

Chapter 5

Considerations of the Mental Workload in Socio–Technical Systems in the Manufacturing Industry: A Literature Review

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ABSTRACT

As cognitive tasks have displaced physical tasks in today's manufacturing industry, this sector can demand high levels of mental workload from workers. In certain situations, there is a high cognitive load, which affects operators reducing their attention to the task and causing them mental fatigue and distractions, resulting in errors that generate economic costs or even injuries to workers. This literature review aims to provide a comprehensive understanding the use of mental workload in the manufacturing sector. The methodology consisted of conducting a search in four databases. In the search, a combination of keywords was used, classifying each journal according to the mental workload evaluation means, the type of evaluation, and the area of application. Articles not focusing on the manufacturing area were discarded. Of the total of 3839 articles found, 12 have been selected. Regarding the methods used for mental load assessment, the analytic techniques were found to be the most frequently used.

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