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Workload, Achievement Motivation, and Mental Fatigue: A Mediation Study Among White-Collar Workers

Beban Kerja, Motovasi Pencapaian, dan Keletihan Mental: Kajian Mediasi di Kalangan Pekerja Kolar Putih

Shamala Ramasamy*, Cheryl Tan Mei Nee & Mohammed Irfan Abdul Malick Sahib

ABSTRACT

Workplace fatigue has long been a plague in most countries as the expectation of employee performances is overstretching. Fatigue is attributed by job demand as workload depletes energy. However, job resources such as organizational, physical, or social characteristic as well as work motivation tend to buffer fatigue. The aim of this paper is to analyse the mediation effects of achievement motivation in the relationship between workload and mental fatigue among white-collared workers, by using Mc Clelland's theory of motivation and Job Demand-Resources model. A cross-sectional survey design was employed. Total of 117 males and 201 females responded to a self-report questionnaire consisting of the Workload subscale from Job Demands-Resources Scale, the Achievement Motivation subscale from Manifest Needs Questionnaire, and the Mental Fatigue Scale. Mediation model was employed. Results revealed that workload significantly predicts mental fatigue, and that achievement motivation is a significant partial mediator in the relationship between mental fatigue and achievement motivation. Findings imply that organizations would benefit from investing in higher levels of achievement motivation aiding in reducing levels of mental fatigue. Avoid compelling employees in handling extremely high workload, as achievement motivation only buffers the impact of mental fatigue.

Keywords: Workload; achievement motivation; mental fatigue; white-collar workers

ABSTRAK

Keletihan di tempat kerja telah lama menjadi wabak di kebanyakan negara kerana jangkaan prestasi pekerja terlalu melampau. Keletihan disebabkan oleh permintaan pekerjaan kerana beban kerja menghabiskan tenaga. Walau bagaimanapun, sumber pekerjaan seperti faktor-faktor organisasi, fizikal, atau sosial serta motivasi kerja cenderung untuk mengatasi keletihan. Objektif kajian ini adalah untuk menganalisis kesan mediasi motivasi pencapaian dalam hubungan antara beban kerja dan keletihan mental di kalangan pekerja berkolar putih, dengan menggunakan teori motivasi Mc Clelland dan model Job Demand-Resources. Sebanyak 117 lelaki dan 201 wanita membalas soal-selidik skala Beban Kerja, skala Motivasi Pencapaian dan Skala Keletihan Mental. Reka bentuk survei digunakan. Model mediasi digunakan. Hasil kajian menunjukkan bahawa beban kerja secara signifikan meramalkan keletihan mental, dan motivasi pencapaian adalah perantara separa yang signifikan dalam hubungan antara keletihan mental dan motivasi pencapaian. Penemuan menunjukkan bahawa organisasi akan mendapat keuntungan daripada melabur dalam tahap motivasi pekerja dalam membantu mengurangkan tahap keletihan mental. Elakkan memaksa pekerja menangani beban kerja yang sangat tinggi, kerana motivasi pencapaian hanya dapat mengurangkan kesan keletihan mental.

Kata kunci: Beban kerja; motivasi pencapaian; keletihan mental; pekerja kolar putih

INTRODUCTION

The increase in numbers of white-collar jobs that are mentally demanding tasks and intense work pressure necessitates workers to employ cognitive resources, which usually leads to mental fatigue in working adults (Guan, Xiaerfuding, Ning, Lian, Jiang, Liu and Ng 2017 & Shaheen, Babski-Reeves, DuBien, Webb, & Strawderman 2016). Physical and psychological health among workers are at risk as projected by World Bank.

Asian workers experience higher incidences of work-related fatigue (Shaheen et al. 2016) which attributed to long working hours and job related stress that are plagued by incidences of sudden deaths, heart attacks, mental disorders and suicide among workers (Cheng, 2018; Zolkifli, 2013; "60% of Singapore Workers", 2013). Japan and South Korea have the longest working hours and young employees work themselves to death (Lee, Kim, Kim & Kawachi 2020). 90% of US employers are facing negative impact due to fatigued workers and 43% of employees are too fatigued to accomplish their work tasks safely, and that fatigue accounts for about 13% of workplace injuries in the United States ("NSC Urges Employers" 2019). Similarly, in Malaysia, more than 94.2% of workers have experienced mental fatigue due to work (Zein, Halim, Azis, Saptari and Kamat 2015).

