

FLEXIBILITY & CHANGE



Issue 13/2020

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InPractice 2020 Issue 13

Editorial

Diana Rus & Angela Carter



So far, 2020 has brought about unprecedented disruptions and challenges to our professional and personal lives. Most of us had to quickly adapt to working from home, engage more intensively with technology to communicate with co-workers and clients, and learn to manage our time and resources to maintain productivity and well-being. At the same time, the traditional boundaries between personal and work-life have blurred or disappeared and it has become more important than ever to be able to flexibly adapt to changes, update professional skills and further develop self-management skills.

We are delighted to publish Issue 13 of InPractice featuring a collection of articles centred around renewal and development, whether that be personal or career development. This issue contains three original empirical articles and an interview with a thought leader in Work and Organizational Psychology. The empirical articles showcase quantitative and qualitative research methods, such as the development and validation of a self-regulation scale, thematic analysis of interview data and a case study exploring research as practice.

Consistent with our journey of renewal with InPractice we open by presenting a new feature, namely an interview with a thought leader in Work and Organizational Psychology. *Dr Hazel MacLoughlin* is the incoming President of the British Psychological Society in the UK. In an interview with the second author Hazel outlines some of the many changes we are dealing with as a result of the coronavirus (COVID-19) outlining her current and future vision for Work and Organizational Psychology.

Next, we continue with a timely paper by *Kirsi Sjöblom, Lauri Hietajärvi and Katariina Salmela-Aro*, from the University of Helsinki in Finland, focusing on the self-regulatory skills and strategies employed by knowledge-workers operating in complex work environments, such as multi-locational digital work. The authors develop a scale for measuring broad self-regulatory skills consisting of cognitive, emotional and behavioural self-regulation strategies. They find that cognitive self-regulation strategies such as actively adding meaning into one's work and seeking advice from others are positively related to well-being at work.

Following, we have a fascinating read by *Vicki Elsey, Neill Thompson, Elizabeth Sillence, Laura Longstaff, and Mark Moss* from the University of Northumbria, UK exploring the development of professional identification in Occupational Psychology in the UK. Based on thematic analysis of twenty narrative interviews, the authors identify five key themes (e.g., education and learning, networking and building relationships, career crafting) underlying professional identification as an Occupational Psychologist. They provide a number of practical solutions to support professional identification and help individuals advance their careers in Occupational Psychology.

We conclude with another new feature from *Leslie Sekerka and Lauren Benishek* working in the USA who take us on a captivating journey of research as practice exemplified in a case study conducted in a Silicon Valley pharmaceutical start-up. The authors highlight

the iterative, at times messy and unpredictable nature of applied organizational research. Their central argument, which is highly valuable especially for junior researchers and practitioners, is that one needs to be flexible, adaptable and engage in a process of on-going learning while conducting applied research.

We have a number of future issues in the pipeline for the rest of the year. The upcoming issue of InPractice will be a *Special issue on Performance management and feedback interventions*. This will be followed by a *Special issue on the Ethics of psychological assessment in organizations* offering a range of papers that were initially presented at a EAWOP Small Group Meeting held in September 2019 at the University of Warsaw, Poland.

For future issues, we welcome submissions from practitioners and scientists focusing on the application of Work and Organizational Psychology. To understand our unique way of working with authors and the types of submissions we are looking for, you can consult the [Editorial of Issue 12](#), [Guide for authors](#) as well as this video with the [Editors](#). You can reach all of us at InPractice@eawop.org or at our individual email addresses below.

Best wishes for the upcoming summer.



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Change in an uncertain world: A vision for Work and Organizational Psychology

Interview with Hazel McLaughlin, London, UK

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About the interviewee

Dr Hazel McLaughlin is the President of the British Psychological Society (BPS) June 2020–2021. She is an international Industrial and Organizational Psychology consultant with corporate experience in both Executive and Non-Executive Director roles. She is the Managing Director and founder of *MorphSmart*, applying the science of psychology to enable change and business transformation. She combines evidence and practice in the areas of leadership, organizational effectiveness, diversity and inclusion, resilience, and corporate culture. She is a Chartered Psychologist who also works with the Alliance in Organizational Psychology (AOP) developing White Papers and knowledge sharing.

In her work role Hazel coaches and advises business leaders and teams in many industry sectors including health, finance and retail; she is a trusted advisor to organizational boards of directors. She has worked in Europe, USA and Asia-Pacific with global clients such as Linklaters, Barclays, Capgemini, L'Oreal, Oracle and Adecco. She was the BPS *Excellence in Occupational Psychology Practice Award* winner in 2019.

Her first degree is in Psychology from Glasgow University, and she has a Masters in Ergonomics from University College, London. Her doctoral research (from Kingston University, London) centred on *Relational power*; exploring uses and implications for leaders and organizations. She was the lead author on the international research paper *Women in Power* (McLaughlin et al., 2018) that reviewed the psychological evidence on women and diversity. Mid-career, she was twice nominated for *Women of the Year*, a national UK event. Hazel is a frequent conference speaker giving keynotes at international events. Since 2012, she has been a regular guest lecturer at the Institute of Psychiatry, Psychology and Neuroscience at Kings College, London.

Keywords: Work and Organizational Psychology, motivation, leadership, agile, technology, future vision

Introduction

Early in May 2020 Angela had the pleasure of interviewing Hazel, a passionate and highly experienced Occupational Psychologist, living and working in the London area of the UK. As you will see from her biography she has just become the President of the member association representing over 56,000 psychologists in the UK (the BPS). Hazel's work combines science and practice and we took this opportunity to ask her to articulate her vision for the future of Work and Organizational Psychology (WOP). We agreed a series

of questions in advance of the interview that lasted for around 60 minutes. This article is a summary of that discussion.

Angela: *Can you describe what is happening to work and the economy in the UK at the moment?*

Hazel: We are living in uncertain times, with changes in economies, the workforce and society. The world is even more uncertain with the advent of the coronavirus (and the strain COVID-19); and there is no certainty as to what will happen in the UK, Europe or across the world. People are responding to the pandemic and reprioritising their lives. Exact figures of the impact of the virus on the British economy are not available yet, but the Bank of England predicts a drop of 14% in Gross Domestic Product (GDP) if the restitutions imposed by the virus cease in June, 2020. So what happens will depend very much on how long the lockdown continues and what measures become available to stimulate demand and encourage spending.

However, it is clear to psychologists that the world has changed and that this will have an impact on peoples' lives. The pandemic has given us all a moment to pause and to reflect on what really matters to us. Compassion and kindness matter more and relationships have greater significance. There is increased concern about the work family interface, with work and home lives no longer having such a clear distinction. With so many people working at home in close proximity to their family or in isolation from others; it is not the differences between the work and home life that are important; it is about integration. Many people are now reflecting on what is important and meaningful in their work within their lives. A White Paper (Rajadhyaksha et al., 2020) recently produced by the AOP is so relevant at the moment.

When I refer to family I mean this in its broadest sense; not just people with children but singles, couples, blended families, partnership and friendship groups. Being concerned with others' health as a result of viral infection has made everyone clearly aware that work is part of life. It helps us to question our purpose, our priorities and our focus. During isolation nearly everyone has been using technology to communicate, to work, or play, and to move things forward; and people have discovered that they really like it. The use of technology has been positive, adding value to the way we live; assisting in communication with others. Looking ahead, it is likely that technology will continue to have a big impact on our lives. But this will change the way we relate to one and another in a business context. We may have less water cooler conversations, but we will find different ways to communicate and support each other. This means we will need to find new ways to interact, to build trust and relationships.

Other things are changing, too. Business travel will happen differently; people will e-meet more often. People will find different patterns to their working life. Already organizations are questioning the use of offices and how much space they need in central locations. People will seek out flexible arrangements. Some areas of the economy will flourish and others will contract. New businesses will emerge, and others will be distressed or disappear. Because of recent experiences different things will become of value, particularly activities that have been denied in lockdown; such as seeing groups of friends. With fewer social gatherings taking place we have got used to electronically mediated conversations. Social distancing is now the way we live our lives; so this means our interactions with others are very different. For example, hygiene factors have changed and greetings in the form of handshakes, hugs or kisses are no longer acceptable. So how do you say hello, in a socially distanced way? We all need to adapt, to listen more to others and to be aware of the new social cues. Our empathy and emotional intelligence will be more important than ever before.

Angela: *Why it is important for WOP to adapt and be agile?*

Hazel: Agility is very much in my thoughts at the moment. It is critical for WOP to adapt to our changing circumstances; fully understanding what is happening. To do this we need to listen extensively; to individuals, groups, teams, organizations, and other voices in society. Relationships are changing at a one-to-one local basis and across the world; but these changes are subtle. As most of our communications outside the household are now virtual; we have more limited information. Can you tell if people are agreeing, or not, with different viewpoints being made - when the non-verbal cues are less easy to see. Further, are people willing to be open and honest with all the people on a remote call? Evidence suggests that teams, who are used to working together, are open in their remote communications; but do others who are less closely connected feel the same way?

Consider the current complexity of working arrangements, particularly with the variability in easing the lockdown regulations. Some people will be working at home, alone; or remotely in teams. While others will be working in the office. This offers a mix of old and new ways of working happening at the same time. No longer are people communicating with the small group of people they work closely with (often criticised as working in a “silo”). This means that relationships are much more complex; involving more informal networks and a wider range of people. Initially this means communication will take more effort on our part; we just cannot operate automatically. Health and well-being is now more in the forefront of peoples’ minds; along with consideration of others’

health. Work will need to be flexible to support mental health; particularly when people are not in the same environment (e.g., at home, and isolated). In these situations, how will people open up, and talk about their feelings when the only contact they have with the workplace is remote? There will be individual preferences as we learn to adapt in a way that suits each of us.

Angela: *What do you think are the core challenges to WOP at this time; and some possible solutions?*

Hazel: As psychologists, we learn to work by the scientific method and to operate by a set of rules. For example, to apply a particular model or theory to solve a problem. However, the situations we find ourselves in at the moment are new and require an approach beyond our known research; so it is important to be agile in our thinking processes to chart a way forward that works for us and for our clients, teams and organizations.

In order to gain a full understanding of what is happening in different parts of society it is important WOPs understand how big data can help us and where we need to think beyond it. We need to extend our critical analytical skills beyond understanding of research evidence to appreciate how population data is represented, and what this means for interpretation. For instance, in the UK the Office of National Statistics (ONS, 2020) presents many forms of analysis. For example, which geographic areas of the UK are most affected by the virus, how the economy is responding and what workplaces are operating. This is often presented in the form of eye-catching league tables; that may exaggerate some points and minimise others. Understanding the nuances of these data and how their reporting affects people and workplaces is critical to our understanding of the support we can offer. For example, if a certain town is reported as being “virus free” this may encourage reckless behaviour in that area and may increase fearfulness in other towns too. This is just one example, but it highlights the underlying premise of careful interpretation. Therefore, we must look beyond our traditional information sources and publications to really appreciate the bigger picture of what is happening in society and apply our critical analytical skills to understand what this means for people, work, organizations and the economy.

Angela: *What do you think are the key areas WOP need to explore to get a grip of what is happening in the COVID-19 and post-COVID-19 environment?*

Hazel: I think there are five areas we need to better understand and facilitate in our professional working.

1. Multi-generational working

Most organizations will have workers from three of four different generations; and it is really important we understand the different motivations and energies existing in these multi-generational groups. We must not make assumptions, but data also provides us with a view on different perspectives. For example, peoples' attitudes may vary; with younger people seeking a sense of purpose and the opportunity to make a difference; but finding limited job opportunities. The mid-age group may be strongly career minded but may be challenged to adapt and respond to changing circumstances. Some people may question their work/life balance and seek out a different way of living. You can't assume these groups at different life stages will have the same expectations and aspirations; but many organizational policies do just that. Again, it is important to really listen and to understand peoples' drivers, values and future aspirations.

Not being aware of these subtle differences can lead to misunderstandings. For example, I have heard experienced workers describing younger colleagues as being "entitled" expecting to do work their way and progress quickly within the organizational structure. When you ask what the young worker thinks of this they reply "*they expect me to be confident about what I am doing; so this makes me sound like I know what I am doing*". There can be a difference between perception and the person's reality. Trust and mutual understanding is key. We now recognise that the global pandemic will have a major impact on 'The Class of 2020' who will struggle to find their identity and meaningful place in the workforce. This time of change will be even more uncertain and stressful for them (Alter, 2020).

It is important to make a bridge across these various viewpoints so that members of differing generations appreciate each other; and get to know each other's points of view. Mentoring schemes can be really valuable to encourage inter-generational understanding. When we talk about diversity and inclusion, this is not simply about numbers of people from different backgrounds, genders, and so on. It is about different people with different ways of looking at the world of work who, working together, can add value. I think of this as mutual thriving. It is generational, inter-group and across society. It is about valuing the other. This becomes more important as our focus is local and family first during the coronavirus pandemic.

2. Invest in different ways

People of varying nationalities and cultures are also motivated by different things and we should be looking to add value in the social environment. For example, not all young

people want to travel, or become vegan. Many do care about change and reflect on what is going on around them. But, what is certain is that most young adults are in a different situation now-a-days; as for many it is very difficult to be financially independent and live in their own household. We need to appreciate these differences in circumstances, drivers and potentially in values.

We need to focus on governance in particular and explore what needs to be done in organizations in an authentic way. For example, we need to listen to hard working staff to find out what is making their work difficult and then remove these barriers. While this may sound like a big task; small things can make a real difference; such as simply saying “*thank you for your work*”. This is about being more explicit and balanced in the psychological contract.

Faced with change, as we are now, in times of economic uncertainty; it is easy to put barriers up. For example, being focused on local issues only and not focusing on a European/global perspective, or recognising the advantage of using technology.

3. Encouraging entrepreneurial approaches

Brilliant and energised people come out of education with dreams, hopes and aspirations; and many people want to set up their own business. But we need to consider the training of WOPs. How well do we train them to develop entrepreneurial behaviours? Further, how far does our work with organizations encourage and integrate innovation. These have not been traditional areas for WOP; as encouraging entrepreneurship and innovation requires different management styles and attitudes to risk. The challenge for us is how to embed these behaviours in education and work; and how to monitor these changes. But, looking at the positive side, having set the correct indicators for change it is not hard to measure these with current technology. We want leaders to see the advantage of entrepreneurial aspirations and to actively encourage innovation and different mindsets in organizations.

