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April 2017

IEA Visual Ergonomics Newsletter—April 2017

This edition of the IEA Visual Ergonomics newsletter has a research theme. In it you can read about two current doctoral projects in Scandinavia, a community based research project in India, and two soon-to-be-delivered conference papers by early career researchers within our network.

Whether you are a researcher—or not– it is well worth marking your 2018 calendar with the IEA2018 Triennial Congress which will be held in Florence, Italy, from the 25th August to the 1st September 2018. The IEA congresses usually contain a blend of papers and workshops, including research, case studies and practical applications.

Now is a good time to put your thinking caps on for possible abstracts to submit for the Congress. The Call for Abstracts will open on the 30th June 2017. Abstracts are welcome from academics, practitioners and educators.

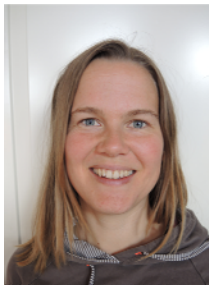
In case you were wondering "What is the IEA?" this newsletter also contains a link to a message from the IEA President, some information about the IEA and technical committees and an example from Europe of a joint meeting between European Ergonomics Societies.

Happy reading!

Jennifer Long

IEA Visual Ergonomics TC Chairperson

Research in focus



Randi Mork is a physiotherapist currently working as a PhD student at the Department of Optometry and Visual Science, University College of Southeast Norway in Kongsberg.

Randi is investigating how the human visual system is affected by poor visual conditions during computer work, such as direct glare exposure and other environmental stress factors such as psychological stress. She says "I think it is really important that visual conditions get more focus in preventive work and adjustment of work places, in addition to the general ergonomics."

Supervised by Hanne-Mari Schiøtz Thorud, Knut Inge Fostervold and Helle Kristine Falkenberg, Randi has already published some of her findings in *Optometry and Vision Science* in 2016 ("Effect of Direct Glare on Orbicularis Oculi and Trapezius During Computer Reading") and she hopes to complete her thesis this year.

Christina Zetterlund, a PhD student at Örebro University in Sweden, will defend her Doctoral thesis entitled "Visual, musculoskeletal and balance symptoms in people with visual impairments" on the 2nd June 2017. Her opponent will be Associate Professor Tony Pansell, Karolinska Institutet, Stockholm, Sweden.

For her project, Christina developed a Visual, Musculoskeletal and Balance symptoms (VMB) questionnaire and discovered that patients with vision impairment report higher levels of visual, musculoskeletal and balance symptoms than age-matched controls without vision impairment.

Good luck on the 2nd June, Christina!

Upcoming Events

HCI International, Vancouver, Canada

9-14 July 2017

http://2017.hci.international/

Nordic Ergonomics Society (NES) Annual Conference, Lund, Sweden 20-23 August 2017.

http://www.eat.lth.se/nes2017/

CIE 2017 Midterm meeting, Jeju Island, Republic of Korea, 24-27 October 2017

http://www.cie.co.at/index.php?i_ca_id=1001

IEA 20th Triennial Congress, Florence, Italy

25th August—1st September 2018.

http://iea2018.org/

More research in focus

Occupational Optometry Service, by Krishna Kumar, India

Occupational Optometry Service, Sankara Nethralaya, Chennai, India has ventured into a community-based project called "Impact of Occupational Optometry Service on productivity and vision-related quality of life among small scale and cottage industries in India". The institute research board and ethics committee have approved this project and the research commenced in January 2017 with independent tailors and electricians.

Visual task analysis of each job is part of the protocol to enable us to understand the visual demand at work and match the visual ability of the workers to the visual demands. The final analysis on the impact of the service will be conducted after the second visit at the end of the second month for each job.

During the next 10 months the service will be offered to automobile mechanics, electronic gadget repairers, watch repairers, jewellery makers, sculptors, wood craftsman, knitting/embroidery/lacemaking/crocheting workers, and tea pickers. The total cost of the project is 36 lakhs Indian rupees, part of which (13 lakhs) has already been received from different sources. The project will benefit initially 500 workers of various small scale industries and will later be extended to include more beneficiaries.

