

The moderating role of just-in-time on sociotechnical practices' effect over quality and workers' health

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Abstract

Sociotechnical (ST) theory emphasizes the notion that the design and performance of new systems can be improved, and can only work satisfactorily within an organization if the social and the technical aspects are brought together and treated as interdependent aspects of a work system. The implementation of lean manufacturing (LM) principles and practices has become popular, despite increasing demand on the current and emerging workforce to achieve higher levels of quality and flexibility with lower costs. Exploratory studies that investigate how LM practices influence the effect of ST practices on performance are still scarce, and a holistic view of such a relationship is needed. In this context, this study aims at verifying the moderating effect of just-in-time (JIT) practices on the relationship between ST practices and the performance of quality and workers' health. We carried out a survey with 144 different companies from Southern Brazil that are undergoing a lean implementation. Results indicate that ST practices have a positive significant relationship with such performance, and the concurrent adoption of JIT does not undermine quality and workers' health.

keywords

Just-in-time (JIT), Quality, Sociotechnical (ST) practices, Workers' health