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## Editorial

Angela J Carter

Hello everyone

2009 has been a busy year, and difficult for many of us with the worsening of the world economy. However, EAWOP succeeded in having an outstanding congress in the beautiful Santiago de Compostela with over 1,200 members enjoying excellent papers and symposia along with the opportunity to meet old friends and colleagues and to make new acquaintances.

There have been some changes for EWOPinPractice with Ute Schmidt-Brasse deciding it was time to stand down as editor. I am staying on as editor and would like to thank Ute for all her help and support and good council that she has given me with this edition of the ejournal and with many other matters.

With the membership of EAWOP growing I would like to strengthen the editorial board by appointing four new sub-editors to assist me in producing the ejournal. Please contact me at the email address at the end of this piece if you would like to join me in ensuring a successful future for this practitioner publication.

There are six excellent papers that will interest you in this edition. Gail Kinman and Almuth McDowall from the UK offer us the content from their successful symposium at EAWOP 2009 looking at work-life balance and questioning that this might depend on where and how we work. This is followed by a fascinating paper by Florence Spitzenstetter and Didier Raffin from France who look at the experience of "near accidents" and how these can be used in accident prevention. Next is a paper from Joan Fraser, Des Leach and Sue Webb (UK) offering us some helpful advice on how to better use the information gained from employee surveys. Following this is a description of the web-based occupational stress prevention system that has been developed in Estonia by Mare Teichmann and Jüri Ilvest. The next paper by Merryn McGregor and her colleagues from the Institute of Work Psychology (Sheffield, UK) who describe the successful development of a training and development evaluation process that supported the move to a more business orientated approach in a membership organization. The final paper is by Viesturs Renge and Janis Dzenis who examine the development of Organizational Psychology in Latvia and the challenges that they currently face with high unemployment and a difficult economy.

There will be something for everyone in these papers that will appeal to you. Please take the time to email the authors to explore your interest or to explain how similar or different your work is to theirs. With the authors' permission we will summarise this discussion for you in our next edition of the ejournal.

If you have enjoyed these papers please think about writing for the ejournal yourself. The philosophy of the journal is that the publications are about the practice of Work and Organizational Psychology in Europe. The format for papers is described in the style guide section of this web section. If you would like to discuss your ideas before preparing your paper please contact me.

Good-bye from me and best wishes for our festive celebrations and a happy and prosperous New Year.



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# Does work-life balance depend on where and how you work?

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## Abstract

This article reports on a symposium presented in EAWOP, 2009 that examined work-life balance issues in different occupational contexts. During a global recession where developing work-life balance policies may not be considered organizational priorities; we argue that the need for systematic research into work-life balance has never been greater. The findings of the four papers included in the symposium suggest that work-life balance initiatives that are firmly grounded in workplace context and that acknowledge diverse approaches to conceptualising and managing the work-home interface will be more successful than those that assume "one size fits all".

## Introduction

Work-life balance is a key issue in all types of employment as dual-career families, high work demands and long working hours have become the norm. Over the last decade or so, the importance of helping employees achieve a balance between the demands of their work and their home lives has been emphasised. A strong business case for the implementation of work-life balance policies has been highlighted by the Department for Trade and Industry (DTI, 2003) in the UK. According to this survey, the benefits to organizations include increased productivity, reduced overheads, improved recruitment and retention and lower levels of absenteeism. In terms of individual outcomes, research has found strong relationships between perceptions of work-life conflict and psychological and physical ill health, substance abuse and family functioning (Kinman & Jones, 2001). This work shows that the potential benefits of helping employees manage the work-home interface are clear.

Daniels, Lewis and McCarraher (2000) have documented a four-stage process for organizational development in the field of work-life balance. Stage 1 (Grass Roots) focuses on the provision of child-care, which is generally provided in response to pressure from women with young children. Stage 2 (Human Resources) is when initiatives are broadened in response to a growing recognition of the benefits provided by introducing work-life balance policies. At the third stage (Culture Change) the focus broadens further to encompass the work-life concerns of the workforce as a whole. At this stage comes recognition that work-life policies will only be effective in a culture that is fully supportive of their aims. Finally, by Stage 4 (Work Redesign), there is a greater awareness of how organizational objectives and employees' work-life balance needs could be satisfied simultaneously. At this stage, work-life balance is seen as an integral component of fulfilling the goals of the organization.

Although many examples of good practice exist, the majority of organizations remain at all the “Grass Roots” stage; only focusing on helping employees to meet their caring responsibilities. In the UK, a number of “family friendly” working arrangements have been made available to some employees, options include: part-time work, shift work, job-sharing, term-time contracts, flexitime, compressed working week, reduced hours and the opportunity to work annualised hours allowing some gaps in employment to allow for school holidays, for example (Kodz, Harper & Dench, 2002).

More progressive organizations have been working towards the second (“Human Resources”) stage in the model developed by Daniels and colleagues, where initiatives are developed in response to a growing recognition of the benefits provided by broader work-life balance policies. This might involve providing employees with opportunities for leave of absence to pursue personal projects. Few have arrived at the third stage, “Culture Change”, where work-life policies are recognised as of fundamental importance to fulfilling the goals of the organization. At this stage, the work-life concerns of the workforce as a whole are considered and work-life balance is seen as an integral component of fulfilling the goals of the organization. This would involve blending corporate priorities with employees' lifestyle responsibilities and personal aspirations and would require regular re-evaluation to reflect the changing needs of employers and employees.

With the world economy in recession, there are serious concerns that further development of work-life balance initiatives will no longer be organizational priorities. Companies that were working towards extending their policies and practices beyond the grass roots stage may currently see work-life balance as a luxury they can no longer afford. There is evidence that many organizations are putting their employees under increasing work pressure in an attempt to survive until economic recovery; and in turn, people who are still employed may be working longer and harder in an attempt to hold onto precious jobs.

The UK government argues vehemently for maintaining the controversial opt-out of the European Working Time Directive's recommended maximum of 48 hours per week; insisting that workers and employers need more, not less, flexibility in the current economic climate. Whilst such approaches might yield short term benefits, down-grading work-life balance initiatives will have serious human and organizational costs (Duxbury, 2009). The latest wave of the 24/7 Work Life Balance Survey (Hurst, Skinner & Worrall, 2009) highlights the initial impact of the recession on workload and the work-home interface. Sixty-two percent of the sample (n = 1,898) indicated that their workload had increased in the previous 12 months compared to 56 percent in the 2008 survey. Moreover, seventy-five percent of participants reported having difficulty achieving an acceptable work-life balance: a percentage increase on the previous year's findings.

There are also indicators that increased pressure upon people's resources comes at a cost, as absenteeism is on the rise. A recent survey by the Work Life Balance Centre and Coventry University (n = 1,900) found that absenteeism has nearly doubled, with senior managers the most prolific absentees (Baker, 2009). The average employee was absent for 9 days in the year to January, 2009 compared to 5 days in the previous year, whilst senior managers took an average of 11 days off this year.

Clearly, the need for systematic research into the nature of work-life conflict and further insight into ways by which the work-home interface can be more effectively managed has never been greater. Based on several years experience working with a range of occupational groups, we believe that context specific work-life balance initiatives are likely to be more effective than those that are developed from a more generic perspective. We argue that knowledge of job specific demands and working conditions, and the differing ways that people manage the work-home interface in response to these demands, is vital in order to advance knowledge. For example, schedule flexibility is generally seen to be a protective factor for work-life balance, but jobs without formal working hours might threaten rather than protect work-life balance as employees may choose to work longer and harder (see Kinman & Jones, 2009). Our symposium at the 2009 EAWOP Conference in Santiago comprised four studies that examined the work-home interface in different working contexts within the public sector using a range of different methodological approaches.

More specifically, the symposium addressed the following questions:

- What are the context specific factors that promote work-life conflict and balance in different job roles and occupational groups?
- What job-related individual difference factors enhance and impede work-life balance?
- How do different occupational groups manage the work-home interface and how successful are these strategies?
- To what extent are Western conceptualisations of the work-home interface relevant in non-Western employees?
- What are the challenges for work-life balance research and practice in a global recession and how might context specific approaches contribute to knowledge?

The individual papers within the symposium will now be described in turn, followed by a general discussion of the salient issues and priorities for future research.

## **Emotional labour and the work-home interface in UK teachers**

The first study in the symposium, by Gail Kinman, Siobhan Wray and Calista Hindler, examined emotional labour as a predictor of work-life conflict in teachers working in secondary schools in the UK. The mechanisms by which the emotional demands of teaching are imported into the work-home interface were also examined. It has long been argued that teaching requires the management of personal emotions and those of students (Fried, 1995) and that emotional labour has the potential to “spill over” into the home environment (Wharton & Erickson, 1993). Nonetheless, as yet, little research has been conducted on emotional labour in teaching or its relationship with the work-home interface more generally. This study tested a mediated model whereby emotional labour is related to strain-based work-life conflict via emotional exhaustion.

It has recently been suggested that models of work-life conflict would be enriched by the inclusion of individual difference variables such as propensity for work involvement and job commitment (Tetrick & Buffardi, 2006). Higher levels of involvement might predispose employees to experience work-life conflict, and/or exacerbate or alleviate the negative impact of demands on the work-home interface. In this study, a second model was tested that examined job involvement as a potential moderator of the relationship between emotional labour and work-life conflict.

Results showed that emotional labour was indeed a strong predictor of work-life conflict, and that emotional exhaustion fully mediates this relationship. Teachers who were more involved in their work tended to have stronger relationships between emotional labour and work-life conflict. Findings suggest that interventions are required to enhance the emotion management skills of teachers. The development of “healthy” role separation and firmer emotional boundaries between work and home should be encouraged to ensure that the negative impact of emotional labour does not manifest itself as negative spill over.

## **Daily Hassles and Stressful Life Events as critical work/life balance factors in UK Police Workers**

The first study in this symposium examined work-life conflict uni-directionally: i.e. from work-to-home only. In the second study, Almuth McDowall adopted a bi-directional perspective in a sample of UK police officers and support staff by examining the impact of work-related daily hassles and stressful life events and circumstances from the non-work domain as well as vice versa.

A focus group of seven experienced police workers (average length of service 20 years) discussed the type of daily hassles and stressful life events likely to be experienced by employees. An index of daily hassles and stressful life events was subsequently developed based on this focus group. Findings revealed that many of the demands experienced by the police are highly idiosyncratic such as managing unpredictable and often dangerous situations and ensuring crime targets are met, as well as more mundane duties such as completing extensive paperwork. The conservation of resources model (COR, Hobfoll, 1989) provided the

conceptual framework for this study. This holds that humans are active agents who strive to preserve, protect and retain limited resources through resource-enhancing strategies, and that stressful life events, specifically those related to the notion of loss, act to deplete one's resources more rapidly than other factors.

Building on prior research by Hobson et al. (1999) and Grandey and Cropanzano (1999) the COR framework allowed an examination of the factors that may help employees to manage the work-home interface (such as social support) as well as increase work-life conflict (such as long working hours). A negative association between levels of professional commitment and work to non-work conflict and non-work to work conflict was expected. As professional commitment might increase the risk of work demands spilling over into the non-work domain due to excessive involvement in the job role, it was tested as a potential moderator of the stressor-strain relationship.

Findings revealed that everyday hassles related to work but not stressful life events such as divorce, bullying, threat of job loss or financial problems were significantly associated with work-life conflict. Somewhat contrary to the key tenets of the COR model, non-work hassles were associated with conflict from both directions (i.e. work to non-work as well as from non-work to work). Professional commitment did not buffer the relationship between daily hassles, more serious life events and perceptions of work-life conflict.

A potential explanation for these findings is that police and associated personnel are trained to deal with unforeseen circumstances, but may be much less equipped to deal with everyday stressors. The impact of everyday hassles may well be exacerbated when life problems spill over into work: a situation that is not seen as acceptable in many organizational environments. For example, concerns over a sick child may result in an employee being distracted and be seen to threaten performance in a safety critical working environment such as the police. The implications are that there is a need for training and awareness raising to help employees successfully manage the work-home interface beyond immediate work demands.

## **The interface of work and families among Thai nursing staff**

The findings of the first two studies highlight the need to examine the impact of job-specific demands on the work-home interface and the factors that might mediate or moderate this relationship. The third study presented by ChatsaranTengpongthorn and Almuth McDowall, explored how Thai nurses conceptualise and manage the work-home interface.

In Thailand, nurses are generally required to reconcile high work demands with high home demands. The objectives of this study were to explore to which extent work-family constructs, such as conflict and facilitation, are relevant to Thai nurses, and how they might relate to each other.

As little was previously known about the experience of work-life balance in this cultural context, this study utilised qualitative methodology and adopted a "bottom up" approach rather than imposing Western models and measures. Transcripts from semi-structured interviews with 26 nurses working in three different hospitals in Thailand were thematically coded using Template Analysis (King, 1998). In order to capture heterogeneous experiences, the sample comprised nurses who were single as well as married, with or without children and those whose husbands were living away from home (with or without children).

Whilst some of the nurses' experiences can be mapped on to Western concepts of facilitation and conflict (e.g., demands are high and contribute to perceptions of conflict); other factors appear more culture specific. Important differences between conceptualisations of work-life balance held by this group and the dominant Western individualistic perspective were revealed. Most importantly, work-life conflict and facilitation were found to be fluid, and negotiated at a group level. Whilst support structures, such as family or colleagues, can be a source of facilitation, they can also be a source of conflict due to expectations for loyalty and reciprocation.

Thai people are socialised to be interdependent rather than independent; thus people are expected to have total loyalty to in-group members and share resources with them. Thus, support can come at a price. There was also evidence of "informal accommodations" which are

unlike experiences in Western countries, such as spouses interfering in work schedules, or creating exceptional home demands. Work supervisors were found to play a particularly key role as 'border keepers' between different domains, in particular they used informal accommodations (such as requests for late notice shift changes) as favours granted only to what they considered "high performing" employees. Nurses increasingly live and work in multi-cultural settings. The findings of this study indicate that insight into non-Western attitudes towards the work-home interface will help develop more inclusive ways of helping employees gain a work-life balance that meets their needs and those of their families.

## **Blurring the boundaries between the personal and the professional: Work-life conflict and recovery in UK academic employees**

Borders and boundaries between work and home played an important role in the final contribution of this paper. A multi-method study of a large representative sample of academic employees working in UK universities was conducted by Gail Kinman and Fiona Jones. Previous research suggests that work-life balance might be generally poor in this sector and that this is a particularly strong predictor of poor psychological well-being and low job satisfaction (Kinman & Jones, 2003). The primary aim of this study was to examine working practices and strategies utilised by academics to manage the work-home interface.

Although academic work is highly demanding and long working hours are commonplace in the sector, relatively high levels of control over where and when these demands can be fulfilled have been documented (Kinman, Jones & Kinman, 2007). A range of strategies utilised to manage the work-home interface were examined as predictors of work-life conflict. The extent of working at home, the type of work most likely to be done there and the use of mobile technologies to facilitate this practice were assessed. Also investigated were the strength of boundaries between work and home, together with the level of work-home integration that was currently experienced compared with the academics' ideal position. The role played by the individual difference variable over-commitment to the job role in predicting work-life conflict was also examined. Qualitative data was utilised to explore specific strategies used by academics to manage the work-home interface.

Findings revealed that a high proportion of workload was done at home, with some core academic tasks (such as marking and writing for publication) were performed exclusively in this domain. Although working at home was related to perceptions of blurred boundaries and work-life conflict, some academics (especially those with young children) found that this helped them manage the work-home interface more effectively. Similarly, considerable variation was found in the extent to which employees wish for a firm boundary between work and home; some desired almost total separation between domains, whilst others wished for a high degree of integration. The "fit" between the level of work-life integration/separation that academics currently experienced and their ideal situation was a particularly strong predictor of work-life conflict. Academics that were more over-committed to the job role also tended to perceive higher levels of work-life conflict.

Thematic analysis of qualitative data obtained from open-ended questions included in the survey highlighted several strategies employed by academic employees to manage the work-home interface. These encompassed forward planning and time management, drawing support from family and friends and reducing involvement in family life and work activities deemed excessive. Significant costs to role performance in the work and family domains of some practices were highlighted. This study once again highlights the importance of examining the work-home interface in different occupational contexts. In contrast to the findings of studies suggesting that a firm boundary between work and home and role separation is uniformly beneficial (Ashforth, Kreiner & Fugate, 2000), the findings reported here indicate that the optimal degree of integration/separation is to a large extent subject to individual preference.

