



The effectiveness sleep hygiene training on the job performance of employees Shift or rotating shifts parvadeh Tabas coal companies in 2013

Seyed Mohammad Razavi^{1*}, Dr. Mansore Nasirian², Dr. Imaneh Afkhami³

^{1,2,3} Islamic Azad University Science and Research Branch Yazd, Yazd, Iran.

ARTICLE INFO

Article history:

Received 08 Dec 2014

Received in revised form 12 Jan 2015

Accepted 28 Jan 2015

Keywords:

The staff,

The quality of sleep,

Job performance,

Sleep disorder,

SPSS software

ABSTRACT

Objective: Getting disturbed sleep, of the most work turns problems that can be physical and psychological consequences for the health of more have sought. Also, the ability and the performance of their daily care and acceptance of liability will reduce job; this half of the mode of experimental data with pretest and post test control group and two 15-Member group that had a prominent sleep disorder, was implemented. **Methodology:** In this study, 18 questionnaire quality of sleep (PSQI) was used for questionnaires and job performance of Patterson. **Results:** After completing the questionnaire and sleep and health education information, then run the test by Using SPSS software and with the help of statistical analysis tests were. **Conclusion:** The results showed that significant differences in test scores and job performance of sleep quality in this group compared to the control group, there have been ($P < 0.0001$). In the following test 24/93%, 26/73%, optimal quality of sleep had high job performance, and 67% of them did not report the incident; staff can improve the quality of sleep and general health, and ultimately enhance the job performance.

1. Introduction

The dream of the necessities of life. The performance of individuals during the human life in the contour full awakening and sleep phase two is complete and each of the other two will be based on the definitive impact (Dinges, 1995).

The awakening time problems can be the quality and quantity of sleep influences and vice versa can also sleep disorders on performance, ability and health of a person leaves an obvious and severe adverse effect (Shermerhorn, 1993) In a study in 1998 by Taffinder was clear colleagues patrol and insomnia can be negative effects on the health status of patients and job scope and its exclusion from the causes of depression, decreased immune function, and heart disease are people (Taffinder et al., 1998).

The results of several studies on the negative effects of chronic sleep deprivation caused by relative and shows that less sleep than 5 to 6 hours at night can lead to dysfunction (Driver, 1994). This deterioration in the performance of the people who have chronic sleep deprivation are relative and they are permanent process for cumulative increases (Mauri, 1990).

Reduce the high level of performance is one of the devastating works turns of industries and factories, the variables are very important, because the performance, safety and efficiency are dependent (Holbrook et al., 1994). The disability program for employees is compatible with work turns can lead to loss of mental and physical welfare, the outcome of performance and safety, and the creation of an undesirable person in addition to the increase in work accidents and reduced job performance, and shifts as well as the quality of sleep decreases (Schwartz & Roth, 2006). Therefore, work turns is on the duration and effect on sleep quality also affects. The other issue is related to the people's daily Night work sleep disrupted, due to environmental factors, especially the head and sound environment (Wright Jr et al., 2013). The habit of napping, the other problem is that this issue also work turns people of being inadequate amount of sleep (Vila et al., 2002). Therefore, since the central nervous system is the most sensitive Member of sleep deprivation to be

* Corresponding author: psy_razavi@yahoo.com

DOI: <https://doi.org/10.24200/jmas.vol3iss01pp5-8>

necessary for the balance of power and sleep tjssadid sleep deprivation of people's Night work can result on safety, health and efficiency of the individuals has an important effect that the outcome of the entire community of work turns people can be realized (Schaefer et al., 2012).

1.2 The expression problem

The importance of sleep in human beings not wearing everybody. Boost the immune system, repair the nervous system neurons and maintain learning memory and organizing children's growth because growth hormone secreted during sleep is more of a special performance in sleep (Fido and Ghali, 2008). So according to the importance of sleep can be said compensation injuries and sleepless insomnia low not acceptance to the person. Including the reduction of learning and focus on the person, can be hard to get up from sleep and napping during the day, feeling fatigue and impatience and bad behavior, and ultimately reduce the sensitivity of the acceptance increase immune system function and the possibility of increasing the illness in person (Owens, 2001).

1.3 Aim of research

To determine the effectiveness of health education on improving sleep performance coal mines work turns staff career peaks.

