

# An Analysis of the Effects of Shift Work on the Lives of Married Employees

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## Abstract

The article focused on the lives of married employees working in shift work across the ITES companies located in Chennai. A huge number of married employees have taken up shift work these days to meet the demanding requirements in the current scenario. The number of employees working in the ITES has been expanding every year. Married employees are taking up night shifts and other shift work to become financially stable as well as to lead a luxurious life. The article studied the problems faced by the married employees in fulfilling their marital commitments. This article is an empirical paper which used multiple regression models to find the correlation between shift work and its effect on family life, marital stability, and development of children, their academic performance, and cognitive skills. Data from 200 respondents were collected from employees who were working in shift work in ITES around Chennai. The study clearly portrayed that working non-day shifts eroded the marital relationship of the couples and lowered the marital quality. The working conditions were studied, and it was found that non-day jobs significantly affected the marital stability of the couples. The study also found working in rotating schedules had a greater effect on couples with children.

**Keywords :** marital life, marital stability, night shift, rotational shift, shift work, married employees

**JEL Classification :** I310, J800, J810

**Paper Submission Date :** August 18, 2015 ; **Paper sent back for Revision :** September 9, 2015 ; **Paper Acceptance Date :** October 14, 2015

In India, there are a vast no of people working in the ITES industry. It is required for the employees of ITES to work in different shifts according to the designated projects and work allocation. Some of the employees work in permanent night shift ; whereas, some of the employees work in shifts. When an employee works on a schedule outside the traditional 9 AM - 5PM day, it is called as shift work. These employees face a lot of problems in their family lives, but many don't express them due to the fear of losing their jobs. Marital stability gets affected because of shift work as couples work in different shifts. In some houses, either one of the spouses works in a shift or in some houses, both spouses work in a shift. The ITES industry in our country cannot do much about this because companies get projects from countries such as U.K., U.S., Australia, and so forth, and are expected to carry out their work 24/7 as the main focus of the work is to satisfy the clients.

ITES is a service sector, and it is a known fact that this 24/7 schedule affects the marital life of the employees (Presser, 2003). According to Satinder (2014), employees working in shifts are unable to have a work-life balance, and they are unable to handle their family commitments. He stressed that mutual adjustment between the work and family will yield better results. According to Fenwick and Tausig (2001), night shift or shift work causes tiredness, anxiety, and sleeping problems in individuals, and has a greater impact on the marital life of a couple.

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As per a study conducted by Charlton and Hertz (1989), among the Air Force Security guards, the men felt a lot of guilt that they were unable to spend good time with their wives and children. Davis, Goodman, Pirretti, and Almeida (2008) found that the divorce rate increased if any one of the spouse worked in night shifts, thus making it clear that spousal relationship is of utmost importance to live a life of harmony. The couples who work in varied shifts are unable to cater to the needs of their children, and this brings a great stress within the children's development, and many studies have found that children's performance in school as well as social skills get affected due to parents working in night shifts.

## **Review of Literature**

The employees and their families are affected in many ways by non-standard work schedules. Previous studies that have studied the effects of shift work show that it creates stress in the marital life by reducing contact among couples. This lack of contact can make it difficult to schedule and carry out family responsibilities, leads to lower levels of marital satisfaction, higher levels of conflict, and poorer family adjustment (Bohle & Tilley, 1998 ; Grosswald, 2004 ; Presser, 2000 ; Staines & Pleck, 1983 ; White & Keith, 1990 ).

Presser (2000) relied on longitudinal data from 3,476 married couples in the National Survey of Families and Households, a representative survey of all American families conducted in two waves : conducted in 1987-88 and 1992-94. Her findings on marital instability predicted whether or not marriages that were intact in 1987-88 had dissolved by 1992-94 as a consequence of wives' or husbands' working in shift work. The findings from Presser's study are that shift work increased the rate of divorce, but only for couples who had children, and only when the parents - either the father or the mother worked the night or rotational shifts. The results showed that working late shifts reduced marital quality among men ; whereas, among women, job-family spillover explained away marital quality effects of working rotating schedules. The bond between married couples would be happy only if there is an attachment and presence of each other, but if there is no time for the couples to meet, and if there is no time for them to spend together, there is a possibility of marital instability (Hill, 1988).

Staines (1980) time-dairy data analysis and Kingston and Nock (1987) found that both parents working in shift work spent few hours together, and this was the reason for marital instability. Presser (2000) conducted a study and found that shift work increased the level of marital instability among the couples, but under certain conditions. The study stated that night and rotational shifts had an even greater impact on the marital stability of married workers.