One sector embracing change ambitiously is retail; where there is major focus on customer experience. On-line shopping is very different to buying in-store. Customers are interested in a face pace, easily accessible product information, one-click payment and flexibility of delivery. Organizations that have embraced these changes to the way they sell their products have benefitted hugely during lockdown; while others have suffered. One of the main facilitators of changes such as these is having different leaders.

4. Changing face of leadership – In the UK, Europe and around the world

Leaders need to operate differently in a post-COVID-19 world; and while previous

models of leadership are useful in different situations, it is important to appreciate the complexity of the current and future contexts. New behaviours will need to be developed that enable leaders to embrace innovation, new ways of working, and deal with uncertainty. This will require leaders to be agile and *think outside the box*.

Leaders will be managing people working both, in the home, and in the workplace; or moving between home and work. At the same time leaders will be remodelling their organization to cope with economic demands and restrictions. Work roles are changing, some being lost, while others are being created requiring new, and different skills. The pressure to *continue business as usual* and, at the same time, dealing with strategic change will increase pressure on mid-level leadership who are both managing the workforce and driving through change. These changes will not be easy on workers; and leaders will need to listen carefully to their workforce to enable them to embrace and develop in the new working arrangements. Leader empathy will be important in the way we gain knowledge, learn and get to know what people can do and what they need.

Critically leaders will need to articulate what is happening in the change process and reinforce the values that are important to the organizational culture. Respect and empathy will be important behaviours in facilitating workplace change; along with the ability to use sources of informal power. Leaders will be more hands-off, enabling others rather than directing them. However, such situations do create many opportunities for WOPs who will be able to coach and mentor leaders, developing empathy and listening skills and helping them moving forward with change.

5. Impact of technology

Recently I have been asked to consider what psychology will look like in 2040; and I am sure people will still want the human touch. But we must embrace and use technology wisely. Work will still be important – we won't all be on beaches enjoying long holidays. But, we will be working differently. Therefore, as technology changes it is important psychology is included and integrated within these developments. We don't know exactly what these changes will be (e.g., will we have smart phones inserted under our skin; or how artificial intelligence will change our lives); but technology will definitely change the way we work. One of these changes will be the use of data analytics, as I mentioned earlier; and it is really important that WOPs are engaged in these developments.

Technology will disrupt things in different ways; and psychology has the opportunity to influence these changes impacting on our daily lives. Large and small organizations will see many changes, but particularly large businesses will be required to change. Work and

Organizational Psychologists can help in all these circumstances. I can imagine groups of psychologists and technical experts working closely together; influencing each other as they work towards agile solutions that will challenge and test our current psychological knowledge and develop new learning. This will change team behaviour and remote and agile working will require different approaches. The distinction between the leader and the team will be less clear with more focus on joint working, on collaboration and solutions rather than formalised processes.

Angela: *Thank you for outlining those important areas of change, Hazel. If I could turn your attention to careers in psychology; what advice would you give to your younger self?*

Hazel: To start with I think it is important to be passionate and energised by what you do. Of course, you need to study and work hard but hard work is not enough; it is also key to do things you are genuinely interested in; to maintain motivation. Further, while it is important to focus on learning and developing psychological knowledge; I think it is critical to listen to what people are saying and question if our theories and models are responding to these needs. Understanding what is important to our clients and understanding the culture they live and work in is vital to building a good working relationship. Being able to appreciate others' perspectives is a particular skill that WOPs need to develop more; but only too often, even with the best intentions, inexperienced psychologists fail to fully understand what their clients' need. We must understand what they are really saying and what creative solutions will make a difference. The approach needs to be tailored and agile.

My advice to the younger me would be to go easier on yourself; realising you don't need to be an expert straight away. Believe in yourself while at the same time recognise and learn from your mistakes. Successful people are open to learning and seek out new opportunities. Learn and move on, we all need to be resilient. Many young people now, faced with the fiction created by social media, feel everyone is better than themselves. My advice is to do as well as you can; and to just be yourself. No one person can be good at everything; we all have different strengths. Build on the talents of others too. Many great people are really modest, and don't go shouting about what they do in the world. Value yourself and have self-compassion.

Next, I think it is important to show empathy with people. While you are learning get to know your peers well; and practice being empathetic.

Having good role models and mentors throughout your career is another essential strand to development; enabling you to see when you are succeeding and how to build on those behaviours.

So, in summary I feel we must challenge what is relevant training and support for the next generations of psychologists; looking to work more closely with other aspects of industry; and in particular with technology. But, by re-examining career development and reviewing mentoring arrangements we will better equip our young psychologists for meaningful careers.

Angela: *Thank you so much for taking the time to talk to the readers of InPractice and share your insights into the future of Work and Organizational Psychology. We are delighted you are our first thought leader interviewed for InPractice. We wish you every success in your up and coming presidency.*

Hazel: It has been my pleasure.

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Measuring broad self-regulatory skills in multi-locational knowledge work

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Kirsi Sjöblom is a psychologist (M.A.) and doctoral researcher. Apart from the academic context, she has been working in clinical psychology, training, coaching and suitability assessments. She currently specialises in research and applied work on topical phenomena related to motivation, learning, productivity and well-being, such as 21st century skills and the future of work. In this study, she had the leading role in planning the study and writing this article. She collected the data together with the colleagues mentioned in the acknowledgements section. She designed the questionnaire and collaborated with Lauri Hietajärvi in designing the methodology of the study.

Lauri Hietajärvi (PhD) is a postdoctoral researcher in educational psychology at the Faculty of Educational Sciences, University of Helsinki, Finland. He has been working with various cross-sectional and longitudinal datasets utilizing several statistical methods, including between and within-person variable- and person-oriented approaches. Lauri is primarily interested in studying adolescents' academic well-being and digital media. He is also interested in general issues of study and work-related motivation and well-being. In this study, he collaborated with Kirsi Sjöblom in designing the methodology of the study. He had the leading role in conducting the statistical analyses and presenting the results.

Katariina Salmela-Aro is a Professor of Educational Sciences and Psychology at the University of Helsinki. She is Past President of the European Association for Developmental Psychology, and previous Secretary General of International Society for the Study of Behavioural Development (ISSBD) and expert in OECD Education 2030. Her research focuses especially on burnout and engagement, related developmental pathways in motivation and well-being and interventions. She has published more than 200 international articles as well as several books and columns. In this study, she supervised the work and collaborated in different parts of the development process and the study.

Abstract

Due to the growing proportion of knowledge work and the work taking place in complex digital, physical and social surroundings employees are facing increasing demands to manage their own work and the psychological resources available to them. This study firstly presents the scientific background for why these skills, also called

21st century skills, are required by current working life, and secondly the process of developing and piloting a new questionnaire instrument to measure individuals' broad self-regulation in knowledge work. Our questionnaire (N=202) measured behavioural self-regulation, cognitive-emotional self-regulation, and self-regulation of recovery. We used confirmatory factor analysis to specify and test the structure of the scale, and independent samples t-test and MANOVA to examine the differences between subgroups. The initial three-factor model showed a good fit. Latent variable correlation analyses indicated expected relations between self-regulation factors and established scales of well-being at work (work engagement, burnout). These results imply that this scale is suitable for measuring the self-regulatory skills of knowledge workers. This study underlines the importance of broad self-regulatory skills in supporting productivity and well-being in contemporary knowledge work. It operationalises the topical questions of how to assess and support proactive employee functioning in today's increasingly complex physical, digital and social surroundings.

Keywords: Knowledge work, self-regulation, multi-locational work, 21st century skills, digitalization, scale

Introduction

As knowledge work increases and the complexity of the digital, physical and social work environments grows, employees face increasing demands in managing their own work and their psychological resources. While modern work environments come with much potential for development there are also risks to employee productivity and well-being (e.g., Bosch-Sijtsema, Ruohomäki & Vartiainen, 2009; Landy & Conte, 2016; Sparks, Faragher & Cooper, 2001). We are now able to work across time and distances in ways that could not have been imagined a few decades ago, but we still need to develop well-functioning practices to do so (Hyrkkänen, Putkonen & Vartiainen, 2007).

Knowledge work is cognitively and socially demanding, and it includes a high level of mental regulation (Vartiainen, 2014). Furthermore, identifying and managing the mental workload factors related to mobile multi-locational work is needed (Vartiainen & Hyrkkänen, 2010). Multi-locational knowledge work requires substantial employee autonomy and self-regulatory skills, also in the use of mobile surroundings and digital tools. These skills are part of new competencies required by current society and working life; also known as *21st century skills* (Ananiadou & Claro, 2009; Lonka et al., 2015). While these skills are increasingly included in school curricula worldwide the

workplace development of these skills is not always acknowledged or supported. The fact that the majority of knowledge workers are high-functioning experts may falsely lead one to assume that they inherently possess specific abilities to self-regulate and manage their mental resources. However, these skills are distinct from the specific professional abilities of each employee. Just like students at school, employees also have varying abilities in terms of the required 21st century skills, and many employees need to consciously practice and learn these skills in order to acquire them.

A large research literature currently exists on both the supporting and hindering aspects of productive and sustainable knowledge work, such as physically and socially distributed cognition (e.g., Hakkarainen, Palonen, Paavola & Lehtinen, 2004; Hutchins, 2000), sufficient recovery (Vartiainen & Hyrkkänen, 2010; Zijlstra & Sonnentag, 2006), distractions and multi-tasking (Bosch-Sijtsema, Ruohomäki & Vartiainen, 2010; Salo, Salmela, Salmi, Numminen & Alho, 2017). However, the various ways in which employees can and need to proactively regulate their psychological resources has received little attention. Furthermore, measures for studying and assessing these skills are lacking.

This paper focuses on the skills and strategies that are available and essential for individuals to manage their psychological resources in order to support both productivity and well-being in knowledge work. As the prior literature is lacking sufficient tools to assess this phenomenon, a focal aim was to develop and introduce a novel self-report instrument and examine its functionality in studying modern-day workplace productivity and well-being. Our study presents a theoretical foundation and an empirical pilot for a scale that measures broad self-regulatory skills in multi-locational knowledge work.

Characteristics of multi-locational knowledge work environments

Knowledge work involves: a) the creation, distribution or application of knowledge as task contents; b) work by highly skilled and/or trained workers, who have autonomy in their work; c) the use of tools (e.g., information and communications technology) and theoretical concepts; d) production of complex, intangible and tangible results; and e) the provision of competitive advantage or some other benefit contributing towards the goals of an organization (Bosch-Sijtsema et al., 2009; Bosch-Sijtsema et al., 2010). Multi-locational work, on the other hand, is characterised by work being carried out in many different locations, such as the office, home, public spaces (such

as cafes or airports), and mobile locations (such as cars or trains) (Hislop & Axtell, 2009). Typically, a substantial part of knowledge work in general (Harrison, Wheeler & Whitehead, 2004), and multi-locational work more specifically, is digitally mediated.

Both the physical environment and tools contribute to human performance. Human cognition does not occur separately from the surroundings; it is distributed both physically and socially (Hakkarainen, Palonen, Paavola & Lehtinen, 2004; Hutchins, 2000). These diverse environments and tools have the potential to both elevate and impair human abilities (Hutchins, 2000; Norman, 1993) and should be utilised thoughtfully. In multi-locational knowledge work, this is particularly prominent: digital tools and changing physical environments hold considerable potential for both supporting and hindering productivity and well-being. Challenges posed by modern environments and tools may include, for example, inadequate work environments or tools for different types of tasks (Bosch-Sijtsema et al., 2010), adverse effects of multi-tasking on productivity (Moisala et al., 2016), or insufficient boundaries between work and rest (Vartiainen & Hyrkkänen, 2010; Zijlstra & Sonnentag, 2006). For example, the fact that work is constantly potentially present through different information channels via mobile devices, or that employees do not have fixed working hours, may challenge sufficient rest and recovery from work. In contrast, opportunities of this way of working include, for example, better networking with experts in one's own field, regardless of geographical location (Hakkarainen et al., 2004), more suitable work environments for different types of tasks (Huber, 2015; Lonka, 2018); and opportunities to minimise unnecessary transitions during the day (Vartiainen & Hyrkkänen, 2010).

The support or challenges related to modern tools and environments does not, however, depend on the tools and environments alone; but also the social practices of how these resources are utilised play a crucial role (Hakkarainen, 2009). For example, if there is an implicit belief at the workplace that high-paced, nonstop work is the most efficient way of working, this is likely to challenge individuals' attempts to proactively arrange sufficient breaks in the working day, even if it is unintentional. Thus, it is necessary to first acknowledge the importance of these practices and second to consciously develop practices that support productivity and well-being on both individual and community of practice levels. This paper focuses on the individual level: the everyday strategies that employees are able to utilise in order to harness the potential of modern environments and tools to support their psychological resources, cognitive functioning and well-being in multi-locational knowledge work.

The need for broad self-regulatory skills in multi-locational knowledge work

Self-regulation processes enable individuals to guide their goal-directed activities over time and across changing circumstances. Regulation implies the modulation of thought, affect, behaviour, or attention (Karoly, 1993; Vancouver, 2000). Individuals can set standards or goals to strive towards, monitor their progress toward these goals, and then adapt and regulate their cognition, motivation and behaviour to reach these goals. (Pintrich, 2000). Self-regulation is an ongoing process, in which an individual regulates the cognitive, motivational and emotional aspects of their activity as well as the environment in which it occurs (Boekaerts, Pintrich & Zeidner, 2000).

As work is primarily a context for goal-directed behaviour, the need for self-regulation in any work context is evident. However, modern work environments entail certain aspects that make self-regulation even more focal than before. Multi-locational knowledge work environments are much less clearly defined than traditional ones; for example, the work is not tied to a particular time or physical space. At the same time, these environments are more complex and include more stimuli and information overflow through various modalities; such as numerous digital devices and applications. The less the environment provides structure and regulation, and the more it pulls the individual in different directions, the more the individual needs to self-regulate and utilise deliberately chosen strategies to guide their own functioning (e.g., balancing between internal and external regulation, Vermunt & Verloop, 1999).