## Challenges and opportunities for work-life balance research

The findings of the papers described above indicate that work-life balance issues differ by occupational context. They are also strongly influenced by cultural assumptions and practices and individual differences such as job involvement, over-commitment and preference for work/life integration. We also acknowledge that work-life balance needs are also likely to differ by gender, age, role, seniority and other factors. If we are to develop more effective interventions to enhance work-life balance in different sectors of the economy, the need for context specificity and diversity in approaches should be acknowledged..

Our discussant Richard MacKinnon argued; there is a fine line between advancing theory to develop broadly applicable models and being over-reliant on the assumption that common issues will apply in all organizational settings. This also brings up the issue of ownership and responsibility. To some extent, the responsibility for finding a balance between work demands and family life and leisure lies with the individual employee. Nonetheless, organizations have some responsibility in ensuring that their work-life balance policies and practices are developed beyond the basic grass roots level. As discussed above, working environment that supports employees in establishing and maintaining a fair balance between their work and non-work lives is likely to improve employee well-being and organizational functioning.

Research in different occupational contexts should provide more detailed information on the needs and concerns of the workforce, thus facilitating the development of more inclusive work-life balance policies that apply to the workforce as a whole rather than just people with caring responsibilities. Rather than aim to help employees create firmer boundaries between work and home, the findings presented in this paper suggest that professionals may expect some degree of work-life integration. Helping employees identify ways by which they can close the gap between the work-life balance that they currently experience and that which they wish for might be a fruitful approach

Burke (2006) has argued that collaborative “action research” projects, where researchers work jointly with organizations to address work and personal life concerns, have considerable potential in facilitating work-life balance. Such initiatives will reflect the characteristics of different working environments and the diverse needs of employees; they can also make a more explicit link between workers’ personal needs and business objectives.

Based on the findings of the studies presented in this paper, the following priorities for future research have been identified for specific occupational groups:

- Which strategies are effective in helping teachers manage the emotional demands of their work and aiding recovery from these demands?
- Which kind of strategies would help police staff to deal with the job-related hassles that they experience? Are interventions required at the organizational level that focuses on awareness raising and/or training, or is this indeed an issue that is best handled at the individual level?
- How can Thai nurses manage their work-life balance, given that this appears to be a collective issue?
- How could we help academics manage the work-home interface in the face of high work demands from a number of sources, which may be compounded by a tendency towards high job commitment?

These contributions also highlight a need to address broader conceptual questions.

Previous research has consistently found that work affects family more than vice versa (Frone, 2003). Consequently research has tended to focus on work-to-family conflict. However, with the recession acting as a catalyst, workers may be more likely to bring worries about home demands (e.g. financial worries) into the workplace. Research recently conducted by the Trades Union Congress in the UK suggests that problems emanating from domestic life (such as financial worries and relationship problems) may be more stressful than work experiences. It is therefore important that we investigate these relationships in both directions.

A diverse range of methods is required to investigate work-life issues, as the current body of evidence is dominated by cross-sectional quantitative studies. There are topics that are better suited to a theory-building qualitative approach, for instance the study of Thai nurses described

above, indicated that we cannot assume that tried and tested constructs will be relevant across cultures.

There is a clear need for more intervention studies. Whilst it is useful to be able to diagnose salient issues in any organizational context, the work-life balance field would progress considerably if an evidence base were to be developed for interventions, such as training or awareness raising, and their association with individual and organizational outcomes investigated.

## The future

Supported by the Division of Occupational Psychology (DOP) of the British Psychological Society (BPS), we have recently set up a Working Group on work-life balance. As argued above, the work-home interface needs to be considered not only at the individual level, in terms of subjective perceptions and strategies utilised to balance work and home lives, but also the organizational level, in terms of what is available to employees to facilitate the interface of work and other domains. We argue for a multi-level perspective, that considers the potentially different needs and perspectives of employers and employees that extend from the individual workplace and family to the wider community. Our approach is underpinned by our recognition that functional work-life balance has long-term benefits for employers and employees, and that employers need to be actively involved and not see work-life balance as an individual issue.

The scope of the Working Group will be broad and will include topics such as recovery from work, work-family conflict, enrichment, integration and facilitation, cross-over within families, as well as organizational culture and change. We are particularly keen to include practitioners and the Human Resource community to ensure that any outputs and outcomes relate firmly to the real needs of contemporary organizations, employees and their families. We would welcome contributions from people from other European countries with an interest in the work-home interface. Indeed, this can only enhance our knowledge of the context specific nature of work-life conflict and how best to achieve a balance between the demands of work and home that meets the needs of employees and organizations.

## References

- Ashforth, B.E., Kreiner, G.E. & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *Academy of Management Review*, 25, 472-491.
- Baker, K. (2009). Absenteeism and stress loads up as recession hits work-life balance. *PersonnelToday.com*. Accessed and retrieved at <http://www.personneltoday.com/articles/2009/03/24/49980/absenteeism-and-stress-loads-up-as-recession-hits-work-life.html> 20th July 09.
- Burke, R.J. (2006). Organisational Culture: A Key to the Success of Work-life Integration. In F. Jones, R. Burke & M. Westman (Eds.) *Managing the Work-Home Interface: A Psychological Perspective*. London: Taylor & Francis.
- Daniels, L., Lewis, S. & McCarragher, L. (2000). *Work-Life Benchmarking Framework: Literature Review and Survey of Other Benchmarking Organisations*. Manchester: Work Life Research Centre.
- Department for Trade and Industry (2003). *The Second Work-Life Balance Study: Results from the Employers Survey – Executive Summary*, London: National Centre for Social Research.
- Duxbury, L. (2009). Managing work-life balance in a recession. Accessed and retrieved at <http://www.unisa.edu.au/news/2009/150609A.asp> 23rd July 09.
- Fried, R. (1995). *The Passionate Teacher*. Boston, MA: Beacon Press.
- Frone, M. (2003). Work-family balance. In, J.C. Quick & L.E. Tetrick (Eds.). *Handbook of Occupational Health Psychology*, Washington, DC: APA Books.
- Grandey, A.A., & Cropanzano, R. (1999) The Conservation of Resources Model Applied to Work-Family Conflict and Strain. *Journal of Vocational Behavior*, 54. 350-370.
- Hobfoll, S.E., (1989). Conservation of Resources. A New Attempt at Conceptualizing Stress. *American Psychologist*, 44(3). 513-524.
- Hobson, C. J., Delunas, L., & Kesic, S. (2001). Compelling evidence for the need for corporate work-life balance initiatives; results from a national survey of stressful life events. *Journal of Employment Counselling* (38), 38-44.
- Hurst, J. , Skinner, D. & Worrall, L. (2009). *The 24:7: Work/life Balance Survey 2009*. England: University of Keele Work/Life Balance Centre.

- King, N. (1998) 'Template analysis', in G.Symon and C. Cassell (eds.) *Qualitative Methods and Analysis in Organizational Research*. London: Sage.
- Kinman, G. & Jones, F. (2001). The work-home interface. In F. Jones & J. Bright. *Stress: Myth, Theory and Research*, London: Prentice Hall.
- Kinman G. & Jones, F. (2003) "Running up the down escalator: stressors and strains in UK academics", *Quality in Higher Education*, 9, 1, 22- 37.
- Kinman, G., Jones, F. & Kinman, R. (2006). The Wellbeing of the UK Academy: *Quality in Higher Education*, 12, 1, 15-27
- Kinman, G. & Jones, F. (2008). Effort-reward imbalance, over-commitment and work-life conflict in UK academics *Journal of Managerial Psychology*, 23, 3, 236-251
- Kodz, J., Harper, H. & Dench, S. (2002). *Work-life Balance: Beyond the Rhetoric*. Brighton: Institute for Employment Studies.
- Tetrick, L. & Buffardi, L. (2006). Measurement issues in research on the work-home interface. In F. Jones, R. Burke & M. Westman (Eds.) *Managing the Work-Home Interface: A Psychological Perspective*. London: Taylor & Francis.
- Wharton, A. S., & Erickson, R. J. (1995). The consequences of caring: Exploring the links between women's job and family emotion work. *Sociological Quarterly* 36, 2, 273-296.

# The impact of prior experience of an almost accident on comparative optimism

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## Abstract

The first aim of this study was to examine comparative optimism (the difference between evaluation of one's own risk and the evaluation of other people's risk). Because research supports the notion that personal experience moderates the optimistic bias, the second aim of the present study was to test the impact of prior experience of an "almost accident". Real accidents are fortunately not too frequent, thus we wondered if the confrontation with an almost accident, which is a more frequent situation, could have the same impact on risk evaluation. Employees of a metallurgical plant in the Eastern part of France who have been confronted or not with an almost accident were asked to evaluate to what extent a work accident was likely to occur for them and/or one of their work colleagues.

We found that people more usually consider the risk of their colleague being a victim of a work accident than themselves. However, we found for employees who have had an almost accident in the last three months this phenomenon is opposite. They estimate that their own risk as higher than the risk to their colleague.

## Introduction

Many health behavioural models point out the prevalence of perceiving one's own risk to develop prevention (Janz & Becker, 1984; Rogers, 1983). People become involved in a safety process (e.g., using personal protective equipment) only if they perceive that dangerous behaviour represents a risk for their own safety (Weinstein, 1998). When asked to evaluate their risk, people mostly consider that they are less likely than others to experience negative events (Weinstein, 1980). A person's assertion that they are less likely to undergo misfortune than someone else may be entirely valid. But if enough people in a group assess their chance of experiencing a negative event as below average, some of them must be wrong. It is logically and statistically impossible for most people to be better off than the average. Therefore this phenomenon is known as unrealistic optimism (Weinstein, 1980) or comparative optimism (Harris & Middleton, 1994). In the area of work, this comparative optimism could lead people to the conclusion that it is less probable for them than for others to be confronted with a work accident (Spitzenstetter, 2006). However, this systematic bias may then result in non-optimal decisions and behaviours because people perceive themselves to be relatively invulnerable to threat. In addition, it could affect risk-reduction motivation and activities (Weinstein, 1984; Weinstein & Lyon, 1999). For example, drivers perceive themselves less likely to be charged with penalties compared to other drivers who are likely to commit more traffic violations (Dionne, Desjardin, Ingabire, & Aqdim, 2001).

Though unrealistic optimism appears to be a robust phenomenon and has been demonstrated across a wide variety of events (Perloff & Fetzer, 1986) and samples (Spitzenstetter &

Moessinger, 2008), some research supports the notion optimistic bias could be moderated by personal experience (Burger & Palmer, 1992; Helweg-Larsen & Shepperd, 2001). Individuals who have already been confronted with a negative event tend to feel less optimistic compared to others when they evaluate their risk of being again confronted with this kind of event (van der Velde, Hooykaas, & van der Pligt, 1992). A negative event leaves the victim with an unusual and unpleasant sense of being vulnerable (Perloff, 1983). For example, it has been demonstrated that people who experienced an earthquake show no optimistic bias about this type of event (Helweg-Larsen, 1999); believing it may happen again. Or people who have had a prior experience with a sexually transmitted disease show less optimistic bias about AIDS risks (van der Velde, van der Pligt & Hooykaas, 1994).

A number of factors could account for the role of prior experience. It has been argued, for example, that experience with a detrimental event could lead to negative affects that would involve a more systematic analysis of the situation (Helweg-Larsen, 1999). People would be more able to consider their negative characteristics (e.g., not wearing their security gloves) and/or other peoples' positive characteristics (e.g., always wearing the safety gloves). A prior experience may also decrease the perception of personal control (Helweg-Larsen & Shepperd, 2001). People could perceive that they had no more control over events than others and thus could be equally likely to experience unwanted outcomes. In addition, a prior experience may lead to the availability of the event (Chambers, Windschitl, & Suls, 2003). People would be more able to imagine the negative event and therefore would judge it more likely to occur to them (Stapel & Velthuisen, 1996). Whatever the explanation is, it has also been demonstrated that this impact is not systematic. In the area of driving for example, there was no evidence that prior experience of an accident reduces optimistic bias (McKenna & Albery, 2001; Rutter, Quine & Albery, 1998).

The first aim of the present research was to test the impact of prior experience on comparative optimism at work. When people have to evaluate their risk in a professional environment will they be influenced by their prior experience? The second aim is to consider an almost accident as a prior negative experience and to explore the fact that the confrontation with an almost accident could lead to a comparative optimism reduction. An almost accident can be defined as an identified critical situation that could have led to an accident. The accident has been notified and people are aware of the fact that they have been "lucky". Almost accidents are statistically more frequent and could be an interesting way to work on risk evaluation. We suppose that this type of prior experience could have a similar impact to a real accident because it has been shown that non-victims react like victims. For example Helweg-Larsen (1999) showed that indirect experience (e.g., people knowing someone who has experienced an event personally) alters the perception of risk as a direct experience (e.g., people experienced personally the event). Thus, we considered that an almost accident could be regarded as an indirect experience of an accident. Moreover, all the explanations about prior experience impact could also be valid for almost accidents.

Finally, we will investigate the impact of time proximity prior to the almost accident. Burger and Palmer (1992) showed that after three months the impact of the prior experience of an earthquake vanished; and that comparative optimism reappears. The memory of the negative event becomes less salient over time and "gives way" to the more usual mechanism of comparative optimism. It is very probable that the proximity will be particularly important for an almost accident, because this experience leads to no direct negative consequences.

## Method

### Participants

A total of 224 French workers (all male) completed the survey with 191 providing valid answers (age range of 23 to 56 years, *mean* 44 years). They were all employees of a metallurgical plant in the Eastern part of France and were randomly chosen within eight different work teams.

### Procedure

In order to measure comparative optimism, we used the indirect method (Perloff & Fetzer, 1986). Participants estimated the likelihood that a work-accident would happen to them and

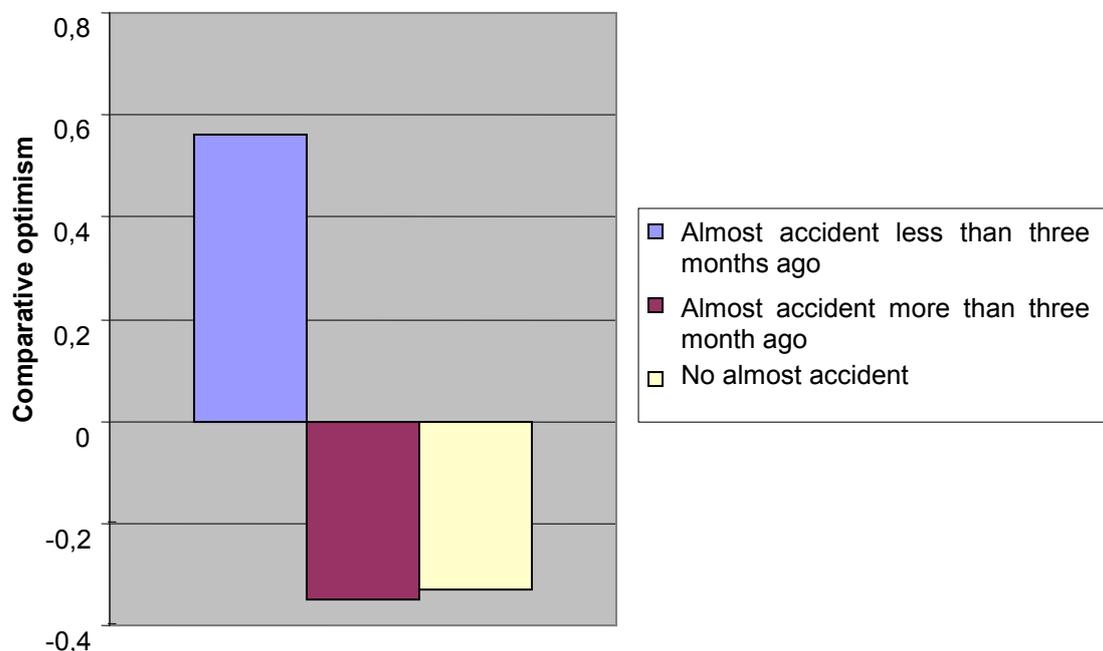
separately to one of their colleagues on a seven-point scale ranging from “1” (very unlikely) to “7” (very likely). Comparative optimism is then calculated by subtracting each participant’s estimate of the colleague’s risk from the estimate of their own risk of work accident. Difference scores could range from -6 to +6; negative scores indicating comparative optimism (perceiving oneself as less at risk than the colleague) and positive scores indicating comparative pessimism (perceiving oneself as more at risk than the colleague). Scores near 0 signify that the individual and the colleague see equally of risk. The order of these two questions (for individual and colleague) was randomised between the 40 questions of a safety climate survey. This article focuses on the questions related to comparative optimism.