Upcoming conference presentations

- Octavio Luis Perez will be presenting a poster at the **19th Annual NPSF Patient Safety Congress** in Florida, USA, 17-19 May 2017. The poster “Lighting and ED clinician wellness and performance improvement” describes some of the results obtained during Octavio’s PhD research about the non-visual effects of lighting in the clinical environment. Perez reports that indirect “blue”-regulated, full spectrum, tunable, solid state “white” lighting has beneficial effects on sleepiness perception, workload perception, clinical procedures execution time and incidence of medical error compared to fluorescent lighting.
- Hillevi Hemphälä, Camilla Zetterberg, Per Nylén (and colleagues) have been developing a visual ergonomics risk assessment method (VERAM) to reduce symptoms associated with poor visual ergonomics. There are two parts to VERAM: a subjective questionnaire which is completed by workers, and an objective assessment of the lighting and other visual ergonomics risk factors which is completed by an assessor. Hillevi will be presenting some of the results of this work at the **Nordic Ergonomics Society Conference** in Sweden, 20-23 August 2017.

NEXT NEWSLETTER DEADLINE: 30th JULY 2017
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Meeting report

Round Table discussion in Amersfoort, Netherlands, by Isabella Steffan, Italy

A round table discussion was conducted at the Annual Federation of European Ergonomics Societies (FEES) Council meeting in November 2016. The presentations included:

- An introduction by Isabella T. Steffan, who centered her speech on the definition of Design for All and its key words: diversity, interaction, participation. (Design for All is another IEA Technical Committee).
- Alexander Rosemann, Professor at Eindhoven University of Technology, who explained the research project "Creating Healthy Environments - Offices" , a collaboration between the University of Technology in Eindhoven, Philips Lighting and Deloitte. The project is investigating opportunities offered by smart technology for lighting in "the Edge", an office building in Amsterdam-Zuid designed by PLP Architecture in London.
- A description of the CEN-CENELEC Guide 6 Jan Doornbusch, from the Dutch Human Factors NL, and how it can help ergonomists involved in standardisation. The document includes 7 tables, each dealing with one focus, for example ,information, packaging, user interfaces, buildings, and focuses on sensory, physical, cognitive-abilities and allergy in combination with "factors to consider" like alternative format, layout, colour, loudness and surface temperature.

A message from the IEA President

Here is a message from Professor Yushi Fujita, President of the International Ergonomics Association (IEA): http://www.iea.cc/

In his letter Prof Fujita outlines some of the strategies which are being implemented by the IEA for strengthening the demand for and the application of high quality human factors and ergonomics. It builds on recommendations published by Dul et al in 2012 in *Ergonomics* "A strategy for human factors/ergonomics: developing the discipline and profession".

What is the IEA?

The IEA is a federation of ergonomics and human factors societies. There are 50 member societies from around the world, usually the ergonomics/human factors society for a country or a region, for example, the Human Factors and Ergonomics Society of Australia, the Nordic Ergonomics Society, and the Chartered Institute of Ergonomics and Human Factors (in the United Kingdom). The IEA is governed by a council of representatives from each member society. One of the purposes of the IEA is to advance ergonomics at an international level.

What are IEA Technical Committees?

There are 27 technical committees within the IEA. Technical Committees provide a platform for sharing up-to-date knowledge within a particular field (as is the purpose of this visual ergonomics newsletter and our visual ergonomics network).

Technical committees also manage streams within the IEA Triennial Congress. For example, our Visual Ergonomics TC is responsible for promoting the Congress to members in our network, encouraging submissions, providing conference abstract reviewers and coordinating the visual ergonomics stream at the Congress.

When is the next IEA Triennial Congress?

The next IEA Triennial Congress will be held in Florence, Italy, 25th August—1st September 2018.

Key dates are:

- **30 June 2017** : Opening "Call for Papers"
- **30 June 2017**: Opening "Registration"
- **30 November 2017**: Closing "Call for Papers"
- **31 January 2018**: Notification for Accepted Papers