

Impact case study (REF3)

Institution: Goldsmiths, University of London		
Unit of Assessment: 17, Business and Management Studies		
Title of case study: The impact of new knowledge of work design on organisational approaches to managing employee stress and interventions to improve the performance of elite professionals		
Period when the underpinning research was undertaken: 2001 – 2008		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Frank Bond	Senior Lecturer; Professor of Psychology and Management	2002 – present
David Bunce	Senior Lecturer	1995 – 2005
Sharon Loivette	Research Assistant	2005 –2006
Period when the claimed impact occurred: 2013 – 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact		
<p>Bond and colleagues' research has led to a greater understanding of core work design factors that underpin employee wellbeing and productivity. This work has influenced organisational approaches to managing employee stress, via policies, guidelines and resources developed and offered by the UK Health and Safety Executive (HSE). It has also been used within two major consultancy projects to inform interventions designed to enhance the performance of elite professionals, specifically: (1) the British Paralympic Association (BPA) Table Tennis (TT) team in 2015/16; and (2) European Space Agency (ESA) mission-critical personnel in 2017/18.</p>		
2. Underpinning research		
<p>General Context. Work-related stress has significant impacts on both employees and organisations. For employees, work-related stress can lead to psychological strain and eventually mental health problems; for organisations, it may lead to individuals taking more time off work (i.e., sickness absence), leaving their employment (i.e., turnover), failing to learn how to do their job effectively, and/or withdrawing their effort (i.e., decreased work performance). In 2000, the HSE—a government agency responsible for overseeing and regulating workplace health, safety and welfare—proposed to tackle this problem by promoting six specific areas of work design, that when properly managed would minimise the potential for work-related stress. They referred to their approach as their 'Stress Management Standards.' The six work design factors they focussed on were reasonable levels of job demand, high levels of job control, adequate support, good relationships, clearly defined roles and well-planned work changes. Whilst, at the time, there was good evidence for the impact of these six factors on employee mental health, <i>their impact on organisations was less clear</i>. For example, would enhancing these six factors lead to financial improvements by increasing work performance, reducing sickness absence, and lowering turnover? Scientifically demonstrating such business benefits was seen as crucial in ensuring that organisations readily and enthusiastically improved these work design factors. Therefore, it was important to understand two key issues: firstly, whether there was evidence that the six factors actually predicted beneficial business outcomes; and secondly, whether work redesign interventions that focused on improving the six factors lead to enhanced business outcomes.</p>		
<p>Predicting beneficial business outcomes. In 2003 and 2006, Bond and colleagues carried out two longitudinal studies examining how well one of these work design factors, job control,</p>		

predicted a range of important outcomes, including productivity benefits [R2, R3]. Job control is defined as people's ability to influence their work environment and is the factor in the HSE's Stress Management Standards for which there was the most convincing evidence base for having beneficial impacts. At the time of their publication, Bond and colleagues research on job control constituted two of the few methodologically rigorous studies on the benefits of that work design factor, as well as a number of the other five. Crucially, they carried out their research in business environments, ensuring real-world relevance and applicability of the findings. Interest in the research is reflected in citation rates [R2, 983 citations, R3, 258 citations]. Findings indicated that job control longitudinally predicted outcomes that resulted in business benefits, namely objectively rated performance and job-related learning, as well as outcomes related to employee wellbeing, specifically mental health and job satisfaction [R2, R3]. Concurrently, in 2004, Bond won a competitive tender from the HSE to conduct a meta-analysis on existing research that examined the business benefits for the HSE's six work design factors. This work confirmed that the six factors predicted better performance (self-report and objective), less absenteeism and less turnover intention, albeit to variable extents [R4]. This work was seminal in the development of an evidence base that would help organisations to identify and tackle factors that may impact employee productivity.

Enhancing beneficial business outcomes. To understand the efficacy of work redesign interventions for improving employee productivity and wellbeing, in 2001 and 2008 Bond and Bunce carried out, what was at the time, only the second and third work redesign interventions that used a longitudinal quasi-experimental design (considered to be the 'gold-standard' of empirical, organisational intervention research). The two studies demonstrated that redesigning employees' work to increase their job control (e.g., deciding the time of day and order in which they could choose to do some tasks), led both to significant improvements in their productivity (i.e., absence rate declines and improved, self-rated performance), and their mental health [R1, R5]. Importantly, findings also showed, for the first time, that these improvements occurred because they increased people's perceptions of job control (i.e., this was the psychological process of change), which at that time was a widely held hypothesis, but one that had insufficient empirical backing. This research also garnered significant attention [R1, 428 citations, R5, 288 citations] and encouraged the development of work redesign interventions as a means of targeting core work environment factors that would lead to marked improvements in employee productivity and wellbeing and resulted in funding, commissions and consultancy with a series of high-profile organisations, including Halifax, JP Morgan, UK Sport, the BBC, Goldman Sachs, the ESA, and Austrian Space Forum (ASF).