The survey included questions that distinguished participants who had been confronted with an almost work accident from participants who had not. More precisely, because some research led to the conclusion that prior experience has a limited impact in time (Burger & Palmer, 1992), we distinguish participants who have had an almost accident less than three months ago from participants who have had an almost accident more than three months ago. These two groups were distinguished from participants who have never been confronted with an almost accident. These characteristics constitute a between participants factor with three modalities: a) workers without an almost accident; b) workers with an almost accident more than three months ago; and c) workers with an almost accident less than three months ago.

## Results

Participants were divided into three groups: a) 23 workers who had not been confronted with an almost accident; b) 88 workers who had been confronted with an almost accident more than three months ago; and c) 80 workers who had been confronted with an almost accident less than three months ago.

**Figure 1. Means of comparative optimism as a function of prior experience of an almost accident**



Comparative optimism scores were calculated for each group by subtracting each participant’s estimate of the colleague’s risk from the estimate of their own risk of work accident and submitted them to a one-way ANOVA. As expected the ANOVA revealed an effect of prior experience of almost accident ( $F(2, 188) = 6.46, p < .001$ ). Newman-Keuls post hoc analyses show that the “with almost accident less than three months ago” group ( $M = 0.56, SD = 0.23$ )

was significantly different from the “with almost accident more than three months ago” group ( $M = -0.35$ ,  $SD = 0.12$ ) and the “without almost accident” group ( $M = -0.33$ ,  $SD = 0.12$ ).

When the “with almost accident less than three months ago” workers evaluate their risk, they exhibit comparative pessimism. The t-test showed that the mean in this group was significantly higher than 0 ( $p < .03$ ). They consider that their chance of being confronted with a work accident is higher than the probability of their colleague.

Whereas the “with almost accident more than three months ago” group did not have a different level of comparative optimism compared to those without prior experience of almost accident. Those participants’ considered that their risk was below that of their colleagues. The t-test showed the two means were significantly below 0 (at  $p < .00001$ ).

## Discussion

The present results support previous work indicating that, relative to a typical other (Weinstein, 1980) or to a colleague (Spitzenstetter, 2006), people think that they are less at risk. In most cases our participants considered their risk of being confronted with a work accident lower than the risk of their colleagues. As other kinds of risks; comparative optimism is present about the likelihood of work accidents. This bias seems quite systematic as soon as a probability of accident is questioned; whatever the field in which the accident takes place.

However, when situational information (the almost accident) suggests that they may be at risk, people adjust their optimistic beliefs accordingly. Indeed, our results showed that this optimistic bias can disappear because of the impact of the particular prior experience of an almost accident. Congruent with Helweg-Larsen’s results (1999), it seems that the experience of an almost accident (no direct consequences) can be as authentic as the experience of a real accident (direct consequences) in moderating the gap between one’s own and other’s risk.

Congruent with Burger and Palmer’s (1992) research, our results also showed that prior experience has to be recent to be effective in the optimistic bias reduction. When participants had been recently confronted with an almost accident they showed a pessimistic bias. They perceived that their personal risk was higher than that of their colleague. But when people had been less recently confronted with an almost accident, they showed comparative optimism as if they have had no such prior experience. This observation confirms the robustness of comparative optimism. Thus, it seems that prior experience of an almost accident does not lead to a profound variation of risk perception but only to a transitive modification. People seem to be motivated to maintain their optimism whenever possible.

A limitation of this study is due to the difficulty with research into the role of personal prior experience. As Mc Kenna and Albery (2001) noticed it implies that observed findings may reflect pre-existing differences between the groups. Thus, more research is needed to thoroughly examine the potential impact of prior almost accident.

It is interesting to note that our results about prior almost accidents are very similar to the results obtained about prior direct experience. These findings have practical implications for accident prevention. As the rate of almost accidents is higher than the rate of real accidents, the data base in the plant could allow risk preventers to work on more significant figures. It is worth while for enterprises to be particularly attentive to almost accidents and to use this information to work on risk perception bias. This we encourage safety managers to collect information about every almost accident in order to maintain a realistic attitude toward risk. This information can be used in various ways. For example, workers who have experienced an almost accident in the last three months can take part in a specific training session focused on the way this perception bias can modify their risk perception. In this way the experience of an almost accident is made more salient to workers and the impact of this experience on their attitudes of risk assessment is explored.

## References

- Burger, J.M., & Palmer, M.L. (1992). Changes in and generalization of unrealistic optimism following experiences with stressful events: Reactions to the 1989 California earthquake. *Personality and Social Psychology Bulletin*, 18, 39-43.
- Chambers, J.R., Windschitl, P.D., & Suls, J. (2003). Egocentrism, event frequency, and comparative optimism: When what happens frequently is more likely to happen to me. *Personality and Social Psychology Bulletin*, 29, (11), 1343-1356.
- Dionne, G., Desjardins, D., Ingabire, M.-G., & Aqdim R. (2001). La perception du risque d'être arrêté chez les camionneurs et transporteurs routiers. Laboratoire sur la sécurité des transports, CRT-2001-14, Montréal.
- Harris, P., & Middleton, W. (1994). The illusion of control and optimism about health: on being less at risk but no more in control than others. *British Journal of Social Psychology*, 33, 369-386.
- Helweg-Larsen, M. (1999). The lack of optimism biases in response to the 1994 Northridge earthquake: The role of personal experience. *Basic and applied social Psychology*, 21, (2), 119-129.
- Helweg-Larsen, M., & Shepperd, J.A. (2001). Do moderators of the optimistic bias affect personal or target risk estimates? A review of the literature. *Personality and social psychology review*, 5, (1), 74-95.
- Janz, N.K., & Becker, M.H. (1984). The health belief model: A decade later. *Health Education Quarterly*, 11, 1-47.
- McKenna, F.P. & Albery, I. (2001). Does unrealistic optimism change following a negative experience? *Journal of Applied Social Psychology*, 31, 1146-1157.
- Meyer, T. & Delhomme, P. (2000). Quand chacun pense être moins exposé que les autres aux risques mais plus réceptif aux messages de prévention pour la santé. *Revue de Santé Publique*, 12, (2), 133-147.
- Perloff, L., & Fetzer, B. (1986). Self-other judgements and perceived vulnerability to victimisation. *Journal of Personality and Social Psychology*, 50, (3), 502-510.
- Rogers, R. W. (1983). Cognitive and psychological processes in fear appeals and attitude change. In J.T. Cacioppo & R.E. Petty (Eds.), *Social Psychophysiology* (pp.153-176). New York, NY: Guilford.
- Rutter, D. R., Quine, L. & Albery, I. P. (1998), Perceptions of risk in motorcyclists: unrealistic optimism, relative realism and predictions of behaviour. *British Journal of Psychology*, 89, 681-696.
- Spitzenstetter, F. (2006). Optimisme comparatif dans le milieu professionnel : l'influence de la fréquence et de la gravité sur la perception des risques d'accidents du travail. *Psychologie du Travail et des Organisations*, 12, 279-289.
- Spitzenstetter, F., & Moessinger, M. (2008). Personnes âgées et perception des risques en matière de conduite automobile : les conducteurs âgés manifestent-ils encore de l'optimisme comparatif ? *Canadian Journal of Aging*, 27, (2), 159-167.
- Stapel, D.A., & Velthuisen, A.S. (1996). Just as if it happened to me: The impact of vivid and self-relevant information on risk judgments. *Journal of Social and Clinical Psychology*, 15, 102-119.
- Van der Velde, F.W., Hooykaas, C., & Van der Pligt, J. (1992). Risk perception and behaviour: Pessimism, realism and optimism about aids-related health behaviour. *Psychology and Health*, 6, 23-38.
- Weinstein, N.D. (1980). Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, 39, (5), 806-820.
- Weinstein, N.D. (1984). Why it won't happen to me: Perceptions of risk factors and susceptibility. *Health Psychology*, 3, 431-457.
- Weinstein, N.D. (1988). The Precaution Adoption Process. *Health Psychology*, 7, 355-386.
- Weinstein, N. D., & Lyon, J. E. (1999). Mindset and optimistic biases about personal risk. *British Journal of Health Psychology*, 4, 289-300.

# Employee surveys: guidance to facilitate effective action

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Joan Fraser, a mature student at the University of Sheffield, gained extensive experience with employee surveys as an occupational psychologist in a large government organization. Regular contact with other managers of surveys raised awareness that taking effective action was a widespread practical problem and stimulated her research interest in finding a solution. Joan's previous experience in educational and health psychology made her consider individual as well as organizational change approaches as a means to improve survey action.

## Abstract

Modern employee surveys have the potential to add value to an organization by assisting planning and change. However, the survey literature shows that using the findings is a challenge (William Steinberg Consultants Inc., 2004). The aim of this article is to provide guidance on how to take action on an employee survey.

The article defines employee surveys and explains the reason for their increasing use. Then, by combining information from the literature with the views of managers who frequently use employee surveys, we identify the main facilitators for action. These are: a clear action purpose for both the overall survey and individual topics; endorsement by senior management; and assignment of both a survey co-ordinator and topic specialists to plan and implement action. These personnel need expertise in the topics targeted for action plus knowledge of how to implement change.

## Providing perspective to employee survey action

The aim of this article is to provide guidance on survey use to improve practice. To begin, we consider the definition of employee surveys and then examine their prevalence. We continue by describing their potential value and the challenges organizations face in taking effective action. Then, using information from both the literature and qualitative research with managers of employee surveys, we focus on processes that should be included in guidance to promote action.

## Introduction

Although many books, consultants and websites describe how to undertake employee surveys, there is a dearth of information on how to use surveys to take action or initiate change. The inadequate use of survey data is an acknowledged issue by both practitioners and researchers. Hartley comments in relation to proposed survey actions:

*"In general, implementation and the sustaining of ... actions was found to be harder than initially anticipated and several [organizations] did not succeed in this area."*

*(Hartley, 2001 p.201)*

There are consequences to lack of action. The potential cost is considerable: a large company survey could cost in the region of £45,000 (Incomes Data Services Limited, 2004 p.44). In addition, there is damage to people's trust. When employees make the effort to complete a survey, it raises expectations that action will be taken (Hogg, Cole, Walker, & Walker, 1989). Breaking this implicit agreement is likely to reduce motivation to complete future surveys (Rogelberg, Luong, Sederburg, & Cristol, 2000). Survey action is vital to organizations, as remarked by Myers and McCutcheon:

*"A technically sound questionnaire accompanied by sophisticated statistical analysis and professionally produced reports will have minimal effect on the organisation unless there is explicit recognition throughout that follow-up action is the most important aspect of the survey."*

*(Myers & McCutcheon, 1995 p.34)*

Even organizations that produce survey action plans can find implementation difficult. An investigation of 600 companies cited action planning as their main survey concern: the proportion reporting their action plans as "fairly successful" was 46 percent with only five percent seeing action plans as "extremely successful" (The Industrial Society, 2000).

## Definition and Prevalence

Descriptions of employee surveys often concentrate on data collection, albeit that many practitioners see the purpose of employee surveys as wider than information gathering (Munro-Faure, 2000). One definition that acknowledges their use for planning and change is that of the Chartered Management Institute (2007) which on their website describes an employee surveys as:

*"A planned procedure which enables an organisation to obtain the opinions of its employees on a particular issue or on the organisation itself, so as to take account of them in the planning process or make changes beneficial to the organisation and individuals alike".*

On investigating the history of employee surveys, we noted that prior to the nineteen eighties most surveys developed around a single topic, often communication. Over time survey content expanded to include topics linked with company productivity, such as leadership, training and satisfaction. Leadership was introduced to identify any relationship between different leaders and performance, and remains a popular topic of enquiry. Training questions are often added when companies surmised that training might increase production (Martin & Nicholls, 1987). Interest in satisfaction came to prominence in the nineties when businesses whose employees reported greater aggregate levels of job satisfaction improved their financial performance (West & Patterson, 1998).

The use of surveys has increased dramatically over the last two decades. For instance, the 1998 Workplace Employment Relations Survey (WERS) found that survey use had risen from 28 percent in 1992 to 45 percent in 1998 in workplaces employing over 25 people (Feature Article, 2000). A more recent survey (WERS, 2004) found 42 percent of workplaces with over ten employees had held an employee survey within the previous two years (Kersley et al., 2005). These findings show that there is extensive use of employee surveys even in small workplaces. However survey use tends to be greater in large companies (56 percent) and in public organizations (66 percent) (Forth, Bewley, & Bryson, 2006). The 1994 European Council Directive may have had some influence on survey uptake, as it requires Member States to consult employees. The related 2002 National Information and Consultative Directive made this consultation compulsory for employers with over 50 employees (Official Journal of the European Communities, 2002). This legislation applies in the UK from April 2008.

In addition to external pressure from legislation, there are internal drivers promoting survey use. These relate to their potential value to the organization. The first is to monitor company initiatives. This is well established and often a survey's prime focus (Heneman, Fox, & Eskew, 1998). Here employee surveys act as an audit rather than an action tool, such as undertaking a performance-monitoring role to assess quality management initiatives (Taylor & Wright, 2006). The second driver is to give employees an opportunity to express their feelings on work issues

(Hogg et al., 1989). If handled well a survey can facilitate two-way communication and develop employee participation. The final and potentially most important internal driver is to make the organization more effective by using survey findings to inform business strategy and assist change. As previously mentioned the use of survey findings in relation to business strategy remains limited due to difficulties with developing action (Hartley, 2001). Our inspection of the survey literature highlights a variety of stumbling blocks to action, such as lack of time and expertise. More importantly traditional advice on how to conduct a survey provides minimal reference to action. This highlights the key barrier that we are trying to address, which is the limited guidance available on how to promote survey action.

## **Developing Guidance for Action**

The starting point to developing guidance was to review the wider literature on individual (e.g., Lewis, Passmore, & Cantore, 2008), group (e.g., Storey & Salaman, 2005), and institutional change (e.g., Quinn, 2004). Although this literature provided useful information, it lacked detailed recommendations on the use of survey data. To gather more specific information, managers from public and private companies were interviewed as part of a study on employee surveys that began in 2000.

## **Method**

To obtain data useful to large organizations, eighteen managers were invited to participate from large (over 5,000 employees) multi-site companies that had conducted surveys for at least three years. The managers interviewed were identified as having major responsibility for managing their company's survey. The organizations all had headquarters in the UK and were from both the public and private sectors. Some were contacted through existing connections; others through snowball sampling following recommendation from early interviewees; others by criteria sampling using desk research to identify appropriate companies.

Semi-structured interviews lasting on average one-hour covered survey objectives; responsibilities and administration; questionnaire design; employee involvement; and results dissemination. These interviews concentrated on obtaining managers' views of good survey practice, particularly on factors that improved survey action, and acquiring examples of successful actions taken.

Interviews were transcribed and thematic analyses used to classify the data by key themes and then make sense of emerging patterns (Ritchie, Spencer, & O'Connor, 2003). Text from interview transcripts was reduced and classified in a matrix. The matrix headings were based on the research questions and information from the literature (Miles & Huberman, 1984).

## **Findings**

This section describes the major themes emerging from our investigation of the literature, enhanced by information from the interviews. Relevant themes on the change process were obtained from reviews of historical theories (e.g., Lewin, 1946), behaviour change approaches (e.g., Sniehotta, Schwarzer, Scholz, & Schuz, 2005), and stages of change models (e.g., Prochaska, 2004). Prevalent themes were Leadership, Experience, Communication and Change Capability. The last theme encapsulates knowledge of how to initiate, manage and maintain the change process. The interviews with experienced managers provide a valuable pragmatic focus to these literature themes as innovative twists result from the interviewees' perspective of what occurs in real life around company surveys.

### **Leadership**

The literature identifies the need for a senior leader to act as a catalyst for change through their ability to focus activity towards a desired outcome (Quinn, 2004). The interviewees were in agreement on the value of senior management to trigger survey action. Many also indicate the need for two additional leaders to be associated with the survey process: a coordinator and a

topic specialist. The former requires expertise in survey administration, plus the ability to influence others to agree and implement action plans. The purpose of the latter is to promote action around particular topics in the survey.

