OCCUPATIONAL PSYCHOLOGY

Occupational psychologists apply the rigour and methods of psychology to issues of critical relevance to business, including employee selection and training. Neil Jones reports.

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The discipline of occupational psychology (OP) has come a long way since the middle of the 19th century when Friedrich Engels published The condition of the working class in England and the first investigations into human reaction times were conducted by the Dutch psychologist, F.C. Donders. No that either Engels or Donders would have recognised the term 'occupational psychology'.

According to the British Psychological Society, occupational psychology is where the rigour and methods of psychology are applied to issues of critical relevance to business, including talent management, coaching, assessment, selection, training, organisational development, performance, wellbeing and work-life balance. The aim is to help organisations to get the best from their workforce and to improve the job satisfaction of individual employees.

But, as Richard Snodgrass, a senior occupational psychologist at the Health and Safety Laboratory (HSL) explained when I met him at HSL’s dramatic hilltop campus in Buxton, Derbyshire, modern OP was a long time coming.

“Early 20th century research and writing was focused on the physical aspects of the relationship between work and humans, not least the 1911 seminal book by the American, Frederick Taylor, The principles of scientific management,” Richard says.

“The thrust of Taylor’s argument was that work should be carefully analysed and standardised in the interests of efficient production – essentially de-skilling the production process – and the impact the theories of this ex-machine shop foreman had were considerable.

“What Taylor was advocating was the removal of emotion from the production equation. It was essentially a ‘worker is robot’ approach that appealed to the managements of the time.”

David Fox, one of Richard’s HSL colleagues, adds that whilst later research, notably work done by Mayo in 1933 and then by Roethlisberger and Dickson in 1939 at the Western Electric Company at Hawthorne in the United States, was still focused on physical issues and its effect on productivity, there was a dawning realisation that workers’ emotions affect productivity.

As early as 1943, Abraham Maslow was writing that only individuals who were psychologically healthy could be motivated to work. Maslow was researching from the point of view of personality and clinical psychology and it wasn’t until later that the significance of his theory of self-actualisation was noticed by occupational psychologists. It is Frederick Herzburg who is credited with the link between working conditions and job performance and mental health.
Occupational psychology – more usually called industrial and occupational psychology in the USA – is now a well established discipline, with applications including coaching, assessment, personnel selection (eg. through the use of psychological tests, as a way of measuring people’s suitability for a particular role), training, organisational development, staff health and safety and work-life balance.

Much of Richard’s work at HSL is at the opposite ends of the age spectrum, conducting research on post 65 year old workers and also on the so-called ‘Generation-Z’; children of late primary school/early secondary school age who will be entering work in the next ten years or so. With these workers of the future research is focused on understanding what their expectations and understanding of ‘work’ actually are.

“What I find fascinating – and why I believe that occupational psychology will become increasingly important – is where work is going in the next 20 years,” says Richard.

“We’ve already seen a dramatic change over the last two decades in the UK from essentially heavy industrial, mainly national, companies to niche manufacturing and service industries, many working globally.

“This has had a major impact on the work environment, on relationships between workers and management – union membership has fallen by 30% in that time – and work becoming safer than ever.”

Richard continues by saying that there has been a shift from physical accidents to a greater level of stress accruing from bullying, harassment and the impact of technology.

“We’re moving towards a situation where many organisations will be virtual, coming together only occasionally and not necessarily on company premises, working across different cultures, time zones and languages. We already have many people working at home or solo in the field and that will increase dramatically in my view over the next two decades, bringing with it issues of isolation. All these issues are tremendously interesting from an occupational psychology point of view, with recruitment, training and employee retention all being affected.

“At the same time, we’ll all still need the dustman to empty the bins and there will be an increase in McJobs – the low paid, low skill jobs in areas like the fast food industry. And there’ll be some interesting developments too in areas like warehousing, where a much larger degree of automation will bring workers in contact with robots of one sort or another. That itself will bring some interesting interactions about which we know very little at the moment.”

David Fox’s recent work has been more in the field of health and safety. He has just finished evaluating the Health and Safety Executive’s (HSE’s) interactive Slips and Trips eLearning Tool (STEP), which was launched in 2009. The learning tool provides practical guidance to help users tackle slips, trips and falls in the workplace.
Despite its relative newness, HSE wanted occupational psychologists at HSL to look at how the tool could be improved.

David Fox: “We have been conducting usability trials, mainly in health and public sector organisations to see how it worked in real-life. That meant sitting alongside employees as they used the tool, questioning them about how they interacted with it and asking for their views on how they found it.

“We have only just finished the research and have not yet finished the report but one item that has come out is that people want more scope to customise the package to their own organisation or even their own department. There are already sections for different industries such as food manufacturing, hospitality and catering and healthcare, but our study found people were wanting even more customisation.