3. References to the research

R1. Bond, F. W., & Bunce, D. (2001). Job control mediates change in a work reorganization intervention for stress reduction. *Journal of Occupational Health Psychology*, 6(4), 290.

R2. Bond, F. W., & Bunce, D. (2003). The role of acceptance and job control in mental health, job satisfaction, and work performance. *Journal of Applied Psychology*, 88(6), 1057.

R3. Bond, F. W., & Flaxman, P. E. (2006). The ability of psychological flexibility and job control to predict learning, job performance, and mental health. *Journal of Organizational Behavior Management*, 26(1-2), 113-130.

R4. Bond, F. W., Flaxman, P. E., & Olivette, S. (2006). *A business case for the management standards for stress*. London: HSE.

R5. Bond, F. W., Flaxman, P. E., & Bunce, D. (2008). The influence of psychological flexibility on work redesign: Mediated moderation of a work reorganization intervention. *Journal of Applied Psychology*, 93(3), 645.

*All outputs available on request

4. Details of the impact

Bond's rigorous research demonstrated that core work design factors consistently predicted employee wellbeing and productivity [R2, R3, R4]. The HSE used this research to develop policies, guidelines and resources relating to work-related stress, which, in turn, have gone on to impact organisational approaches to managing employee stress throughout the REF period, August 2013-2020. Bond's research also demonstrated the ubiquitous wellbeing and productivity benefits of enhancing one particular work design factor, job control [R1, R5]. Two consultancy projects led by Bond used this knowledge to facilitate improved leadership and organisational change, respectively, in order to enhance the performance of two sets of elite professionals. Specifically, these projects focussed on enhancing: (1) the medal take of the BPA TT team in 2015/16; and (2) mission-critical operations in ESA personnel in 2017/18.

Impact 1. Impacting organisational approaches to managing employee stress. Bond and colleagues' research contributed to the development of the HSE's policies, guidelines and resources relating to work-related stress, with their research report in 2006, *A business case for the management standards for stress* [R4], being particularly influential. The HSE's former Senior Occupational Psychologist, Stress Priority Programme Team, Steve Lee, states that Bond's "evidence-based approach...made a significant contribution to the work being taken forward by the Health and Safety Executive." Lee continues: "The development of the business case was essential for being able to show return-on-investment and provided an economic argument that reinforced, and made more palatable, an employer's duty to assess risk. This work enabled the regulator to galvanise its position." The HSE's work has since gone on to impact organisational approaches to managing employee stress and according to Lee "remains the benchmark for assessing organisational performance." Lee continues: "I now work as the Head of Health and Wellbeing within the NHS, overseeing the health and wellbeing offer to over 1.3 million staff. The work that Goldsmiths undertook to produce, especially around the adoption of preventative approach to health and wellbeing, is now influencing the agenda within Europe's largest employer." [S1]. Over this REF period, August 2013-2020, the HSE continue to provide opportunities for organisations to implement their approach in order to better manage employee stress and in 2017 launched a stress microsite to provide advice and resources to that end. Bond's research continues to inform the HSE's 'business case' for promoting the Stress Management Standards, as evidenced in Appendix 1: 'Business Case Preparation' of their March 2019 Workbook; '*Tackling Work-Related Stress Using the Management Standards Approach*,' (March 2019) [S2].

Impact 2. Increasing medal take of the BPA TT team through enhancing autonomy/control in athletes. Paralympic TT is professionally played in over 100 countries and is the third largest Paralympic Sport in terms of the number of professional athletes. In the 2012 Summer Paralympic Games (held in London), the British team achieved a total of 3 medals (having won none in 2009). Keen to improve the number of medals won (i.e., the 'medal take') by British Paralympic teams, UK Sport invested in measures to improve the world ranking of those teams in 2015 and to increase their medal take at the 2016 Paralympics in Rio.

Since 2010, Bond has consulted with Team GB and ParalympicsGB to train sport psychologists who worked primarily with these elite athletes. One of these psychologists, Dr Tim Pitt, former Performance Psychologist at English Institute of Sport (EIS), recommended Bond, and his evidence-based approach, expertise and holistic methods to the BPA TT Head Coach, Greg Baker. Baker had won a financial award from UK Sport to develop effective leadership skills and to empower an effective dynamic within his team. This award reflected UK Sport Performance Director (2009-present) Gorazd Vecko's ambition to build a "positive and dynamic team environment designed to enable players to realise their potential and achieve at their highest level" (BPA TT team official website, Sept 2020). With his award, Baker hired Bond to apply his research and practical skills surrounding improving the performance of workers and athletes by increasing their autonomy/control, which started by enhancing effective leadership. Bond began working with the BPA TT team in April 2015, and his worksite intervention involved 1:1 and group sessions with coaches to train them in Transformational Leadership (TL) techniques that were enhanced by Bond's own research projects. A core aim of TL is to train leaders on how to

provide their workers/athletes with more autonomy/control over their work/training, and to teach leaders ways they can achieve this aim, so as to enhance worker/athlete motivation and commitment.

