects hardly feature at all, making it difficult for anything specific to be found. A separate and more comprehensive subject list would benefit this otherwise useful book.

## Forthcoming events

Keep up to date with forthcoming occupational health psychology events on the 'International' pages of the European Academy's website at [www.ea-ohp.org](http://www.ea-ohp.org).

Your attention is drawn to two events that have been announced for 2009:

**14<sup>th</sup> European Congress of Work and Organizational Psychology:** Santiago de Compostela (Spain), May 13-16, 2009

**SOHP/APA/NIOSH conference:** 4-7 November 2009, San Juan, Puerto Rico

Here we present an abbreviated paper by colleagues in Pavia, Italy. Short research reports are welcome: See last page of this newsletter.

# The prevalence of secondary PTSD symptoms in Italian rescue workers

By Ilaria Setti, Bianca Dell’Olivo and Piergiorgio Argentero, Department of Psychology, University of Pavia, Italy

**E**mergency and social workers are often exposed to traumatic stress through helping other people in emergency situations. According to the *Diagnostic and Statistical Manual of Mental Disorders* (4<sup>th</sup> ed., text revision) (DSM-IV-TR) (APA, 2000), the essential feature of Post Traumatic Stress Disorder is the development of characteristic symptoms following exposure to traumatic stressors. PTSD symptoms are divided into three categories: *intrusion*, or re-experience of the traumatic stress;; *avoidance* of trauma-related stimuli; and increased emotional *arousal*, including anxiety, difficulty falling asleep, and hypervigilance (Bride, 2007).

In contrast to primary stress symptoms, which are directly related to the experience of primary traumatic stress as a victim, secondary stress can be defined as “*the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other—the stress resulting from helping or wanting to help a traumatized or suffering person*” (Figley, 1995, p. 10).

Although there is a growing interest in the consequences of occupational stress in emergency services personnel, only a few studies have been performed. McFarlane (1989) found PTSD prevalence rates of 32% in a sample of fire-fighters 4 months after an Australian forest fire.

Compared with the prevalence of 5-6% for the European general population (Frans et al., 2005) the prevalence varies across emergency occupations, ranging from 8% to 32% (Fullerton et al., 2004; Guo et al., 2004) with the highest prevalence documented in rescue personnel (25%) (Ozen & Aytakin, 2004) and fire-fighters (21%) (Chang et al., 2003).

Some studies have reported that the prevalence of PTSD among rescue workers was: 18.2% in German professional fire-fighters (Wagner et al., 1998); 18.6% in Japan (Mitani et al., 2006) and ranging from 12% to 16% in the US. (Perrin et. al., 2007; Bride, 2007).

The greatest risk of developing PTSD was found among workers who are repeatedly exposed to secondary traumatic stress (Perrin et al., 2007): for this reason, in our study we focused on a population of rescue workers.

The main purpose of the present study was to investigate the prevalence of post-traumatic symptoms in a sample including ambulance personnel, Intensive Care Mobile Unit Operators, civil protection volunteers and firefighters. In particular, our specific objectives were to: investigate the prevalence of individual symptoms; investigate the presence of main diagnostic criteria for PTSD, as delineated by DSM-IV-TR; investigate symptom severity; and compare different professional groups in order to determine which of them is at higher risk of experiencing post-traumatic effects.

## Method

A cross-sectional observational study was performed, in collaboration with emergency and social workers working in Northern Italy. 374 operators enrolled in the study, including ambulance personnel (N = 182), Intensive Care Mobile Unit Operators (N = 42), civil protection volunteers (N = 32) and firefighters (N = 118).

All participants completed a questionnaire on demographic characteristics and a self-report

instrument designed to assess the presence and severity of PTSD symptoms on a 5-point scale. The questionnaire used was the Secondary Traumatic Stress Scale (STSS) (Bride, Robinson, Yegidis & Figley, 2004), a 17-item self-report instrument, that includes three subscales rating symptoms of *intrusion* (five items), *avoidance* (seven items), and *arousal* (five items), deriving from working with traumatized people, that correspond to the B, C and D criteria for PTSD, as delineated in DSM-IV-TR. Each item of the STSS corresponds to one of the 17 PTSD symptoms listed in the manual.

