

Work Motivation and Performance Level of the Employees Working in Day and Night Shifts

Ayesha Sheikh
Student of BS.(Hons)
Department of Applied Psychology
University of the Punjab
Lahore, Pakistan
Rj.ashi@hotmail.com

Shazia Khalid
(Senior lecturer)
Department of Applied Psychology
University of the Punjab
Lahore, Pakistan
Shazia_gha@hotmail.com

Running head: Work Motivation and Performance level at day and night shift.

Abstract

The present study aimed to investigate the motivation and performance level of the employees working in day and night shifts. It was hypothesized that there is a difference between motivation and performance level of the employees working in day and night shift patterns. The sample of 160 employees (80 employees from day shift and 80 employees from night shift) was selected from call centers where workers had adequate timings for day and night shifts. Self motivation inventory by Milana Leshinsky and Larina Kase (2008) was used to measure the work motivation level and health and work performance questionnaire (HPQ) by Mark Attridge (2003) was used to measure performance level. The findings revealed that the performance level of employees working in day shift was higher than the employees working in the night shift. Similarly, work motivation level of the employees working in day shift was higher than the employees working in a night shift. This study will help to understand and overcome those factors which are affecting their performance and motivation level.

Work motivation and job performance have been emerging constructs in past few decades. This has been observed in organizational set ups that work motivation and performance level is strongly associated. The current research is an attempt to explore the dimensions of work motivation and job performance.

Generally speaking motivation can be defined as a set of forces that cause people to behave in a certain way. It is always goal directed. Motivation is a base for present and future technology, essential for production. It sets challenging goals for workers. It can only be inferred, not seen. Work motivation is defined as a process to energize employees to the work to achieve a goal through a specific path (Roy, 2003).

In social sciences, motivation is one of the major topics to be discussed, and work motivation plays a similar central role in the research and practice of administration. Work motivation has received intensive theoretical development, and scholars have reported thousands of studies bearing on the topic. For present purposes, however, we can say that basically work motivation indicates and refers to that how much a person is willing and actually tries to work hard—to the arousal, direction, and how much persistent a person is in work settings (Rainey, 2008).

Motivation in human resource development has been defined as the motivation to learn, to perform, or motivation to train. It has been argued that this is too limited concept of motivation because it does not actually incorporate motivation to use learning to improve performance. The theoretical rationale for this higher-order construct i.e. motivation, is presented along with proposed measures. Initial evidence of validity is provided by a confirmatory factor analysis (Naquin & Holton, 2003).

Job performance is a commonly used, yet poorly defined concept in industrial and organizational psychology, the branch of psychology that deals with the workplace. Job performance is generally referred to as if a person is doing his work properly or not. Despite the confusion about how a job performance should be defined properly, it is an extremely important criterion that relates to employees' work, organizational outcomes and success (Campbell, 1990).

Hogan, Hogan, and Roberts (1996) concluded that a well-constructed measure of a personality are valid predictors of a work and occupational performance, the results drawn can be linked to the work performance that is defined in terms of productivity (Hogan, Hogan & Roberts, 1996).

If recent surveys on employees have been studied and the analysis of job performance and retention rates of recently hired welfare recipients is done then the findings suggest that most recipients perform as well as or better than employees in comparable jobs and that their turnover rates appear fairly low. Various characteristics of the workers, employers, and jobs are associated with performance and retention difficulties among working welfare recipients (Holzer, Stoll & Wissoker, 2004).

Shift work refers to a job schedule in which employees work hours other than the standard hours of 8 a.m. to 5 p.m. or a schedule other than the standard workweek - Monday through Friday (Grosswald, 2004). There are certain advantages and drawbacks of all shift work systems. You cannot find even a single 'optimum shift system' which can be used in industry. However, the difference in the context of psychology, physiology and social recommendations for the shift system's design, can be seen that some work shifts are less favourable and some are more (Knauth, 1993).

From the perspective of social identity theory and self-categorization theory work motivation and performance were analyzed. Performance and work motivation are the major

issues in any organizational development, thus in Pakistan as the organizational area is developing so does the focus on these issues are also developing.

Furnham, Forde and Ferrari (1999) did a study on Personality and work motivation. It is surprising that the fact that personality factors appeared to account for between about 20 to 30% of the variance in work performance has been neglected in the organizational psychology literature till now.