Bond's TL programme is directly cited in Sections 2 and 3 of Baker's report on the project and Baker went on to reflect on the success of the programme, highlighting an expected shift to a more involved, autonomous and participative decision-making leadership culture. Specifically, Baker wrote that through Bond's approach: "Passive-avoidant leadership significantly reduced...which is a positive change, with the athletes and support staff noticing the coaches asking more open questions than telling, being more involved when needed, making decisions when needed, and implementing positive changes where applicable." Furthermore, Baker wrote that through Bond's approach: "coaches were trained as to how to allow athletes to have their own voice in feedback and within their training programmes, and these skills were used in regular one to one meetings prevented coaches from avoiding or overly controlling these conversations" [S3].

Bond's intervention ultimately contributed to Vecko's ambition for the BPA's TT Team. In the 2015 World Championships the BPA TT team exceeded UK Sport's target and placed joint third in the world (up from 13 in 2012). Twelve players qualified for the 2016 Paralympics (up from 9 in 2012), and the team went on to win 2 gold and 1 bronze medals. The impact of Bond's intervention in contributing to this outcome is corroborated by Pitt who stated that: "The TT team ultimately exceeded expectations" and "the training that Bond delivered which improved the relationship between the coaches and the athletes was part of this journey." [S4].

Impact 3. Enhancing mission-critical operations in ESA personnel through increasing job control. In 2018, two teams at the ESA's Astronaut Training Centre in Cologne (Spacecraft Communicators, who communicate with the astronauts on-board the International Space Station (ISS); and Bio-Medical Engineers, who represent the Medical Operations community in the Flight Control Team) underwent an organisational restructure. Having heard about Bond's research at the Association for Contextual Behavioral Science (ACBS) conference in Seville (2017), Antonio Fortunato, Deputy Lead of the Astronaut Operations Team from ESA, approached Bond to see if he could help them facilitate the integration of their highly skilled mission-critical personnel into one division.

The proposed restructure at ESA, including the need to integrate mission critical teams, left employees feeling uneasy, to the extent that some were leaving the organisation as a result of the proposed changes. Bond and colleagues worked with Fortunato, and key employees at ESA, to design and manage an organisational change strategy that facilitated employees' understanding for the need for this organisational restructure, and to identify and mitigate perceived safety concerns. Fortunato states that it was Bond's "evidence-based approach to enhancing job control that led us to better define role specifications, management skills, job discretion abilities, and helped us to integrate the new structures, teams, and processes." According to Fortunato this successful outcome was not at all assured, and he was particularly pleased to notice how "restructured teams interacted more effectively and creatively to ensure our astronaut's health, safety, and efficient work" [S5].

ESA personnel reported that ISS mission critical operations improved as a result of Bond's restructured strategies and Fortunato asserts that this occurred because of the enhanced job control experienced by the mission-critical personnel. Firstly, this job control allowed staff opportunities to make decisions based on their expert knowledge, skills and abilities. Fortunato states "The impact of the restructure was most salient as the team's new sense of autonomy allowed them to effectively define the required changes in processes and procedures, which translated in meaningful proposals to the management team." Secondly, this job control allowed staff to communicate more effectively with the astronauts. Fortunato continues "In addition, given this heightened sense of autonomy and agency, they found that they were more receptive to, and better able to probe, the moods of astronauts and communicate with them more effectively

and efficiently, providing a more conducive environment for astronauts to conduct effective operations in the complex technical environment of the International Space Station” [S5]

Due to the success of the ESA project and evidencing the value that the ESA placed upon Bond’s worksite intervention, ESA and their partner agencies (e.g., the Austrian Space Forum, 2019/20) commissioned Bond to undertake further consultancy work.

5. Sources to corroborate the impact

S1. Confirmation on Bond’s impact on the HSE’s Steering Committee for the Management Standards for Stress and the impact of the HSE on organisational approaches to managing employee stress: Testimonial, Steve Lee, former Senior Occupational Psychologist, HSE.

S2. Evidence of Bond’s ongoing impact on HSE approach to promoting the Stress Management Standards: See HSE Management Standards Workbook, [Tackling Work-Related Stress Using the Management Standards Approach](#), (March 2019) p. 36

S3. Evidence of the impact of Bond’s leadership intervention with coaches in the BPA TT Team; Report by Greg Baker, BPA’s TT Organisational Behaviour Programme, p. 14-19

S4. Confirmation on Bond’s impact on the BPA TT medal take: Testimonial, Dr Tim Pitt, former Performance Psychologist at English Institute of Sport.

S5. Confirmation on the impact of Bond’s strategies for restructure at the ESA: Testimonial, Antonio Fortunato, Deputy Lead of the Astronaut Operations Team at the European Space Agency (Cologne, Germany).