



International Journal of Home Science

ISSN: 2395-7476
IJHS 2017; 3(1): 380-383
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www.homesciencejournal.com
Received: 19-11-2016
Accepted: 20-12-2016

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Mental fatigue among working and non-working married women

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Abstract

Cognitive fatigue is a special kind of fatigue, or tiredness. It is a common problem that can happen after a mild, moderate or severe brain injury. When a child has cognitive fatigue, it means their brain has to work harder to concentrate on tasks it used to be able to do much more easily before the brain injury.

The present study is aimed to explore the level of mental fatigue among working and non-working married women. The study has been done in Lucknow city. Sample of the study consists of 120 working and non-working married women (working married women =60, non-working married women =60). In the range between the 25-45 years. Random multistage sampling techniques has been used in this study. Mental fatigue scale (MFS) gave to the participant to measure fatigue. Mental fatigue scale developed by Rodham 2001. Analysis of data was done by PAS software. The result showed that working married women have more mental fatigue problem in their compare to non-working married women.

Keywords: mental fatigue of working and non-working married women

Introduction

Fatigue is defined as a condition or phenomenon of declined ability and efficiency of mental and/or physical activities caused by excessive mental and/or physical activities, or illness; Fatigue is often accompanied by peculiar sense of discomfort, desire to rest, and reduced motivation, referred to as a fatigue sensation (translated from Japanese into English by M.T.) Today, more than half of the general adult Population in Japan complains of fatigue. Mental fatigue manifests as a reduced efficiency of cognitive workload and has become one of the most significant causes of accidents in modern society. Therefore, it is important to clarify the neural mechanisms of mental fatigue, in particular those mechanisms related to the impaired cognitive performance, for the future development of overcoming strategies of mental fatigue.

Fatigue

'Tired all the time' is a popular phrase given by patients to their family doctors. Tiredness or fatigue is a common problem. Often, it is not a medical issue but one that can be reversed by a change of lifestyle.

Tiredness can negatively impact performance at work, or have an adverse effect on family life and social relationships.

Fatigue has a reputation as a vague and difficult problem for doctors to investigate, a 'heart sink' problem, and many people with fatigue do not report it to their doctor.² Primary care physicians who are conscious of this, and the ongoing patient-physician relationship, will take the problem seriously and attempt to determine an underlying cause.

Simply-put, Fatigue is the feeling of being tired. It is generally different from the sleepy feeling of drowsiness, or from the psychological feeling of apathy, although these can both accompany fatigue.

Other terms to describe fatigue include:

- Reduced or no energy
- Physical or mental exhaustion
- Lack of motivation.

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Symptoms of fatigue

Symptoms of fatigue tend to build, slowly worsening, until you feel like a hamster stuck on an exercise wheel. Fatigue can show itself in many ways. For many women these symptoms ebb and flow with their monthly cycle. But in real fatigue they last for weeks or more. Eventually the symptoms are nearly constant. They include:

- Feelings of exhaustion (mental and physical)
- Being tired in the morning, even after a full night's sleep
- Feeling rundown or overwhelmed
- Inability to bounce back or recover from illness or stress
- Headaches
- Joint pain
- Depressed mood, loss of energy, or "blah-ness"
- Poor short-term memory, confusion, irritability
- Strong food cravings (particularly for sweets or other carbs)
- Dependence on caffeine, sugar or alcohol, especially in the afternoon and early evening.

Fatigue is a common experience - we all feel tired occasionally-but this is not usually due to disease. There are numerous medical and non-medical causes of fatigue, including personal dietary and lifestyle habits.

Some groups are more likely than others to suffer from fatigue, with women more often reporting feelings of fatigue. People who live in poverty, and/or who live with mental or physical illness are also more likely to present with fatigue.

Many factors contribute to fatigue, either alone or in combination, demonstrating just how varied the causes can be:

- Psychological and psychosocial - e.g., stress, anxiety and depression
- Physical - e.g., anemia, diabetes, glandular fever and cancer
- Physiological - e.g., pregnancy, breastfeeding, inadequate rest or sleep, and excessive exercise.

Fatigue that may be considered normal, i.e. not a medical problem, include tiredness as a result of:

- Physical activity
- Emotional stress
- Boredom
- Lack of sleep.

Objective

To assess the impact of mental fatigue among working and non-working women.

Review of literature

There are only few studies that explicitly investigated the effects of mental fatigue from an executive control perspective. One set of studies investigated the effects of fatigue on response planning and task switching, both being important aspects of executive control. Used behavioural and EEG-data to study the effects of time-on-task (i.e., mental fatigue) on planning and task switching. The EEG-data of their study showed that with increasing time-on-task there was a reduced involvement of those brain areas that are associated with the exertion of executive control (the frontal lobes). This result supported their initial expectations on the effects of mental fatigue. In addition fatigue led to an increased number of errors and an increase in reaction time. However, the study did not reveal differential effects of fatigue on switch and non-switch trials, nor did it show effects of fatigue on response planning. Thus, at the behavioural level, a specific effect of

mental fatigue on task switching (executive control) was not found.