The relationship of job satisfaction with substitutes of leadership, leadership behavior, and work motivation was measured by Steven in 1997. The results showed that all were significant predictors of job satisfaction except for subordinate substitutes. More than any other variable leadership style and work motivation effects the levels of job satisfaction, it is observed in in both the independent and stepwise analyses.

Effects on job performance and job-related stress related to nurses and shift work, was a study done by Coffey, Skipper & Jung (2006). In this research, the influence of night, day, afternoon and rotating shift schedules on the job related stress and job performance of the nurses has been observed. The results showed that the job performance was highest for the nurses in the day shift, then afternoon shift and least for the night and the rotating shifts. Most job related stress was experienced by the nurses working in rotating shift followed by the afternoon, day, and night shift nurses.

Hypothesis

The hypothesis of the present research is that:

- The motivation and performance level of the employees working in day shift is high as compared to the employees working in a night shift.
- Motivation and performance of the unmarried group is higher than married group.

- There is a correlation between motivation and performance level of employees.
- Motivation level and performance level are correlated to qualification.
- Age is correlated to motivation and performance level.

Methodology

Research design

This research investigated the comparison of motivation and work performance among the employee working in dayshifts and night shifts. The research was laid out through survey research design.

Sample

Purposive sampling was used in the present research as the choice of the sample was dependent on the availability of the participants. The sample consisted of 160 employees of call center with age range 18-45 were taken. The sample consisted of a single gender i.e. male, so there is no question of equal distribution of gender as only males were taken, but there was an equal distribution across both shifts i.e. day shift and night shift. Half of the participants were taken from the day shift and half from the night shift. There were no conditions applied to participate in this study. Inclusion and exclusion criteria for the participants are as follows:

- Employees of telecommunication call centers were taken.
- Age range was between 18-45
- Gender was restricted to male (both married and unmarried)

The administration of the telecommunication companies cooperated in the selection of participants according to the above mentioned criteria and in the administration of the questionnaires. Demographic characteristics of the sample are shown in the table 1.

Table 1

The Demographical Characteristics of the Sample (N=160)

	Frequency	Percentage
Age of respondent		
18-25	61	38.1%
26-35	87	54.4%
36-45	12	7.5%
Qualification		
Graduate	71	44.4%
Masters	89	55.6%
Marital status		
Married	83	51.9%
Unmarried	77	48.1%
Income		
10,000-20,000		
20,000-30,000	31	19.4%
30,0000-40,000	66	41.3%
40,000-50,000	52	32.5%
Work Shift	11	6.9%
Day		
Night		
	80	50%
	80	50%

Operational definition of variables

Work motivation

Work motivation is the process to energize employee to the work goal through a specific path (Roy,2003)

Work performance

Work performance in terms of quantity and quality expected from each employee these standards for the basis for performance reviews (Campbell, 1970).

Shift work

The standard work day unfolds during an 8to 5 timeframe. Shift workers are considered to be individuals who work non standard hours (Root, 2004).

Measures

There are two scales which were used to measure the motivation level and performance level. Self motivation inventory by Milana Leshinsky and Larina Kase (2008) was taken to measure the motivation level. It contains thirty items which measure the motivation level. It is a reliable scale with a cronbach alpha 0.9041. Health and work performance questionnaire (HPQ) by Mark Attridge (2003) was used to measure performance level. It is also a reliable scale with cronbach alpha 0.89. It has got the categories to measure if the performance is not good; none of the time, a little of the time, some of the time, most of the time, all of the time. These measures of present research purported to find out motivation and performance level of the employees working in different shifts i.e. day shift and night shift. The sample of employees was taken from the call center. The scale that is purported to find out the motivation level has got a scale range

from 1 to 5 whereas 1 indicates that the statement is “less true” and 5 indicates that the statement is “more true”. It means that high scores show high motivation. The scale that measure the performance level of the employees is divided into five categories which shows if the performance level is not good; none of the time, a little of the time, some of the time, most of the time, all of the time. It means that high scores show low performance.

Procedure

Self motivation inventory and Health and work performance scale were used in this research to measure motivation and performance level respectively. Permission was taken from the authors of these scales in order to use them for the research. After receiving a formal permission from the respective authors, the sample of employees was selected from call centers. The call centers of telecommunication companies were targeted. Different call centers of telecommunication companies were visited. Sample of 160 employees (males) was taken (80 from the day shift and 80 from the night shift). The age range was from 18 years to 45 years. A consent form was given to the participants and they were ensured that the information acquired from them would be held confidential and would not be used for any other purpose. Both the tests i.e. motivation measuring scale (self motivation inventory) and performance measuring scale (Health and work performance questionnaire) were administered on the employees.