Chronic illnesses and job dissatisfaction, affects employees' attitude, increased absenteeism thus declines in performance and behavioural issues (Guan et al. 2017; Frone & Tidwell 2015) and increase risks for workplace failure and decreases the chances for workplace success (Blekemolen, Hulshof and Sluiter 2016), as such a heavy price tag is associated with fatigue.

Fatigue or exhaustion has been attributed to the exertion of effort in tasks or the decline in resources to deal with the demands, and it develops from a continuous effort to maintain work goals in situations that are challenging (Bartley & Chute 1947; Thorndike 1900; Kahneman 1973; Kanfer & Ackerman 1989). Having tight deadlines, staff shortages, long working hours and multi-tasking are attributed to job demands. Multiple screen devices are also being used at office type of tasks adding on to their already fatigued mind.

Certain individuals are more likely to experience mental fatigue as compared to others. This suggests that work motivation plays a role in influencing mental fatigue by buffering the effects of workload on workers. Thus, this paper aims to look at the achievement motivation and determines its' interaction with workload and mental fatigue in workers.

JOB DEMAND-RESOURCES MODEL

In order to understand the impact of workload on fatigue, the Job Demands-Resources Model by Demerouti, Bakker, Nachreiner, and Schaufeli (2001) has been adopted. This theory suggests that there are two categories of work conditions which can account for the specific work outcomes, namely, job demands and job resources (Demerouti et al. 2001).

This model suggests that high job demands depletes an individual's energy, leading to higher risk of experiencing fatigue (Bakker & Demerouti 2007; Shirom 2011) in alignment with the model proposed by Karasek (1979). However, some researchers have argued that certain job properties have been a buffer to minimize and moderate the impacts of high job demands on fatigue leading to lower risk of experiencing fatigue (Bakker and Demerouti 2007; Karasek 1979; Marshall, Barnett, & Sayer 1997; Shirom 2011; Van Yperen & Snijders 2000; Wall, Jackson, Mullarkey & Parker 1996).

Contrary to the findings, some individuals do not experience exhaustion even when faced with high job demands or workload, and it has been attributed to job resources. Richter and Hacker (1998) indicate that resources may be not necessarily be external, but could also be internal, such as cognitive features. This is exemplified in the work of Hockey (2011) that individuals may abandon task goals to conserve their resources if the task goals are not deemed as important to them, preventing the occurrence of fatigue which is managed by higher-order control functions.

MCCLELLAND'S THEORY OF MOTIVATIONAL NEEDS

Over the recent decades, studies show that modern work and workplace settings have evolved drastically to accommodate an increased diversity of workers, changing job requirements, development of technologies, new forms of organization, and shifts in hierarchies and power distribution, as a result of increasing globalization (Steers et al. 2004). Although debates are on-going on the understanding of motivation, most theories agree that motivation comes from both external and internal factors which

stimulates and drives behaviour (Locke & Latham 2004).

Work motivation is an element that energize, direct, and maintain actions of employees (Steers et al. 2004). Employees who are motivated are more likely to be engaged at work, perform better, and show more outcomes from occupational training (Cerasoli et al. 2014 & Massenberg et al. 2015). Apart from that, employees will have higher commitment towards work and tend to achieve more demanding task goals (Becker et al. 2015). Having recognised these positive outcomes, many companies are interested to increase employee motivation (Rybnicek, Bergner, Gutschelhofer 2017). McClelland's motivational needs theory is adapted due to its distinguishing factors as theorized in the content theory, specifically domain of achievement (Steers et al. 2004; Latham & Pinder 2005).

LITERATURE REVIEW

WORKLOAD AND FATIGUE

Relationship between workload and fatigue had a significant moderate positive correlation in a passenger rail company, (p<.05, r=.58). However, fatigue was also associated by other factors such as unhealthy lifestyle, lack of support or control at work, and shift work (Smith & Smith, 2017).

There are two aspects of fatigue, namely physical and mental. The former reduces the performance in the body muscles, while the latter reduces alertness and weariness (Arellano, Martinez, Perez & Alcaraz 2015). However, there was no significant correlations established between workload and fatigue. This is because Physical Demands is perceived as workload, while Physical Effort deemed as fatigue, however, both are similar concepts. Arellano et al also suggested that fatigue is a cumulative and gradual process associated with the work task performed by the workers, and it is aggravated by task demands that are imposed on the worker.