The need for individuals to manage their energy and resources is not new, being recognised in several research traditions. For example, partly overlapping skills and strategies, for which measurement scales have also been developed, include self-leadership, energy management, vitality management and job crafting (e.g., Fritz, Lam & Spreitzer, 2011; Houghton & Neck, 2002; Op den Kamp, Tims, Bakker & Demerouti, 2018; Slemp, & Vella-Brodrick, 2013; Tims, Bakker & Derks, 2012). However, in present-day knowledge intensive work, the need to self-regulate is more important than before, as work is more autonomous, and conditions more abstract and complex. Without proactive strategies (Grant & Ashford, 2008; Parker, Bindl & Strauss, 2010), individuals are at risk of applying a large part of their mental resources to secondary tasks and distractions, reacting to various immediate stimuli emerging from the environment rather than proactively choosing to focus on what is important. Self-regulation now also includes managing and utilising complex environments and

tools in meaningful, deliberate ways (e.g., Moisala et al., 2016; Vartiainen & Hyrkkänen, 2010). As work tasks are often collaborative and occur in shared environments, self-regulation related to collaboration and co-regulation are crucial (Miller, Järvelä & Hadwin, 2017). Moreover, in addition to behavioural, cognitive and emotional self-regulation, deliberate attention to well-being and recovery is now a significant part of the required self-regulation. Certain aspects of novel work environments have been found to potentially risk employee health and well-being (Hyrkkänen, Putkonen & Vartiainen, 2007; Sparks, Faragher & Cooper, 2001; Vartiainen & Hyrkkänen, 2010), and mental overload and stress have been shown to be one of the most prevalent health risks worldwide (WHO, 2013). Both working life and other life domains call for new competencies (21st century skills), such as stress management, cognitive load management, and the skills for using modern tools (Ananiadou & Claro, 2009).

Current research offers extensive information on aspects that support or hinder well-being and productivity in knowledge work, and can be applied in practice by utilising various proactive strategies. Practical examples of these kinds of self-regulatory strategies that employees can utilise are *behavioural strategies*, such as limiting multi-tasking (Pashler, 1994; Salo, Salmela, Salmi, Numminen & Alho, 2017) and choosing an environment that supports the work task (Lonka, 2018; Vartiainen & Hyrkkänen, 2010). In modern multi-locational knowledge work this may mean, for example, deliberately turning off notifications of different digital applications in order to enable periods of focused and uninterrupted work, or choosing to carry out quiet individual work remotely in case the work environment does not sufficiently accommodate for it.

Cognitive strategies that employees can utilise may include, for example, actively directing one's own work to be more engaging and meaningful (Wrzesniewski & Dutton, 2001) and aligned with one's interests and values (Deci & Ryan, 2000; Ryan & Deci, 2017). Further cognitive strategies may involve recognising and utilising collaborative potential and actively seeking advice from others when needed (Hutchins, 2000; Miller, Järvelä & Hadwin, 2017).

As knowledge work relies on how well one can focus one's mental potential on the essential tasks; *emotional strategies* are a focal part of self-regulation in this kind of work. For example, emotional intelligence and the ability to deal with difficult emotions at work (Donaldson-Feilder & Bond, 2004; Newman, Joseph & MacCann, 2010) are increasingly important, especially as a substantial part of knowledge work is

collaboration with coworkers (El-Farr, 2009). As knowledge work is highly abstract and often consists of numerous tasks overlapping and spread out over long periods of time, concrete indications of completion and success are much more infrequent than in more tangible jobs. Thus, emotional strategies such as actively noticing accomplishments (Baas, De Dreu & Nijstad, 2008; Manz & Neck, 1991) may be helpful in maintaining motivation and well-being at work.

Finally, many aspects related to physical recovery have been found to directly impact on cognitive functioning. Sufficiently maintaining and replenishing one's mental and physical resources are important to fostering cognitive capacity in knowledge work. Thus, *self-regulatory strategies related to recovery* include, for example, paying attention to the effects of nutrition and exercise on cognition by having regular, healthy meals and moving around frequently enough (Gómez-Pinilla, 2008; Hillman, Erickson & Kramer, 2008; Scholey, Harper & Kennedy, 2001), taking sufficient breaks and rest (Zacher, Brailsford & Parker, 2014; Zijlstra & Sonnentag, 2006) and making use of restorative environments in supporting recovery (Berto, 2005).

In the next section, we explain how these aspects, that have been scientifically proven to contribute to productivity and well-being, have been incorporated into a new questionnaire measuring broad self-regulatory skills in multi-locational knowledge work.

Method

This study was carried out to develop a means to assess knowledge workers' self-regulatory skills related to productivity and well-being, and to identify needs for learning these skills. More specifically, the aim of this study was to: a) develop and pilot a new questionnaire to measure broad self-regulatory skills in multi-locational knowledge work; and b) start the scale validation process by examining its relations with established scales of well-being at work. Aligned with the theoretical background and empirical evidence on the relations between self-regulatory strategies, productivity and well-being described in the previous section, we expected the subscales of self-regulation to be positively related to work engagement and negatively related to job burnout.

Participants

A total of 203 participants from two large public organizations in the Finnish metropolitan area responded to an online questionnaire (environmental services; $N=143$ and education; $N=60$). These organizations were taking part in a developmental programme (the European Social Fund project 3SPACES – Towards Inspiring Workplaces) and the questionnaire formed part of a broader survey included in the programme.

The participants worked mainly in offices and their job descriptions included varying levels of multi-locational work. The data represented both female (70,1%) and male respondents working in different organizational positions (26.4% employees, 53.2% officials, 20.4% superiors). Although the age distribution leaned more towards mature age groups and presumably more experienced professionals, different age groups were represented in the data (14.3% were 34 years old or less, 56.2% were between 35–54 years, and 29.5% were 55 years or older).

Instruments

Scale development

We assessed *Broad self-regulatory skills in multi-locational knowledge work* using a scale developed for this study. Items were based on cognitive, emotional and behavioural areas of self-regulation (Karoly, 1993; Vancouver, 2000), as well as factors found to potentially challenge productivity and well-being in multi-locational knowledge work (such as multi-tasking or unsupportive physical work environment). In addition, background research was carried out on the existing scales for related phenomena measuring skills and strategies such as self-leadership, energy management and job crafting (e.g., Fritz, Lam & Spreitzer, 2011; Houghton & Neck, 2002; Slemp & Vella-Brodrick, 2013; Tims, Bakker & Derks, 2012),

More specifically, five items were developed to assess *behavioral self-regulation* (e.g., “I deliberately restrict factors that take my attention away from the main task at hand”), four items measuring *cognitive self-regulation* (e.g., “I aim to work in a way that is meaningful to me”), and three items assessing *emotional self-regulation* (e.g., “I pay attention to successes and things that I have accomplished at work”). Further, aligned with the specific challenges of self-regulation in present day knowledge work, five items measuring *self-regulation of recovery* were included in the scale (e.g., “I pay attention to physical well-being at work”). Responses to these items were measured on a scale from 1=’not at all true’, to 5=’completely true’.

During item development, the items were expected to separately reflect the behavioural, emotional, cognitive, and recovery dimensions. The pool originally contained 22 items. However, based on preliminary investigations of the item properties and exploratory factor analyses, we excluded five items. The final model contains 17 items (see Figure 1) representing three dimensions, in which the items originally designed to reflect cognitive and emotional regulation separately reflect a joint cognitive–emotional dimension.

Figure 1
The self-regulatory skills in multi-locational knowledge work questionnaire

Instructions: Please think of your everyday work routines and assess the extent to which the following statements are true using the 1-5 scale where 1=not at all true and 5=completely true.

QUESTION	QUESTIONNAIRE ITEM
1	I plan and schedule my primary weekly tasks. (B)
2	I schedule my tasks according to my typical flow of vigour during the day (for example: work on tasks requiring concentration early in the day). (B)
3	I pay attention to things that maintain healthy vigour for work (for example: starting the day with a good personal routine, utilizing beneficial work strategies, refreshing myself with proper breaks). (R)
4	I pay attention to physical well-being at work (for example: ergonomics, exercise, breaks, nutrition). (R)
5	I aim to minimise unnecessary transitions during the working day. (B)
6	I deliberately restrict factors that distract my attention from the main task at hand (for example: interruptions originating from the work environment, messages from digital devices). (B)
7	I choose an environment that supports my work (for example: a calm environment for focused work, more freely defined surroundings for brainstorming or collaborative work). (B)
8	I aim to be around people who support my work (for example: inspiring or encouraging colleagues or those who can support me in content-related issues). (C-E)
9	I pay attention to successes and the things that I have accomplished at work. (C-E)
10	I find that I am able to deal with challenging feelings and experiences at work. (C-E)
11	I think about the purpose of my work and aim to work in a way that is meaningful to me. (C-E)
12	I develop my work practices. (C-E)
13	In my work community, we discuss work practices and aim to find effective ways to organise work. (C-E)
14	I pay attention to how I approach my work (for example: set reasonable expectations of the quality of my work). (C-E)
15	I make sure that I take sufficient breaks during the working day. (R)
16	I pay attention to sufficient rest in my everyday life. (R)
17	I spend time in restorative environments, such as nature or my own favourite places. (R)

Note: Abbreviations stand for B=behavioral self-regulation CE=cognitive-emotional self-regulation R=self-regulation of recovery. They are included here for information and should not be included in the questionnaire.

Existing scales

Work engagement was assessed using the Utrecht Work Engagement Scale with nine items (UWES-9; Schaufeli, Bakker & Salanova, 2006). The scale measures three dimensions: *vigour* (e.g., “When I get up in the morning, I feel like going to work”), *dedication* (e.g., “I am enthusiastic about my work”) and *absorption* (e.g., “I am immersed in my work”). These items were measured on a scale of 1 to 7 where 1=’never’ and ‘7’=daily. The construct validity of the short version of the UWES has been shown to be better than the longer version for Finnish occupational groups (Seppälä et al., 2009). For the purposes of the analyses, we used the total composite score of UWES (Schaufeli & Bakker, 2010; Schaufeli, Bakker & Salanova, 2006).

Burnout was assessed using the Bergen Burnout Indicator (BBI-9; Salmela-Aro et al., 2011; Feldt et al., 2013). This scale consists of nine items measuring three core dimensions of burnout: *exhaustion at work* (emotional component; e.g., “I am snowed under with work”), *cynicism toward the meaning of work* (cognitive component; e.g., “I feel dispirited at work and I think of leaving my job”) and *sense of inadequacy at work* (behavioural component; e.g., “I frequently question the value of my work”). The items were measured on a scale of 1 to 6 where 1=’strongly disagree’ and ‘6’= strongly agree. The three components of the scale measure the core dimensions of burnout, the emphasis and sequential progression of which has received mixed results (Maslach, Schaufeli & Leiter, 2001). For the purposes of the analyses, we used the subscales of exhaustion, inadequacy and cynicism (see Table 1).

Table 1
Raw descriptive values and Cronbach’s Alphas

Raw descriptive values and Cronbach’s Alphas				
	Mean	SD	Cronbach’s Alpha 95% Confidence Interval	
Behavioural	3.46	0.70	0.60	0.75
Cognitive - Emotional	3.61	0.61	0.73	0.84
Recovery	3.55	0.73	0.71	0.83
Engagement	5.76	0.98	0.89	0.95
Exhaustion	2.57	1.05	0.57	0.74
Cynicism	2.08	1.08	0.72	0.85
Inadequacy	2.45	1.26	0.70	0.83

Note: Confidence interval bias-corrected and accelerated bootstrap.

Analyses

First, we specified and tested the structure of the scale, i.e., the dimensions of behavioural self-regulation, cognitive-emotional self-regulation and self-regulation of recovery, using the confirmatory factor analysis approach (CFA). All items were allowed to load on their corresponding factor only. No residual covariance between different items was allowed. The analyses were conducted using R and RStudio (R Core Team, 2018). We used maximum likelihood with standard errors robust for non-normality (MLR) as the estimator and handled missing data using the full information maximum likelihood estimation (FIML).

Second, we utilised a method of visualising the correlations between the three dimensions of self-regulation and established scales of well-being at work (work engagement, job burnout). In order to do this, we added work engagement and the three subscales of job burnout (exhaustion, inadequacy and cynicism) as latent variables to the model to examine the relations between broad self-regulation and well-being at work (i.e., criterion validity).

To describe the method more specifically, both the correlations and partial correlations among the self-regulation factors, work engagement and the three subscales of burnout were visualised and examined. We did this by exporting the latent variable correlation matrix of the model and visualising the cross-sectional correlations by plotting the latent variables as nodes in a correlation and partial correlation network (Epskamp & Fried, 2018). We used R-package qgraph (Epskamp, Cramer, Waldorp, Schmittmann & Borsboom, 2012), similarly to a latent variable network model (see, e.g., Epskamp, Rhemtulla & Borsboom, 2017).

The edges in the latent partial correlation network can be interpreted similarly to regression coefficients, as they are controlled for each other, but without assuming any direction of effects. The figures display the strength of correlations between the different components (behavioural self-regulation, cognitive-emotional self-regulation, self-regulation of recovery, work engagement and the three subscales of job burnout) as well as whether it is negative or positive. The strength of this particular type of modelling is that it allows for powerful measurement error-corrected modelling of undirected structural relations between latent variables (Guyon, Falissard & Kop, 2017).