Maume and Sebastian (2012) collected the data from a bigger longitudinal study to analyze the effects of work schedules and their effects on family life. The data were taken from 599 members of a mid-Western chapter who worked in grocery and drug stores; the members here frequently changed their shift timings. They conducted the survey on 15 liker items based on questions such as marital dissatisfaction and marital discord, sexual problems, marital interaction, marital arguments, marital conflict, and child rearing. The study found that working in shift work caused problems in the marital life of the workers. The research found that men who worked in continuous night shifts had bad marital relations with their wives than the men who worked fixed day shifts, and the study proved that women had lower marital quality when their husbands worked in night shifts. The article also focused on the effect of women working in night shifts, and the problems faced in taking care of the children.

Transition to parenthood increased the psychological strain for both the spouses (Veroff, Douvan, & Kulka, 1981). Nonstandard work was also prevalent when there were children in the family, mostly due to a greater uptake of nonstandard work when women became mothers. In 1997, one-third of the dual-earner American families with at least one child under the age of five had at least one parent working nonstandard hours during the week, 60% if weekends were included (Presser, 2003).

Bronfenbrenner's ecological theory (Bronfenbrenner, 1979) is helpful in linking parental work schedules with children's well being. In particular, the bioecological theory conceives of child development as occurring within

nested settings beginning with the developing person (the micro-system), and extending out to the immediate social settings of home, school, and neighbourhood (the meso-system), and settings that may have a direct and an indirect impact on the developing person through the exo-system, such as the parental workplace and the macro-system, such as the wider society and culture. Renamed as bioecological theory, it has since been extended to highlight the importance of genetic and other physiological characteristics and the continuous reciprocal interaction that takes place between a person and the environment (Bronfenbrenner, 2005).

A second and important consideration is whether the influence of parents' work schedule on children depends on children's age or their developmental status and needs. Attachment, psychoanalytic, and family theorists have underscored the importance of the parent - child relationship in developing trust and a sense of self in children, and have drawn attention to the importance of age-related transitions in developmental capabilities (Parke & Buriel, 2006; Sroufe & Waters, 1977). Parental work arrangements, nonstandard hours in particular, may have a differential impact on child development dependent on the child's age and developmental needs. Infants and toddlers require a large investment of time from a primary caregiver in meeting their physical needs and forming secure attachment. As toddlers, they require constant supervision and activities focused on language development, including reading time with their parents. Parents are invaluable in helping children to understand and express language, develop a variety of skills, and solve cognitive tasks (Bradley & Corwyn, 2002).

## Research Hypotheses

★ **H1** : There is a significant relationship between the independent variables (shift work difficulties, age, gender, no of years since married, no of years of working in night shift, position of the employees) and the dependent variable (spousal relationship).

★ **H2** : There is a significant relationship between the independent variables (shift work difficulties, age, gender, no of years since married, no of years of working in night shift, position of the employees) and the dependent variable (child development).

## Methodology

A total of 225 sample respondents participated in the study, out of which the responses of 200 respondents were used for this study. The data were collected from the employees working in ITES around Chennai. The questionnaire method was used for collection of data. A total of 20 questions were included in the questionnaire based on the difficulties faced by shift work, spousal relationship, and children's growth. The data were collected by using a simple random sampling method. The respondents in the survey were in the age group of 25 -55 years, and the respondents comprised of both male and female employees working in shifts. Most of the respondents had been working in shifts for more than 2 years. The time period of the study is from May - August 2015.

## Analysis and Results

**(1) Step Wise Multiple Regression** : Multiples regression was conducted to find the relationship between the independent variables and spousal relationship (dependent variable).

The Table 1 gives a summary of the model. Since stepwise multiple regression was used, the independent variables were added one by one to get the standard coefficient. Here, you see as the independent variables : shift work difficulties(Model 1), age (Model 2), gender (Model 3), no of years since married (Model 4), no of years of working in night shift (Model 5 ), and position (Model 6) were added one by one with the dependent variable -

**Table 1. Model Summary**

Model	R	R Square	F Value	Sig
1	.886	0.784	720.512	.000
2	.888	0.788	366.491	.000
3	.902	0.814	286.39	.000
4	.909	0.827	233.031	.000
5	.920	0.846	213.292	.000
6	.923	0.852	184.814	.000

**Table 2. Standardized Coefficient Table**

Model 6	Unstandardized Coefficients			t	p- Value
	B	Std. Error	Beta		
(Constant)	10.572	1.461		7.235	.000
Shift Work difficulties	0.923	0.031	0.865	29.73	.000
Age	1.071	0.381	0.104	2.812	.005
Gender	-3.724	0.476	-0.232	-7.824	.000
No of yrs Married	-1.16	0.317	-0.147	-3.656	.000
No of yrs in Night Shift	-1.242	0.263	-0.150	-4.729	.000
Position of the employees	1.473	0.542	0.113	2.716	.007

spousal relationship, the *R* and *R* square value increased. The Table 1 shows the *R* square and adjusted *R* square values for every step. The first step shows the *R* value as .886, but as the steps were added, the *R* value kept increasing and reached .923 in the final step, which is a gain of (.923 - .886 = .037) .037. Hence, the model is statistically significant, which contains six independent variables and accounts for approximately 85% of the variance in spousal relationship.