A combination of environmental as well as individual factors may lead to poor wellbeing in workers (Remmen, Herttua, Riss-Jepsen & Berg Beckhoff 2017). Long working hours and shift work, which may consequently lead to fatigue (Jepsen, Zhao, & van Leeuwen 2015; a Hovdanum, Jensen, Petursdottir, & Holmen 2014). In another study, Remmen et al. (2017) found that physical workload was most significantly related to general fatigue, physical and mental fatigue (Remmen et al. 2017). From the analysis, it is evident that physical workload was least related to mental fatigue, although the results were significant. This suggests that physical workload is not the main contributor of mental fatigue as suggested by previous studies (Jepsen, Zhao, & van Leeuwen 2015; a Hovdanum, Jensen, Petursdottir & Holmen 2014). Another study on nursing population echoes similar stance, that multitasking, and time demands to be the main contributors in their experience of physical and mental fatigue at work (Steege, Drake, Olivas and Mazza 2013).

Job strain is a major concern that is associated positively with mental fatigue, burnout, and chronic illnesses among employees. (Guan et al. 2017). A study by Burns, Butterworth, and Anstey (2016) has pointed out that poor working conditions and high workload were one of the few stressors that contribute to job strain. Job strain among employees decreases work enthusiasm, which subsequently leads to mental fatigue (Guan et al. 2017). A study among teleworker concluded that both mental workload and fatigue must be monitored because their extremes jeopardize the quality of work life (Venegas Tresierra & Leyva Pozo 2020).

MOTIVATION AND MENTAL FATIGUE

Mental fatigue is a phenomenon that is usually seen after long periods of cognitive activity, which leads to major negative consequences in workers (Gergeylfi, Jacob, Olivier & Zenon 2015). Cognitive processes that lead to mental fatigue remain unclear, whereby there is no evidence yet as to whether mental fatigue results from the decline in cognitive resources, or from a decline in motivation Gergeylfi et al. (2015). However, some studies have indicated that mental fatigue could be resulted from the lack of motivation to engage in tasks that are not rewarding, rather than due to workload or job demands (Chaudhuri and Behan, 2000); Hockey, 2013). Thus, Gergeylfi et al. (2015) hypothesized that mental fatigue is not due to the over usage of neural process while engaging in cognitive activities, but rather, caused by a decline in motivation in engaging in a task.

However, when investigated, the results of the study conducted by Gergeylgi (2015) has shown that there was no significant interaction between motivation and mental fatigue, and that the adverse effects of mental fatigue could not be improved or alleviated even in conditions which should elicit high motivation. This non-significant interaction

suggests that the experience of mental fatigue could not be associated with a decrease in motivation. However, this study was conducted in a laboratory setting, whereby the tasks given were not as demanding as a real-life task at work, and the levels of motivation were set by manipulating the rewards given to the participants, hence, the results of this study may not be conclusive.

In contrast, an experiment was conducted to determine if intrinsic motivation can counteract with mental fatigue measured by time-on-task effects. Those who have high intrinsic motivation can sustain their performance over time because they appear more motivated to put forth effort over time than those who have low intrinsic motivation (Herlambang, Cnossen, & Taatgen 2021).

A recent study conducted in the Iranian setting found that the factors which had the greatest influence on academic burnout were high workload and achievement motivation, respectively. The findings of this study may help agricultural higher education policymakers and planners take steps to reduce student academic burnout and remove barriers to dynamic academic progress (Moghadam, Abbasi & Khoshnodifar 2020).

Under circumstances of high workload and work stress, where work motivation plays a strong mediating role between the effects of both parameters, work motivation will also play a considerable role in increasing job satisfaction among nurses (Salsabilla, Setiawan, & Juwita 2022). Hence, this study aims to determine the mediating role of achievement motivation towards the relationship between workload and mental fatigue among the white-collared workers.

METHODS

This study employs a cross-sectional research design to determine the relationship between workload and fatigue, and to determine the mediating effect of motivation—among white-collar workers. To conceptualize this study, the variables will be tested against the job demand-resource model developed by Demerouti et al. (2001) and theory of motivational needs by McClelland (1985). The study uses a mediation analysis, mental fatigue is regarded as the dependent variable and workload is the independent variable, while achievement motivation is the mediator variable.