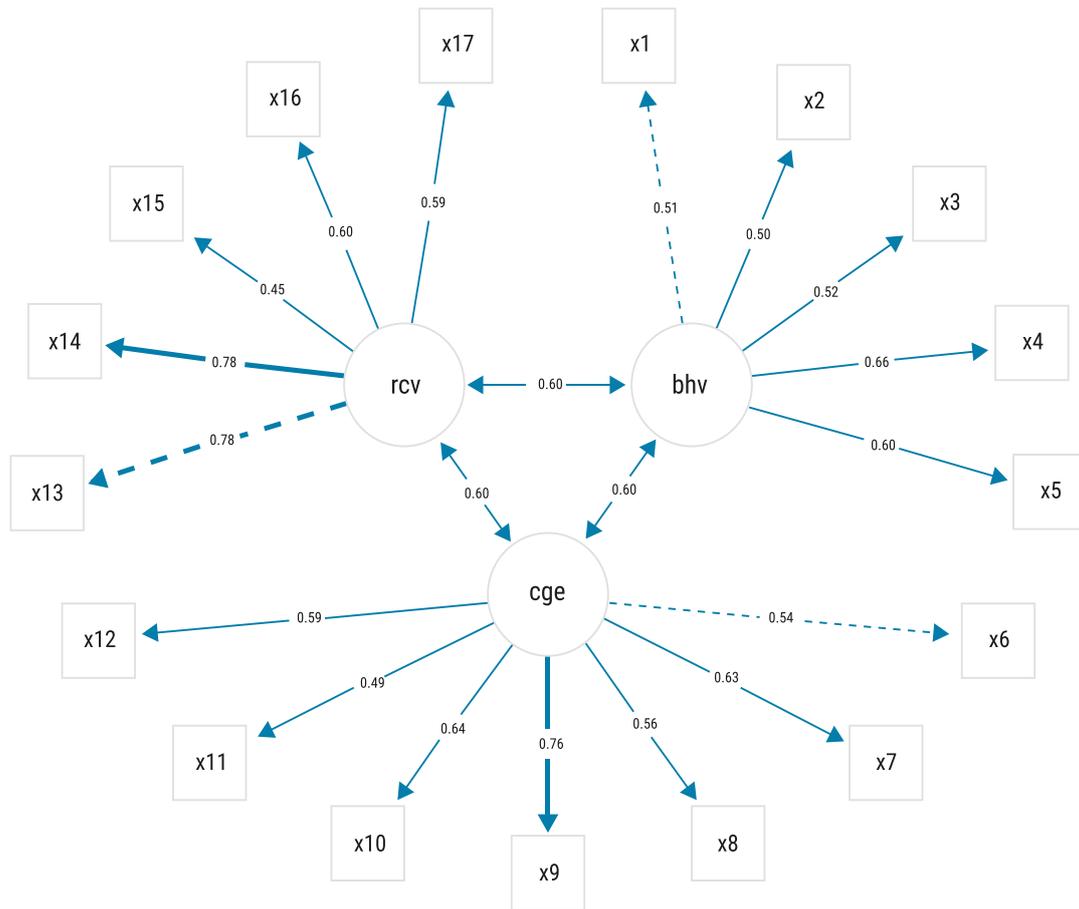
Results

The initial three-factor model (see Table 2 and Figure 2), specified according to the theoretical background, fitted the data well: $X^2(116)=158.61$, $p=.005$, $CFI=.944$, $RMSEA=.043$. All factor loadings were significant and no post-hoc modifications were necessary.

Table 2
Standardised factor loadings and explained variance (R^2) of the measurement model

	Behavioural	Cognitive-Emotional	Recovery	R-squared
x1 = q1	0.51	0.00	0.00	0.26
x2 = q2	0.50	0.00	0.00	0.25
x3 = q5	0.52	0.00	0.00	0.27
x4 = q6	0.66	0.00	0.00	0.43
x5 = q7	0.60	0.00	0.00	0.36
x6 = q8	0.00	0.54	0.00	0.29
x7 = q9	0.00	0.63	0.00	0.39
x8 = q10	0.00	0.56	0.00	0.31
x9 = q11	0.00	0.76	0.00	0.58
x10 = q12	0.00	0.64	0.00	0.41
x11 = q13	0.00	0.49	0.00	0.24
x12 = q14	0.00	0.59	0.00	0.34
x13 = q3	0.00	0.00	0.78	0.61
x14 = q4	0.00	0.00	0.78	0.61
x15 = q15	0.00	0.00	0.45	0.20
x16 = q16	0.00	0.00	0.60	0.36
x17 = q17	0.00	0.00	0.59	0.35

Figure 2
Confirmatory factor analysis model of self-regulatory skills in multi-locational knowledge work



We then added the scales for well-being at work as latent variables for Model 2. Model 2 fit the data acceptably ($X^2(536)= 799.89, p<.001, CFI=.907, RMSEA=.049$) when three residual covariances were estimated between the items in the work engagement scale.

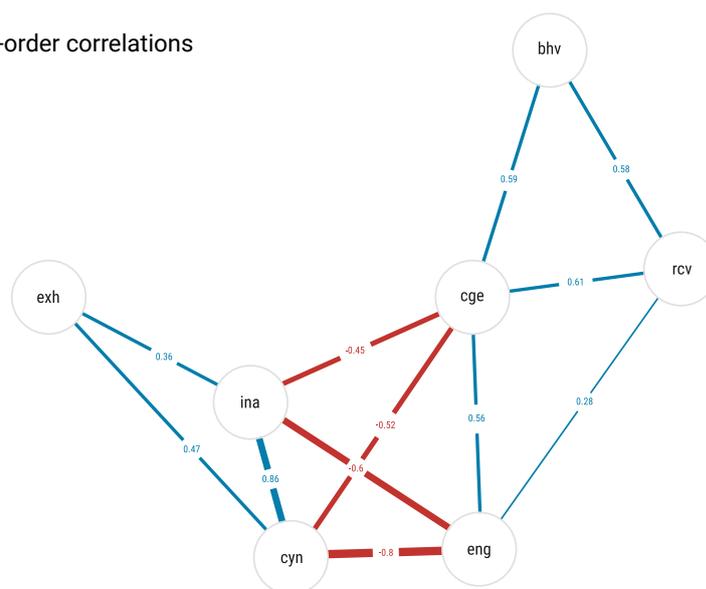
Regarding the relations between the new broad self-regulation factors and indicators of well-being at work, the model indicated that the measured self-regulatory skills were positively related to well-being at work and negatively related to ill-being at work, as expected (see Table 3).

Table 3
Latent variable correlations

	1	2	3	4	5	6	7
Behavioural	1.00						
Cognitive-Emotional	0.59	1.00					
Recovery	0.58	0.61	1.00				
Engagement	0.19	0.56	0.28	1.00			
Exhaustion	0.02	-0.05	-0.13	-0.12	1.00		
Cynicism	-0.04	-0.52	-0.21	-0.80	0.47	1.00	
Inadequacy	-0.03	-0.45	-0.11	-0.60	0.36	0.86	1.00

More specifically, latent variable zero-order correlations indicated positive relations between work engagement and cognitive-emotional self-regulation, as well as self-regulation of recovery. These correlations also indicated negative relations between cognitive-emotional self-regulation, inadequacy and cynicism. These relations are demonstrated in Figure 3: blue edges indicate positive correlations and red edges negative ones, and the width of the edges corresponds to the absolute value of the correlations: the higher the correlation, the thicker the edge (see Espkamp et al., 2012).

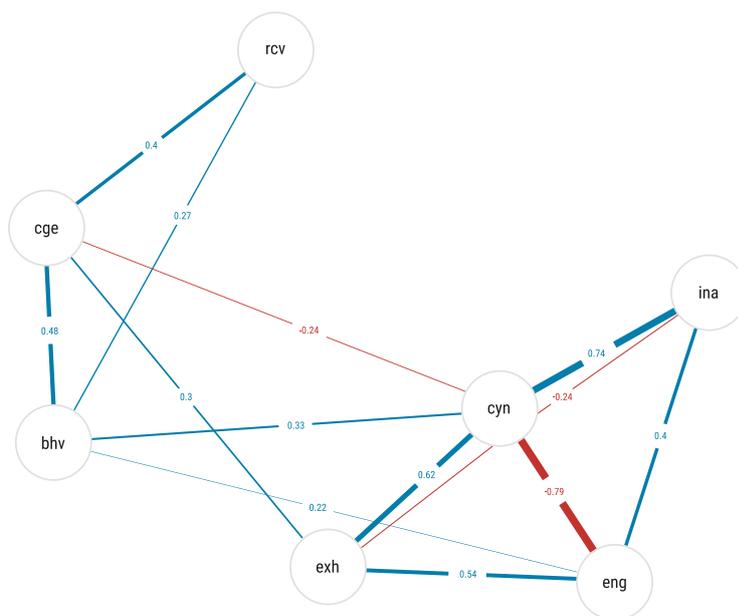
Figure 3
Latent variable zero-order correlations



Note: Non-significant edges ($p > .05$ with Bonferroni correction) were omitted. Nodes were placed by Fruchterman-Reingold algorithm (Fruchterman & Reingold, 1991)

Overall, the latent variable correlations confirmed the expected relations between self-regulation factors and established scales for well-being at work. However, latent variable partial correlations (see Figure 4) indicated both expected and unexpected relations. Similarly to Figure 3, the thickness of the edges demonstrates the level of correlation between variables, blue edges indicating a positive and red edges indicating a negative relation. These correlations indicated a positive relation between work engagement, exhaustion and inadequacy. They indicated a positive relation between behavioural self-regulation and work engagement, but also between behavioural self-regulation and cynicism; a negative relation between cognitive-emotional self-regulation and cynicism, but also a positive relation between cognitive-emotional self-regulation and exhaustion. Self-regulation of recovery was positively related to work engagement (zero-order correlations), but no statistically significant relations were found with dimensions of burnout.

Figure 4
Latent variable partial correlations



Note: Non-significant edges ($p > .05$ with Bonferroni correction) were omitted. Nodes were placed by Fruchterman-Reingold algorithm (Fruchterman & Reingold, 1991)

Finally, we examined possible differences in broad self-regulation components between subgroups. Welch t-tests and analyses of variance showed only very minor or no differences across organization, employee position, gender and age (more detailed results of these analyses as well as additional study materials can be found at open science framework platform: <https://osf.io/v6r5e/>).

Overall, the measurement model showed a good fit and the analyses of relations to well-being at work indicated that the broad self-regulation scale had the expected and meaningful relations with the established measures of well-being at work. Thus, the results presented here are promising in terms of using this scale to measure self-regulatory skills in multi-locational knowledge work. Regarding the few unexpected relations between self-regulation factors and indicators of well-being at work, the scale can be further improved by the measures explained in the discussion section.

Discussion

This study focused on the importance of broad self-regulatory skills in contemporary knowledge work. It aimed to develop a scale for measuring multi-locational knowledge workers' self-regulatory skills related to productivity and well-being. The purpose of the scale was to offer a means with which to assess the individual state of required skills, as well as to determine how these skills may need to be developed.

The study indicated promising results regarding the use of this scale for measuring the self-regulatory skills related to productivity and well-being in multi-locational knowledge work. However, in the item development we failed to design items that would reflect the cognitive and emotional aspects of self-regulation separately. It appears that these types of regulative activities, although conceptually distinct, are not empirically separated, at least not with the items used in this study. It is, however, debatable whether these dimensions need to be separated at all; for example, aspects such as connecting with the meaning of work, or acknowledging accomplishments, are likely to tap into both cognitive and emotional experiences and strategies. Within the contexts of learning and motivation it is already established knowledge that cognition and emotion are in many ways intertwined (e.g., Mega, Ronconi & De Beni, 2014; Pekrun, Goetz, Titz & Perry, 2002). More work and subsequent piloting is needed to be able to understand the interplay of cognitive and emotional components in this context. However, at this point, as the measurement model showed a good fit and the latent variable correlation analyses indicated the expected relations between self-regulation factors and established scales of well-being at work, it can be considered a promisingly useful tool for studying well-being at work.

To elaborate on the more specific relations between each of the self-regulation factors, work engagement and the three subscales of job burnout, firstly, behavioural self-regulation was related to both work engagement and cynicism. This factor's items

measure ways of creating fruitful circumstances for productivity as well as deliberately limiting unneeded burden (e.g., the item with the highest factor loading “I deliberately restrict factors that take my attention away from the main task at hand”). It may be that the current focus and phrasing of the items capture the underlying motivational orientations of both proactivity and avoidance (e.g., Elliott & Church, 1997). Thus, future research should even more clearly define the focus and phrasing of the items and further examine the resulting relations.

Secondly, cognitive–emotional self–regulation was, as expected, negatively related to cynicism, but also positively related to exhaustion. This may indicate, like the positive relation between work engagement, exhaustion and inadequacy, a co–occurrence of positive and negative phenomena, namely engagement and proactive behaviour and an overly consuming work routine (for similar results on work engagement, see also Bakker, Albrecht & Leiter, 2011a; Bakker, Albrecht & Leiter, 2011b). On the other hand, the results indicated a rather strong positive relation between the cognitive–emotional self–regulation factor and work engagement. This factor’s items measure the proactive mental management of work through various cognitive and emotional strategies. They partly overlap with certain practices of job crafting, such as increasing job resources (e.g., developing one’s capabilities, asking others for advice) or decreasing hindering job demands, both cognitive and emotional (Tims, Bakker & Derks, 2012). It has been noted that there often are virtuous circles between actively making changes to work and being engaged – engaged employees are also active in their everyday practices, and vice versa (see Bakker, Albrecht & Leiter, 2011a). However, in addition to the co–occurrence of virtuous work life phenomena, this kind of approach may also have a tiring dimension. A more accurate picture of this phenomenon requires further research. Overall, the cognitive–emotional self–regulation factor was related to established indicators of well–being at work in various meaningful ways, and as such appeared to be important for employee well–being and productivity.

Thirdly, self–regulation of recovery was related to work engagement only. This may suggest that paying sufficient attention to recovery and well–being is indeed a matter of proactive employee behaviour related to both productivity and well–being, rather than merely the minimisation of adverse health effects. Perhaps this is embodied in the items with the highest factor loadings: paying attention to physical well–being and maintaining healthy vigour at work. It is also important to point out that the burnout subscales measure actual ill–being at work (Hakanen & Schaufeli, 2012; Iacovides, Fountoulakis, Kaprinis & Kaprinis, 2003; Maslach, Schaufeli & Leiter, 2001). The lack

of found relations between them and self-regulation of recovery does not indicate that the factor would be irrelevant to well-being at work. In fact, the focal basis for developing the scale in the first place was to obtain measures of practices that are related to the everyday fluctuation of well-being and productivity, not their extreme states. Examining the relations with these two established scales for well-being at work offers only one way to study the validity of this scale. In the future, utilising more diverse scales for well-being at work, as well as experiential sampling methods, would be beneficial.