1.4 Research hypothesis

Sleep health education on improving sleep quality on improving employee job performance coal mines work turns peaks can be effective (Dumbrell and Steele, 2015).

2. Materials and methods

2.1 Research method

The study of experimental data in terms of how the half with pretest and posttest and control group, respectively. And in terms of the objective applied and will be implemented for the field.

Statistical population, sample size and sampling

2.2 Statistical Society

The statistical population consists of all the employees of the company is the staff fully Tabas, based on the quality of sleep questionnaire (PSQI) were diagnosed with sleep disorders.

2.3 Sample and sampling method

Method of sampling in this study was randomly included 30 people who were in the group test (the sleep health education staff has a sleep disorder) as well as in the control group $n = 15$ and 15 people were to be equal.

2.4 Research instrument

2.4.1 Questionnaire quality of sleep

This a questionnaire to evaluate the quality of sleep during the past one month and includes 18 phrase. A number of studies of the validity and reliability of the questionnaire have shown above. As is this a questionnaire, bad quality of sleep are distinct from sleeping well. Each of the seven branches of the scale reliability and validity can be about 83% and 36% would have had.

2.4.2 Job functions questionnaire

Job functions questionnaire by Patterson (1970), and by senior translated. This a questionnaire has 15 questions of four degrees: rarely-periodically – most often and always has been formed. For minor changes to the questionnaire performance measurement with a performance evaluation questionnaire was converted. Subjects in the above questionnaire your responses for tick marks on a scale of 4 degrees in occupational functioning questionnaires are significant the method of calculating this test method are: 0, 1, 2, 3.

3. Discussion and results

3.1 Descriptive findings

Sleep health education improves the performance of the job. The third hypothesis to assess the research performance of the participants in the questionnaire score career steps to pre-test and post-test were statistically analyzed that the results presented in the following tables it is. For the evaluation of this Covariance analysis test a test variable was used.

Table 1. Test results of Wilk - Schapiro and Kolmogorov – Smirnov normal distribution assumption being in scores of job performance

Wilk – Schapiro Test					
Variable	Step	Index	Statistics	DF	Significant level
Job performance	Pre test	Experience Group	0.953	15	0.579
	Post test		0.961	15	0.718
	Pre test	Control Group	0.901	15	0.100
	Post test		0.962	15	0.727

Before using ANCOVA analysis, assumptions that were used. As the test results of Wilk - Schapiro shows distribution of scores in the community have been normal the default being the normal scores confirmed ($0.05 < P$). According to these results and draws the sample size in the ANCOVA analysis of groups as a parametric test is allowed.

Table 2. Variance of the hemoginity review, the test-experimental and control groups in the Levine pretest and posttest variable is dependent on job performance

Levene's Test of Equality of Error Variances			
F	DF1	DF2	Significant level
1.250	1	28	0.273

As can be seen in table-top test Lavigne in meaningful job performance-dependent variable is not the 1,250. So the variance of the two dependent variables in the control group test and job performance is not significant and therefore assume the variance becomes hemotegini confirmed so in this case, the variance are equal and the reliability of the results confirms the next.

Table 3. Results of the analysis of covariance test a few mtghiri on the average test score employee job performance test and control groups

The source of the variance	Test name	The amount	df Hypothesis	df Error	F	Significant level	Effect size (Eta)	Observed power
The main effect of job performance	The effect of pilaiy	0.785	3	23	27.988	0.0001	0.785	0.99
	Wilks Lamboda	0.215	3	23	27.988	0.0001	0.785	0.99
	Hetling effect	3.651	3	23	27.988	0.0001	0.785	0.99
	Most roots on the great	3.651	3	23	27.988	0.0001	0.785	0.99

In the table above are the results of the analysis of variance test chndmetghiri Wilks lamboday pilaiy, effect, effect on root and most big hetling for comparing job performance will be based on the variable groups. Based on the information, we can say that the groups have different job performance with each other. I.e. at least between one of the tests (pre-test and post-test) job performance in control and there are differences. It is a reminder that being a significant ANOVA test does not show a few mtghiri that between which the test (pre-test and post-test) in the experimental and control group, there is a difference.