SPSS Process Macro Version 25 was employed for data analysis and the decision criteria was set at a .05 level. Ethics approval (BPS1-01-17(22) 2019) was sought and obtained from the University Ethics Committee prior to data collection. This study does not contain any physical, psychological, or social risks. Participation was strictly voluntary, and participants' responses were kept anonymous. Consent was gathered from the participants. Demographic data such as gender, age, ethnicity, occupation, number of years of working were collected. All questionnaires were administered in English. Samples were selected from a population of white-collar workers using Cochran's (1963) formula for calculating a sample size for unknown population. A minimum of 384 respondents from the population of white-collar workers has been recruited using purposive sampling method.

MATERIALS

JOB DEMANDS-RESOURCES SCALE (JDRS)

Overload subscale was adopted from JGRS which contains seven items in the form of questions that are rated on a 4-point Likert scale ranging from 1 (never) to 4 (always), with no reverse items. Sample items are 'Do you work under time pressure?' and 'Do you have to be attentive to many things at the same time?'. The composite scores were obtained by adding up the scores of individual items, whereby higher scores on this scale reflect a higher amount of workload perceived by the workers. The established Cronbach alpha reliability was 0.75 (Jackson & Rothmann 2005).

Mental Fatigue Self-Assessment Questionnaire

This scale is used to measure mental fatigue in healthy individuals and employees. The self-report questionnaire consists of 15 items with no reverse coding, and includes 'affective', 'cognitive' and 'sensory symptoms of mental fatigue', 'sleep duration' and 24-hour variations. Each item is presented in the form of a description with examples of daily life activities, and rated based on the intensity, frequency, and duration of each symptom, ranging from 0 which corresponds to normal function, 1 indicating a problem, 2 indicating a marked symptom and 3 indicating a maximal symptom. Respondents may also give in-between ratings of 0.5, 1.5 and

2.5. Scores range from 0 to 45. The established reliability index shows good internal reliability, with a Cronbach alpha value of .944.

Manifest Needs Questionnaire (MNQ)

The scale is developed to measure manifest needs also termed as motivational needs (Steers & Braunstein, 1976) with specific reference to work settings. The adopted domain is 'need for achievement' which consist of 5 items in the form of behavioural statements which are to be rated on a 7-point Likert Scale ranging from 1 = always, 2 = almost always, 3 = usually, 4 = sometimes, 5 = seldom, 6 = almost never, 7 = never. One item has reversed scoring and the total score ranges from 5 to 35. The scores are correlated with Personality Research Form (Steers & Braunstein, 1976), showing evidence of convergent validity of the scale. The achievement need subscale has a 2-week test-retest reliability of .72, and an internal consistency reliability of .66, which is deemed to be acceptable by the authors, considering the type of measure and that the scale compared favourably with other scales.

RESULTS

A total of 318 white-collared workers responded in this study. The respondents comprised of 117 males (36.79%) and 201 females (63.21%). Age range of the participants were 21 years old to above 45 years old. Whereby 32.39% respondents comprised of workers with longer years of work experience (>25 years), while the least was 6.91% were those who had 11-15 years of work experience. The highest frequency in occupation are professionals (35.85%), followed by administrative and clerical workers (34.90%), and managerial workers (29.25%). The reliability analysis yielded Cronbach's alpha of .88, .92, and .89 for the JDRS, MNQ, and MFS respectively.

TABLE 1. Minimum and maximum scores, the mean, and standard deviation

	N	Minimum	Maximum	Mean	Std. Deviation
Job-Demand Resources	318	7.00	28.00	19.37	4.66
Mental Fatigue	318	0.00	32.50	10.59	6.44
Achievement Motivation	318	5.00	35.00	24.19	7.40

Upon fulfilling the assumptions for normality of distributions, a simple linear regression was used to predict mental fatigue based on workload, in which a significant regression equation was found, F (1, 316) = 259.754, p = .000; = .451; = .672, t =16.117, p = .000. A coefficient of determination (shows that 45.1% of variance in mental fatigue is being explained by workload. With every unit increase in workload, mental fatigue increases by .928 unit.