Practical implications

As described in the introduction, extensive research shows that current working life includes numerous aspects that can potentially hinder both productivity and well-being. These aspects impact all knowledge workers, but their importance is often not recognised or elaborated amidst everyday work routine, although it in fact forms a substantial basis for the work itself. Thus, as to the practical implications of the study, this questionnaire can first of all serve as a concrete tool in raising awareness on the importance of self-regulatory skills and proactive work strategies in knowledge work. This tool is applicable to employees from various multi-disciplinary backgrounds. Presenting the questionnaire and having knowledge workers fill it in serves as a mini intervention in itself: it guides the respondents to recognise and reflect on the impact of the small practices presented in it, possibly even offering an insight that one is in fact able to actively influence one's everyday productivity and well-being at work in these ways.

Secondly, a focal purpose of assessment is naturally to have an understanding of the prevailing situation regarding the level of the skills as well as to recognise and address possible developmental needs. As the challenges to which this scale aims to respond concern all knowledge workers, this scale would be useful as a screening tool and as a means of preventative support for productivity and well-being. The results should be processed together with the respondents and where needed, they should be offered support for learning and practicing these skills. The required support can be offered, for example, in the form of training (e.g., Sjöblom, Lammasaari, Hietajärvi, Mälkki & Lonka, 2019), workshops or one-to-one sessions.

Thirdly, a work and organizational psychology practitioner can help bring the aforementioned perspectives present to both individual and organizational levels,

and this, in fact, is essential in supporting employees in utilising these proactive practices. While there are a number of choices available to employees regarding their daily work practices, the work community also defines the framework of putting them into practice. For example, even if an employee recognises the importance of having uninterrupted work periods in order to have the most important tasks done, if at the same time the shared working culture or management is expecting them to be continuously available via email, the individual has limited possibilities to adapt proactive practices.

It is indeed important to emphasise that although this study focuses on individual skills, the role of the environment and the importance of the support offered by the organization, management and community should not be underestimated. A practitioner can offer valuable support in creating a shared proactive working culture. For example, although knowledge work is typically highly autonomous, it is not a given that employees are encouraged and free to regulate their everyday work practices. Depending on the specific focus in each case, it could also be useful to use this scale combined with measures of working culture, for example, basic psychological needs at work, which also include autonomy at work (Deci et al., 2001).

Limitations

Regarding the limitations of the study, despite these promising results, the scale needs to be further developed by rephrasing some of the items less ambiguously. At the moment, some of the items reflect aspects of more than one dimension. As noted earlier, this may partly also reflect the nature of the phenomena, but some of the items could be defined more clearly, by for instance deleting or simplifying the examples in parentheses, which were initially included to help the respondents connect with what was being asked. After this modification, a more detailed analysis on the importance of each item on the scale could be carried out. Overall, the results should be confirmed with several representative samples. Assessing predictive validity of the scale with regard to productivity and well-being through a longitudinal study would be highly beneficial. This would also be useful in defining reference values – currently the interpretation of the score is not based on specific values but rather on the practical interpretation of them, low score being an indication of possibly insufficient self-regulatory skills and need for support.

It is also important to point out that we expected the items included in the scale to contribute to employee well-being and productivity; however, our analyses did not include measures of productivity. In general, measuring productivity in knowledge work is considered challenging (Bosch-Sijtsema, Ruohomäki & Vartiainen, 2009; Ramírez & Nembhard, 2004). This study did not permit us to draw conclusions regarding whether the self-regulatory skills measured by this scale were related to productivity. However, as described in the theoretical background, previous studies have shown that the practices included in the questionnaire contribute to either productivity, well-being or both.

Conclusions

Employees' cognitive potential is the most important and valuable resource in knowledge work. Success in this kind of work, from both the individual and organizational perspective, depends on harnessing human potential in a way that is both productive and sustainable. This study sheds light on how contemporary knowledge work requires broader, more diverse self-regulatory skills of employees than before. It offers new understanding of the current challenges in working life, as well as a practical tool for measuring knowledge workers' self-regulatory skills related to productivity and well-being. The study operationalises topical questions of how to assess and support proactive employee functioning in today's increasingly complex physical, digital and social surroundings.

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Becoming a professional: The five pillars of identification in Occupational Psychology in the UK

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Author biography

Vicki was the Principal Investigator for this research, which formed part of her Professional Doctorate in Occupational Psychology, supervised by Mark Moss (Head of Psychology) and Elizabeth Sillence (Associate Professor). Vicki and Neill are Occupational Psychologists and Laura is currently training to become a Chartered Psychologist. Vicki, Laura and Neill collectively deliver the British Psychological Society (BPS) Accredited MSc in Occupational and Organizational Psychology programme at Northumbria University. Neill is the current director of this programme and an experienced qualitative researcher. They are responsible for module design and delivery, setting and marking student assessments and supporting the employability of their students and graduates. This shared interest brought them together in this research, which has and continues to enable them to adopt an evidence-based approach to supporting students and graduates. Understanding the experiences of people post-graduation helps to ensure an authentic learning experience built on a foundation of research, practice and applied experience. Vicki and Laura are also members of the BPS's Division of Occupational Psychology Committee, and Vicki has a particular responsibility for supporting careers within the discipline. Volunteering for this committee enables them to understand the professional context and support the needs of members of the profession. As a team of scientist practitioners, there is a real passion to support the employability of all Occupational Psychology graduates.

Abstract

This study aims to explore how professional identification occurs in Occupational Psychology (OP) in the UK. Professional identification is a sense of belonging and individual feelings towards a group. In OP, competition for jobs is high and availability of roles with the title of "Occupational Psychologist" is low. Thus, many OPs are self-employed and multiple terms are used to describe the profession. Twenty working individuals, with a BPS accredited entry-level and master's qualification in OP, participated in narrative interviews. Thematic analysis led to the development of five 'pillars' of professional identification: a) education and learning; b) networking; c) managing challenges; d) career-crafting; and e) professional recognition and authenticity. Each of the five pillars have a unique role to play in supporting professional identification in OP. Strong professional identification requires sustained effort in all pillars. Practitioners supporting the careers of Occupational Psychologists,

and Occupational Psychologists themselves must develop stronger opportunities for networking and relationship building to enable individual development through multiple and diverse experiences. Furthermore, routes to accredited professional practice must be diversified and a positive rhetoric constructed around the achievement of Chartered status. Suggestions for future research are presented providing clear actions for the practitioner community.

Keywords: Occupational Psychology, professional identification, thematic analysis, narrative interview, career development

Introduction

Research into the careers of psychologists is limited, and that which does exist typically groups all professional psychologists into a macro category (e.g., Otto, Row, Sobiraj, Baluku & Vasquez, 2017). This fails to account for the nuances in professional practice and the micro categorisations of psychologists' work; for example, with children, organizations and/or clinical populations (see also Straumsheim, 2018 for a discussion of Work and Organizational Psychology in Norway).

The aim of the current study is to research how professional identification occurs in Occupational Psychology (OP) in the UK. The introduction examines the professional landscape in OP and outlines the current literature in relation to careers, identity and identification. We conclude there is a lack of research exploring OP professional education and the practitioner context.

Career landscape of Occupational Psychology

Occupational Psychologists are concerned with human behaviour in the workplace (BPS Statement of Intent, January 2019). Whilst OP is the term primarily used in the UK, variations exist across Europe and the world; for example, Work and Organizational Psychology, Industrial and Organizational Psychology (I-O), Work Psychology, Organizational Psychology and Business Psychology (these terms are also used in UK practice).

In the UK, the title 'Occupational Psychologist' is protected by law, where title-holders must demonstrate relevant undergraduate and postgraduate training and experience, with professional practice regulated by the Health and Care Professions Council (HCPC). Over the lifespan of OP, the scope of work has diversified often in

response to economic drivers and workplace changes. Primary applications include selection and assessment, organizational change, employee engagement, training, career development, and workplace well-being, as well as other more niche areas such as human factors, workplace rehabilitation and neurodiversity at work. Occupational Psychologists typically work as in-house or external (and self-employed) consultants, in the public and private sector and in academia (BPS Statement of Intent, January 2019) although they may not necessarily hold the job title of Occupational Psychologist. The term Occupational Psychologist is more often used in association with professional recognition and regulation; rather than a 'personal brand' or preference (Else, 2018; McDowall, Sealy, Redman, Chamorro-Premuzic & Ogden, 2015). Additionally, and perhaps adding to the complexity, Human Resource (HR) professionals, management consultants and other aligned professions conduct work in the same domains as Occupational Psychologists.

In this career landscape, OP epitomises the 'new' career perspective where agency and career self-management (Akkermans & Kubasch, 2018) is the norm. This 'new' perspective has coincided with changes to organizational structures, from more traditional and hierarchical to flatter and matrix. Structural changes have created a necessity for individuals to be proactive in their pursuit of work and thus create their careers within (or outside of) organizations (Fugate, Kinicki & Ashforth, 2004; Wittekind, Raeder & Grote, 2010). In this context, rather than career development and management being seen as the responsibility of the organization (via the provision of job security), it is increasingly perceived to be the responsibility of the individual (Arthur & Rousseau, 1996; Fugate et al., 2004). Therefore, instead of 'job security' scholars refer to 'employability security' or self-managed careers (Bernstrøm, Drange, & Mamelund, 2019; Clarke & Patrickson, 2008; Forrier & Sels, 2003; Haasler, 2013). Occupational Psychology careers are essentially *boundaryless* (Arthur & Rousseau, 1996) and self-directed (*protean*, Hall, 1976), where OP graduates can move freely between organizations, across organizational and professional boundaries occupying various job titles, but less frequently with the title 'Occupational Psychologist' (Else, 2016).

In light of the professional challenges, over recent years, the professional body for psychologists in the UK (the BPS), and the Division of Occupational Psychology (DOP) has been concerned with understanding the identity and unique value of Occupational Psychologists. The DOP has commissioned two reviews focused on this issue (OP-First, 2006; Expert Panel Review, 2012 see Patterson, Harrington, Stevenson, & McDowall (2013) for a summary of findings). Both reviews concluded that Occupational

Psychologists needed to develop a unique selling point (USP) to assure the sustainability of the profession. Building upon this, the DOP Strategic Plan (2016–2020) emphasises the importance of improving the employability and visibility of Occupational Psychologists. Prior work has aimed to identify what the professional brand of Occupational Psychologists is, how to sell it, and how to inspire the next generation of practitioners (McDowall et al., 2015). Occupational Psychology is arguably having an ‘identity crisis’. But, this identity crisis is not unique to the UK, with I–O Psychology in the United States also appearing to face similar challenges (Byrne et al., 2014; Zickar & Highhouse, 2017). Although there is clear need and on-going work by the BPS to address these issues empirical work is lacking to enable understanding of how professional identification occurs in a landscape defined by fluidity, self-employment, sole roles in organizations, and multiple potential ‘career paths’ and job titles. The potential to support the careers of Occupational Psychology graduates is therefore limited, as interventions are not necessarily built upon a strong evidence base. Therefore, faced with the challenges identified, the current study aims to answer the research question: How does professional identification occur in OP?

Professional identity and identification

Professional identity is “*the self that has been developed with the commitment to perform competently and legitimately in the context of the profession*” (Tan, Van der Molen & Schmidt, 2015, p.1505). It develops throughout a career, where individuals learn and adapt to the environment on the basis of gaining experience and understanding in more depth their own values, beliefs and motives (Ibarra, 1999; Ibarra & Barbulescu, 2010; Schein, 1978). Professional identity is believed to be relatively adaptable, as change in professional identity can be attributed to change in role or job. Having a strong sense of professional identity can lead to improved feelings of career success, job satisfaction and accomplishment (Hall et al., 2002 in Slay & Smith, 2011; Pearson, Hammond, Heffernan & Turner, 2012).

Professional identity is a social construct, which can adapt on the basis of three key factors: a) observation of role models; b) experimentation with provisional selves; and c) evaluation of professional selves (Ibarra, 1999). Research suggests individuals need to build ‘identity capital’ which can be developed through initiatives such as communities of practice and work experience opportunities (Tomlinson & Jackson, 2019). Building ‘identity capital’ is crucial in early career, and, following graduation can lead to enhanced career progression (Holmes, 2001; 2015; Tomlinson, 2017). Tomlinson and Jackson (2019) describe how professional identity supports graduate

employability by enabling early socialisation with the profession. Strong professional identity can also focus an individual through helping them to identify multiple pathways to a goal. Professional identity can occur prior to working within a profession and is termed 'pre-professional identity'. The formation of pre-professional identity in graduates can help to demonstrate their preparedness for their chosen career (Jackson, 2016). Therefore, in OP, building a strong sense of identity in early career and in the transition from university to work could be an important time point in enabling longer-term career success and satisfaction.

Whilst research has focused on 'identity', the related concept of 'identification' has received less direct attention with Miscenko and Day (2016) suggesting researchers have typically treated the terms as similar. Identification refers to the "*process by which people come to define themselves...to navigate their lives, workwise or other*" (Ashforth, Harrison & Corley, 2008, p. 334). There is a dearth of applied research focusing on the way in which individuals identify with their *profession*, instead focusing on how individuals identify with their *organization* (Ashforth, 2016; Ashforth, Joshi, Anand & O'Leary-Kelly, 2013). It is important that identification is contextualised to fully understand the idiosyncrasies of the different professions.

Identification is described as a precursor to identity, often referred to as the process of "*emerging identity*" (Scott, Corman & Cheney, 1998, p. 304), which includes cognitive awareness of membership, values (Ashforth et al., 2008) and the emotional investment an individual has towards a specific role, team or organisation (Miscenko & Day, 2016). Fundamentally, identification refers to belonging to a group, whether that be an organization, occupation or profession (Ashmore, Deaux & McLaughlin-Volpe, 2004). Where identification occurs, individuals feel a sense of pride and oneness with that group (Ashforth et al., 2008).

To summarise, whereas identity is more internally focused on the self, identification has an outward focus relating to group membership. When an individual identifies with something, they promote it and are positive about it, almost as an extension of themselves (Ashforth, 2016). Therefore, rather than understanding what the profession (i.e., Occupational Psychology) or professional (i.e., Occupational Psychologist) is (i.e., a focus on identity and 'the self') the current research focuses on the sense of oneness an individual feels towards the profession (i.e., a focus on identification). In other words, we are interested in what factors support individuals with OP qualifications to feel a sense of oneness with the discipline, and consequently how they identify with the profession.