## Results

The sample was mainly composed of men (77%), most of them married (33%) and without children (58%). The average age of the sample was 36 years (SD = 9.7).

The first objective of our study was to investigate the frequency of individual symptoms of Intrusion, Avoidance and Arousal. Bride (2007) suggested that a symptom could be considered as endorsed if the respondent indicated that it was experienced "occasionally", "often" or "very often" in the preceding week: In our study the Intrusion subscale contained the most frequently reported symptom, "intrusive thoughts about clients" (item 10), with 45.4% of respondents reporting this symptom at least "occasionally" in the last week: so almost half of all respondents indicated that they thought about their work with traumatized clients without intending to do so (see also Bride, 2007). The least frequently reported symptom was in the Avoidance subscale, "avoidance of people, places and things" (item 12) that would remind the participant of the traumatic event (7.4%).

The second objective of this study was to examine how many respondents met the diagnostic criteria for PTSD. DSM-IV-TR identifies six diagnostic criteria for PTSD, but the STSS considers only three of them, which are considered the core symptoms for PTSD: Intrusion symptoms (Criterion B), Avoidance symptoms, (Criterion C) and Arousal symptoms (Criterion D). These three criteria can be used in order to determine PTSD caseness. In particular, an individual who selected at least one item on the Intrusion scale, three items on the Avoidance scale and at least two items on the Arousal scale, with a rating of 3 ("occasionally"), 4 ("often") or 5 ("very often"), meets the diagnostic criteria for PTSD.

The overall prevalence rate of secondary PTSD symptoms among all rescue workers was found to be 18.2% for all three PTSD criteria. After working with traumatized clients, only 8.3% of respondents failed to meet any of the diagnostic criteria. The most frequently reported symptoms were from the Arousal scale (81.3%), followed by Intrusions (69.9%) and Avoidance (20.7%). 18.2% of respondents met the main diagnostic criteria for PTSD: they reported at least one Intrusion symptom, at least three Avoidance symptoms and at least two Arousal symptoms. Almost half of respondents (41.2%) reported mild severity symptoms of PTSD, whereas only 5.1% had developed severe post-traumatic symptoms.

Another approach to interpreting the STSS scores is by comparing an individual's score to normative data (see Bride, 2007). These scores can be used to classify participants into categories based on percentiles: scores at or below the 50<sup>th</sup> percentile are interpreted as having little or no post-traumatic symptoms, scores between the 51<sup>st</sup> and the 75<sup>th</sup> percentile are interpreted as mild symptoms, scores between the 76<sup>th</sup> and the 90<sup>th</sup> percentile indicate moderate severity symptoms, scores between the 91<sup>th</sup> and the 95<sup>th</sup> percentile (44 to 48) indicate high post-traumatic stress and, finally, scores above the 95<sup>th</sup> percentile are interpreted as severe symptoms.

As shown in Table 1 (based on normative data, see Bride, 2007), only 5.1% of respondents had developed severe post-traumatic symptoms, 32.9% showed little or no severity symptoms and almost half (41.2%) reported mild severity symptoms of PTSD.

The STSS scores could also be interpreted on the basis of a cut-off value: individuals who obtain a score at or above the cut-off could be considered to have PTSD. Bride suggested a raw score of 38 as the cut-off value (the lower threshold of the moderate range)

**Table 1: Severity of PTSD symptoms.**  
**STSS = Secondary Traumatic Stress Scale**

STSS total score (percentile)	N	%
At or below 27 (50)	123	32.9
28-37 (51-75)	154	41.2
38-43 (76-90)	53	14.1
44-48 (91-95)	25	6.7
Above 49 (above 95)	19	5.1
Total	374	100

and 25.9% of our sample would be considered to have PTSD based on this interpretation.

The last purpose of our study was to compare the different professional groups of the sample, in order to identify which of them had more PTSD symptoms. An analysis of variance revealed that Intensive Care Mobile Unit Operators had the highest scores on all three sub-scales, when compared to the other three professional groups, with statistically significant differences for the Avoidance scale ( $F = 7.62, p < .01$ ) and Arousal scale ( $F = 3.50, p < .05$ ), but not for the Intrusion scale. Further analysis revealed that the most significant differences concerned the 118 Operators: they reported more PTSD symptoms when compared to the other three professional groups (difference between mean values = .95;  $p < .01$ ).