There were a variety of comments highlighting the benefits of a survey coordinator. For example, Interviewee 6 describes an overall coordinator facilitating action planning with divisional coordinators supporting action locally. Other interviewees suggest that a central team for the coordinating role. Coordinators appear particularly valuable in large organizations to liaise with remote locations.

In contrast topic specialists need to be responsible and skilled on specific survey issues. For example, Interviewee 12 describes a specialist from their personnel department concentrating on improving training and development. Therefore while senior management are needed to endorse survey action, the planning and implementation of action requires survey coordination and topic specialists.

## Experience

Both the literature and the interviewees confirm that all leaders (senior management, coordinator and topic specialist) require experience for credibility and quicker more effective decision-making. Management studies find experienced executives generate more positive organizational outcomes, as they can perform more varied or complex activities (Quinn, 2004). The marketing literature highlights that credible sources appear expert and trustworthy, and therefore are more persuasive (Kotler, 1988).

The interviewees confirm that the senior manager's experience provides benefits. For example, when skilled senior people are involved in the survey process through steering groups, surveys have greater action orientation. Furthermore the interviewees recognise that experience and credibility are vital for the coordinator, expressing this as:

*"People with no experience were running surveys so the results were ambiguous and the objectives unclear."*

*Interviewee 1*

Managing a company survey is complex, as Das points out:

*"Designing a valid survey questionnaire requires considerable training and experience."*

*(Das, 2004 p.23).*

One company, where the interviewee reported "very little" evidence of action, regularly reallocated responsibility for their survey to someone without experience, not realising the benefits of having an established and knowledgeable manager. Here the literature is very specific, advising on the use of consultants to provide expertise when a survey is complex (Heller & Golzen, 1996). In addition, to facilitate action, expert credibility is shown to have greater influence than power, such as dictates from senior management (Kotler, 1988 p.645). Therefore the coordinator plays a vital lead role based on their skill in survey management.

Topic specialists require skills in setting goals and promoting change. The literature bears out the need for specific knowledge during change implementation, when knowledge barriers are greater than motivational barriers (Stiles, 2000). With some survey questions this specialist knowledge may need to be acquired from external consultants. For example, Interviewee 15 describes the need to "buy in a lot of safety training" because improving safe working practice was a major concern for their Board. The important factor with topic specialists is that they should be able to set goals and influence work objectives in their area.

## Communication

In the literature, a communication strategy is described as a critical success factor for employee surveys (Harwood, 1998). The interviewees highlight that the important aspect of communication is that all leaders communicate "commitment to action". This can be expressed in various ways: senior leaders often show this focus from the start of the survey, while

coordinators may demonstrate commitment through distribution of timetables and results, and topic specialist can reflect this through their action plans.

Senior management, according to the survey literature, should communicate their commitment to the survey AND to making changes at the start of a survey (William Steinberg Consultants Inc., 2004). Interviewees back up the benefits of an early senior management focus on action. They describe a variety of methods being employed to assist action including senior management making funds available, relating action to Directors' bonuses, employing consultants to assist action planning, with the most popular being to integrate action with business plans.

*"Every initiative within the business links back to the survey and actions for each initiative decided by process group and outcomes measured through survey."*

*Interviewee 6*

There were a variety of ways by which the interviewees describe coordinators communicating their commitment, such as advertising aspects of the survey, identifying areas of concern, setting targets, proposing plans, or monitoring action. These activities can be encapsulated as the organising, communicating, and monitoring of action plans. This method of displaying commitment is exemplified in a comment from one interviewee:

*"Action plans communicated. ... Evaluate actions to ensure linked to purpose of survey - communicate progress or deterioration (through measurement of future survey results) ..."*

*Interviewee 15*

Based on their experience, several interviewees highlight an important coordinating task as the production of timetabled activities. An important milestone within this timetable is speedy communication of survey results to all employees. It appears that many companies do not plan areas for action until they receive these results. As a consequence, the interviewees express difficulties in using their survey findings to develop and communicate action plans.

*"When it comes to interpreting the results and action plans the company is weak, and the [company] believes they need new ways of communicating."*

*Interviewee 4*

To address this, one interviewee uses a form to coordinate plans.

*"The action plans ... have basic headings of actions, timescales and who responsible (on a proforma supplied by HO)."*

*Interviewee 7*

Prior planning emerges as important, yet some survey literature advises that surveys should not be change orientated but overly inclusive, concentrating on general rather than actionable questions (William Steinberg Consultants Inc., 2004).

Topic specialists normally communicate their commitment in a similar way to coordinators by developing and communicating their particular plans for action. The use of a form permits topic specialists to describe their plans with the resources / responsibilities required for implementation. The literature suggests that it is rare for more than three or four major changes to follow a survey (Walters, 1996). Therefore coordinators should be able to liaise with these topic specialists to design actionable questions and to publicise plans and progress.

## **Change capability**

An important facilitator is change capability through knowledge of how to manage change. The literature recognises a weakness throughout organizations regarding knowledge of change techniques (Buchanan, Claydon, & Doyle, 1999). The interviewees describe addressing their lack of knowledge by gaining information from consultants, books, conferences and professional bodies. Even so they report that taking action on survey findings is hard work and takes time. Similarly the literature shows that achieving change requires persistence. This means that

survey action may need to continue over more than one year, and communicating progress depend on the next year's survey results.

Although leaders require a thorough knowledge of the change process, change capability is particularly pertinent for the topic specialist for two reasons. First, a knowledgeable topic specialist can ensure that the style of question in the survey provides the information they require to take action. Second, by planning potential action, specialists can propose a goal and describe tasks required to reach the goal.

One aspect that affects change capability is the length and content of the questionnaire. Interviewees recognise that a long questionnaire can cause confusion over where to target change.

*"Initially set the survey up to identify people's issues so that they could be addressed. Since then the survey has picked up all sorts of other things, monitoring initiatives. Possibly measuring things that should not be being measured by the employee survey, ..."*

*Interviewee 12*

A very small number of the interviewees accept that their survey is used for monitoring only, but the majority comment that survey content should be limited to actionable questions on specific topics.

*"The survey needs to be an action tool rather than a monitoring tool. ... Focused, shorter questionnaires may be more actionable."*

*Interviewee 16*

The main point that emerges for topic specialists is that action to bring about change requires formal planning with responsibilities and reporting detailed. Indeed the literature endorses the planning of tasks and resources to improve business results (Smith, 2003). Benchmarking topic results assists goal setting; but in relation to capability, does not tell topic managers how to make improvements. Prior planning is often needed to understand the effect of proposed changes (Mason, Chang, & Griffin, 2005).

Pre-planning of potential action areas requires the company to consider how to undertake change and its capacity to take action. When change is not planned people do not know if it is possible. As part of the planning process topic managers may need to seek expert advice, consider methods of communication, or gradually build tasks into existing work to avoid overload. These findings broaden a survey from having one overall survey purpose to recognising that for action to take place each topic question should have a clear reason for inclusion in the questionnaire.

## Top Tips

It is argued that a well-organised survey, where the final result provides reliable actionable information, gives a company data, which would be difficult if not impossible to obtain even at a higher cost by other methods (Schuman & Presser, 1981). Yet one in five organizations report problems with post survey action (The Industrial Society, 1994). This research examined how organizations conduct employee surveys and, more specifically, how organizations action their results. Although each company survey is different, on the basis of our work we have drawn together the following tips to assist managers wanting to undertake surveys:

- Clarify the action purpose of the survey:
  - At the initial design of the survey make it clear that the purpose is to gather data to make improvements for employees and the business.
  - Make the purpose of each topic to be investigated clear and design questions in such a way that improvements emerge.
  - Ensure corresponding actions link with business needs.
- Communicate the names of leaders and resources available:
  - Senior management should commit to assist action implementation.
  - The coordinator promotes resources available for action.

- Topic specialists plan and undertake the implementation of action.
- Added expertise may be required, for example to understand the effect of proposed actions or to undertake training in change management techniques.
- Persist to complete planned actions:
  - Use benchmarking, of results and methods, to set realistic goals.
  - Integrate work towards goals into employees' job objectives.
  - Track, report, and celebrate action implementation.

## Conclusion

This article is not recommending an increase in the number of employee surveys, it is arguing for better use of the information gained from surveys. At present, in spite of the fact that the majority of organizations use employee surveys, practitioners and researchers note that effective action taken is limited. This article provides some guidance on how to address this problem through communicating a clear action purpose, committing to specific actions and providing expert knowledge on how to achieve these actions. These principles need to be applied by senior management, the survey coordinator, and the topic specialist.

## References

- Buchanan, D., Claydon, T., & Doyle, M. (1999). Mixed Results, Lousy Process: The Management Experience of Change. Paper presented at the British Academy Of Management.
- Chartered Management Institute. (2007). Undertaking Employee Attitude Surveys [Electronic Version]. Retrieved August 2008, from [www.managers.org.uk/mic](http://www.managers.org.uk/mic)
- Das, H. (2004). Employee Surveys: A Key to Organizational Excellence. *Canadian Manager*, 29(2), 23 - 24.
- Feature Article. (2000). Employee Retention 1 - The Tools and Techniques. *Employee Development Bulletin*, 128, 6 - 10.
- Forth, J., Bewley, H., & Bryson, A. (2006). Small and Medium-sized Enterprises: Findings from the 2004 Workplace Employment Relations Survey. Retrieved June 2008. from <http://www.dti.gov.uk/>.
- Hartley, J. (2001). Employee Surveys: Strategic Aid or Hand-Grenade for Organisational and Cultural Change? *The International Journal of Public Sector Management*, 14(3), 184 - 204.
- Harwood, P. d. L. (1998). Employee Surveys in the Public Service: Experiences and Success Factors (Management Practices No. 20). Ottawa: Canadian Centre for Management Development. (Strategic Research and Planning Group.)
- Heller, R., & Golzen, G. (1996). Walking the Talkback (Attitude Surveys). *Human Resources (UK)*, 96(27), November/December.
- Heneman, R. L., Fox, J. A., & Eskew, D. E. (1998). Using Employee Attitude Surveys to Evaluate a New Incentive Pay Program. *American Management Association, Compensation and Benefits Review*, 30(1), 40 - 44.
- Hogg, C. E., Cole, G., Walker, P., & Walker, S. (1989). Attitude Surveys. *Personnel Management (September)*, Factsheet 21.
- Incomes Data Services Limited. (2004). Employee Attitude Surveys + Guide to Suppliers. London: IDS HR Studies Plus 777
- Kersley, B., Alpin, C., Forth, J., Bryson, A., Bewley, H., Dix, G., et al. (2005). Inside the Workplace. First Findings from the 2004 Workplace Employment Relations Survey (WERS 2004) (No. URN 05/1057 ): Crown Copyright/Economic and Social Research Council/Advisory, Conciliation and Arbitration Service/Policy Studies Institute. (R. T. a. F. Group.)
- Kotler, P. (1988). *Marketing Management Analysis, Planning, Implementation and Control* (6th ed.). New Jersey: Prentice-Hall International Inc.
- Lewin, K. (1946). Action Research and Minority Problems. *Journal of Social Issues*, 2(4), 34 - 46.
- Lewis, S., Passmore, J., & Cantore, S. (2008). Positive psychology and managing change. *The Psychologist*, 21(11), 932 - 934.
- Martin, P., & Nicholls, J. (1987). *Creating a Committed Workforce: The Key to Competitive Success*. London: Institute of Personnel Management.
- Mason, C. M., Chang, A. C. F., & Griffin, M. A. (2005). A Strategic Use of Employee Opinion Surveys: Using a Quasi-Linkage Approach to Model the Drivers of Organisational Effectiveness. *Australian Journal of Management*, 30(1), 127 - 134.

- Miles, M. B., & Huberman, A. M. (1984). *Qualitative Data Analysis. A Sourcebook of New Methods*. London: Sage Publications.
- Munro-Faure, L. (2000). How to Conduct an Employee Survey. *People Management*, 58 - 59.
- Myers, C., & McCutcheon, M. (1995). Making Effective Use of Staff Views. *People Management*, 1(8), 32 - 34.
- Official Journal of the European Communities. (2002). DIRECTIVE 2002/14/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 March 2002 establishing a general framework for informing and consulting employees in the European Community. Retrieved 21 August 2008. from <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:080:0029:0033:EN:PDF>.
- Prochaska, J. (2004, February 2005). Applying the Transtheoretical Model to Increase Impacts on Health Behaviours. Paper presented at the Division of Health Psychology Annual Conference, 8/10 September, Queen Margaret University College, Edinburgh.
- Quinn, R. E. (2004). *Building the Bridge As You Walk On It. A Guide for Leading Change*. San Francisco: Jossey-Bass.
- Ritchie, J., Spencer, L., & O'Connor, W. (2003). Carrying out Qualitative Analysis. In J. Ritchie & J. Lewis (Eds.), *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. (pp. 219 - 262). London: SAGE Publications Ltd.
- Rogelberg, S. G., Luong, A., Sederburg, M. E., & Cristol, D. S. (2000). Employee Attitude Surveys: Examining the Attitudes of Noncompliant Employees. *Journal of Applied Psychology*, 85(2), 284 - 293.
- Schuman, H., & Presser, S. (1981). *Questions and Answers in Attitude Surveys: Experiments on Question Form, Wording and Context*. London: Academic Press Inc.
- Smith, B. (2003). Plans are nothing, planning is everything. *Marketing Business*, p32 - 34.
- Sniehotta, F. F., Schwarzer, R., Scholz, U., & Schuz, B. (2005). Action Planning and Coping Planning for Long-Term Lifestyle Change: Theory and Assessment. *European Journal of Social Psychology*, 35, 565 - 576.
- Stiles, P. (2000). Constraints on Strategy Implementation: the 'Problem' of the Middle Manager. In P. Flood, T. Dromgoole, S. J. Carroll & L. Gorman (Eds.), *Managing Strategic Implementation: An Organisational Behaviour Perspective* (pp. 168 - 180). Oxford: Blackwell Publishers Limited.
- Storey, J., & Salaman, G. (2005). *Managers of Innovation: Insights into Making Innovations Happen*. Oxford: Blackwell Publishing.
- Taylor, W. A., & Wright, G. H. (2006). The Contribution of Measurement and Information Infrastructure to TQM Success. *Omega*, 34(4), 372 - 384.
- The Industrial Society. (1994). *Employee Surveys (The Regular Benchmark No. No. 5)*. London: The Industrial Society
- The Industrial Society. (2000). *Managing Best Practice: Employee Surveys (The Regular Benchmark No. 73)*. London: The Industrial Society
- Walters, M. (1996). *Employee Attitude and Opinion Surveys*. London: Institute of Personnel and Development.
- West, M., & Patterson, M. (1998). Profitable Personnel. *People Management*, 8 January, 28 - 31.
- William Steinberg Consultants Inc. (2004). Why Employee Surveys Fail. Retrieved June, 2004, from [www.notjustsurveys.com/trends/fail/html](http://www.notjustsurveys.com/trends/fail/html)

# Web-based occupational stress prevention system

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## Abstract

This paper discusses the design and use of a web-based occupational stress prevention system in Estonia. There was a pressing need for such a system since 38% of the Estonian labour force manifests occupational stress. The cost of occupational stress is high - it includes human suffering as well as medical and socio-economic problems. It also causes considerable disturbances in terms of productivity and competitiveness. The web-based occupational stress prevention system was developed for decreasing occupational stress through offering individual assistance, advice and guidance using e-psychodiagnostics and e-learning.

## Introduction

In the European Union (EU) work-related stress has been consistently identified over the past decade as one of the major workplace concerns (European Commission, 1999): a challenge not only to the health of working people but also to the healthiness of their organizations. Work-related stress is conditioned by, and contributes to, major environmental, economic and health problems. It affects at least 40 million workers in the EU Member States and costs at least EUR 20 billion annually (European Commission, 1999). The human and financial cost of occupational stress to business and industry is increasing. In the UK, over 5% of the gross national product (GNP) is spent on solving stress-related medical and socio-economic problems. Occupational stress contributes to the cost of human suffering, disease and death. It also causes considerable disturbances in terms of productivity and competitiveness. Much of this is likely to be preventable. In addition a growing body of empirical evidence shows that in Eastern European countries occupational stress levels are even higher than in Western Europe and the US (Sparks et al., 1999; Spector et al., 2001; Spector et al., 2002; Teichmann, 2004; Teichmann et al., 2005; Teichmann et al., 2006).