Method

A qualitative approach was taken utilising an interactionist (Veld, Semejin & Van Vuuren, 2015) and post-modern (Swanson & Fouad, 2015) standpoint; which is common in identity and identification research. Essentially, the researchers believe careers are constructed through stories and meaning making activities (i.e., Career Construction Theory, CCT; Savickas, 1997, 2002, 2005, 2013) and social processes (i.e., Social Identity Theory, SIT; Tajfel & Turner, 1979). The interaction of multiple theories and the perspective that there is more than one 'truth' necessitated a qualitative approach where individuals could explain experiences in their own words, without the researcher imposing a predefined view.

The study received institutional ethics approval and participants were advised of the study content in advance, how confidentiality was ensured and their right to withdraw. Participants signed consent forms if they agreed to participate and received a written debrief following the interview.

Participants

Twenty participants (14 females and six males) who all held a BPS accredited Masters (MSc) OP qualification (as the highest level of qualification) and Graduate Basis for Chartered Status (from completing a BPS accredited undergraduate or conversion course in psychology) were recruited for the study. This 'purposive sampling' meant participants were eligible to pursue Chartered status with the BPS and become a full member of the DOP (with potential for HCPC Registration). Recruitment was through the principal investigator's professional network on LinkedIn and other social media platforms such as Facebook and Twitter as well as university alumni networks. Ages were categorised by year into five groups enabling anonymity to smaller groups: 22–26; $n=4$; 27–30 years; $n=5$; 31–34; $n=3$; 35–39 years; $n=5$; and 40 plus years' $n=3$. Seven participants were Occupational Psychologists who were Chartered Psychologists, six were trainee Occupational Psychologists, four were graduate members of the BPS and three held no professional membership. Participants were employed in a range of occupational settings from academia to self-employed consultancy working and as in-house Occupational Psychologists, across the UK. Work experience ranged from 0–27 years with a *mean* of 13.95 years.

Data collection

Semi-structured interviews (Edwards & Holland, 2013) were employed utilising a narrative interview approach (Maitlis, 2012). This approach reflects the dynamic process of identification, where story-telling enables individuals to construct and reflect upon their career and externalise the identification process; something which occurs through hindsight (Ashforth, 2016; Del Corso & Rehfuss, 2011; LaPointe, 2010; Meijers & Lengelle, 2012). Interviews lasted between 50 and 70 minutes, were either face-to-face, via Skype or over the telephone, depending upon availability. Each interview was audio recorded and transcribed verbatim. During the interview participants were encouraged to describe their career from “*the moment they made the decision to pursue Occupational Psychology to the present day*” (an interview schedule can be provided on request). This “*generative narrative question*” (Riemann & Schutze, 1987, p.353 cited in Flick, 2014) is typical of the beginning of narrative interviews. Participants were then encouraged to explain their career history and choices, uninterrupted by the researcher (Jovchelovitch & Bauer, 2000). This process enabled participants to explain their career prior to the researcher asking any questions to clarify understanding.

Following this narrative stage, questions were asked based upon the content of the story to seek clarification or to understand and explore responses in more depth (e.g., “*You mentioned wanting to be stretched, in the roles that you’ve said you’ve enjoyed, the words you used were ‘being in demanding roles’ and feeling ‘challenged and stretched’. Is that something that’s important to you?*”). Participants were finally asked about factors relevant to their story and the research question, often referred to as the ‘balancing phase’ (e.g., “*Why do you think that employers have chosen you for the jobs that you have had in the past?*”). Further, all participants were asked to discuss the future and how they felt about their career going forward, which enabled an understanding of the beginning, transition and future work self; a salient feature in narrative career accounts. This latter stage of the interview ensured similarly of questions for all participants.

Thematic analysis

Inductive thematic analysis (Braun & Clarke, 2006) was adopted to analyse these data. Six steps were followed: a) familiarisation with the data; b) generating initial codes; c) searching for themes; d) reviewing themes; e) defining and naming themes and f) producing a report. To ensure rigour Lincoln and Guba’s (1985) quality criteria of: a) credibility; b) dependability (e.g., Braun & Clarke’s, 2006 six steps); c) transferability; and d) confirmability were utilised throughout.

A reflective log was taken after each interview noting initial thoughts in relation to content and process to “*foster ongoing reflexivity*” (Riessman, 2008, p.191) and to improve credibility (Haynes, 2012). In addition, the researcher reflected on time and place of interview and other factors which could contribute to the participant experience (e.g., transferability). The researcher reviewed the codes after five and 15 interviews had taken place to ensure there was no repetition in coding (e.g., confirmability). A researcher (independent of the data collection stage and analytic process) reviewed one transcript, and the codes generated were discussed to ensure consistency in the development and reviewing of themes (e.g., confirmability). Then final codes and rationale were explained to a different member of the research team to ensure clear evidence and representation of views (e.g., confirmability). Finally, member checking (e.g., credibility) was utilised where initial themes were discussed with two participants to ensure they reflected their narrative accounts. Whilst these procedures did not lead to adaptations, the reflexive nature ensured the outcome was based upon the content of the interviews and therefore enhanced the trustworthiness of the findings.

Findings

Five themes were developed from the narrative interview transcripts explaining how professional identification occurs in OP. Findings are summarised in Figure 1. The five themes are represented by pillars as the foundations for professional identification, and therefore are areas for opportunity to support professional identification in OP. Each pillar is explained in turn in the following section.

Figure 1
The five pillars of professional identification in Occupational Psychology



Education and learning

Professional identification was initiated through the psychology knowledge base, achieving a solid foundation in psychological theory enabling understanding of human behaviour. This knowledge came from formal education and informal learning opportunities. Participants explained a desire to ensure every job, post-qualification, afforded “*opportunities for training and development*” (Participant 8) to learn more about self and profession, and to capitalise on their investment in their formal education. When looking back over their profession, participants were continuously learning as a way to enable identification: “*I want to learn and I feel like [I] am still learning*” (Participant 12). Where experience validated learning, professional identification occurred, and this was particularly apparent following Masters (MSc) courses in OP that linked theory and application:

“...the way in which the course is structured and the content within those courses was really valuable...being able to apply that theory into practice...working out how you would then apply them into businesses...probably the best part of the master’s degree...some of the core consulting skills that we learnt in the degree and I think that is really critical for Occupational Psychology, so on top of learning all of the science behind it, it’s actually really important to understand...how to apply” (Participant 14),

Equally, participants were aware that simply studying the MSc did not guarantee a career in OP and a persistent risk came from the “*romantic view*” (Participant 2) of the OP career, an ideal present in formal study which did not always match reality:

“On the first day of the masters...lecturer...looked around and he said none of you...no 6 [out of 30] of you are actually going to be Occupational Psychologists...I feel quite angry I feel like I was erm...hoodwinked actually...I was expecting to have a career...got nothing” (Participant 3).

Whilst experiences of MSc study were mixed, it was clear that education was formative in the identification process, indeed there was a *desire* for individuals to identify with the profession. During formal education, participants described how they could ‘try out’ OP as a potential profession. Learning about the profession led some participants to conclude it was worth pursuing a career as an OP as, they believed on a cognitive level, this career would ‘fit’ with their own aspirations and values. Other participants in the study decided it was not the profession they desired.

To summarise, education and learning could serve as an anchor, both at an early formative stage in one's career (i.e., through formal study) and continuing throughout by affording development opportunities and life-long learning which could 'top up' identification.

Networking and building relationships

The second theme describes those individuals who surround themselves by others to support and shape their OP identification, indicating a social element to identification. Course tutors (undergraduate and postgraduate) and fellow students supported the pursuit of an OP career and formed the basis of early professional networks. Other important relationships were with managers and colleagues, but also of note was "working with other Occupational Psychologists" (Participant 5) which led to a sense of belonging with the profession. Formal and informal mentoring relationships were described by participants as formative experiences, leading to identification with the profession by "influence[ing] my decisions" (Participant 14). These mentors encouraged participants to consider moving jobs to gain further experiences and, in some cases, were fundamental in securing new roles:

"A couple of people in my life have been important mentors...where I've been at my best... there's been somebody else, had an important role, either challenged me, stretched me, created opportunities for me" (Participant 1).

"Six months into my role I got a call from the contacts I made during my time as an intern at [organization]...said 'I am building a team...I need people can you come and help?'" (Participant 12).

Participants described the importance of nurturing contacts within the small profession of OP. Tangible benefits such as enhanced perceptions of employability and increased awareness of job opportunities could be afforded by investing time and effort in formal and informal networking. The network was additionally valued in relation to support, idea sharing and the validation that OP was the right profession for them. Professional identification that developed in this way was abundant in the career narratives, explaining how both formal and informal opportunities to enhance one's career were utilised:

"I think having a really good network of people who kept in touch with me from the masters and that's been a massive factor, there's definitely something about networking and having a network

of people who you can turn to and ask questions or get support from. I don't think I'd be in the position I was now if I didn't have that network" (Participant 13).

To summarise, networking and building relationships encouraged an interest in OP, as the career developed, participants would identify professional contacts or mentors who could support and therefore enable identification. Of particular importance was ensuring there were fellow Occupational Psychologists in this network, to champion the profession and to encourage participants to see potential opportunities.

Managing challenges

Professional identification continued even through challenges, although involved shifts in expectations based on factors such as availability of roles, awareness of the value of OP, geographic location, work–life balance, and family commitments. Participants questioned their sense of belonging, often reshaping their understanding of the profession and the opportunities it afforded:

"It's been challenging; I think it's opportunity as... I mean at the end of the day consultancy positions or positions where we can apply our skills as an OP doesn't come around very often..." and "...I think part of the challenge is not articulating what we can offer to our potential employers but for them to recognise that we can offer help, so...it's a two-way street isn't it? So I think in terms of our ability to say what we can offer that's one thing, for them to be open to us offering resources is another" (Participant 12).

Lack of good quality opportunities and choice was frequently coupled with conversations around family considerations, work–life balance, part–time and flexible work arrangements. Working part–time and flexibly had led to participants feeling “restricted” (Participant 5) in their work (e.g., through an inability to travel or work away from home due to childcare arrangements). Participants experienced feelings of guilt through making decisions which were “better for my family” (Participant 4) or to achieve “balance” between career ambition and desire to “just be a Mum” (Participant 17). In these scenarios, participants often looked to the future to support their professional identification, suggesting they recognised the temporary nature of challenges to professional identification (e.g., it may be more possible to pursue different opportunities when their children are older). Whilst experiencing challenges, participants worked to maintain labour market value to remain employable, but chose to compromise their career expectations.

Diversity of terminology used in OP (such as Work Psychologist, Business Psychologist, Organizational Psychologist as well as the crossover between professions including HR, Learning and Development, and Organizational Development) was described as potentially confusing for practitioners and employers. There was also a feeling of lack of congruence between the job participants do, and the profession they are in. This was described as a challenge faced by the profession as a whole. Whilst personally participants were invested in OP, they felt more must be done to address this identity or professional branding issue. Many expressed exhaustion; constantly having to explain what OP was. Despite confusion, individuals were not prepared to let go of OP as their profession, but often chose to use more readily accessible and easily understood terminology (such as Business Psychologist), adding to the confusion described.

In summary, this pillar emphasises the personal and professional challenges faced by individuals in identifying with the profession. Challenges could weaken a strong foundation built through education and learning and networking and support. Some challenges were temporary and within the control of the individual (e.g., achieving balance), others were described as more pervasive (e.g., professional brand) and issues for the profession as a whole to address.

Career crafting

This theme is characterised by openness to experience, adapting, creating and developing roles as well as adopting alternative career strategies to support professional identification. These strategies include work shadowing, volunteering and internships; all identified as non-traditional ways of securing longer-term roles. Identification with the profession was clarified through these more 'low stakes' experiences where OPs could try out different roles to identify a 'best fit'. For example, at entry to the profession individuals described how pursuing multiple experiences, learning how to find work, and sell and promote themselves was paramount. Participants were able to shape roles to fit aspirations. One participant described how a major organizational restructure had created a new role, which although not the desired role "*there might be some scope to change it*" (Participant 11). Creating opportunities to enact OP or "*play*" (Participant 4) with roles was important alongside the perception that OP was "*very applicable*" (Participant 10) to the workplace in many guises:

"A lot of what I offered was very relevant so it's getting them to see that that stuff can be helpful and useful to them" (Participant 20).

Through reflection, participants described how they had developed an acute awareness of how others perceived their careers and the impact this could have on their identification with the profession. Tensions were expressed over broad versus specialist careers – both perspectives were apparent in the transcripts from concern over not having a “specialism” (Participant 17) to becoming “too niche” (Participant 16). In these cases, participants sought ways to enhance their career through adopting a future focus. Looking to the future facilitated participants to set goals and think about next career steps, these strategies enabling them to continue to identify with the profession. Next steps were not limited to seeking new roles but also acquiring volunteer experiences:

“In reality I think now I have been ready to broaden out again and actually possibly one of [my] motivations for joining the [professional body as a volunteer] and getting involved with [them] is to give me a bit more breadth” (Participant 19).

Experiences were not all positive, but participants described how even the negative ones were still “formative” (Participant 1) in helping OPs to broaden their mind-set, including looking for opportunities to work overseas (Participant 12). Occasionally a clear career planning strategy was not evident, with participants describing serendipity, where they “fell into” (Participant 6) roles within the profession and made the most of opportunities presented to them, again evidence of crafting.

To summarise, career crafting was utilised as an effective strategy to enable professional identification, finding the ‘OP’ in any role and viewing career at a macro level. All opportunities (regardless of job title, paid or volunteer work) were seen as useful in understanding how to be a practitioner within the profession.