TABLE 2. Regression and significance values for workload-achievement motivation and achievement motivation-mental fatigue pathways

	b	SE	LLCI	ULCI	p
Workload → Achievement Motivation	-.861	.075	-1.009	-.713	.000
Achievement Motivation → Mental Fatigue	-.575	.028	-.631	-.519	.000

Mediation analysis was used to investigate whether achievement motivation mediates the effect of workload on mental fatigue. Based on Table 2, results indicated that workload was a significant predictor of achievement motivation, (b = .861, SE =.075, p < .05, 95% CI = -1.009, -.713), and that achievement motivation was a significant predictor of mental fatigue, (b = -.575, SE = .028, p < .05, 95% CI = -.631, -.513). According to Baron and Kenny (1986), these two assumptions had to be fulfilled in order to assume a mediational model.

TABLE 3. Total and direct effects of workload on mental fatigue, and indirect effects of achievement motivation mediating the relationship between workload and mental fatigue outcomes

	Mental Fatigue Outcomes				
	b	SE	LLCI	ULCI	p
Total Effect of Workload	.928	.057	.815	1.041	.000
Direct Effect of Workload	.432	.045	.343	.521	.000
Indirect Effect	b	Boot SE	Boot LLCI	Boot ULCI	
Achievement Motivation	.495	.056	.388	.612	.000

Note. b = unstandardized coefficients, SE = standard errors, p = significance values with lower and upper limits of 95% confidence intervals utilizing SPSS Process Macro analysis *($p < .05$)*

Table 3 shows significant total effect of workload on mental fatigue which was consistent with the results from the linear regression analysis ($b = .928$, SE = .057, $p < .001$). After controlling for the mediator (achievement motivation), workload predicted mental fatigue with less effect ($b = .432$, SE = .045, $p < .001$). Since the direct effect of workload was lowered when achievement motivation was added into the model, it shows that achievement motivation significantly mediates the relationship between workload and mental fatigue. The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples, implemented with the PROCESS Macro Version 3 (Hayes, 2017). These findings indicated the indirect coefficient was significant ($b = .495$, SE = .056, 95% CI = .388, .612), indicating that the association between workload and mental fatigue scores .4958 higher after being mediated by achievement motivation. However, the findings revealed achievement motivation provided partial mediation effects.

DISCUSSION

Achievement motivation functions as a mediator in the significant relationship between workload and mental fatigue. The result is consistent with some of the findings in previous studies (Arellano et al. 2015; Burns et al. 2016; Guan et al. 2017; Shaheen et al. 2016) and the role of motivation to reduce the levels of mental fatigue associated with workload and job demands (Earle et al. 2015; Herlambang, Cnossen, & Taatgen, 2021; Remmen et al. 2017; van der Linden, 2011). Several studies have revealed the role of achievement motivation in relation to mental fatigue was ambiguous as some studies had found no association between workload, individual motivation, and mental fatigue (Gergelyfi et al. 2015). However, this study, as well as other past studies have shown that by increasing achievement motivation, employees experience lower levels of mental fatigue (Earle et al. 2015; Remmen et al. 2017; van der Linden 2011). This study has fulfilled the knowledge gap by demonstrating that achievement motivation is a significant mediator in the relationship between workload and mental fatigue.

The findings in this study also confirms the initial assumption that achievement motivation is an internal resource to a worker to balance out the job demands faced by employees as explained by the job demands-resources model in ensuring the wellbeing of workers. In general, job resource was considered to be the 'umbrella' term that covers a wide range of internal as well as external characteristics of the individual and the job that are able to minimize the effects of job demands - one of it being achievement motivation, which is the primary focus of this study. As specified in the theoretical framework, job demands and job resources balances out each other (Demerouti et al. 2001), emphasizing that it is more about the job resources to serve as a buffer to minimize the effects of job demands, since job demands may be inevitable. Hence, this study serves as a bridge for the insufficient evidence of the role of achievement motivation as a resource in the association between job demands and mental fatigue, by testing out the mediation model.

Results reveal a partial mediation, which suggests that although achievement motivation was a significant mediator, there are other contributors to the relationship between workload and mental fatigue. As noted in previous studies, many causes could contribute to the experience of mental fatigue among white-collar workers, such as the decline in cognitive resources (Qi et al. 2019; Shaheen et al. 2016) or poor working conditions (Burns et al. 2016; Guan et al. 2017). Nonetheless, the findings obtained from this study is able to shed light on the role of achievement motivation as a desired trait in the workplace to buffer the effects of workload.