The starting-point of any prevention work is to provide a clear, coherent and precise definition of occupational stress. However, prominent researchers have found that this is not straightforward (Cooper, 2004; Hart & Cooper, 2001). The on-going debate about the meaning and definition of occupational stress shows that the academic community has still not adopted a common position. The stressor and strain approach is the core of the majority of recent research into

occupational stress. This approach is based on a relatively simplistic theory that views stress as occurring when work characteristics contribute to poor psychological or physical health (Beehr, 1999). According to this approach, stressors refer to work-related characteristics, events or situations that give rise to stress, and strain refers to the employees' psychological or physiological responses to stress. The main interest, however, focuses on the presumed causal relationship between stressors and strain. The stressor and strain approach is generally the accepted definition of occupational stress in the EU. Work-related stress is defined as the emotional, cognitive, behavioral and physiological reaction to aversive and noxious aspects of work, work environments and work organizations. It is a state characterised by high levels of arousal and distress and often by feelings of not coping (European Commission, 1999).

Empirical evidence shows that in Eastern European countries occupational stress level is even higher than in Western Europe and the US. For example, 38% of the Estonian labour force manifests occupational stress (Praxis, 2002). The human and financial cost of occupational stress to business and industry is increasing contributing to human suffering, disease and accidents. It also causes considerable disturbances in terms of productivity and competitiveness; much of all this is highly likely to be preventable.

## The Occupational Stress Prevention System

The occupational stress prevention system was launched in the autumn of 2006 (Teichmann & Ilvest, 2007) and is available in the web environment (<http://www.pekonsult.ee/stress.php>) free of charge for all users. A system was developed for decreasing occupational stress by offering psychodiagnostics, knowledge, advice and guidance to enabling coping. The system includes: a) the Occupational Stress Indicator (OSI-2); b) individual feedback for the user; and c) two digital teaching tools on "Occupational Stress" and "Coping with Stress".

### Occupational Stress Indicator (OSI-2)

The OSI-2 comprises of 90 items. Measures of job satisfaction are divided into two subscales; satisfaction with the job itself and satisfaction with the organization (12 items). Items have six response choices ranging from "very much dissatisfaction" to "very much satisfaction". Psychological well-being is divided into three subscales: contentment, resilience and peace of mind (12 items) All items have six response choices; with some variation. For example, "If colleagues and friends behave in an aloof way towards you, do you tend to worry about what you may have done to offend them as opposed to just dismissing it?" Choices ranged from "definitely worry" to "definitely do not worry". For all three scales, a high score represented high level of well-being. Physical well-being is divided into two subscales; calmness and energy (six items) asking about somatic symptoms such as shortness of breath and muscle trembling (with six responses range from "never" to "very frequently").

In addition, there is a Type-A behaviour indicator (six items); and a locus of control scale (four items).

The Work Locus of Scale (Spector, 1988) assesses employees' beliefs about their control at work in general. Half the items indicate external locus of control, whereas the other half indicate internal locus of control. Work locus of control reflects the individual's tendency to believe that they control events in their working life (internality) or that such control resides elsewhere, e.g., with powerful others (externality). The Work Locus of Control Scale (WLCS) has 16-items assessing employee beliefs about their control at work in general. For example, external locus "Getting the job you want is mostly a matter of luck" and internal locus "Promotions are given to employees who perform well on the job". All items have six response choices range from "strongly disagree" to "strongly agree". High scores represent externality and low scores internality.

Exploration of sources of pressure in the job examines eight job stressors: workload (PW, six items), relationships (PR, eight items), home/work balance (PH, six items), managerial role (PM, four items), personal responsibility (PP, four items), hassles (PD, four items), recognition (PC, four items), and organizational climate (PO, four items). All occupational stressors' scales have six response choices ranging from "very definitely is not a source" to "very definitely is a source". Coping with occupational stress is divided into two subscales: control over stress (six

items) and social support (four items) with six response choices from “strongly disagree” to “strongly agree”.

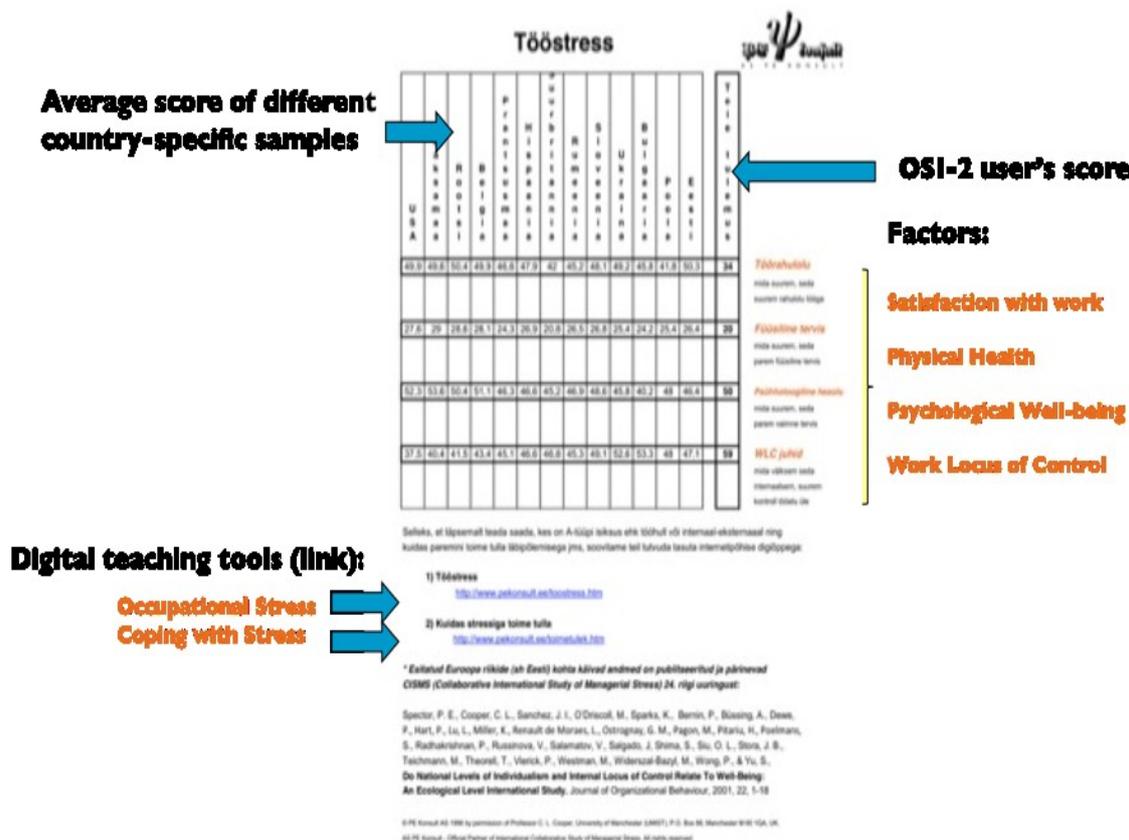
### Validity and reliability

The validation data for the Occupational Stress Indicator (OSI-2) were collected with the help of Collaborative International Study of Managerial Stress (CISMS) founded in 1996 to conduct global research on job stress by pooling efforts of an international group of researchers. Participants of the CISMS study were 5,185 managers from 24 nations/territories. Validation evidence for the OSI-2 was summarised in various publications (such as Spector et al., 2001; 2002) and the coefficient alpha was between 0.78 to 0.88. The WLCS internal consistency (coefficient alpha) reported by Spector (1988) ranges of 0.75 to 0.85. From these data we conclude the scales are both reliable and valid.

### Individual feedback for user

The user answers the OSI-2 test questions in the web environment. Processed results are sent individually to each user to their e-mail address within 2-3 minutes (see Figure 1 below). The internet links for access to e-learning facilities and the digital teaching tools “Occupational Stress” and “Coping with Stress” are attached to the test results that are returned to the user.

Figure 1: Individual Feedback for Users (an example of the first page)



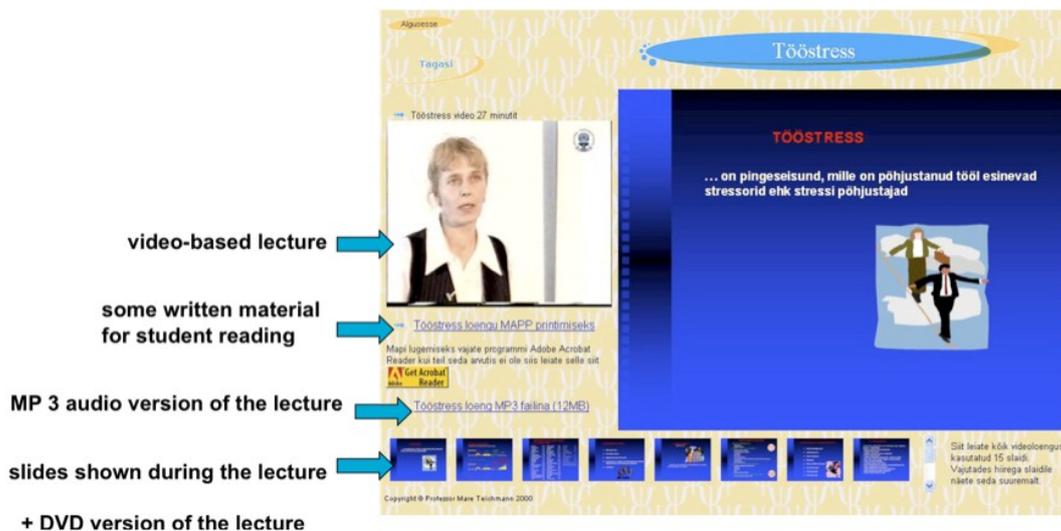
### Digital teaching tools

These are video-lectures about stress at work addressing the theoretical background of occupational stress, burn-out, the occupational stress risk scale and stressors at work (see Figure 2 below). In addition, results from the OSI-2 aggregated at country level (Estonia) are provided to offer normative data for comparison. For example, indicator of managers' and teachers stress levels and stressors at work. There is no individual feedback in the digital teaching tool, as this is more about general knowledge for the participant to enable better

coping with occupational stress. Analysed are the results of OSI-2 and individual feedback for user. By adding the new knowledge from digital teaching tools (knowledge about occupational stress and coping with stress) the employee has the opportunity to make behavioural corrections in their everyday working life.

The digital teaching tool comprises of two video-lectures about occupational stress and coping strategies; describing aspects of problem-solving, social support, and time management. The video-lectures are supported by a copy of the slides and written materials for reading. A MP3 audio version and DVD option are available for users. An example is given in Figure 2 below.

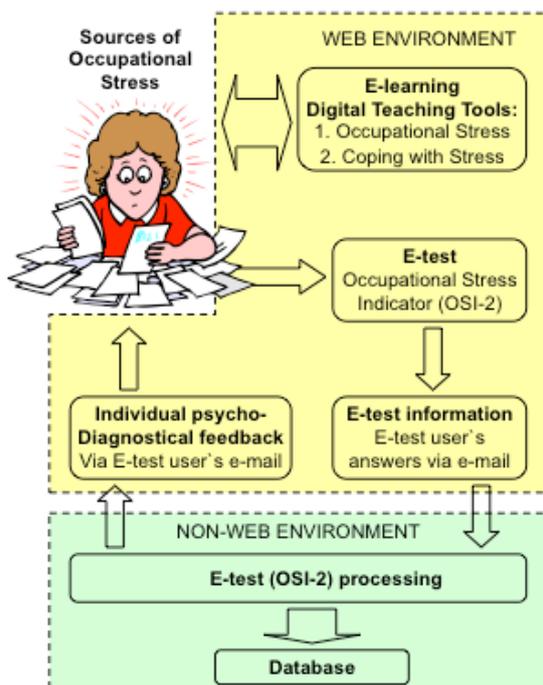
**Figure 2: An example of the Digital Teaching Tool “Occupational Stress”**



### The procedure

The occupational Stress Indicator (OSI-2) is available for users in the Web environment. The user answers the OSI-2 test questions on-line and the test results are automatically sent to the recipient by e-mail once the user pushes the “send” button.

**Figure 3: A flow diagram of the Web-Based Occupational Stress Prevention System**



The user's answers are then removed from the Web environment since according to the test manual, processing of the OSI-2 test takes place outside the Web environment. There is guaranteed OSI-2 database security at least RAID 5 level. This ensures a copyright on the test key is not violated and the confidentiality of the user's test results is guaranteed.

Data of the final test results are copied into and kept in a database outside the Web environment. Processed results of the OSI-2 test are sent individually to each user within 2-3 minutes. The time delay occurs for security reasons as the test answers have to be copied into a database outside the Web environment, processed and copied again to a suitable format to be returned to the user (see the flow diagram in Figure 3). The length of the delay depends on the type of internet connection speed used by respondents.

## Feedback from users

During the last three years 2,573 users have benefited from the Web-based occupational stress prevention system. Special study of users' feedback data were collected by the authors via the Internet from September to December 2008. Users were selected by random sample rules. The total sample consisted of 320 persons using the web-based occupational stress prevention system.

The rate of response was high; only 11 persons not giving answers to our short feedback questionnaire. The total sample (N= 309) consisted of 190 males (61%) and 119 females (39%) with an average age of 39.1 years (SD=10.37). The participants' educational level was: primary education 0.3%, secondary education 9.2%, vocational education 10.5%, and college graduates 79.9%. Their marital status was: single 15.9%, married 60.5%, cohabiting 17.8%, separated 1.3%, divorced 2.9%, and widowed 1.6%.

The feedback questionnaire consisted of six statements (for example, "Already I have suggested my friends or colleagues to use Web-based occupational stress indicator"; "This tool helped me to cope with occupational stress"; "I learned something new about occupational stress in video-lectures"). All items had five response choices from "strongly disagree" to "strongly agree". In addition, there was a possibility to give open answers, explanations or comments.

The feedback study shows users' positive attitudes towards web-based occupational stress prevention system. The users' evaluation and feedback for web-base occupational prevention system was highly positive - 4.6 points on a 5-point scale. The most frequently mentioned advantage of the system being that the user was not being dependent on location and time. He or she was free for choose when and where (at work, at home) they used the web-based occupational stress prevention system. Thus positive results should not be surprising, as quite often we get more personal and also very positive evaluation from web-based occupational stress prevention system users; many users show their gratitude and satisfaction by personal phone calls or e-mails.

The web-based occupational stress prevention system was founded as a non-profit initiative of an Estonian private company (PE Consult Ltd.) three years ago. The system will support a project entitled "Occupational stress study and web-based occupational stress prevention system for academic staff of Estonian universities (Acad OSI)" supported by Primus grant nr 3-8.2/23 from the European Social Fund.

## References

- Beehr, T.A. (1995). *Psychological Stress in the Workplace*, London, Routledge.
- Cooper, C.L., & Dewe, P. (2004). *Stress: A Brief History*. Blackwell.
- Hart, P.M., & Cooper, C.L. (2001). Occupational stress: toward a more integrated framework. In N. Anderson, D.S. Ones, H.K. Sinangil, C. Viswesvaran (Eds.), *Handbook of Industrial, Work and Organizational Psychology (2)*, London: Sage, pp. 93-114.
- European Commission (1999). Guidance on Work-related Stress. Spice of Life – or Kiss of Death. *Employment and Social affairs, Health and Safety at Work*, European Commission.
- Praxis (2002). *Estonian Mental Health Policy*, Center for Policy Studies, Tallinn, Estonia.

Spector, P.E. (1988). Development of the Work Locus of Control Scale. *Journal of Occupational Psychology*, 61, 335-340.

Sparks, K., Cooper, C.L., Spector, P.E., Sanchez, J. I., Bernin, P., Dewe, P., Hart, P., Lu, L., Miller, K., Renault de Moraes, L., O'Driscoll, M., Pagon, M., Pitariu, H., Poelmans, S., Radhakrishnan, P., Russinova, V., Salamatov, V., Salgado, J, Shima, S., Siu, O. L., Stora, J. B., Teichmann, M., Theorell, T., Vlerick, P., Westman, M., Widerszal-Bazyl, M., Wong, P., & Yu, S. (1999). The price of economic development: A 22 nation study of occupational stress in male and female managers. Unpublished manuscript. UMIST.

