

How do we measure the
'workload' on our people?
What construction
can learn from the
measurable and planned
preventive approach
of sport science towards health,
wellbeing, and human performance.



Graham Brierley, 2024

The UK Construction Industry has a poor reputation, and reports over a twenty-five-year period share common themes contributing to a fragmented, adversarial, and challenging environment. This takes its toll on those working across the industry. Whilst the recognition of the importance of health and wellbeing continues to improve, support is often a reactive intervention only once an individual's physical, emotional, or mental health has been compromised.

Research by the Chartered Institute of Building (CIOB) in 2019 and the Construction Industry Training Board (CITB) in 2021 describe determinates of poor health and wellbeing in the UK Construction Industry. However, research by these bodies found little evidence of programs measuring employee health and wellbeing, or the effectiveness of existing interventions. Another gap included a lack of consistent health and wellbeing key performance indicators. To try and address these gaps in measurement of health and wellbeing, this dissertation explores an alternate industry, sport, where balancing high performance alongside health and wellbeing is fundamental to taking part at elite level. The evidence base suggests sport science can provide significant insights for fields, such as construction, which are characterised by high-pressure environments, and where employee health and wellbeing is paramount to deliver on outcomes.

The research explores how sports science underpins ‘athlete workload monitoring’, a measurable and planned preventative approach towards health and wellbeing. Parallels are drawn with construction, leading to the development of a proposed translation ‘construction workload monitoring’. The proposal brings together converging themes from research by CIOB and CITB with established practises in sport science.

The proposal was reviewed in three parts. Part one, provides context by comparing CIOB and CITB health and wellbeing research findings with existing data from a UK Tier One Main Contractor, (the Contractor). Part two, provides critical appraisal of the proposed translation from interviews with subject matter experts from health and wellbeing, sport, and construction. Part three, provides reaction to the proposed translation from a survey of staff at the Contractor.

A key finding from existing data at the Contractors was that younger age groups had scored lower to health and wellbeing questions in a recent staff engagement survey. However, survey feedback across the converging themes of the proposed translation was consistent for all age groups. Whilst survey feedback supported the determinates described by CIOB

and CITB, it highlighted key areas to recognise independently for effective measurement of health and wellbeing, and additional areas such as the impact of meetings, working relationships, and physical workplace. Subject matter experts shared valuable insights on which measures to prioritise, the frequency of measurement and the importance of key relationships.

Participants shared a positive reaction to the proposed translation. This research recommends this collective feedback be included in its development, alongside further research in the form of live testing. This testing should set out to assess its potential to support a planned preventative approach to health and wellbeing in construction.