De Jong (2000)^[8] also studied the effects of fatigue (time-on-task) on task switching and response planning. He investigated whether reaction time costs of task switching were due to periods in which participants did not engage in response planning even though they had the opportunity to do so. Moreover, he assessed whether fatigue influenced the number of periods in which participants did not seem to engage in planning.

Thus, even though fatigue literature suggests that fatigue affects high-level information processing, the studies by De Jong (2000)^[8] did not unambiguously showed an effect of mental fatigue on executive control. There are several possible explanations. In the studies by Lorist *et al.* and de Jong, mental fatigue was operationalized as the time spent on the same task. Thus, after some time, participants in the task switching studies (De Jong, 2000)^[8] might have had so much practice that some of the processes of task switching could have been executed automatically. However, executive control on behaviour is particularly important when a task is novel (Dias, Robbins, & Roberts, 1997; Duncan *et al.*, 1996)^[13, 17]. For example, Dias *et al.* (1997)^[13] found that inhibition problems in task switching were mainly found in situations where a switch was novel and not well practiced. Hence, with well-practiced participants it would be much more difficult to detect effects of fatigue on executive control processes. Moreover, in a task-switching paradigm, participants are told exactly what to do, which reduces the need to develop own strategies and to engage in complex problem solving. However, developing strategies in a complex task and reacting to changes in task circumstances are situations that typically put heavy demands on executive control (Duncan *et al.*, 1996)^[17] and thus these types of behaviour may be vulnerable when mentally fatigued. In the current study we investigated the effects of mental fatigue with a different design. First we induced fatigue by using tasks that are different from the experimental tasks. Thus, we measured the effects of mental fatigue between-tasks instead of within-tasks. The advantage of this approach is that the tasks after the fatigue manipulation were novel and can be expected to put heavy demands on executive control. Second, we used tasks that are not strongly structured but that required the participants to develop their own strategies and to adequately process feedback. Specifically, we expect that in such complex tasks, fatigued people show deficits in two major aspects of problem solving that are considered hallmarks of executive control, namely, flexibility and planning. A deficit in flexibility often manifest itself in behaviour as a tendency to perseverate or to hold on to an ineffective strategy, whereas deficits in planning can be observed by a tendency to initiate actions without considering a strategy beforehand, by ineffective plans, or by increased planning time (Oaksford, Frances, Grainger, & Williams, 1996)^[17]. To test whether fatigue leads to these specific changes in task behaviour we used tasks that have been used extensively in executive control research, namely, the Wisconsin Card Sorting Test (WCST) and the Tower of London (TOL).

Methodology

The present study entitle "Mental Fatigue among working and non-working married women." Was conducted on a sample comprising of working and non-working married women. Mental Fatigue scale developed by was selected to conduct the study on the selected sample.

Locale of the study

The study was conducted in Lucknow district which is purposively selected to conducted the study, as it is convenient for the researcher to conduct the study.

Sampling procedure

Multistage random sampling Technique was used to select the sample.

Sample size

The derived Sample Size of 120 respondents were equally divided into working and non-working women. The sample size was derived using the formula, $n=22$

Tools and techniques used

Mental Fatigue scale developed by was used to measure mental fatigue of the married, unmarried women.

Methods of data collection

The data for the present research was collected personality through interview method. A pilot study was conducted on 10% of the sample to ensure the validity of the sample and data collection instrument. After the pilot study requisite change in the schedule were made visits were made to the selected areas in order to establish a rapport and to ensure full cooperation from the identified sample.

Data processing and Analysis

The data was procesed and tabulated and further relevant statistied technique was used for data analysis.

Results and discussion

Assessment of mental fatigue across working and non-working women

S. no.	Statement	Working		Non-working		T	P
		Mean	S.D	Mean	S.D		
1.	Fatigue	.77	.745	.67	.572	.825	.105
2.	Lack of initiative	.85	.899	.98	.873	.824	.399
3.	Mental fatigue	.98	.873	1.07	.821	.539	.622
4.	Mental recovery	1.13	.853	1.03	.780	.670	.290
5.	Concentration difficulties	.98	.965	.92	1.046	.670	.290
6.	Memory problems	.82	.948	.95	.928	.779	.534
7.	Slowness of thinking	.75	.876	1.05	.852	1.902	.247
8.	Sensitivity to stress	1.25	1.035	.88	.976	1.996	.295
9.	Increased tendency to become emotional	1.10	.915	1.02	.833	.522	.169
10.	Irritability or "a short fuse"	1.30	.944	1.23	.909	.394	.533
11.	Sensitivity to light	1.23	.998	1.13	.911	.573	.363
12.	Sensitivity to noise	.65	.899	.58	.850	.418	.451
13.	Decreased sleep at night	.98	1.017	.95	.891	.191	.154