Spector, P. E., Cooper, C. L., Sanchez, J. I., O'Driscoll, M., Sparks, K., Bernin, P., Büssing, A., Dewe, P., Hart, P., Lu, L., Miller, K., Renault de Moraes, L., Ostrognay, G. M., Pagon, M., Pitariu, H., Poelmans, S., Radhakrishnan, P., Russinova, V., Salamatov, V., Salgado, J, Shima, S., Siu, O. L., Stora, J. B., Teichmann, M., Theorell, T., Vlerick, P., Westman, M., Widerszal-Bazyl, M., Wong, P., & Yu, S. (2001). Do National Levels of Individualism and Internal Locus of Control Relate To Well-Being: An Ecological Level International Study, *Journal of Organizational Behaviour*, 22, 1-18.

Spector, P. E., Cooper, C. L., Sanchez, J. I., O'Driscoll, M., Sparks, K., Bernin, P., Büssing, A., Dewe, P., Hart, P., Lu, L., Miller, K., Renault de Moraes, L., Ostrognay, G. M., Pagon, M., Pitariu, H., Poelmans, S., Radhakrishnan, P., Russinova, V., Salamatov, V., Salgado, J, Shima, S., Siu, O. L., Stora, J. B., Teichmann, M., Theorell, T., Vlerick, P., Westman, M., Widerszal-Bazyl, M., Wong, P., & Yu, S. (2002). ). Locus of Control and Well-Being at Work: How Generalizable Are Western Findings? *Academy of Management Journal*, (2), pp 443-453.

Teichmann, M. (2004). Work and Stress: Estonian perspective. WHO European Ministerial Conference on Mental Health, WHO Pre-conference on Mental Health and Working Life, Tallinn, <http://www.sm.ee/eng/pages/index.html>

Teichmann, M., Spector, P.E., Cooper, C.L., & Sparks, K. (2005). Job stress and quality of life. In: F. Avallone, H. Kepir Sinangil, A. Caetano (Eds.), *Convivence in Organizations and Society*, Milano, Edizioni Angelo Guerini Associati SpA, pp. 179-187.

Teichmann, M., Spector, P.E., Cooper, C.L., Sparks, K., Bernin, P., Pagon, M., Pitariu, H, Polemans, S., Russinova, V., Salamatov, V., Salgado, J.F., Stora, J.B., Theorell, T., Vlerick, P., & Widerszal-Bazyl, M. (2006). Eastern European Managers versus Western Managers: Work Locus of Control, German 6<sup>th</sup> Congress on Work and Organisational Psychology, Leipzig, p.3, CD-ROM.

Teichmann, M.; & Ilvest, J. Jr. (2007). Engineers' Occupational Stress and Stress Prevention System: E-psychodiagnostics and E-learning. In M. Iskander (Ed.), *Innovations in E-learning, Instruction Technology, Assessment and Engineering Education*. Springer, pp. 249-255.

# Evaluation of training and development: an opportunity for a systems review?

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## Abstract

Following Investors in People (IIP) assessment a membership organization wanted to understand how evaluation of learning and development (L&D) activities for 800 UK staff could be improved and aligned with business objectives.

We carried out focus groups, interviews with key stakeholders and a series of trio interviews with people who had recently undertaken L&D along with their manager and a peer. Analyses confirmed the need for knowledge sharing and quantification of behavioural and cognitive changes linked to current systems. These themes were explored by using the TOTADO model of evaluation (Birdi, 2006) to ensure future evaluation would be a marriage of theory and practice.

We created an evaluation model that interacted with human resource systems as well as shaping future L&D activities. This was supported by a set of tools utilising the organization's IT platform. Use of the model encourages role innovation and reflection in the workplace based on knowledge sharing. We delivered the model earlier this year and advised the roll-out across the UK.

Immediate results were IIP accreditation along with increased conversations about performance and the use of innovative approaches to learning. It is too early to measure financial or membership benefits for the organization but these are expected to occur after full implementation.

## Introduction

According to the Learning and Skills Council's Survey in 2007 British companies spend 38 billion pounds (about 42.22 billion EUR) investing in the training and development of their staff. However, it is surprising how few organizations evaluate the return on this investment or enquire whether the training and development carried out is supporting the achievement of planned organizational goals.

Several reasons are given for the lack of practical evaluation: it takes too long; it costs too much to do; practitioners are unaware of how and what to evaluate (Bates, 2004); and the pace of change in the organization is so fast they have moved on before the evaluation results can be delivered (Birdi, 2000).

Most organizations do use post-delivery feedback (commonly called "happy sheets") to understand whether the goals of the training programme have been achieved and whether participants have enjoyed the experience. However, this type of evaluation fails to give account of learning taking place in the workplace following delivery or behaviour changes that can occur whether participants have enjoyed the programme or not (Arthur, Bennett, Edens, & Bell, 2003). This is illustrated by the quotation below from Arthur and colleagues.

*"There is very little reason to believe that how trainees feel about or whether they like a training programme tells researchers much, if anything, about: a) how much they learned from the*

*program, b) changes in their job-related behaviors or performance, or c) the utility of the program to the organization” (Arthur et. al, 2003, p.235).*

Transfer of learning to the workplace and knowledge transfer to peer workers are important aspects of learning and development that can lead to return on investment in training and development. Further, learning and development activities can occur within many situations both in and outside of the workplace; not only associated with formal learning. Examples of learning and development activities are: mentoring, work shadowing, secondments to different job roles, dealing with errors and/or complaints, and describing one's work to the public. Therefore, if the focus of learning and evaluation is solely based on directly taught opportunities and immediate evaluation the opportunity to measure return of investment, transfer of learning, knowledge sharing and changes in behaviour will be lost. Reticence in carrying out more in-depth evaluation in organizations may also be because one of the most well known model's of training and development evaluation from Kirkpatrick (1959) has been criticised for being theoretically and practically vague in its definition of learning outcomes (Phillips & Phillips, 2001). However, Kirkpatrick's training evaluation framework does encompass many of the aspects which Arthur and colleagues suggest are missing from the more simple forms of reaction style evaluations. The framework identifies four levels of analyses: reactions (trainees' opinions about overall and specific aspects of training), learning (acquisition of appropriate knowledge and skills), changes in work behaviours (whether trainees utilise newly acquired knowledge and skills in the workplace) and business results (does training appropriately influence the organization, perhaps showing an increase in production or reduction in errors). A potential solution to encouraging greater use of evaluation techniques would be to use another model of evaluation that builds on the strengths of the Kirkpatrick model and addresses some of the weaknesses.

One of the most promising models of evaluation of learning and development available today is TOTADO (Taxonomy of Training and Development Outcomes, Birdi, 2006) providing an 'integrative' and 'multi-level' approach to training evaluation (Birdi, 2006; Birdi, 2010). The model is based on the notion of Individual, Team, Organizational and Societal-levels of analyses and examines the impact of the learning and development activity on amongst other things: affect (how people feel); cognition (what people learn); work behaviours; health and fitness; and outcomes (a fuller explanation of the model is given in Figure 1 below). The level of detail the model provides helps practitioners to understand more fully how training can be assessed. The model suggests that measurements of outcomes should be taken (minimally) before and after the learning activity and at longer intervals after the activity (for example at six months or one year after the event to examine behavioural changes). Further, exploration of the learning and development activity should take place with a range of stakeholders: such as the individual, managers, peers, customers and clients using a variety of measurements (such as interviews, focus groups, objective performance measures and questionnaires).

There may be other reasons why organizations are reluctant to explore the evaluation of learning. They may not have practitioners sufficiently trained in the skills needed to carry out this work. Or, if they do, practitioners do not have time within their current job role to carry out evaluation adequately. A final reason for inertia in the evaluation of learning is that it requires a systems approach to organizational working that explores recruitment and selection, induction, formal and informal training and development processes, performance appraisal, career development, promotion and turnover. Put this way, undertaking evaluation may seem too daunting a task to be implemented by an organization and a way forward is to recruit external support.

The Institute of Work Psychology at the University of Sheffield has an experienced consultancy division; made up of occupational psychologists and researchers who are well placed to deliver high quality evaluation work within a reasonably short delivery time-frame. ConsultIWP was approached by a large membership charity based in the United Kingdom (UK) to work with them to examine their current evaluation process and build another that was applicable to their current working environment.

**Figure 1: The TOTADO Model; an explanation of Outcomes**

TOTADO	Sub Level	Explanation
Individual Level Outcomes	Affective	How people feel as a result of taking part in a learning and development activity (reactions, attitudes, motivation, self-efficacy)
	Cognitive	What people learn as a result of taking part in a learning and development activity (verbal knowledge, knowledge representation)
	Behavioural	What changes in work performance occur as a result of taking part in the learning and development activity (e.g., task performance, skills)
	Physical	What effects health and fitness as a result of taking part in the learning and development activity (e.g., levels of fitness and number of injuries)
	Instrumental	What events occurred as a result of taking part in the learning and development activity (work intrinsic e.g., praise from manager; work extrinsic e.g., pay rise, work relational e.g., better relationships, non-work e.g., qualifications).
Team Level Outcomes	Affective	How the team feels as a result of the individual taking part in the learning and development activity (team attitudes, motivation, efficacy, team well-being)
	Cognitive	What the team learns as a result of the individual taking part in the learning and development activity (verbal knowledge, knowledge representation)
	Behavioural	What effects on the team's work performance has occurred as a result of the individual taking part in the learning and development activity (e.g., team task performance, intra-team processes e.g., communication and support)
	Instrumental	What events within the team have occurred as a result of the individual taking part in the learning and development activity (work-intrinsic e.g., praise from manager, work-extrinsic e.g., pay rise, work relational e.g., better relationships)
Organizational Level Outcomes	Financial	Changes in the organization's financial performance as a result of individual taking part on the learning and development activity (e.g., turnover, profit, cutting costs)
	Processes	Changes in the organization's efficiency/way work is carried out as a result of learning and development activity (e.g., time to complete task, communication systems)
	Outputs	Changes in the organization's outputs as a result of learning and development activity (quantity e.g., work per employee, quality of product/service e.g., customer satisfaction, variety e.g., new products/services)
	Resources	Changes in the organization's personnel (e.g., absenteeism, satisfaction) and material resources (e.g., stock, waste) as a result of learning and development activity
Societal Level Outcomes	Economic	Impact of learning and development activity on local economy (e.g., investment, unemployment)
	Health	Impact of learning and development activity on health of the community
	Educational	Impact of learning and development activity on educational levels of the community
	Law and Order	Impact of learning and development activity on law and order issues in community (e.g., robberies, drug crime)
	Environmental	Impact of learning and development activity on geographical environment of region (e.g., pollution and waste levels).

The organization is a registered charity, operating both as a professional association and trade union representing over 400,000 members in the UK, and employing 800 staff based in the Countries of England, Scotland, Wales and Northern Ireland. The organizational purpose is to "represent the interests of its members, support and protect them, develop the profession and to achieve influence at national policy level". The organization spends a large amount of money (approximately £200,000 or 222,200 EUR a year) on the learning and development of staff supporting their members. The organization wished to conduct an evaluation of their current systems as it was likely that different methods were being used throughout the organization.

The central Organizational Development (OD) team, based in London, deal with the core development activities of the organization for staff and members. OD was unaware of the different methods and systems currently being used to assess learning and development activities across the different Countries. It was also understood that whilst there was and is a large investment in learning and development there was little knowledge sharing throughout the organization. Finally, a new Chief Executive had been in post for one year and it was his and the senior management teams' view that the organization needed to be more proactive in their responses to members needs and less entrenched in a "standard way of doing things"; hence there was a need for the organization to become more business orientated.

A further factor associated with this project was that the OD team were passionate not to talk solely of training programmes but to encompass all learning and development activities including informal learning opportunities. Within the organization there was a heavy reliance on formal training for staff and there was considerable misunderstanding about the purpose of individual Performance Appraisal. Many staff members felt the function of appraising performance was the opportunity to express their learning and development needs and to gain access to various "training courses". Management wanted to emphasise other learning activities that were available to staff and to harden the process of appraisal to focus more on individual performance.

Staff development was managed in each of the four Countries by Learning and Development (L&D) managers heading up a directorate. L&D managers would allocate budgets, oversee the administration of L&D activities; and deliver specific activities necessary for their Country area (e.g., the organization's member call centre was located in Wales and specific training to equip staff with skills and abilities to work in the call centre were delivered by the Welsh directorate). In addition, each L&D manager would coordinate the production of the directorates' L&D plan that would be presented to the central OD team. Within each directorate there were networks of L&D representatives involved in every stage of L&D - identifying local development needs, delivery of development activities, evaluation of activities and aligning L&D activities to organizational strategy. Managers and representatives away from the London headquarters were fully aware that senior management wanted to change the evaluation process and align it more closely to business needs.

In summary, ConsultIWP were asked to understand how the evaluation of learning and development activities was currently carried out for 800 staff. From this information we were to build and recommend a model of evaluation that could be applied across the four Countries taking a more systematic approach to learning and development that matched the business needs of the organization.

## Method

In the interests of space we will describe the research process that led to the design of the evaluation materials and not give a detailed explanation of the various tools that were provided to the organization.

In order to appreciate how L&D activities for staff were carried out across the organization we designed a consultation process that would involve staff from England, Scotland, Wales and Northern Ireland. We conducted a focus group with L&D representatives across the UK to introduce the project, gain their involvement, set up local contacts and to understand their views about evaluation. It was important that all staff associated with this process were involved in the consultation and for that reason their views of potential evaluation formats were sought. In this way we could build our work on areas of good practice increasing staff buy-in to the project. In addition, we carried out stakeholder interviews with the Head of OD and the Human Resources Director to gain a strategic understanding of the issues facing the organization and the current change processes that were underway. It was essential that we produced a new evaluation process that had the backing of senior management and fitted the new performance orientated approach that they wished to adopt. Without such support it was unlikely that any new process would be successful. Following the interviews we arranged further consultations with the four Country L&D managers to appreciate how activities were currently being evaluated and how they would like to see this activity developed in the future.

To balance these managerial views it was important that we talked to individuals who had recently undertaken L&D activities and to see how knowledge from these activities were being transferred to the workplace. Therefore, in each Country we set up a series of trio interviews with a participant, their line manager and a peer. This information helped us gain an understanding of the depth of evaluation currently being carried out. From the individual we could appreciate how much evaluation occurred at the individual level. From peers we could understand what knowledge transfer activities were taking place in the workplace and from line the managers we could understand the impact learning would have on performance at a local level. Conversations with each of these representative groups would be helpful in the design of the future evaluation system and its practicality.

All interviews were carried out face-to-face or over the telephone by one or two researchers. Interview schedules were emailed to the participants in advance so they were aware of the questions along with a brief synopsis of the consultation process. Interviews lasted between 30 minutes and 60 minutes and the interviewer(s) took thematic notes during the conversations. Themes from these notes were fed back to the participant in line with best practice (Bryman & Bell, 2003). Interviews were not taped to protect the anonymity of the participant.

