

Effect of mental games as cognitive ergonomic intervention on subjective workload and objective productivity of call centre employees

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THE WORK IN CONTEXT

Call centre work is tedious and stressful. The nature of call centre work lacks the flexibility to bring variety of tasks in a typical workflow of an employee's work shift. The stringent time limitations on the call monitoring key performance indicators makes work challenging for employees. A previous study which highlighted the ergonomic problems that call centre employees face, led to further investigation in this area. This study was an intervention study which rose from the interest in finding ways to make the work of call centre employees more enjoyable to enhance employee wellbeing and efficiency. This study attempted to alter the design of the workflow of the employees by placing mental games (such as crosswords, jigsaw puzzles, hangman and board games) in the break areas of employees. Employees were encouraged to play the games in their breaks. Because this study was based on mental games as an intervention (not physical), and involved employee's perceptions, hence its association with cognitive ergonomics. The game playing was kept within the entitled breaks, avoiding other times, to bring minimum disruption to the normal workflow. The aim of the study was to mentally engage employees in mental games rather than work related thoughts. It was assumed that this kind of short but enjoyable disengagement might reset the mind of the employee and enhance wellbeing when they reassume their work after the break. This wellbeing in turn might affect outcomes such as objective productivity and subjective workload.

KEYWORDS

Mental games, subjective workload, objective productivity

A brief outline of the work carried out

The interventions were carried out using the quasi-experimental design. 32 call centre employees took part in this intervention. The employees were divided into a comparison group and an interventional group. The time frame for the intervention was four weeks. The first week served as baseline, followed by the three weeks of the interventional game playing. The employees used the NASA raw Task Load Index scale to record their subjective workload at the end of the day. The objective productivity metric (average speed of answer) was retrieved from the system by the call centre manager. These were then recorded, each day, for four weeks.

Findings/solutions (the outcome)

Analysis of variance and percentage comparisons were used to observe the variations in objective productivity and subjective workload scores.

- Variations in subjective workload

It was found that subjective workload decreases at day 4 and 5 of each week for the intervention group. Rather than game playing, an approaching weekend was the reason why participants thought workload decreased at day 4 and 5 of the workweek. It was interesting to find that subjective workload decreased in the middle of the intervention. According to the players, this was because it was hard for the players to accept games in the beginning, hence the decrease in workload in the middle of the intervention rather in the beginning. Then workload increased again at the end because employees lost interest in the intervention.

- Variations in objective productivity

Regarding productivity, it is highest in the mid days of each week of the intervention group. According to participants, productivity increased in the middle of each week because that is the time when work picks up momentum.

It reaches its highest at the end of the intervention. According to participants, productivity increased at the end because employees knew that the intervention is coming to an end, focus shifted from fun to work.

Impact

This research is important from two perspectives. On one hand it highlights employee's behaviour and perception regarding game playing during an intervention and its impact on outcomes being studied. It also highlights how work can be designed to bring positive changes in both employees and organisations.