

Call Centre Employee's Perception of Mental Games as Cognitive Ergonomic Break Strategy to Enhance Mental Well-Being

Silvia Ahmed*

Department of Ergonomics, University of Nottingham, Nottingham, United Kingdom

ABSTRACT

Mental games play a pivotal role in stimulating the mind and mental well-being of an individual. The role of game playing in workplace has recently been studied. Since research on mental activity at the workplace is scant; this study investigates the perceptions of call centre workers on whether mental game playing in breaks leads to better mental well-being at work. Employees concluded that introducing mental games as a work break strategy can make the workplace happier.

Keywords: Mental games; Mental fatigue; Cognitive ergonomics

INTRODUCTION

Games have been played since times unknown and have been associated with fun [1]. Recently the idea of game playing has been extended to workplace [2-4] and it has helped improve well-being and performance in people belonging to various walks of life [2,5].

Studies that have researched the effects of play at work exist in the literature [6,7]. These studies provide an overview of the existing literature, while there also has been an attempt to create a theory of play and creativity [8].

Games have been defined by different authors in different ways. Wixon [9] describes a game as an activity for the sake of fun, based on participation. Suits, a Canadian philosopher has brought forward the most popular definition of game playing [10].

To play a game is to engage in activity directed towards bringing about a specific state of affairs, using only means permitted by the rules, where the rules prohibit more efficient in favour of less efficient means, and where such rules are accepted just because they make possible such activity.

Cognitive ergonomics and its links to Human factors

Ergonomics has a well-known contribution in improving the design of work and workplaces; This includes design of cockpits,

improvements in radio communication and better supply of oxygen during world war two [11,12].

'Cognitive ergonomics examines how work affects people relative to their attention distribution, decision making, and cognitive aspects of mental load, stress and human errors' [13].

According to Wickens, et al. [14], Human factors involve the study of factors and development of tools that facilitate the achievement of the following goals:

- Enhances performance
- Increases safety
- Increases user satisfaction

In this case, performance is either increase in productivity or reduction in errors. From this definition, it is evident that human factors and cognitive ergonomics at least have the same goals, which means enhancing performance, well-being/safety and user satisfaction; which very much links them together.

WELL-BEING AT WORK AND GAME PLAYING

Well-being

Well-being has been defined as 'reflecting a state of being healthy, self-fulfilled, secure, having enough resources to enjoy a decent life and time to have a satisfactory private life'[15]. Well-

Correspondence to: Silvia Ahmed, Department of Ergonomics, University of Nottingham, Nottingham, United Kingdom, Tel: 01509226916; E-mail: S.Ahmed2@lboro.ac.uk

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being is a subset of quality of life while health is a subset of well-being [16-18]. Although well-being has been used as an indicator of general state of good mental and physical wellness, it is often replaced with terms, as quality of life, happiness or overall health because of its association with all the mentioned terms.

Mental fatigue

An aspect of mental well-being is mental fatigue. Increase in fatigue and stress has an overall effect on well-being [19,20].

International organization for standardization defines mental fatigue as 'temporary impairment of mental and physical functional efficiency, depending on the intensity, duration, and temporal pattern of the preceding **mental strain**' [21] and describes other fatigue like states in terms of boredom, mental satiation and reduction in vigilance. These are fatigue like states and not fatigue, however, this study takes all these terms under the same broader category of fatigue.

There are mental and physical implications on a human body and mind when it is fatigued, it reduces the heartbeat rate, affects physical abilities and reduces mental concentration which increases risk propensity for making errors [22]. A study in the Stockholm vicinity concluded that fatigue prevailed amongst workers due to immersion in work, little social support, gender bias, being bossy and increasing age levels [23].

The need for breaks at workplace and game playing

There are several alternatives to reduce fatigue on job, but breaks are the usual alternative that workers follow [24,25].

In a research aimed at promoting health practices at workplace, a qualitative study [26], found the benefits of a 15-minute physical break as an intervention at three work sites. The benefits of the intervention included i) Reduced stress and promoted enjoyment, ii) Increased health awareness and facilitated behaviour change iii) Enhanced workplace social interaction.

When talking about parts of the brain involved in recovery and work, activities in the putamen and pre-frontal regions of the brain have been observed [27]. It is assumed that game playing at work will also stimulate similar brain areas and have similar benefits.

Game playing experience involves steps identified by Sonnentag and Fritz [28] for successful recovery process. These are:

- Psychological detachment from work
- Relaxation: Returning to baseline levels of psychological and physiological arousal
- Mastery experiences (building up internal resources for example new competencies and self-efficacy) through challenging activities during off job time and
- Control (Enhancement in psychological health by using personal control during leisure time)

CONCLUSION

Several studies now advocate the use of workplace interventions, yet the ideal workplace intervention is still unknown and

provides basis for further research. This study suggests that it is the nature of the job which makes it sedentary and not the number of the breaks. Employees showed clear signs of tiredness and repetition of work tasks. They have welcomed game playing as a cognitive ergonomic intervention in their work breaks, for the purpose of mental well-being.

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