## Conclusion

The high prevalence of secondary PTSD in our sample of rescue workers indicates that they often fail to cope with secondary stress in their daily work. This problem, together with the individual psychological consequences and costs related to work absenteeism and early retirement, seems to be very specific for the emergency professions, in particular for the operators in the Intensive Care Mobile Unit Service. The present findings provide a better understanding of the relationship between secondary traumatic stress and PTSD in professional emergency workers and high-risk populations such as emergency and social workers. Disaster training and shorter work shifts could reduce PTSD among emergency workers and volunteers in future critical events.

## References

- American Psychiatric Association (APA), 2000. Diagnostic and Statistical Manual of Mental Disorders Fourth Edition (Text Revision) (DSM-IV-TR). Washington: American Psychiatric Association.
- Bride, B. (2007). Prevalence of Secondary Traumatic Stress among Social Workers, *Social Work*, 52, 1: 63-70.
- Chang, C, Lee, L, Connor, K.M., Davidson, J.R.T., Jeffries, K, Lai, T. (2003). Posttraumatic distress and coping strategies among rescue workers after

an earthquake. *Journal of Nervous and Mental Disease*, 191:391-398.

- Figley, C.R. (1995). *Compassion fatigue as secondary traumatic stress disorder: an overview*, in *Compassion Fatigue*. Edited by Figley, C.R. New York, Brunner/Mazel, 1-20.
- Frans, Ö., Rimmö, P.A., Åberg, L., Fredrikson, M. (2005). Trauma exposure and post-traumatic stress disorder in the general population, *Acta Psychiatrica Scandinavica*, 111, 4: 291-290.
- Fullerton, C.S. Ursano, R.J., Wang, L. (2004). Acute stress disorder, posttraumatic stress disorder, and depression in disaster or rescue workers. *American Journal of Psychiatry*, 161:1370-1376.
- Guo, U., Chen, C., Lu, M., Tan, H.K., Lee, H., Wang, T. (2004). Posttraumatic stress disorder among professional and non-professional rescuers involved in an earthquake in Taiwan. *Psychiatry Research* 2004; 127:35-41.
- McFarlane, A.C. (1989). The aetiology of post traumatic morbidity: predisposing, precipitating and perpetuating factors. *British Journal of Psychiatry*, 154:221-228.
- Mitani, S., RN, PhD, Fujita M. MD, PhD, Nakata K., Shirakawa T., MD, PhD. (2006) Impact of post-traumatic stress disorder and job-related stress on burnout: a study of fire service workers, *The Journal of Emergency Medicine*, 31, 1: 7-11.
- Ozen, S., Aytekin S. (2004) Frequency of PTSD in a group of search and rescue workers two months after 2003 Bingol (Turkey) earthquake. *Journal of Nervous and Mental Disease*, 192:573-575.
- Perrin, M.A., M.P.H., L. Di Grande, P.H., M.P.H., K. Wheeler, M.P.H., Thorpe, L., Farfel, M., Brackbill, R. (2007). Differences in PTSD Prevalence and Associated Risk Factors Among World Trade Center Disaster Rescue and Recovery Workers, *American Journal of Psychiatry*, 164:1385-1394.
- Wagner D., M.S., Heinrichs M., M.S., and Ehler U., Ph.D. (1998) Prevalence of Symptoms of Posttraumatic Stress Disorder in German

## Corresponding Author:

Ilaria Setti, Department of Psychology, P.zza Botta, 6, University of Pavia, 27100 Pavia, Italy.