The enhancement of achievement motivation has been seen to bring about many benefits, for instance, buffering the impacts of workload on their wellbeing (Biggs, Biggs, & Tang, 2011). The core of achievement motivation is competence. Individuals who perceive themselves as competent will be more driven to aim for success and achievement, which can then influence performance in a task (Elliot & Dweck, 2005). In considering competence as a core to achievement motivation, theorists have identified two key ideas: (1) performance goal that is concerned about demonstrating more abilities compared to others, in line with the idea of explicit motives and (2) mastery goal which is centred on mastering a task and developing competence, in line with the concept of implicit motive (Church & Elliot, 2001; Butler, 1999).

Church and Elliot (2001) mentioned that individuals with performance goals, or explicit motives, prefer easier tasks and have higher tendency to withdraw effort in the face of failure, while individuals with mastery goals, or implicit motives, prefer more challenging tasks and persist in the face of failure. Butler (1999) supported this idea, suggesting that the engagement in tasks which stimulates implicit motivation typically provides an opportunity to develop competence, often resulting in higher achievement motivation than tasks which brings about extrinsic rewards. This is because individuals strive to engage in the activity due to self-satisfaction rather than being driven to succeed for external reasons such as maintaining self-worth. By strengthening achievement motivation especially promoting intrinsic enjoyment in challenging task also helps withdrawal of undesired behaviour.

Additionally, motivation theory has strong ties to behavioural psychology, in which there are many behaviour modification techniques that have been proven to enhance achievement motivation, such as token economies, extinction, shaping, or reinforcement (Martin & Pear, 2003). Individuals with high achievement motivation prefer personal responsibilities and are interested in getting feedback regarding their performance and output, as these are deemed to be rewarding to them, and if given accordingly, will be able to further enhance the levels of achievement motivation (Tamannaifar and Gandomi, 2011& Dobre 2013).

Efforts to enhance the levels of achievement motivation among employees would be an investment of time and money for the organization, in terms of finding out employees' needs and conducting professional organizational training. Thus, these investments by organizations to enhance the levels of achievement motivation will not be in vain, since organizations can then cut down on the high costs associated with the phenomena of mental fatigue. As mentioned by the NSC ("NSC Urges Employers" 2019), a company with 1,000 fatigued employees may suffer losses as much as US$1 million annually due to absenteeism, reduced productivity, and increased health care cost. Moreover, employees with lower levels of mental fatigue have been found to perform better, in turn, increasing the efficiency and productivity of the company while fulfilling the organizational goals (Guan et al. 2017). Ultimately, this will be a possible solution to reduced mental fatigue.

Nevertheless, it is important to note that enhancement of achievement motivation is not a matter of forcing employees to handle extremely high workload. As results have shown, achievement motivation only buffers the impact of mental fatigue to a certain extent, not forgetting that workload still has impacts on the experience of mental fatigue, perhaps due to other factors such as the decline in cognitive energy. The purpose of enhancing achievement motivation is more so of helping employees to be able to adapt better in the face of high amounts of job demands in the white-collar work setting, whereby workload may sometimes be inevitable.

Despite the significant findings in this study, there are some limitations. This study measured the level of achievement motivation based at one point of time as previous studies suggest that a longitudinal study is best be conducted because motivation correlates with age factor (Tamannaifar & Gandomi 2011). Also, this study examined one domain of implicit motives (i.e., achievement motivation). Future studies could examine other domains, such as power or affiliation motivation as the mediating effects.

Despite the significant findings in this study, there are some limitations. This study examined only one domain of implicit motives which is achievement motivation. Future studies could examine other domains, such as the power or affiliation motivation, on the mediating effects in the relationship between workload and mental fatigue.

CONCLUSION

Mental fatigue is an unfavorable phenomenon that causes concern for the employees, as well as employers in any organization. High levels of mental fatigue often led to negative consequences such as job dissatisfaction and poor performance. This study has suggested that achievement motivation among employees is crucial to minimize the experience of mental fatigue in the face of high job demands and workload. Thus, by lowering the levels of mental fatigue among workers through the enhancement of achievement motivation, more positive outcomes appear in the organization associated with higher job satisfaction, and better work atmosphere, leading to greater efficiency, productivity, and improved performance. The findings in this study concludes that internal resources such as achievement motivation aids in buffering the impacts of workload, which will be helpful for employees to deal with stressful and demanding work environments, yet not totally removing mental fatigue among the workers.

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Shamala Ramasamy
Cheryl Tan Mei Nee
Mohammed Irfan Abdul Malick Sahib
Psychology Department
International Medical University
Kuala Lumpur, Malaysia