

# Employee well-being: Task Feedback

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## Introduction

The fourth industrial revolution was triggered by new and disruptive intelligence and information technologies. These new technologies enable ever-increasing efficiency in manufacturing through the use of AI, AR, VR, Big Data and analytics, blockchain, cloud, advanced robotic assistance and simulation [1]. Due to technological development, manufacturing processes are becoming increasingly complex, placing new kinds of demands on companies management practices and processes, as well as on employees competencies and skills [3], [4], [5]. Manufacturing companies that have a high level of technological competence can take advantage of and benefit from these technological developments, while companies with a lower level of competence are unlikely to be successful in competition [2]. This inevitably has an impact on the company and on the health and well-being of its employees. Therefore, it is necessary to focus on the well-being of employees. Psychological well-being (WB) encompasses the overall assessment of an employee's life and affective state and is considered a key aspect of individual and group health [6]. Well-being is important for the sustainable growth of both employees and employers. Positive emotions, good feelings, motivation and recognition at work benefit employers by improving employee performance, engagement and retention. Studies have shown that intuitive task feedback plays an important role in influencing employee performance and well-being [7]. However, the way feedback influences task performance and well-being is not yet fully understood.

As Locke, Cartledge, and Knerr [8] argued, for those who are satisfied with their past performance, they will continue to perform at their current level, while those who are dissatisfied will change their performance. Based on this argument, feedback may contribute to enhancing task performance if the subject believes they are not progressing satisfactorily. In general, subjects will have a high expectation of reaching the goal if they feel that they are close to it. Hence, we include two ways of independent variable and measuring the well-being on the basics of the dependent variable e.g. motivation and goal commitment.

In this paper, we discuss different types of feedback that affect employee well-being when working with an intelligent assistant in production. Well-being is measured using the dependent variables of motivation and goal commitment. The characteristics of feedback are presented using an activity ring plot. (Independent variable: work completed - IV1 and work remaining - IV2). As feedback parameters we consider the time spent on the task, the error rate of the task, the quality of the task, the number of completed assemblies.

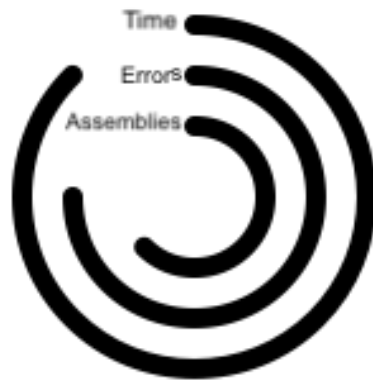


Figure 1: Ring plot for Feedback (Independent Variable)

## Hypothesis

The change in any of the feedback parameters (Independent Variable) lead to increases or decreases the Motivation and Goal Commitment (dependent variable).

Change in IV is directly proportional to the dependent variable.

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