All questions used in the interviews and focus group were devised based on the TOTADO model. We wanted to gain as much information about evaluation and understand meaningful aggregate concepts within the workplace (such as work groups and teams). We created four different inquiry schedules for: Focus Groups, Senior Managers' interview, interviews with the Country L&D Managers and Trios. In all the interviews we asked about what was happening generally within the organization in terms of evaluation. For example: *'How do you currently carry out learning and development evaluation?'*

Within Senior Managers interviews we asked questions that related to the organizational level of analysis as managers would be best placed to comment on how much evaluation currently considers aspects of organizational need and outcomes. For example: *'How do learning, development and evaluation fit in with organizational targets?'* *'What would make the organization's learning and development evaluation more effective?'*

Within the Country L&D managers' interviews it was particularly important to identify what each Country office was currently doing in terms of L&D activities and evaluation and to understand similarities and differences across the Countries. For example, we asked: *'What is your current local L&D output? "What is the L&D cycle? How do you decide on what L&D activities to carry out"?' We finished by requesting trios of a manager, a participant and a peer who we could interview at a later stage.*

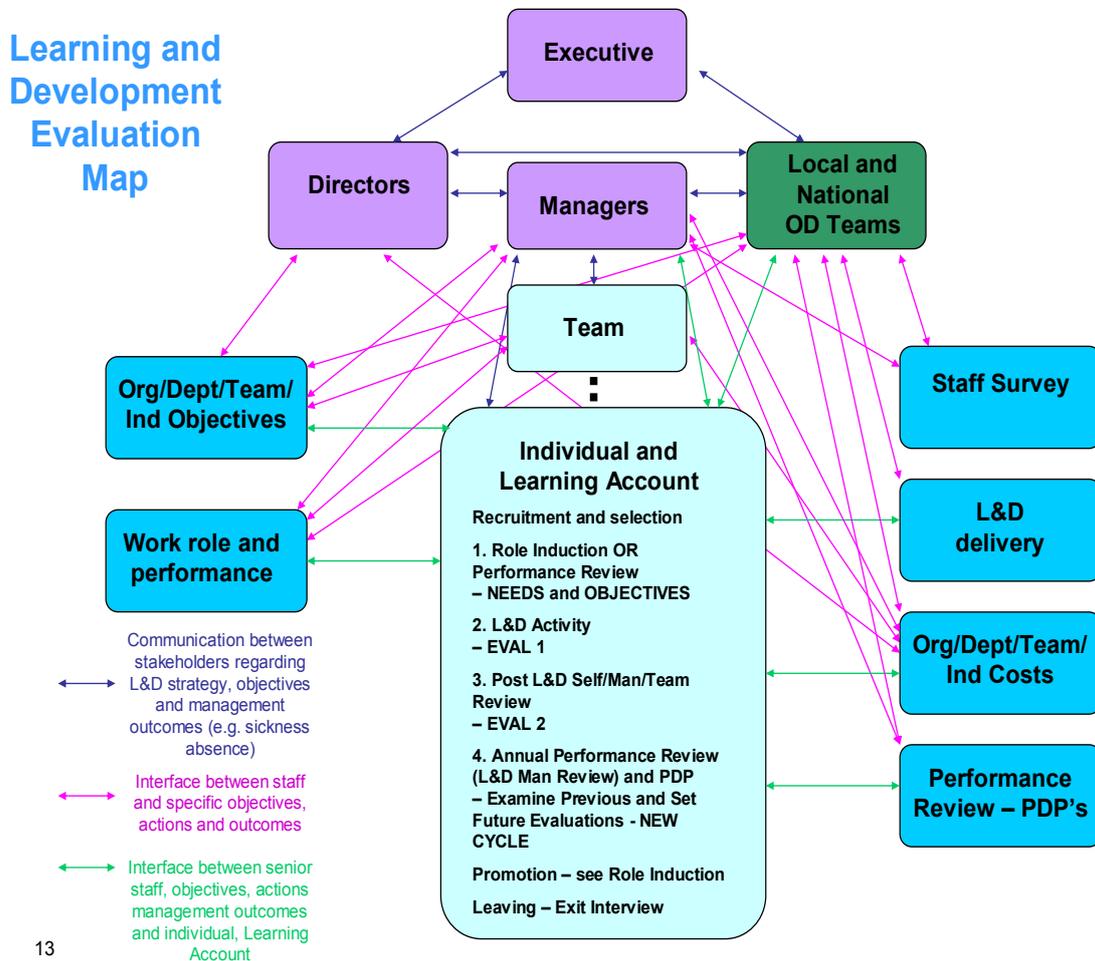
Trio interviews were carried out with a recent L&D participant, their line manager and a workplace peer. We asked about knowledge sharing, the practicality of carrying out pre and post measures associated with the L&D activity, and opportunities to quantify changes in affect, behaviour and cognition. Example questions were: *"Did you discuss this learning and development programme with you line manager BEFORE attending the course? Did you tell / discuss the activity with your peer group / work group so that you could pass on some of your learning?"*

Immediately following the interviews we did some analyses to develop our ideas about what the evaluation process should look like. We inspected the themes from the Trio interviews to gauge how our ideas of an appropriate future evaluation process matched that of others within the organization. In addition, we took some time to understand and map out how the various human resource processes (such as induction and promotion) were used in the organization, along with the organizational structure and how evaluation could map onto these processes (see Figure 2 below).

We analysed qualitative data by constructing templates based on the interview questions (Thematic Analysis, Braun & Clarke, 2006). Data was compared and contrasted and comments were grouped into themes. This enabled us to understand the common needs across the organization and those needs that were specific to a particular area or Country. These themes were then validated (or not) within the trio interviews. It was important to clarify the substance of the points that were being made, to make sure that the initial themes were accurately reflecting participants' views and to collect any additional / different information that was being offered. The resulting themes were related to the TOTADO model to ensure the theoretical framework

was maintained. Correspondences of data to the levels of the model were noted as were any gaps. These data were compared with the systems model of the organization (see Figure 2). By examining areas of good practice and suggestions for future evaluations a picture developed of the areas that required strengthening and those that needed to be developed.

**Figure 2: A systems map of human resources processes, organizational structure and evaluation**



Following the analyses an organizational report was written in the form of a Power-point presentation. It was important that information was presented in an interactive way so that the complex findings could be fully explained to the client to aid understanding of the new evaluation cycle. A visual form was useful as it could be used to train individuals in aspects of the new cycle; thus maintaining accuracy of our input and saving the client time and resources creating new materials. This presentation was given to the OD team in a three-hour conference where they took ownership of the process and planned how to inform the other participants and Country stakeholders as part of the roll-out process.

## Results

In total 26 staff were consulted across four Countries. No one participant withdrew from the process and all were keen to be involved and to describe their experiences of the current system and offer improvements. From our initial consultation we decided to drop the Societal-level of evaluation recommended by the TOTADO model. This would have been a “step too far” to consider issues outside the organization before major business objectives were aligned.

Our analyses highlighted some important themes suggesting people in the organization appreciated that evaluation was more than simply a tick box exercise but were aware that the current system was over simplistic. L&D staff wanted to keep some of the information about the practicalities of classroom training in the new system. However, at Individual-level there were few materials in existence that explored the application of learning in any depth and identified criteria that would be associated with positive outcomes after an L&D activity. Therefore, it was critical that the new system would build in time with the participant and their line manager to discuss learning both before and after the activity.

Team-level analyses demonstrated a strong need to demonstrate changes in behaviour and to build on areas of good practice where knowledge transfer to the work group was being achieved.

Organizational-level analyses highlighted the importance of line manager involvement to set expectations of learning and transfer from activities both before and after L&D activities. Table 1 below sets out more fully the main themes identified within the interviews.

**Table 1: Summary of themes and comments from interviews**

TOTADO	Themes from analyses	Quotes/ explanation
<b>Individual Level</b>		
Affective	Keep happy sheet	'We still want to keep in some 'happy sheet' information'
Cognitive	Assessment of learning, knowledge transfer, application of knowledge	'There is little application of learning'
Behavioural	Changes in work place behaviour	'I am keen to be able to evaluate what is being done differently after the learning and development activity in terms of competence or behaviour'
Instrumental	Identify success criteria	'Success criteria need to be identified'
<b>Team Level</b>		
Affective	Keep happy sheet	'We still want to keep in some 'happy sheet' information'
Cognitive	Knowledge transfer, application of knowledge	'I went on a workshop, came back to the office and shared what I had learned in a team meeting. It helped my learning and I'm sure it helped others'
Behavioural	Changed team and boundary behaviours	'We want evidence that practice changes behaviour'
Instrumental	Identify success criteria	'We think that more emphasis should be placed on evaluation at the outset of activities; asking what people want to 'take away from session'
<b>Organizational Level</b>		
Financial	Return on Investment in Learning & Development	'Individuals and managers must consider Return on Investment of activities – helps individuals understand the value of learning and development activities'
Outputs	Identify success criteria	'Work with line managers to identify what is important to gain from each activity; spending time after to see if these criteria have been achieved'.
Processes	Standardisation across four countries, links in with other systems	'Activities need to be talked through with a manager and reflected upon – we have no formal structure for this'
Resources	L&D matches organizational objectives	'We need to fit learning and development activities in with organizational and directorate objectives'.

In addition, our analyses identified a number of general features that a new evaluation system should consider. These have been placed into three categories; HOW the evaluation should be carried out, WHAT the evaluation should consist of and what OUTCOMES do the organization want out of the evaluation. Example features include: evaluation should be a reflexive activity that was considered a natural part of every L&D activity; L&D activities should be matched carefully to individual work objectives and needs; any new system would utilise the current IT platform; evaluation would provide overview information for the senior management team demonstrating return on investment. Table 2 below describes these themes in more detail.

**Table 2: Summary of themes relating to general features of a new evaluation process**

<b>General Features</b>		
<b>How</b>	Make evaluation a reflexive activity	Interviewees stress the importance of making evaluation more reflexive, and allowing them the time to really consider the learning that had just taken place and how they could then apply this to their work place.
	Managers involved in evaluation	It was also clear that there needed to be some standardisation around the involvement of managers in the evaluation process; some managers were doing this well whilst others were not involved and rarely discussed learning activities with their staff.
	Work time and space allocated for evaluation	"We can't do the appraisal in the managers office; there are too many interruptions and no IT"
<b>What</b>	Sets up expectation of evaluation of L&D activity bespoke to individual needs	The evaluation process must be a part of all aspects of the organizational life cycle and most importantly managers must set up the expectation of evaluation of learning from induction, into performance appraisals and throughout an individual's career.
	Matches to individual, team, and organizational objectives	It was evident that organization wanted to move away from the standard set of courses offered to more bespoke learning and development activities which really address individual learning needs.
	Electronic system supported by current platform	The best way to incorporate the new evaluation processes would be to utilise their current electronic learning platforms. This would standardise processes whilst using a system individuals' are already familiar with.
<b>Outcome</b>	Provides feedback to senior management team (SMT).	Evaluation of L&D activities must feedback essentials to SMT: they must be able to see whether there has been return on investment and have some basic facts and figures around L&D. It is important the OD team are able to use evaluation to inform their feedback to SMT and to be able to plan future investment and activities.

Having identified key themes from the consultation and linked them with the TOTADO model, we were able to set these within the organizational systems (see Figure 2) and design an appropriate evaluation framework. The evaluation was based around an Individual Learning Account utilising the organization's current IT platform.

The evaluation framework consisted of a series of tools and a set of processes to be followed at key points in the organizational life cycle. The primary focus being the Individual Learning Account in which L&D needs are set out and evaluated. When an employee enters the organization they proceed through specific stages such as role induction, annual performance appraisals, promotions and leaving; evaluation was incorporated into each of these stages.

At Role Induction or Performance Appraisal it is important to set up expectation of taking part in the evaluation process: completion of evaluation tools, sharing of knowledge, reflection and

quantifying behaviours that may have changed. It is also important that managers work with employees to clarify their work roles and what L&D they may require to develop in their roles. It is critical this is a two-way process as role holders may well offer managers useful insights into how best to develop or alter work roles. This process introduces an element of role innovation and possible change.

Once individuals have taken part in an L&D activity they are asked to complete an L&D activity evaluation tool. This tool incorporates measures of knowledge and behaviours while encouraging reflection. For example, employees are asked to rate their levels of competence in certain skills and behaviours related specifically to their job and to reflect on the application of the learning in relation to their work situation, team and the organization more generally.

In order to assess transfer of learning to the work place and to others we designed the second set of tools to assess the impact of the L&D activity at later stages e.g., 1-2 months, 6 months or 9 months after the L&D activity had taken place. This tool incorporates self, manager and peer ratings in order to quantify shared learning and any changed behaviours or skills from an objective stance.

The evaluation tools are used as part of the Performance Appraisal process to examine changed behaviours, reflect on work objectives and previous L&D activities and to plan future activities. The annual Performance Appraisal signals the start of a new evaluation cycle and managers and individuals are encouraged to revisit their expectations of the L&D activities, the criteria they set up to appreciate success and any changes in work objectives.

Employees may be promoted or leave the organization at some point in this cycle. When promoted the employee will start their new role with a Role Induction interview in which their manager will clarify new work objectives and identify appropriate L&D activities. This introduces the Induction Phase tool. If an individual decides to leave the organization their exit interview is a useful time for the manager to reflect on individual and group work roles, L&D activities and other things that may or should have happened in the employment. Some of the reflective questions used within the tools can be modified for this activity providing valuable information and learning for the organization.

## Discussion

In summary, we developed an evaluation of Learning and Development (L&D) that incorporates all parts of the organizational system from induction to exit. Figure 2 illustrates how L&D evaluation is linked into human resource practices, stakeholders and stages within the organizational life cycle. Most importantly the evaluation promotes joined-up thinking between staff and managers so that people are being developed in line with organizational objectives promoting a greater return on investment. We have encouraged a multi-level conversation between the manager, the employee and the work group to capture aspects of role innovation.

The TOTADO framework provided a robust model enabling exploration of a multi-level perspective of organizational life. The model encouraged reflection and application of the human resource systems already in place and the development of an evaluation process that was systematic and sensitive to desired changes in organizational culture. The features of the TOTADO model build on the model of evaluation described by Kirkpatrick (1959) in focusing the assessment of learning and development in the workplace and at the work group and organizational levels. TOTADO was sufficiently descriptive enabling new systems to be developed in contrast to the more vague terminology of the Kirkpatrick model. However, we were unable to use the Societal-level outcomes from the model to examine the impact of learning and development with the organization with regard to the economy, health, education and environment of the various Countries. As a systematic evaluation process was new for the organization the inclusion of these broader concepts would be too greater focus on external aspects of the organization. We would hope, in the future, as the evaluation process becomes embedded within the Country areas that it would be possible to incorporate a broader impact analyses on Societal outcomes. It is entirely possible the role innovation encouraged by this model will examine environmental and educational changes in the near future that will bring this aspect of evaluation one step nearer.

Within a few months of the completion of this project the client organization are delighted that they are utilising a cutting-edge model of evaluation that is driving their performance management strategy. The immediate result was accreditation by Investors in People. In addition they have developed their performance management process with managers' reporting more frequent conversations with staff about their day-to-day and future performance. Staff appear to be adopting a more reflective approach to their learning and development by the slowing down of the decision-making about development activities and taking time to understand the relationship between learning activities and work objectives. Further, there is documented evidence of more innovative approaches to learning such as job shadowing and mentoring being used in the organization. The systematic approach is enabling the OD team to build a picture of learning and development across the four Countries that was previously absent. It is too early to measure financial or membership benefits for the organization but these are expected to occur after full implementation. The authors have had this work short-listed for an award by the Division of Occupational Psychology, at the British Psychological Society. The judging panel were impressed at the application of theory to the practices within the organization.

There were several features of this evaluation process that were critical to the success of this project. These were:

- Introducing differing forms of L&D to supplement traditional classroom tuition;
- Considering evaluation at the Individual, Team and Organizational levels;
- Assessment of change in knowledge and behaviours before and after L&D activities;
- Continuing assessment of change for periods up to 12 months to examine longer term effects;
- Incorporating self, peer and line manager feedback on knowledge and behaviours;
- Providing information on return of investment and encouraging staff and managers to appreciate the costs involved in L&D;
- Offering opportunities for managers, peers and employees to stand back and review roles, systems and objectives encouraging innovation;
- Providing opportunities to see where challenges lie in changing the organizational culture towards a more systematic way of thinking and working. Exit interviews will be helpful in this process;
- Finally, and possibly most importantly, providing a systematic view of evaluation that is incorporated within the existing organizational processes.

## **Reflections**

As with any piece of qualitative enquiry we found it helpful to reflect on the process used and the points of learning we gained working with this client. We discovered the power of maintaining on-going communication throughout the project by using a tailored consultation process and data collection that listened to as many different peoples' views about Learning and Development as possible. We are continuing to work with the organization on various projects and realise how important it is to revisit the objectives of the evaluation process with the senior management team in one or two years to see how these are changing.

In the consultation process we acknowledged what was currently working well within the Country areas and what they wanted to do in the future. By linking our theoretical model to areas of good practice and building on these we "took the organization with us" encouraging and assisting implementation. The process of listening to people improved our understanding of the possibilities and limits within the development of our model (e.g., not using the Societal-level of TOTADO).

We presented the work to the client using active methods of presentation rather than delivering a complex report that may have been misinterpreted or taken them a long while to understand. By continuing an interactive dialogue communicating our findings and proposed methods of evaluation and by listening to what was possible within current working practices (such as building on their existing IT platform) this assisted the immediate roll-out of the process across

the Country areas. The client was saved the workload of devising training materials and we maintained control of the level of accuracy that was achieved in the roll-out communications.