Analysis and Results

Descriptive statistics such as mean, standard deviations and demographic data were tabulated. Independent sample T-test was used to analyze the data.

Independent sample t-test was applied to compare work motivation and performance level among employees working in day and night shifts. Results of t-test analysis are shown in table 2.

Table 2

Independent sample t-test comparing work motivation and performance level among employees working in day shifts and night shifts.

	Day shift		Night shift		t	df	p
	n=80		n=80				
	M	S.D	M	S.D			
Job performance	2.275	0.524	2.311	0.284	-.542	158	0.00
Work motivation	3.073	0.519	2.988	0.202	1.356	158	0.00

**P<0.05*

Results showed significant difference in mean scores of day shift and night shift in job performance level ($p=0.00$, $N=160$, $df=158$). According to results, significant difference in mean scores of day shift and night shift in work motivation was analyzed ($p=0.00$, $N=160$, $df=158$). Mean scores shows that performance and work motivation level of the employees working in day shift is higher than night shifts.

Independent sample t-test was applied to compare work motivation and performance levels of married and unmarried group as shown in table 3.

Table 3

Independent sample t-test comparing work motivation and performance level of married and unmarried group.

	Married n=83		Unmarried n=77				
	M	S.D	M	S.D	t	df	p
Job performance	2.388	0.409	2.191	0.412	3.026	158	0.243
Work motivation	3.704	0.278	2.983	0.489	1.455	158	0.00

* $P < 0.05$

Results showed no significant difference in mean scores of married and unmarried groups in job performance level ($p=0.243$, $N=160$, $df=158$). According to results, there was significant difference in mean scores of married and unmarried groups in work motivation ($p=0.00$, $N=160$, $df=158$).

Correlation analysis was also performed to measure the relationship between demographic characteristics of the participants and study variables. Results are given in table 4.

Table 4

Correlation between Demographic Characteristics of Participants and Study Variables (N=160)

	J. Performance	W. Motivation	age of respondent	qualification of respondent
J. Performance	-	-.012*	.092	.022**
W. Motivation	-	-	.073	.032
age of respondent	-	-	-	-.141
qualification of respondent	-	-	-	-

*P<0.01, **P<0.05

Significant negative correlation between low performance and motivation was shown by the results ($r=-.012$, $N=160$, $p<0.05$). Job performance has no significant correlation with age of the respondents. Work motivation has no significant correlation with age and qualification of respondent.

Discussion

Work motivation and job performance has long been the subject of researches. Many researches have been done on these variables by associating them with other variables. Much work has been done on these variables in Pakistan also but still there is a lots of scope to work on researches in relation to these variables.

The present research is about the comparison of work motivation and performance level among employees working in day and night shifts. It was assumed that the work motivation and

performance level of the employees working in a day shift will be higher than the employees working in a night shift. The result proved the hypothesis of the current study. Similarly Coffey, Skipper and Jung (2005) did a study on nurses and shift work to find out the effects on job related stress and job performance. The results of this research indicated that job performance of the nurses working in day shift was highest than afternoon and night shifts.

The difference in the marital status of employees showed no effect on their motivation and performance level. The similar results were found in the study of Russel and Rush (2007). They found no significant difference in the performance level of married and unmarried employees but they are evaluated on the basis of that especially females. Likewise Gorman (2001) also studied the effect of marital status on attitudes towards pay and finances and eventually motivation. It was seen that the married people has a great focus on the pay and finances, so the married people are motivated to the work when they are getting satisfactory pay and finances.

Results indicated that there is a negative correlation between low performance and work motivation, thus showing that performance and motivation are positively correlated. In 1999, Knippenberg, from the perspective of social identity theory and self-categorization theory, analyzed work motivation and performance. A conclusion was drawn from the review and analysis of the empirical studies of the relationship of organizational identification with motivation and performance that there is a positive relationship of organizational identification with task performance, work motivation and contextual performance to the extent that social identity is salient, and high performance is perceived to be in organization's interest. Many other researches like this can be found in which motivation and performance are associated with other

variables but their direct relationship has not been found, thus a work is done on that and found to be positively correlated.