The family structure will have a great impact on the mental fatigue of working women, as joint families will be able provide efficient support system in comparison to nuclear families. It is elident from the data significantly high differences were found among working belonging to nuclear and joint families. The working women living in nuclear families do indicated more fatigue in comparison to the working women of joint families. Which clearly indicates that

the support system of joint family is much better than nuclear families. It can also be noted that other parameters denoting are mental fatigue are found to be high among working women to nuclear families. Concentration difficulties, memory problems, slowness of thinking, sensitivity to stress, increased tendency to become emotional, irritability and decreased sleep were found to be more among the working and non-working women

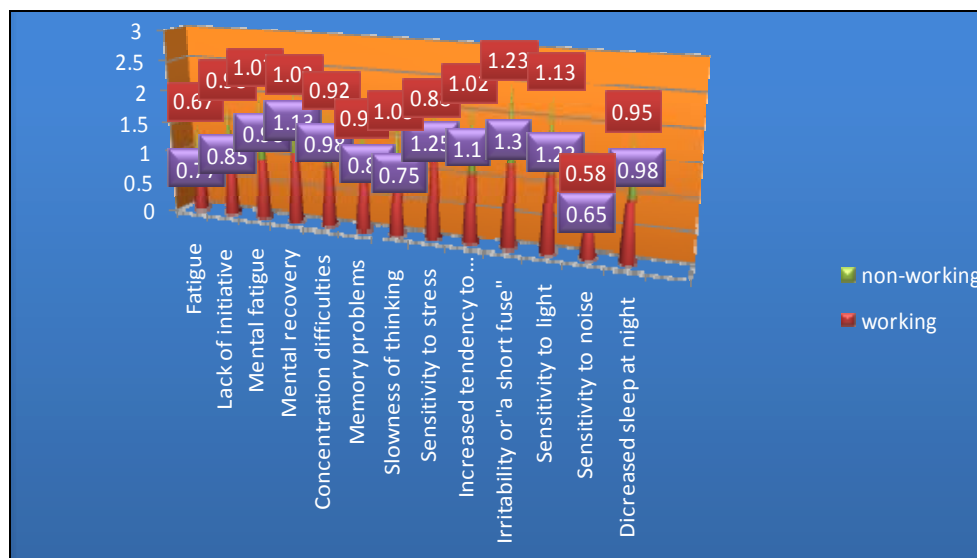


Fig 4.2: distribution of respondent according to Non-working women

The data clearly indicate that no significant differences exists in mental fatigue among working and non-working women.

But it may be noted that mental recovery is faster among working women in comparison to non-working women. It can

also be noted that fatigue, concentration, memory problem, increased anxiety to become emotional, irritability, sensitivity to light and sound, decreased sleep is more than among working women indicating more mental fatigue among working women in comparison to non-working women.

Conclusion

Mental Fatigue is varied concept that predicts a general consensus of definition a general concept the is likely to include a relative agreement by elderly on issues perceived to be important, Sharing similar tasks and activities and showing affection for another. Marital successes as distinguished from mental fatigue generally refer to the Achievement of one or more goals. Permanence, companionship, fulfilling the expectation of the community and so forth marital happiness distinguished from adjustment as success is an emotional response of an individual. The Marital adjustment, an individual experiences in marriage which can only be evaluated by each person in response to the agreement of marital pleasure, it depends upon the individual's expectation, needs and desire in their elderly. This would mean the degree of marital adjustment they feel with their relationship. This marital could be addressed both from the perspective of the wife towards the husband or the husband towards the wife. Women belonging to working and non-working areas perspective the married life in different ways this may due to the variation in their style, education level, type of family, profession, working status, exposure of different conditions of society etc. To see differences on their mental fatigue and marital adjustment the present study was conducted with the following objectives-

- To assess the marital adjustment among women working in organised and onorganised sector.
- To determine the mental fatigue among women of the selected sectors.
- To identify the factors affecting the marital adjustment among women.
- To assess the impact of mental fatigue on marital adjustment among women.

The study was conducted in Lucknow district which is purposively selected to conduct the study, as it is convenient for the researcher to conduct the study.

Women belonging to the age group of 25-45 year segregated into two age groups 25-34, 35-45 from working and non-working women were selected for the study to Asses the mental fatigue and marital adjustment. One working women and non-working women from lucknow district were selected randomly based on the information collected from south city, lucknow. Sixty sample each from the working status of working and non-working were selected using stratified random sampling technique totaling to 60 from working women and 60 from non-working women. Mental fatigue scale. Was used to study the level of mental fatigue and a marital adjustment scale was used to the study the level of marital adjustment.

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