Table 4. Results of the analysis of covariance of a template in the text Mancova on the average test score of job performance and test control group subjects

Variable	The source of the variance	SS	DF	MS	F	Significant level	Effect size (Eta)	Observed power
Job performance	Pre Test	274.432	1	274.432	12.063	0.002	0.903	0.93
	Group	615.001	1	615.001	27.034	0.0001	0.85	0.99
	Error	614.235	27	22.749	-	-	-	-
	Total	34522	30	-	-	-	-	-

As the table above shows the test group and control between subjects in terms of job performance at the level of p variables there is a significant difference. Effect of the size of the coefficient indicates that 85 percent of the difference between the two groups is related to the cloud-based intervention and be equal to 0.99 and test.

Among a score of pre-test and post-test experimental difference was there, these results show that health education in increasing the employees ' job performance and job performance improvement has been effective, he added.

3.2 Covariance analysis of test results

Based on the findings showed the hypothesis was confirmed, and the test group and control between subjects in terms of job function level variable p is there a significant difference.

Among a score of pretest and post test, there was a significant difference between experimental groups, the results showed that health education in increasing the employees' job performance was effective and improves job performance has been.

Several experimental studies have shown that not having the desired quality and quantity of sleep and disability program for employees is compatible with work turns can lead to loss of mental and physical welfare, and safety of undesirable consequences of the creation of this performance. In work turns the sleep deprivation and the lack of compliance with the biological rhythm of the physical performance led to the injury.

4. Conclusion

Due to the fact that families can reduce sleep disorders can result in staff roles (father of the family), the future research may be the family and staff of the interventions evaluated together as well.

According to the difference of periodic rhythms and cycles of sleep and wakefulness is recommended between the two genders, the effect of health education on sleep quality and quantity of sleep in two genera to be monitored.

In order not to overlook the problems of individual employees, clinical interview is recommended by individual before you start training and treatment, individuals who, in addition to other problems, problems are also the group, after the termination of the research was to find individual treatment.

REFERENCES

- Dinges, D.F., 1995, An overview of sleepiness and accidents, *A582*:4-14.
- Driver, H.S., 1994. Sleep in women. *J Psychosom Res* 403: 227-30.
- Dumbrell, D., & Steele, R., 2015. PRELIMINARY ANALYSIS OF A PUBLIC HEALTH TWITTER CAMPAIGN: WORLD HEALTH DAY 2014. *Humanities & Social Sciences Reviews*, 2(1), 74-81.
- Fido, A., & Ghali, A., 2008. Detrimental effects of variable work shifts on quality of sleep, general health and work performance. *Medical Principles and Practice*, 176, 453-457.
- Holbrook, M. I., White, M. H., & Hutt, M. J., 1994. Increasing awareness of sleep hygiene in rotating shift workers: arming law-enforcement officers against impaired performance. *Perceptual and motor skills*, 791, 520-522.
- Mauri M., 1990. Sleep and reproductive cycle: a review. *Health Care Women Int* 114:409-21.
- Owens, J. A., 2001. Sleep loss and fatigue in medical training. *Current opinion in pulmonary medicine*, 76, 411-418.
- Patterson, B. H., 1970. A Legal Audit Questionnaire. *Bus. Law.*, 26, 983.
- Schaefer, E. W., Williams, M. V., & Zee, P. C., 2012. Sleep and circadian misalignment for the hospitalist: a review. *Journal of hospital medicine*, 76, 489-496.
- Schwartz, J. R., & Roth, T., 2006. Shift work sleep disorder. *Drugs*, 6618, 2357-2370.
- Shermerhorn, J., 1993. *Management For Productivity*. New York: John Wiley.
- Taffinder, N.J., McManus, I.C. & Gul. Y., 1998. Effect of sleep deprivation on surgeon's dexterity on laparoscopy simulator. *Lancet* 352: 1191.
- Vila, B., Morrison, G. B., & Kenney, D. J., 2002. Improving shift schedule and work-hour policies and practices to increase police officer performance, health, and safety. *Police quarterly*, 51, 4-24.
- Wright Jr, K. P., Bogan, R. K., & Wyatt, J. K., 2013. Shift work and the assessment and management of shift work disorder (SWD). *Sleep medicine reviews*, 171, 41-54.

How to Cite this Article:

Razavi .S.M. , Nasirian M., Afkhami I., The effectiveness sleep hygiene training on the job performance of employees Shift or rotating shifts parvadeh tabas coal companies in 2013, *Uct Journal of Management and Accounting Studies* 01 (2015) 5–8.