E-mail address: [ilaria.setti@unipv.it](mailto:ilaria.setti@unipv.it)

## European Academy of Occupational Health Psychology Offices

<b>President</b>	Tom Cox	<a href="mailto:Tom.cox@nottingham.ac.uk">Tom.cox@nottingham.ac.uk</a>
<b>Executive Officer</b>	Jonathan Houdmont	<a href="mailto:Jonathan.houdmont@nottingham.ac.uk">Jonathan.houdmont@nottingham.ac.uk</a>
<b>Finance Director</b>	Phillip Dewe	<a href="mailto:p.dewe@bbk.ac.uk">p.dewe@bbk.ac.uk</a>
<b>External Relations Officer</b>	Amanda Griffiths	<a href="mailto:Amanda.Griffiths@nottingham.ac.uk">Amanda.Griffiths@nottingham.ac.uk</a>
<b>External Relations Assistant</b>	Maria Karanika-Murray	<a href="mailto:Maria.karanika-Murray@nottingham.ac.uk">Maria.karanika-Murray@nottingham.ac.uk</a>
<b>Membership Officer</b>	Birgit Greiner	<a href="mailto:eaohpmember@gmail.com">eaohpmember@gmail.com</a>
<b>Research Forum Chair</b>	Annet de Lange	<a href="mailto:a.h.de.lange@rug.nl">a.h.de.lange@rug.nl</a>
<b>Professional Practice Forum Chair</b>	Peter Kelly	<a href="mailto:peter.kelly@hse.gsi.gov.uk">peter.kelly@hse.gsi.gov.uk</a>
<b>Education Forum Chair</b>	Stavroula Leka	<a href="mailto:Stavroula.leka@nottingham.ac.uk">Stavroula.leka@nottingham.ac.uk</a>
<b>Newsletter</b>		
<b>Editor</b>	Kate Sang	<a href="mailto:k.j.c.sang@lboro.ac.uk">k.j.c.sang@lboro.ac.uk</a>
<b>Editorial Assistants</b>	Alex Birch Victoria Friedman	
<b>Members' representative</b>	Evelyn Kortum	<a href="mailto:Kortume@who.int">Kortume@who.int</a>

**Information on Academy membership and associated benefits can be found at:**

**[www.ea-ohp.org](http://www.ea-ohp.org)**

---

## Academy Publications

***the Occupational Health Psychologist*** Published three times per annum. ISSN 1743-16737 (Online). Back copies can be downloaded at [www.ea-ohp.org](http://www.ea-ohp.org)

***Work & Stress*** A journal of work, health and organisations. Published by Taylor & Francis in association with the EA-OHP.  
ISSN 0267-8373

### ***Occupational Health Psychology: European Perspectives on Research, Education and Practice***

The Academy's annual book series, which charts developments across the three broad areas of activity in the discipline. Copies may be purchased online at: [www.nup.com](http://www.nup.com)  
Volume three will be launched at the Academy's conference in Valencia in November 2008.



# *the Occupational Health Psychologist*

## **SUBMISSION GUIDELINES**

Please find below general guidelines for submitting articles for future issues of the Occupational Health Psychologist. We are keen to publish many different kinds of articles, and we hope this will encourage submissions from all our members. We welcome articles from students, new researchers, practitioners, as well as long-standing members of the Academy.

We aim to publish three issues per year (Spring, Summer and Autumn).

### **OHP Research / Practice**

We welcome short reports (of no more than about 1200 words) of research findings, practice issues, case studies, brief literature reviews, and theoretical articles. This could be a valuable opportunity for you to disseminate information on your work to both academics and practitioners. When writing these reports please make them as accessible as possible to the broad readership of the newsletter.

### **OHP Briefings**

We also welcome overviews of your OHP-related activities, or those of your research group, consultancy or organisation. This type of article provides a useful insight into the sort of work that is being undertaken across the OHP world community. Additionally, this section enables the communication of policy developments that may have implications for OHP research, practice and education in your country. We would ask that such articles are between 1000 and 1500 words.

### **Other articles**

We welcome news, conference announcements, open letters to your fellow occupational health psychologists regarding any OHP related topics, and brief summaries (in English) of OHP issues that have been reported by your national news media.

To accompany all contributions we welcome appropriate photographs

**Please email your questions or contributions to  
The Editor, Kate Sang:  
[K.J.C.Sang@lboro.ac.uk](mailto:K.J.C.Sang@lboro.ac.uk)**

## **Occupational Health Psychologist Editorial Team:**

**Kate Sang (Editor) is a post-doctoral research associate at Loughborough University**

**Alex Birch is an analyst in the London office of Robertson Cooper Ltd, UK**

**Victoria Friedman is a consultant at PreVisor (UK)**

**Newsletter design: MCT**