There were several limitations to this piece of work. The consultation, while broad was not extensive and there may have been some areas that were neglected. We have advised the organization to conduct a detailed survey of the use of the evaluation process as part of their annual staff review; this will happen in early 2010. This will allow the organization to fine-tune the process of evaluation. There was one level of the TOTADO model that was not used within our research. It is hoped that the Societal-level of evaluation can be incorporated into the evaluation process once the basics have been embedded.

Bearing these points in mind we believe that we have delivered a systematic evaluation process that is reliable and valid and matches the organization's needs at this time. We are aware that those needs will change over time and that is it important that the system is robust enough to reflect this.

## References

- Arthur, W., Bennett, W., Edens, P., & Bell, S. (2003). Effectiveness of training in organizations: A meta-analysis of design and evaluation features. *Journal of Applied Psychology, 88*, 234-245.
- Bates, R. (2004). A critical analysis of evaluation practice: the Kirkpatrick model and the principle of beneficence. *Evaluation and Program Planning, 27*, 347-371.
- Birdi, K. (2000). The bigger picture: Identifying the factors influencing training effectiveness. Presented at the ESRC 'Working to Learn seminar', University of Sheffield.
- Birdi, K. (2006). Evaluating effectiveness: The taxonomy of training and development outcomes (TOTADO). Presented at CBPOT 2, Brasilia, Brazil.
- Birdi, K. (2010). The taxonomy of training and development outcomes (TOTADO): A new model of training evaluation. Paper to be presented at the annual BPS Division of Occupational Psychology Conference, Brighton.
- Bryman, A., & Bell, E. (2003). *Business Research Methods*. Oxford University Press.
- Braun, V., & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.
- Kirkpatrick, D. (1959). Techniques for evaluation training programmes. *Journal for the American Society for Training and Development, 13*, 3-9.
- National Employers Skills Survey (2007). Learning and Skills council.
- Phillips, P. & Phillips, J. (2001). Symposium on the evaluation of training: Editorial. *International Journal of Training and Development, 5*(4), 240-247.

# Development of Work and Organizational Psychology in Latvia

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## Abstract

This article describes the development of Organizational Psychology (OP<sup>1</sup>) in Latvia from the time of their first independence, through the communist period to the time of regaining independence. The current work situation and challenges for OPs is described along with information about The Latvian Society of Industrial and Organizational Psychologists (LSIOP). Further development of OP in Latvia is discussed.

## Introduction

Organizational psychology (OP) development in Latvia can be divided into three periods: (a) from Latvia's first independence – 1925 until 1940 when a few institutions related to OP were created; (b) after World War II until the middle of the century when there was no OP in Latvia at all. Starting from 1956 there were chances for the development of OP although only in a strictly ideological communist frame; and (c) following regaining independence in 1991 OP started to re-develop and now mainly consists of academically oriented OP and practically oriented Human Resources (HR) activities.

## From Latvia's 1<sup>st</sup> Independence, before World War II

The first psychological institution related to OP was Riga Municipal Youth and Vocational Research Institute (the Institute). It was established in 1925 and was created from an alliance of the Psychotechnology cabinet of the Ministry of Education and the Nerve Ambulance of Pupil of Riga city. At that time psychotechnology was practical, applied psychology, covering industrial psychology, personnel selection, and vocational guidance (Drillis, 1957). The Institute was concerned with preparation of job descriptions, administration of vocational aptitude tests, assessment of vocational interests, and study of physical and psychological conditions of job efficiency. The Institute had different kinds of clients; private entities as well as governmental institutions. More than 64,000 individuals were tested in the Institute up to 1940.

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<sup>1</sup> There is a need to differentiate the abbreviation OP into the term used for Organizational Psychology in Latvia (OP); and Occupational Psychology (Occ P); the term used for the equivalent practice of Work and Organizational Psychology in the UK.

## **After World War II and in the times of the USSR**

The soviet occupation of Latvia in 1940 interrupted the functioning of the Institute and the development of applied psychology in Latvia; as well as in the rest of the USSR. OP practically stopped until 1956. From the beginning of Khrushchev's "thaw" period (1956 - 1963) chances for OP development returned although in strictly ideological communist frames.

Research was carried out in different fields of psychology; and psychology started to be a subject in the Universities. But psychology had to go in line with the ideology of communism. In certain ways the traditions of work psychology initialised in the period before the occupation were continued. The profession of a psychologist was officially recognised in Latvia at the beginning of 1970s but a university degree was not available until 1989 (neighbouring countries of Estonia, Lithuania and Russia had university education for psychologists twenty years before this date).

Prior to 1989 psychological research was conducted by psychophysicists, medical practitioners, and sociologists. Research was undertaken by other specialists because of the lack of professionals in psychology. Examples of this work were: examination of the impact of work conditions on work efficiency; opportunities for improvement of work procedures; and problems of professional orientation.

The first research into "management psychology" emerged at the end of 1960s exploring leadership styles (mostly according to the work of Kurt Levin) and the psychological conditions for effective preparation of managers. This work was undertaken by economical and technical specialists and focused more on practical application than scientific development. For example, there were attempts to estimate which leadership style (authoritarian, authoritative, liberal, or democratic) could characterise managers of appropriate organizations and what could be done to improve those leadership styles.

The first USSR Symposium on social psychology of management was held in Riga in 1974. The event had a great significance as it facilitated further development of work and OP in Latvia and was one of the main contributing factors to the emergence of the profession of the "industrial psychologist". "Industrial psychologists" were primarily employed for "departments of the scientific organization of work" in governmental entities (there were no non-state owned institutions in USSR); but these professionals did not always have an education in psychology. By then, graduates from Leningrad and Moscow Universities of Psychology had just started to work in Latvia. This was the first wave of OP (with a scientific basis) after World War II in Latvia.

At the end of 1970s the core issues studied by industrial psychologists were: labour turnover (with recommendations on how to prevent it); and climate and leadership style (with recommendations on how to improve it). Sociologists graduated from University of Latvia were now more active in this research than psychologists (although there were only a few psychologists in Latvia at that time). The largest industrial enterprises established their own psychology departments mainly under the direction of the district communist party (the Party) committees; rather than by the initiative of the companies. At that time the politic of the Party was to raise labour productivity with the focus on personnel factors. Changes occurred as a result of this research but there was little discussion or debate about any of the topics. Once the top of the Party (the Central committee) had made a decision this had to be carried out at all levels of organizational management. As there was no competition among companies, management of organizations were interested neither in motivation of employees or in the rise of personnel productivity. Nevertheless, Psychology departments aimed to improve social and psychological methods of management although this work was highly confidential and was not allowed to be published.

## **Before and after regaining independence**

Gorbachov's "perestroika" in the second part of 1980s started a new stage in Work and Organizational Psychology in Latvia. New initiatives, such as the "election" of managers were initialised in many organizations where previously managers had been chosen by the communist party committee. This created the need for psychological assessment of the candidates. At this time psychological tests were used for assessment; although these tests

were not officially forbidden they were not generally supported. The number of psychologists in Latvia was growing due to graduates from Russian universities. Psychologists took active roles in the selection of candidates, their development as managers and conducted training programmes. It was noticeable at this time that there was wider practical usage of intelligence tests and personality profiling along with new training methods such as “business” games (e.g., the use of the in-basket and group discussions as part of the selection process).

After World War II Latvia had maintained a well-developed educational infrastructure and developed specialists. For this reason Moscow decided that some of the Soviet Union's most advanced manufacturing factories would be based in Latvia. New industries were created in Latvia including a major machinery factory (RAF), electro-technical factories, food and oil processing plants. After Latvia regained independence in 1991 the state owned companies were chaotically privatised and unfortunately most of them ceased to exist (examples being: the State Electro-technical Factory, a leading commutation producer in the Soviet Union; Red Morning, a leading knitted fabric producer; and Riga Radio-technical Factory, a leading sound technique producer). The reasons for the failure of these companies varied. Some were producing products for military purposes and these were no longer needed anymore. Others were just not competitive in the new markets.

The impact of the liquidation of state owned manufacturers resulted in steep rise in unemployment in Latvia, along with a fall in the economic and psychological well-being of a significant part of the population. As a knock-on effect of this situation, the demand for psychological studies in organizations drastically dropped. The work of psychologists in organizations became limited to conducting seminars on psychological issues of work motivation and management and the practice of psychological counselling. Roles were limited to management consulting, mentoring and coaching; being the only services in demand by management.

However, the entrance of foreign companies into Latvia in the middle of 1990s caused the demand for personnel selection to rise gradually. More attention was given to different courses and seminars and in particular issues of OP such as team building, effective leadership, and effective motivation. The rise in demand for OP by foreign companies was initially led by specialists from USA, Germany and Scandinavia, but gradually Latvian psychologists engaged in this process.

By the middle of 1990s the market economy had stabilised and a more serious interest in OP began. Particularly, interest was expressed in “management psychology” but as this discipline was created in soviet times it was absolutely inapplicable to the free market economy. The term “Organizational Psychology” in Latvia was first officially mentioned in 1992 as the title of a lecture course for the students of psychology at the University of Latvia. At that time the first working places for psychologists educated in Latvia appeared with international consulting companies.

Until the end of 1990s first year students of psychology as well as historians, teachers, medical doctors and representatives from other professions often worked as organizational consultants looking at psychological issues in Latvia. Employers had very little idea of what kind of help to expect from the consultant psychologist, and what professional knowledge and skills they had. Usage of unprofessional psychological tests was wide spread in personnel selection. Due to easy accessibility, tests were used by people without appropriate knowledge of the methods for their use and interpretation of results. Furthermore these tests were not adapted to the local conditions in Latvia; often violating the copyright conditions of the test developers. The main impact of the inappropriate usage of selection tests was the low validity and reliability of the test results. Poor selection decisions were being made and this resulted in a low credibility of the discipline of psychology in society.

## **Development of OP as we know it today**

Fifteen years ago in Latvia there were only few professionally specialised Organizational Psychologists with the appropriate university qualifications. In 1996 a Master's programme of Psychology was created at the University of Latvia. Specialists in OP are prepared in the University of Latvia and by teachers from the Riga Training and Education Management

Academy. Similar programmes have appeared in some of the other universities in the country. However, there are currently several hundreds of psychologists working in organizations in Latvia; but only fifty of them have a Master's degree in OP.

Now-a-days standardised, adapted tests are used in personnel selection and research, and the conditions of copyright are observed. People with the appropriate background and experience are using test materials as well delivering psychological training and development programmes. Compared to beginning of the rise of psychology in Latvia (10 – 15 years ago) organizations are now more aware of the quality standards and requirements, necessary knowledge and competences of professional psychologists.

However, while the Master's degree in OP is offered by the University of Latvia it should be noted that OP is not included in the list of sub-sectors of science of psychology prepared by the Council of Science in Latvia. The Latvian occupational classification is likely to be the only official document recognising the profession of Organizational Psychology. Unfortunately, Latvia is one of few countries in the world and the only country in European Union (EU) where OP does not have official status as an occupation. Sadly this is indicative attitude towards OP that results from insufficient understanding of psychology as a science which is still dominant in Latvian society. This problem increases the responsibility and the necessity of each Organizational Psychologist in Latvia to explain to people, organizations and society the objectives and strengths of the role of the Organizational Psychologist. From experience, each year management and employees come more and more to recognise the opportunities and gains offered by OP. Indeed, all over Latvia people are becoming more open to the new disciplines of science.

Currently research in OP is undertaken by master's students and this work is mostly practically oriented. The current topics of research are: job satisfaction (and the association of personality traits, organization type, status and personality values, locus of control, and relationship with work efficiency); organizational culture (and the differences in various organizations); burn-out at work; the association of personality and organization values; the impact of personality traits on decision-making; the relationship of leadership style to psychological climate; organizational and professional commitment (in relation to personality traits, organization type, seniority, personality values, locus of control, compensation, job satisfaction); attribution errors in personnel selection; gender stereotypes of managers, significance of locus of control in work (and differences among managers and employees in locus of control), and the notion of learned helplessness.

Latvian psychologists are currently involved in practical work related to Human Resource (HR) issues (such as personnel selection, career planning, preparing job descriptions, developing remuneration system, and training). Frequently performing these tasks does not ask for a deep knowledge of OP and the work may be completed by economists, lawyers and representatives of other professions. There are different explanations of the reasons why psychologists are doing HR work. It may be that there is a lack of understanding and demand for the organizational services of OPs (Jānis Dzenis). Or, organizational psychologists are adjusting their behaviour to work in non-demanding organizational environments and are do not showing initiative for psychological activities such as research (Viesturs Reņģe).

## **The Latvian Society of Industrial and Organizational Psychologists**

The Latvian Society of Industrial and Organizational Psychologists (LSIOP) was created in 2000. Currently LSIOP brings together 40 members; organizational psychologists with different professional backgrounds. The statutes of the Society have two grades of membership: associate members (psychologists with a Bachelor's degree) and ordinary members (psychologists with a Master's degree). In terms of affiliation LSIOP is member of Union of Latvian Psychologists and co-operates with Latvian Association of Personnel Management. In 2007 LSIOP joined the European Association of Work and Organizational Psychology (EAWOP). Until now cooperation between different associations has given the possibility for LSIOP members to find local contacts and information (such as exchange of experience) and the opportunity to attend workshops and conferences at reduced fees.

LSIOP's main activities are the organization of workshops and annual conferences.

The topics cover both HR and OP. Two large conferences have been organised by LSIOP recently. In 2007 the annual conference was about the theoretical aspects of the Person and Organization Fit. In 2008 the annual conference focused on Organizational Effectiveness and was held in cooperation with a local business newspaper *Dienas Bizness*. In addition, LSIOP has held several workshops and seminars over the last two years including: Employee leasing; the psychological aspects of head hunting; psychological support programmes for employees; employee motivation; effective remuneration systems; knowledge management, the organizational efficiency mode; and change management. The workshops are organised by Board members of LSIOP and are mostly held in the working premises of LSIOP members. Presenters or moderators of workshops mostly are members of LSIOP who contribute their time with no fee.

The number of participants is dependent on the content of workshop but on average it is about 15 participants per workshop. Most participants are LSIOP members but workshops are open to other interested persons (for example, members of Association of Personnel Management). Workshops are for free for members and for symbolic fee (3LVL, about five EUR) for external visitors.

Currently LSIOP is working in co-operation with Educational and Clinical psychologists to develop the Law of Psychologist's Practice. As there is no legal act in Latvia which regulates professional activities of psychologists there is high risk for clients to receive unqualified psychological services. Experience from European and other Western countries shows that the Law of Psychologist's Practice helps to prevent this risk.

## The future

Over the last 18 years until 2007 we have seen a gradual increase in the Latvian economy; particularly with joining the European Union. There has been an increase in the number of professional psychologists in Latvia and there is a growing understanding of the importance for managers to have psychological competence. This situation had encouraged us to think that OP in Latvia will continue to strengthen and become an independent branch of science. Unfortunately, the current international economic downturn and local economical recession has decreased and possibly erased these optimistic scenarios for the development of OP in Latvia.

In terms of economy Latvia has been hit the most among EU countries. Additionally it has loaned several billions EUR to maintain its financial situation at a satisfactory level. This means that the next decades will be spent on the repayment of these credits; not a bright picture for the state of the economic future. Because of the economic climate there have been several layoffs in HR departments; but these are not as painful as in the School of Psychology where many professionals has lost their jobs due to layoffs. From the European and US experience it can be seen that OP develops together with economic development. Large corporate companies have opportunities to invest in research, development of methodologies and practical implementation. Unfortunately, Latvia is currently lacking such investment. But nevertheless, development as we all know is just a matter of time. Based on our 18 years of development experience, one could forecast that it may take the same amount of time until OP in Latvia will be at the same level of development as in other Western countries.

In conclusion, we hope that this short paper has given you some insight into the development of the field of OP in Latvia. Authors would be pleased to answer additional questions and hear your comments on this article. Contact information – Viesturs Reņģe: viesturs.renge@lu.lv and Jānis Dzenis: janis.dzenis@lop.lv, mobile phone - +371 29691095

## References

- Reņģe, V. (2007). Mūsdienų organizāciju psiholoģija. *Apgāds Zvaigzne ABC*.
- Drillis, R. (1957). Latviešu praktiskās psiholoģijas 30 gadi. (30 years of Latvian applied psychology). *Amerikas Latviešu humanitāro zinātņu asociācija. Rakstu krājums*. 1, 98-114.
- Zusne, L. (1976). Development of psychology in Latvia. Catalog of Selected Documents in Psychology, 6, American Psychological Association. p 17.