Professional recognition and authenticity

The final pillar is characterised by stories of achieving success (both objective and subjective) which solidified the participants’ professional identification. Purely objective success included a desire for status and recognition achieved through becoming qualified as an Occupational Psychologist (known as Chartership). For those individuals not yet Chartered this was a driving force in their career. Such recognition helped to establish professional identification and improved marketability beyond their organization. Professional recognition helped to build self-confidence and “cred[ibility]” (Participant 20) and was viewed as important. This was despite a perceived lack of awareness from employers about the specific detail, the fact it was a professional

qualification, that was recognised and therefore valued. Professional membership enhanced feelings of oneness with the discipline; particularly where employers were aware there was an evidence-base or “science” (Participant 6) behind decisions and interventions:

“I got Chartership...and registered in the same year and I’ve got to be honest I’m pleased that I did that. Although it’s not a pre-requisite to the role I’m doing now it’s a personal achievement and maybe looking to pursue things differently in the future I think I’m pleased that I did do it...I feel competent in the experience that I’ve got and to have someone say ‘yeah you’re competent to do that role’, and I think it just gives me a bit more confidence behind that” (Participant 5).

“...that was me at my best...and that was because I am an [Chartered] Occ[upational] Psych[ologist]...couldn’t have arrived at that [solution] any other way” (Participant 1).

Professional identification was enriched by doing meaningful, OP work (as defined uniquely by the individual). This more subjective element emphasised values and authenticity and demonstrated that status was not the only driving force. Additionally, working authentically by achieving congruence between the values the individual had and the work they did was evident:

“I think for me it’s just being able to really relate to the work that you are doing and seeing the difference that it makes and the impact that it has on the people that you are working for or with or the organizations or clients that you are working with...and being able to see how they have changed as a result of your work...” (Participant 14).

Where perceived values were incongruent (between individual and role), participants described taking action such as becoming self-employed so they could identify with the profession in a way that was authentic, and a driving force for achieving satisfaction and happiness.

Professional recognition was emphasised as an investment and personal achievement which enabled professional identification through boosting confidence and enhancing credibility. It was a mark of professional pride and often enabled participants to work authentically, ensuring roles were congruent with their values.

Summary of the five pillars of identification

The five pillars identified from the 20 narrative interviews explained the ways in which professional identification occurs in OP. Some of these pillars such as ‘Education

and learning' and *'Networking and building relationship'* offered clear ways in which an individual could develop a sense of belonging to the profession. *'Career crafting'* and *'Professional recognition and authenticity'* demonstrated an active role on the part of the participant to consciously find ways to identify with the profession. This is why these four pillars are represented pictorially on either side of a central pillar in Figure 1. The middle pillar of *'Managing challenges'* presented more significant concerns; requiring the support of the external pillars. All pillars provide opportunities to enable professional identification in OP in order to build a solid foundation for practitioners in pursuit of their career within the discipline.

Discussion

This research aimed to understand how professional identification occurred in OP, given the nature of the profession, and the challenges and opportunities it faces as outlined in the introduction. Analysis of the narrative interviews led to the development of five key themes, or 'pillars' to professional identification (see Figure 1). These pillars act as a foundation, each serving a purpose in developing secure identification. At various stages in career, different assessments were made of the current situation and linked to a broader concept of professional identification.

Education and learning were important drivers for many early career OP graduates, their experiences during undergraduate and master's programmes served to support professional identification or in some cases led to dis-identification (see Kreiner & Ashforth, 2004). This stage was about building capital (e.g., human, employability, social, psychological). Participants were not (at this stage) Occupational Psychologists (as defined by law) but they were learning whether and how they could identify with the profession on a cognitive level (often referred to as 'liminality'). Ashforth et al. (2008) believe it is possible to "*think or feel one's way into identification*" (p.329), something which was clear in the narratives. Individuals described a 'need for professional identification' and wanting to feel part of something, linking to the concept of Need for Organizational Identification (nOID; see Glynn, 1998) which has been suggested to predict actual identification. If there is indeed a 'need for professional identification', this formative stage is where individuals can make conscious choices about their engagement with the profession.

It may also be at this formative stage where individuals consider recognition (e.g., Chartership) as a way of enhancing professional identification through building

confidence and credibility and becoming an authentic practitioner (linking to Kaleidoscope Career Model, KCM; Mainiero & Sullivan, 2005). However, our findings indicate that education and learning, and achieving Chartership alone are perhaps insufficient to secure professional identification. There are challenges along the way. This is where it is important to adopt strategies such as building social networks, mentoring, engaging with other OPs in order to gain the identity they desire (Ashforth et al., 2008). This is because identification was enhanced through relationships and comparisons with others in the same group or the group they aspired to be part of (SIT, Tajfel & Turner, 1979).

Perhaps most interesting in our research was that professional identification could be reinforced through a more experiential approach of career crafting, building on the job crafting concept (Demerouti, 2015; Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001). Individuals found ways to identify with the profession in a more global way (Ashforth, 2000) over and above role and organization, through collections of experiences which were shaped into professional relevance. Career crafting involved adopting a mind-set that allowed them to work in the way an Occupational Psychologist would, or to do the work of an Occupational Psychologist without necessarily having an Occupational Psychologist job title.

The process of identification is turbulent, careers are plagued with challenges, turning points, and transitions (Cooper & Mackenzie-Davey, 2010) from aspects such as external environmental issues, family considerations, external awareness or willingness of employers and practitioners to offer experiential opportunities and part-time and flexible work (see also KCM; Mainiero & Sullivan, 2005). Ashforth et al. (2008) described this process as self-verification, where during periods of change individuals are forced to cope with threats to who they think they are. They will seek to stabilise these challenges and reaffirm or “*manipulate the immediate environment*” (Ashforth et al., 2008, p.335) to ensure consistency. As long as professional identification has occurred these challenges can be managed. However, if they are coupled with a weak foundation from the other pillars, it is possible individuals will dis-identify with the profession, presenting a wider risk to the future of OP careers.

The five pillars were utilised to varying degrees throughout all career stories, dependent on experience and factors outside of work, thus providing support for the developmental nature of careers (Super, 1980). Utilising CCT (Savickas, 1997) this research reinforces the view that careers and professional identification manifests

in a fluid way. This fluidity and flexibility is important for practitioners as it means there are opportunities to develop applications which can enhance professional identification, in a more overt way. Currently, there appears to be an assumption that individuals already *have* professional identification if they choose to study OP. This position is naïve, given the storied nature and fluidity identified in research. We should not assume professional identification is stable but rather develop collective and on-going strategies to support individuals to feel part of the profession, building on SIT. However, in order to secure professional identification and therefore develop a strong professional identity, all five pillars need to be attended to and nurtured. Supporting individuals to feel positive about their group membership (i.e., identification), will mean they are increasingly likely to describe themselves as being part of that group which becomes the ‘core of identity’ (Ashforth et al., 2008). Indeed, this could support the brand and identity that the professional body and practitioners seek. Additionally, this will enable “*ontological security*” (Morales, 2019, p.253) where identification can become a precursor for identity even in careers where multiple roles and career paths exist.

As practitioners, we must support the construction of professional identification enabling OPs to build ‘capitals’ such as ‘employability’ (Peeters et al., 2019), ‘human’ (Becker, 1964; Veld et al., 2015), ‘movement’ (Forrier & Sels, 2003), ‘social’ and ‘identity’ (Tomlinson & Jackson, 2019). This is an on-going activity and a collective responsibility.

Implications for practice

This research provides numerous potential implications for practice. Perhaps most obvious and important, due to its ability to impact on all pillars, is the development of good quality social networks and support mechanisms. There are multiple ways in which enhance this, including, building a solid network at all career stages with individuals already in the profession. Whether this is between students and course tutors, practitioners and students or both, these networks provide individuals with something to feel part of, but must be built upon more than sharing OP theory and knowledge. The networks must also share journeys, skills, contacts and opportunities (e.g., work shadowing, internships), and include discussions around what it means to identify as an Occupational Psychologist, what it means to be part of the profession and the benefits of group membership.

Occupational Psychologists need to know how to sell themselves and their profession, how and where to find work congruent with their own values as well as support in becoming practitioners. Building communities of practice will only serve to make the profession stronger. In a profession where individuals may be the sole OP (i.e., self-employed or within an organization), we must find ways to network formally and informally, to champion one another, and to share stories of successes, in a much more open and proud way. Perhaps the national professional body (the DOP) and equivalents across Europe (EAWOP) and globally (such as SIOP) could support this, for example, sharing stories through social media and platforms across professions, where practitioners explain, “I achieved that *because* I am an Occupational Psychologist”. There is an appetite for this within the profession, in the UK, and there must be opportunities to share more openly outside of the profession.

Achieving Chartership afforded confidence and credibility and supported professional identification. However, the single process of becoming a Chartered as an Occupational Psychologist has undergone challenges over recent years. Therefore, developing multiple approaches to achieving practitioner Occupational Psychologist status seems necessary. Choice would enable a more competitive market for training Occupational Psychologists. Linked to the process of Chartership, mentoring was important for supporting professional identification and perhaps one of the easiest ways to develop this is through education providers and professional supervision, however this is delivered.

Given the range of opportunities present for OPs, coupled with the perceived lack of awareness of how OP differs from other (related) professions, OPs must be trained to career craft. Career crafting relies on OPs having the confidence to sell themselves and to deliver interventions within their own professional framework. Every OP practitioner must get on board to truly promote the profession, to share their stories and successes, and to engage the next generation of Occupational Psychologists to create a voice which communicates the unique value of OP to the external world.

Finally, there must not be arrogance that individuals will simply want to be ‘part of the OP club’; membership must be something worthy of time and financial investment. The authors would like to see a more positive rhetoric around achieving Chartership, sharing stories of the advantages of working as a qualified professional. Individuals and organizations who employ Occupational Psychologists, can add support by clarifying the benefits of employing qualified Occupational Psychologists within their organizations.

This requires people to have confidence to use the title Occupational Psychologist. The work of the professional body to create a clear brand is necessary and must continue – this is about supply AND demand and the nurturing and enabling of talent in the profession. As participants described the applicability of OP to all workplace contexts as a selling point, it would seem professional adaptability is a real strength of the profession. However, without clearly articulating the diversity of opportunity, this breadth of application can appear a weakness leaving individuals, particularly early in their career, without a clear understanding of what they can tangibly do, after leaving education, to develop into the profession.

Limitations and ideas for future research

Whilst there are strengths of the current research, there exist limitations that could be addressed by follow-up work. This research focused on a very traditional route to OP which may fail to address the nuances associated with career changers (e.g., individuals finding OP as a second or third career). Therefore, the authors would like to see more research investigating the careers of a broader range of practitioners, and those finding OP later in their career. Exploring career changers may enable us to understand how professional identification is portrayed to the outside world (see, for example Lefsrud & Meyer, 2012; Kitay & Wright, 2007; Van Dick, 2004) through various career transitions.

In addition, this research focused on OPs in the UK, however it is likely that professional identification challenges exist in other psychology professions (such as Health Psychology), or indeed different professions with multiple routes to practice (e.g., accountancy or consultancy.). The authors would also like to research other European nations and globally to identify whether there are idiosyncrasies or commonalities across country and culture, critical to building a picture of shared challenges and opportunities. The five pillars could be utilised as a template to foster research in professional identification, to identify whether these five pillars are pervasive across professions. This understanding would encourage the development of bespoke, contextual and evidence-based interventions for professionals.

Finally, the model presented is theoretical, and has not been empirically tested, nor does it explain whether professional identification predicts any tangible outcomes such as engagement, employability, career success and so on. Additionally, aspects such as psychological capital (Luthans, Avolio, Avey & Norman, 2007) in the form of self-efficacy and optimism were referred to throughout the narratives. These aspects although implied and therefore not thoroughly investigated indicate avenues for future

empirical and longitudinal research to fully understand the factors which can support OP careers and build employability capital (Peeters et al., 2019).

Conclusion

This research demonstrates the way in which professional identification occurs in OP, and to the authors knowledge is the first time it this has been explored empirically. In the era of the boundaryless career and career self-management, it is essential to engage in empirical career related research, which enables evidence-based interventions to be developed to support individuals to maintain continuous professional development. Our findings suggest the five pillars of *Education and learning*, *Networking and building relationships*, *Managing challenges*, *Career crafting* and *Professional recognition and authenticity* could all lead to a strong sense of professional identification. Professional identification in OP is fluid and develops over the lifespan via multiple experiences (e.g., learning, achievements, networks). Practical solutions to support professional identification include building strong and active support networks, promoting the profession (i.e., the brand) and options for developing the next generation of Occupational Psychologists, via solid educational and practitioner pathways. It is hoped this research will encourage more empirical and practitioner work in OP to fully appreciate the career challenges and advantages of OP qualifications. This work is paramount to the sustainability of a profession which has the potential to add considerable value to the working lives of individuals.

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Research as a practice

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Case study



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Introduction

Discovery has no end, as it always drives new questions. While practitioner-oriented research is a profession, it also requires improvement through repetition, experience, and ongoing learning. In facing change, we must remain fluid and learn from adversity. To do so we need to listen and adapt, while proceeding with resilience and determination. Despite the challenges, the rewards of our work are plentiful. We move to not only determine findings, but to also seek out what we might co-create along the way.

This article is based upon empirical research conducted at a pharmaceutical start-up, over a three-year period. Our views do not necessarily reflect the perceptions of every organizational member or the publisher. The content is based on the authors' scholarly inquiry, analysis, and professional judgment. Names, dates, and financial information have been modified to sufficiently anonymise the article, as requested by the organization under study.

Meeting the CEO

I attended an ethics programme in California, and chanced upon hearing a CEO share his insights about leading a start-up company in the Silicon Valley. As he spoke from a panel addressing business ethics, my interest was piqued. Jim was the first leader I had ever heard who openly talked about how to shape the culture of a company, even before it had a product. He recognised that, from the onset, getting character into the core of his organization wasn't going to happen as the result of an ethics code or a value statement. Instead, such concerns needed to be addressed at the firm's inception. Ethics had to be a part of how the firm achieved its goals, how it treated its employees, and how it recognised and dealt with shareholder and stakeholder issues from day one.

I went up to Jim after the meeting and expressed my appreciation for his approach. I asked him if he would consider letting me use his organization, *Start-up Pharma* (SP), as a possible case study. Inquiry within a start-up would ultimately provide educational tools to business students and offer insights for future research. He agreed to continue our dialogue. We met some months later. He then visited and spoke to my undergraduate students at Menlo College and, from there, we planned a study. Years later, I'm looking back at one of the most unusual research projects I've ever engaged in. In this article, we'll share what happened, how the study evolved, and what resulted from it. Let's just say, things didn't go exactly according to plan.

