Representations and operations: parts of the problem and the solution: Comments on J.C.F. de Winter: Controversy in human factors constructs and the explosive use of the NASA TLX: a measurement perspective

Abstract: In his contribution on the usage of NASA TLX, De Winter highlights two major issues in psychology, specifically in the area of human factors and ergonomics (HFE). The first issue deals with the scientific status of commonly used concepts such as workload or situation awareness. The second is the self-concept of our discipline regarding measurement theory and practice. De Winter proposes a solution to the former by taking an extreme position on the latter. We comment on the main theses of his analysis and try to put into perspective some of his conclusions that seem, to us, to be interesting but somewhat premature.