Results showed that there is a weak relationship between performance level and qualification. Hoskins, Newstead and Dennis (1997) did a study and found that to predict a performance, type of qualification was weak predictors, but across disciplines, degree classifications were found to differ significantly.

Results showed that Work motivation has a positive correlation with the age showing that motivation increases with the growing age. Kanfer and Akerman (2004) showed that there is a positive motivation is associated with the age and it's a very important issue that had been ignored. They also said that chronological age may also play an important role. A slight negative correlation between performance and age was seen in the results but it was not that significant.

Results of the study indicated difference between work motivation and performance of the employees working in day and night shift. This might be because of many reasons that could be physiological, psychological, psychosocial and social. Some basic human physiological functions are depressed during the night, which may suggest that people are not well suited for the night work.

References

Attridge. M. (2003) Health and work performance questionnaire (HPQ). Retrieved from <http://www.easna.org/wp-content/uploads/2010/08/Bennett-AttridgeEASNA2007-HPQItems-forWEB.pdf>

- Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (pp. 687-732). Palo Alto, CA: Consulting Psychologists Press, Inc.;
- Campbell, J. P., Bunnette, M. B. (1970). *Managerial behavior, performance and effectiveness*. New York:Mc GrawHill
- Coffey, C. L, Skipper, J. K. & Jung, F. D. (2005). *Nurses and shift work: effects on job performance and job-related stress*, retrieved on 6th july,2010 from;
<http://www3.interscience.wiley.com/journal/119464156/abstract?CRETRY=1&SRETRY=0>
- Coffey, L. C. Skipper, J. K. & Jung , F. D. (2006). Nurses and shift work: effects on job performance and job-related stress. *Journal of Advanced Nursing*, 13, 245-254
- Furnham, A, Forde. L & Ferrari. K. (1999). Personality and work motivation. *Personality and Individual Differences*, 26, 1035-1043
- Gorman, E. H. (2001). Marriage and money,the effect of marital status on attitudes toward pay and finances. *Work and occupation*, retrieved on 6th July, 2010 from;
<http://wox.sagepub.com/content/27/1/64.abstract>
- Groswald, F. (2004). shift work on family satisfaction. *Families in Society: The Journal of Contemporary Social Services*, 85(3), 413-423.
- Hogan, R., Hogan, J., & Roberts, B. W. (1996). Personality measurement and employment decisions. *American Psychologist*, 51, 469—477.

- Holzer, H.J. Stoll, M.A. & Wissoker, D. Job Performance and Retention among Welfare Recipients. *The Social Service Review*, 78, 343-369
- Hoskins, L. S, Newstead, S. E, Dennis, I. (1997). Degree Performance as a Function of Age, Gender, Prior Qualifications and Discipline Studied. *Assessment & Evaluation in Higher Education*, 22, 317 - 328
- Kanfer, R. & Ackerman, P. L. (2004). Aging, Adult Development, and Work Motivation. *The Academy of Management Review*, 29(3), 440-458
- Knauth, P. (1993) The design of shift systems. *Ergonomics*, 36, 15 - 28
- Knippenberg , D. V. (2001). Work Motivation and Performance: A Social Identity Perspective. *Applied Psychology*, 49(3), 357-371.
- Leshinsky. M & Kase. L. (2008). Self motivation inventory .Retrieved from <http://southlakecounseling.com/resources/assessments/self-motivation-assessment/>
- Naquin, S. Holton, E. (2003). Motivation to improve work through learning in human resource development. *Human Resource Development International*, 6, 355 - 370
- Rainey, H. G. (2008). Work Motivation. Work Motivation. *Encyclopedia of Public Administration and Public Policy*, 2
- Root, F. (2004). Shift work on family satisfaction. *Families in societ: the journal of contemporary social services*, 85(3), 413-423

Roy, D.D. (2003). *Work motivation: Barriers and strategies*, retrieved on 8th July, 2010 from,
<http://www.isical.ac.in/~ddroy/workmoti.html>

Russell, J.E. A. & Rush, M. C. (2004). The effect of sex and marital/ parental status on
performance evaluation and attribution. *Sex roles*, 17(4), 221-236

Steven, W.P.(1997). The Relationship of Job Satisfaction with Substitutes of Leadership,
Leadership Behavior and Work Motivation. *Journal of Psychology*, 131