“This is a good example of where occupational psychology can make a difference by improving what is already a good and useful tool that is having an impact on safety management.”

Another occupational psychologist whose work focuses on safety management is Ashley Morris, who works for The Occupational Psychology Centre (OPC) in Watford, Hertfordshire.

The consultancy was originally part of British Rail before becoming an independent consultancy in 1995 and, not surprisingly, still works for many of the train operating companies as well as National Rail.

Ashley qualified last year as a chartered occupational psychologist (COP) and she explains that this was the culmination of a long process of study and training.

“To become a chartered occupational psychologist initially means taking an undergraduate psychology degree and then a Masters degree in occupational psychology, both from universities recognised by the British Psychological Society.

“Then you have to do a traineeship that lasts at least two, often three, years and as a trainee you must work across different areas and demonstrate a breadth of experience. During my traineeship I covered career progression and development, human machine interaction, work with safety and transport, training, selection and assessment including working on a rail industry safe train driver profile, organisational development, management structures and culture.”

Now that she has become a COP, Ashley’s particular interests include human factors. “It’s about working with people, they’re fascinating beings,” she says.

Some of her work is with train drivers, examining train driver assessment and training at an individual level but also at a team and organisational level.

“For example, where a train driver has had a safety incident, what one of my colleagues and I do is to work with the individual driver, look at their personality, look at their motivation, look at their abilities to see what might have added to the likelihood of these incidents,” Ashley explains.
“These incidents include signals passed at danger (SPADs), where the driver goes through a red light or fails to stop at a station. For me it’s really interesting to see what in the environment in which they’re working or in the individual themselves have led to these incidents. For example, are they more susceptible to distractions than other drivers, what are their concentration levels like and what can we do to lower the risk of incidents happening again?

The Post Incident Assessment (PIA) carried out by Ashley and her colleagues works as follows:

- Prior to conducting an assessment of the train driver, the OP has an in-depth telephone discussion with the driver’s manager to help understand the background to the driver and his/her incident(s).
- The psychologist will then put together a bespoke assessment for the driver consisting of eg. interviews, psychological tests and exercises designed to assess concentration, reaction, stress, personality and motivation.
- The driver is then invited to the OPC to complete the assessment tools.
- At the end of the assessment day the findings from the assessment are fed back and discussed with the driver and his/her manager.

The psychologist prepares a personalised report and development plan for the driver and his/her manager. For example, one of the ways that train drivers can lower the risks imposed by concentration lapses is to use what Ashley describes as risk triggered commentary driving.

“We teach these drivers to recognise that there are particular periods of their shift – often the last two hours – or particular aspects of their routes such as coming into stations where they are at a higher risk than elsewhere and to start speaking out loud what they are seeing and doing,” explains Ashley.

“It’s a technique that, to the best of my knowledge, was first introduced in the training of advanced police drivers in 1937 and is still used at police driving schools to this day. It’s also in use during train driver training by some of the train companies.

“The reason it works so well is that you can think faster than you can talk, so having to describe out loud what you’re doing and seeing means concentrating harder than normal and looking further ahead than you might otherwise. It’s a great way of developing anticipatory rather than reactive driving.”

Three and nine months after the Post Incident Assessment the psychologist meets up with the driver and his/her manager again to review progress against the plan, including successes to date and work in progress. In the OPC’s experience this follow-up is the key in helping shape real change in the driver’s behaviour.

“We regularly got positive feedback from the drivers who have taken part in a Post Incident Assessment. For some it has increased their confidence, others have said it has opened their minds to the role of human factors, others have said that the development plan has helped them to remain safe and stay incident free, whilst
for a few it has been a life-changing experience and they go on to share their learning and experiences with other train drivers.”

In addition to her work with SPAD incidents, Ashley is involved with recruitment for safety critical staff. “What we’re trying to do is develop the perfect profile for, say, drivers, guards, signallers and other staff.” She highlights traits like acceptance of rules and procedures, high concentration levels, reaction to unexpected situations and motivation for the role as key aspects, and for many, the ability to work on their own for fairly long periods of time.

“The fascination of my job is that each case is different, each individual is so different an interesting and they can be affected by so many factors, including their home life. In fact they can be the most interesting cases, with different factors at home, work and elsewhere.”

Asked what she sees as the major challenges for the profession over the next five years or so, Ashley points out that OP within companies is still relatively new. “I think OP will have an increasing role to play, even – or perhaps especially – in the current economic climate, as it looks at the whole cycle, from attracting people, selecting them, putting them through their training, looking at their performance on the job, and then the exit. It looks at the individual, it looks at the team and it looks at the organisation, so I think there will always be a part for OP to enable people to perform to the best of their ability. It’s still up and coming,” she says.

Further information:

www.hsl.gov.uk
www.theopc.co.uk
www.bps.org.uk