DETERMINANTS AND CONSEQUENCES OF INFORMATION OVERLOAD – A SYSTEMATIC REVIEW

Andreas Seidler*, Anne Steputat, Stephanie Droßker, Melanie Schubert, Nadine Günther, Ronny Staudte, Marlen Kohli, Janice Hegewald. Institute of Occupational and Social Medicine, Faculty of Medicine, TU Dresden, Germany

Methods We searched EBSCOhost (Academic Search Complete + Business Source Complete + PsycARTICLES + PsycINFO + PsycYNDEX), PubMed, and Web of Science (until March 2017) using a sensitive search string. Two independent reviewers screened the titles and abstracts for eligible articles and a third reviewer negotiated consensus. Further assessments of eligibility and quality assessment (of quantitative studies only) were conducted in a similar manner. The search resulted in 2535 records. The data of 33 full-text articles representing 16 quantitative and 18 qualitative studies were included and extracted. All quantitative studies were judged as of poor methodological quality: most studies applied a cross-sectional design and reported only univariate correlation coefficients. Due to the high heterogeneity of the studies, a meta-analysis could not be conducted.

Results The results of our systematic review point to a relationship between high information amount and perceived information overload. According to the included studies, information overload was positively associated with work time spent with Emails, work-to-family conflicts and negatively associated – inter alia – with technical support, segmentation between work and family life, and appropriate Email management techniques.

Discussion The most striking result was a clear lack of methodically sound studies on the determinants and consequences of information overload. Future studies on this important topic should provide a defined study base, should take the temporal sequence into account and should quantify information amount.

STRESS AMONG CENTRAL INDUSTRIAL SECURITY FORCE PERSONNEL – A COMPREHENSIVE ASSESSMENT AND ACTION PLAN

Udaya Kumar Reddy, GF Prabhut, Madhura Joshi, BC Shivakumar S, Ajayesh Shafi, Ajayesh Shafi. Sagar International Institute and Policlinic of Occupational and Social Medicine, Faculty of Medicine, TU Dresden, Germany

Methods A cross-sectional study was conducted in two randomly selected police districts in Kuala Lumpur from 2012–2015. A total of 579 police officers from 2 headquarters and 11 police stations participated in this study. The 21-item Depression, Anxiety and Stress questionnaire was used. Multinomial logistic regression analyses were carried out.

Results The study reported that 40.3% police officers (95% CI: 55.0 to 64.3) had some level of stress; 6.4% (95% CI: 4.4 to 9.2) severe, 15.1% (95% CI: 11.9 to 19.0) moderate and 18.8% (95% CI: 15.3 to 22.8) mild. A police officer who reported mental illness had 6 times the odds of being severely stressed (aOR 5.83, 95% CI: 1.82 to 18.61) compared to one not mentally sick while a police officer who reported headache had nearly 3 times the odds of experiencing severe stress (aOR 2.91; 95% CI: 1.09 to 7.75) compared to one who reported no headache. A police officer who did not exercise or pray had 3.8 times odds (aOR 3.79, 95% CI: 1.65 to 8.75) and more than 5 times odds (aOR 5.15 (1.58,16.85) of being severely stressed compared to an officer who exercised or prayed respectively.

Discussion Headache and mental illness were positively associated with police stress levels. Higher prevalence of stress justifies instituting peer counselling and stress reduction strategies while annual medical screening must be made compulsory for early detection of those with common diseases (hypertension and diabetes), frequent headache and mental diseases.
THE INVOLVEMENT OF THE EMPLOYEES IN THE PROJECT MANAGEMENT: A KEY ISSUE FOR EFFICIENCY AND HEALTH AT WORK

B Dugué*, J Petit. Researcher in ergonomics, University of Bordeaux, Bordeaux-INP, IMS, France

Introduction The design of working places fitting for all the employees is a major issue for the prevention of health and safety. It is a double challenge: because of the target, the result of the design, but also regarding the methods of intervention. The management of changes is a way to promote a learning and collaborative organisation, and thus the role of the final users. The participation of the employees in the design process is an important issue to achieve these goals, but it is a complex process which needs several requirements. The involvement of employees can lead to failure if the conditions and the aim of the participation is not clear enough.

Methods An ergonomic intervention aiming the design of a reception desk for 280 agencies of a bank company has been carried out. After two attempts which led the company to a social conflict, they decided to start over the process with an ergonomist, with a different management. A steering group and a working group had been set up, simulations and test performances were carried out.

Results The result of the design and its acceptance by the employees show that the process is as important as the goal. We can attest that several conditions must be controlled: which structure of the project, who to be involved, how, for what regarding their professional position, with which knowledge of the real work situations?

Conclusion The way we build the interventions must be in line with our vision of the future operation and the place of the users in the organisations. The project structure must insure two goals: the involvement of the relevant managers and the participation of the employees concerned by the implementation, but with tools and a methodology. It is both a matter of efficiency and a dynamic for healthy organisations.

SUBSIDIARITY AS A TARGET FOR HEALTHY ORGANISATIONS

J Petit*, B Dugué. Researcher in ergonomics, University of Bordeaux, Bordeaux-INP, IMS, France

Introduction Corporate governance, through the involvement of employees and the dynamics that it can produce, is an essential issue for efficiency and for safeguarding workers’ health. Many studies have shown that individual autonomy is a determining factor for occupational health. Employees must have individual and collective leeway in organising their work, not only applying procedures that have been defined by others but being able to show their creativity and influence their work environment. In this aim, organisational design should provide the opportunity to influence management modes, distribution of power, individual participation in the design processes. The concept of subsidiarity can help to achieve these goals.

Methods From an ergonomic intervention in an insurance company about the organisation of a call centre, we can see what are the conditions to build an organisation aiming at subsidiarity, both as a target and as a process for the management of change.

Results Contrary to the idea of a predetermined definition of all the decisions that can be taken at every level of the hierarchy, efficiency consists in constantly adapting the level of decision-making to the problem being dealt with. This requires constructing an organisation which is sensitive to details of events, which can be always adjusting the levels at which matters are dealt with. However, this swing from one decision level to another is only possible if the organisation and the people within it are well prepared beforehand.

Conclusion The concept of subsidiarity constitutes an ethical point of reference for dealing with questions of organisational design and corporate governance. It favours decision-making at the lowest appropriate level by following three organising principles: the competency principle, the assistance principle, and the substitution principle. The way we build the interventions must be in line with this vision. It is both a matter of efficiency and a dynamic for healthy organisations.

MOBILE PHONE USE AND MENTAL HEALTH – A REVIEW

Sara Thomée*, Department of Occupational and Environmental Medicine, University of Gothenburg and Sahlgrenska University Hospital, Gothenburg, Sweden

Introduction Mobile phones have in a few decades affected how we communicate, interact, search for information, and pass time, at work and at leisure, implying a near ubiquitous use. There is a growing literature on potential health effects of mobile phone use. The aim was to review epidemiological studies that take a psychological or behavioural perspective on mobile phone use and mental health.

Methods PubMed and PsycINFO were searched for studies on mobile phone use and mental health in May 2, 2016. 1550 papers were screened on title/abstract. Exclusion criteria: studies considering electromagnetic fields, attention while driving/studying, relational aspects, sexual behaviour, cyberbullying, case or experimental studies, and reviews. 176 papers were retrieved of which 126 were included. Formal systematic quality assessment of the papers was not done.

Results Only approx 5% of the papers had longitudinal design. Self-report was the dominating method of measurement for exposure and outcomes. One third of the studies concerned children or youth. The majority of studies on