Original idea

We began our work thinking that the study would be about *Positive Organizational Ethics* (POE). Several colleagues and I had just completed a special issue on *Positive Organization Scholarship* and *Positive Organizational Behavior*. We defined POE as the study of people, practices, and contexts that cultivate and sustain individual and collective ethical strength to achieve successful and durable moral performance in organizations (Sekerka, Comer & Godwin, 2014).

Our goal with the SP study was to ascertain how using a positive lens might help us advance our understanding of ethical cognition, affect, and behaviour in the workplace. Scholars tend to recognise the value of research that leads employees to make poor ethical choices. But we saw the need for more inquiry into what encourages and sustains positive ethical decision-making and action in organizations. By going beyond ethical failure and examining the building blocks of ethical strength, the motivation

behind our work was rooted in Positive Psychology, inquiry that strives to help people engage in productive and meaningful lives (Sekerka, 2016).

The original team consisted of myself and three others. I, a business ethicist, have a background in organizational behaviour, organizational development, and practitioner experience with Appreciative Inquiry. The others had complementary backgrounds, but also added rich expertise in personnel research, multivariate statistics, and leadership development. We decided to use a case study approach, complemented by a series of critical incident interviews as a means of discovery. At some point, we would gather internal organizational culture survey data from the firm, and correlate this quantitative data with our eventual qualitative findings, to execute triangulation, adding depth and rigour to the investigation.

The CEO agreed that SP's executive group (himself and eleven others) would participate. With busy schedules it took about a year to conduct all 12 interviews. We did the majority of them in person, which was important to everyone on the team (researchers and participants alike). The 'incident' question was designed to help leaders think back to a time when they faced an ethical challenge and exercised moral courage. The in-depth interviews lasted for 60–90 minutes; with probing questions used to collect details of job, role, how they felt about ethics within the company, and working for their organization. About half-way through the schedule, a member of our project team self-imposed a career shift. So, they stepped away from the project and we carried on.

Project Expansion

After having the data transcribed and performing some initial analyses, we had an interesting story. There were exciting strategic developments occurring within SP. But with some emerging tensions, we felt like we needed more information. We were missing important nuances about what was happening at the center of, and throughout the organization. While the bird's-eye view was magnificent, we wanted boots-on-the-ground details.

We met to report our initial findings to Jim and the entire SP leadership team, explaining what we had learned thus far. They agreed to let us carry the study forward. Together, the research team and organization initiated a snowball approach. Each leader would identify a handful of key people within their respective functional areas,

which would represent each of their own departments. That way we would have all of the various areas and levels of the organization represented. Within a few months' time, we had a list of 35 people to interview, all over the world. This would be known as Phase 2 of the project.

With full-time teaching loads, service duties, and publishing commitments, my colleagues and I faced some tall hurdles. We maintained the method of conducting as many interviews in person as possible. But on the analysis side of the story, the Nvivo software we intended to use to code the vast amounts of data wasn't working out. The functional tools in the package were not in keeping with our training and how we intuitively made sense of the data using classic qualitative analysis techniques. We decided to shift to use of a purely traditional method, which meant coding all of the transcripts, including the original 12, manually. I think we held about 4 kilos of codable material after printing out all the transcripts. It was daunting, to say the least! But one paragraph, one page, one transcript at a time, we pushed into the data, and started the process of thematic analyses (Boyatzis, 1998; Glesne, 2016).

After conducting about half of the interviews, another colleague joined the project, an expert in workplace well-being, team optimisation, and training development. We could see that the output, once analysed, would provide useful input to the organization. Having an expert on board who had an active bridge between research and practice would be exceptionally helpful.

During Phase 2, major advances were happening at the company. The organization was growing exponentially through a series of mergers and acquisitions. This rapid expansion was coupled with a major strategic decision to bring the research and development function in-house. This modified the identity of the company from a manufacturing and distribution firm, to one that also develops pharmaceutical drugs. The company also faced external pressure, as a result of government investigation related to funding patient charities. Donations that the company had made to patient assistance charities were deemed by the government to resemble kickback schemes. The company co-operated fully and addressed the charges by paying a fine of 57 million dollars to the U.S. Justice Department.

The more we met with employees and listened to their experiences about what was going on in their organization, the more we realised that this was no longer a story about POE. Rather, it was one about the dynamics of organizational culture and change

on a broad scale. The story was evolving dramatically, as the company's identity, growth, and transformation were being captured in our interview data. While the basic critical incident interview script remained the same, the prompts and probes that accompanied each interview revealed the nuanced challenges that employees encountered as SP went through this extended period of development.

Unexpected challenges and results

Learning that the organization had varied their questions in their annual in-house culture survey, the aggregated information to be used in our comparative analysis between the company findings and the thematic findings was no longer feasible. At that point our quantitative analysis expert stepped-off the project, realising their role was no longer viable. Around this same time, myself and another member of the team experienced unexpected medical issues. They decided it was best to leave the project completely. I was unable to work for three months, but then gradually reengaged in the coding chores.

As the sole remaining members of the team, Lauren and I completed the qualitative analyses using grounded theory (Straus & Corbin, 1997). We went through the entire dataset the old-fashioned way. Imagine mounds of index cards, colored pens, and post-it notes, laying across the table (and floor), along with multiple excel and other forms of computer files to check and cross check the data. If you've ever performed analyses in this manner, you can appreciate the fact that there's method in the madness! However, it's exceptionally time consuming. There were moments when we felt like this was a second Ph.D. dissertation. We carried on, knowing that we wanted to offer the company a final report, craft a case study for educational use, and write an empirical paper for publication. Most importantly, to finish what we started!

The results were stunning. We had actually been inside the organization, as they faced a compliance issue and, in the midst of a tumultuous period of growth and expansion, our themes reflected this protracted effort. Early themes included:

- CEO as father figure, trusted/admired leader, strong focus on optimism;
- tensions within the executive group;
- emergence of microclimates; and
- multiple perceptions of company identity stemming from different organizational groups (start-up, Research and Development, merger and acquisition hires).

While excited and thrilled, it was obvious that we now faced a new problem. The original dataset, with the twelve executives, had been collected over two years ago. The themes emanating from the participants in what was now referred to as Phase 1 of the project, now seemed dated and stale. If we used this data, we feared that our findings would not reflect the current perspectives of leadership to date.

After meeting with our project liaison at the company about this concern, we set up a meeting with Jim. Here, we shared an overview of our preliminary findings. Our initial themes identified some important observations, which corresponded directly with what the firm's internal culture surveys had found. There were also some additional nuances that added depth and rigour to their internal perceptions. Several of our key themes related to differences among the organizational members. Original members of the organization saw SP as an organic inclusive family place, one where participatory decision-making was expected and access to leadership was easy. As any organization grows, processes have to be put in place to organise operations.

The way SP began to impose these changes felt oppressive to some of the company's founding members. For new hires, or people brought in via merger and acquisitions, it felt like they were on the outside, somewhat excluded from Jim's inner circle. There were concerns that middle management did not consistently reflect SP's culture and there was much confusion about who owned decision-making authority. What's more, the Research and Development departmental function was being managed with a more command and control style, viewed in opposition to SP's inclusive culture. The upshot was a sense of emerging microclimates. While members ardently agreed "patients first" remained SP's primary value, frustrations were palpable, as growing pains were experienced throughout the organization.

During the meeting we worked together (the CEO, our SP project liaison, Lauren, and myself) to discuss the similarities and differences between the organization's internal observations and the external findings. Around several key areas, the company had already begun to augment their management training programme (re-emphasising SP's culture) and modifying their performance metrics. They also initiated some team development activities at the executive level and made some personnel changes at the top. Given our concern about the lapse in time, Jim agreed to another full round of interviews with the executive group (those still with the organization). This became Phase 3 of the project, and we labelled the method a "bookend" approach. Serendipitously, the executives provided a pre/post snapshot, with the center of the

organization revealing the process of change, as it was happening. What started out as a discovery piece about ethics in a small company, grew to become a case study about organizational identity, character, and organizational cultural development over time.

Research as an intervention

Although our motivation was to consider the inner workings of a start-up organization, field research comes with interactive aspects that have a life of their own. The Hawthorne effect refers to people changing their thought-action tendencies and behaviours, because of an awareness of being observed (cf. Wickström & Bendix, 2006). Our presence at SP signaled to organizational members that their thoughts and feelings were important and valued by company leaders. Our questions about ethical challenges, strengths, and experiences signaled that this topic was being taken seriously. The conversations we had with employees had the potential to spark deeper reflection about members' work experiences, which they may not have otherwise considered. Thus, our presence had the potential to influence the stories organizational members were telling themselves about their company, its culture and identity, and where it was heading.

Beyond the reciprocal relationship that can emerge between qualitative researcher and study participants, our research afforded SP a unique opportunity to compare their company culture data against our findings. In effect, we became another tool and resource that Jim could leverage to understand what was happening in the company. We also shed light on any discrepancies, adding significant contextual information to the thoughts, feelings, and perceptions of organizational members. When trying to gain research access to an organization, this is a very important benefit that research practitioners can offer leaders. If you can provide useful knowledge to the CEO, the concern "*What's in it for me?*" is addressed. Conducting research as an intervention opens the door to scholarly inquiry, providing a unique opportunity to conduct scholarship within a dynamic operation.

Report-out session

After all of the bumps in the road, detours, and hard work, the day finally came when we were ready to share our results with the interview participants, and to hear their reactions. We invited everyone who had participated in the study to an official Report Out Session. To effectively communicate our findings and to gather participants' feedback, we summarised our final themes and asked each participant to read and react

to them, prior to the meeting. Specifically, we wanted to know if they were consistent with how they felt about SP at the time of their interview. Recognising that the clock keeps ticking, and the organization continues to change over time, we also wanted to know if our themes still applied.

In total, we interviewed 59 employees (including the CEO). At the time of our report out, 22 of the participants were no longer with the company and three were unavailable. Of the 34 who were still employed at SP, 13 provided feedback prior to the meeting. Five more employees delivered their written feedback afterward; making a total of 18 feedback responses. Nineteen employee-participants attended the meeting. Jim welcomed us, and demonstrated a surprising amount of appreciation for our work at the outset of the meeting. Given he had pushed back on some of our findings, especially themes that related to discontentment, we really had no idea how this session would unfold. He was complimentary and expressed a belief that our report offered value beyond the company's annual culture survey.

Our plan was to briefly review the themes, then have attendees break out into small groups where they could discuss them and share their thoughts. They would identify what themes stood out and why, what themes were still accurate today, and then comment on anything we might have missed. Once the meeting was underway, it was clear that people wanted to stay together, to discuss matters as a whole. We were in a large room with tables forming a huge square, with several virtual attendees clearly visible by large screens. This was conducive for collaborative discourse and reflection. We asked everyone how they wanted to proceed, and it was unanimous that we should continue as a full group. So that's exactly what we did!

Going theme by theme to consider each theme's merit, everyone appeared to feel comfortable in expressing their views, often validating what we had presented, and other times providing us with a deeper level of understanding and/or specific examples. The participants offered useful hints about how to refine several themes, especially when certain terms became problematic. For example, "ethics" was replaced with "compliance." By working together, we teased out distinctions between ethical decisions versus compliance-related issues. To the outside observer, this may have seemed obvious. But in retrospect, it was a breakthrough moment in terms of establishing shared understanding. At the end of the meeting the attendees expressed gratitude for our time and the opportunity to discuss the findings. They seemed to be truly affirmed by our results in a way that was much more personal, descriptive, and

reassuring than via quantitative metric tools. Our findings told the story of SP in a way that deeply resonated with their personal experiences. It was an incredibly validating feeling for us as well.

The story so far

Our journey with SP has shown us the deep impact that founding members have on the culture and identity of a firm. A patriarchal leader that creates an experience of belonging and family in the company can successfully create excitement, engagement, and commitment among their staff, fostering a positive vision for what is possible. However, authenticity in communicating a realistic image of what is unfolding, as change occurs, is essential. While optimistic leadership inspires and energises employees, communicating through an overly-rosy lens may ring hollow to employees, prompting worry, and even skepticism and disappointment.

There may be limits to the influence that inspirational leaders can have on organizational culture during periods of explosive growth. An influx of many new perspectives within a short period of time bears an uncertain impact on a start-up organization. This may be especially true when newcomers have had previous experiences working for industry competitors, with vastly different organizational cultures. It may be difficult for them to check their expectations at the door when joining a company that seeks to be a positive deviant in its respective industry. When newcomers do not reflect quite the same values as the start-up's founding members, differences can create tensions that, if not addressed quickly, may generate an organic drift in the fabric of the company's identity. Young companies may be at considerably greater risk of cultural shifts in response to newcomers, than more established firms. These possibilities should be considered explicitly, particularly when deciding on a growth strategy employed via mergers and acquisitions.

Project takeaways

Applied, organizational 'real time' research is messy. It's imperfect, iterative, and dynamic. This project was practice in patience, endurance, and adaptability. Throughout our time working with SP there had been considerable growth, both within the company and for us as researchers. Many of the employee-participants that we interviewed, some who had been with SP since very the beginning, had left the company (37%) by the time the project concluded. New hires replaced some of

these people, bringing their own unique backgrounds, experiences, and expectations. Certainly, SP's turnover has had an impact on their organization. Elements of SP's identity and culture of origin will likely endure, but it will also continue to be transformed by the ebb and flow of the people who work there and via the new processes and procedures being introduced. Nothing is static, after all.

That's what makes research in practice so vibrant. It's ever-changing and never truly finished. Thus, the goal of our organizational development and scholarship activity should not be to unequivocally determine *what is*, but rather, to ascertain *what is possible*. If we allow ourselves to stay open to on-going learning, the process of inquiry will take us in new directions that provide unexpected insights.

Conclusions

Looking back, the myriad of surprises, challenges, and nuances of this project were numerous. But with dogged determination and resiliency we believe that the outcomes are more profound than the original plans would have ever produced.

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