The Table 2 depicts the coefficient values, which present the results. It is understood that there is a change and adjustment happening as we come down each model, but here, there is more interest in knowing the final model, which is Model 6. The standardized coefficients give us the predictors that have a strong influence on the dependent variable (spousal relationship). The difficulties faced due to shift work have the strongest influence on spousal relationship followed by gender, no of years since married, and no of years of working in night shift, respectively. Age and position have the least influence. There is a significant relationship between the dependent variable and independent variables. The difficulties observed by the respondents due to shift work and gender have a strong relationship between the dependent variable (spousal relationship). Here, we see that the hypothesis H1 is accepted as the *p* - value is less than 0.05, indicating that there is a significant relationship between the independent variables (shift work difficulties, age, gender, no of years since married, no of years of working in night shift, position of the employees) and the dependent variable (spousal relationship).

**(2) Multiple Regression to Find the Relationship Between Independent Variables and Children's Development (Dependent Variable) :** The Table 3 gives a summary of the model. Since stepwise multiple regression was used, the independent variables were added one by one to get the standard coefficient. Here, you see as the independent variables : shift work difficulties (Model 1), age (Model 2), gender (Model 3), no of years since married (Model 4), no of years of working in night shift (Model 5), and position of the employees (Model 6) were added one by one with the dependent variable - children's development, the *R* and *R* square values increased.

**Table 3. Model Summary**

Model	R	R Square	F	Sig.
1	.822	0.676	412.593	.000
2	.828	0.686	215.176	.000
3	.829	0.687	143.365	.000
4	.840	0.705	116.606	.000
5	.866	0.75	116.304	.000
6	.867	0.751	97.01	.000

**Table 4. Standardized Coefficient Table**

Model 6	Unstandardized Coefficients		Standardized Coefficients	t	p - value
	B	Std. Error	Beta		
Constant	-4.79	1.357		-0.353	0.724
Shift work difficulties	0.63	0.029	0.824	21.852	.000
Age	1.221	0.354	0.166	3.451	.001
Gender	0.74	0.442	0.064	1.675	.096
No of yrs Married	-1.16	0.295	-0.205	-3.937	.000
No of yrs in Night Shift	1.409	0.244	0.238	5.779	.000
Position	-0.474	0.504	-0.051	-0.941	.348

The Table 3 shows the *R* square and adjusted *R* square values for every step. The first step shows the *R* value as .822, but as the steps were added, the *R* value kept increasing and reached .867 in the final step, which is a gain of (.867 - .822 = .045) .045. The model is statistically significant, which contains six independent variables and accounts for approximately 75% of the variance of spousal relationship.

The Table 4 depicts the coefficient values and depicts the results. It is understood that there is a change and adjustment happening as we come down each model, but here, there is more interest in knowing the final model, which is the Model 6. The standardized coefficients give us the predictors that have a strong influence on the dependent variable (children's development). The difficulties faced due to shift work have the strongest influence on children's development followed by no of years of working in night shift, no of years since married, and age, respectively. Gender and position have the least influence. It is noted here that the *p*- value is > 0.05 for the independent variables : gender and position of the employees. Hence, there is a significant relationship between the dependent variable and independent variables for only shift work difficulties, no of years of working in night shift, no of years since married, and age, respectively. However, there is no significant relationship between gender and position with children's development. We find that the difficulties due to shift work and no of years of working in night shift have a strong relationship with the dependent variable (children's development).

Here, we understand that the alternate hypothesis H2 is accepted for the independent variables such as shift work difficulties, age, no of years since married, no of years of working in night shift, as the *p* - value is <0.05, whereas the demographic factors : gender and position of the employees are rejected since the *p*- value is > 0.05.

According to the study conducted by Maume and Sebastian (2012), marital quality declined with age and due to children at home. This was mostly in the recent marriages for both men and women. The study clearly portrayed that working non-day shifts eroded the marital relationship of the couples and lowered the marital quality. The working conditions were studied, and it was found that non-day jobs significantly affected the marital stability of the couples. The study also found working in rotating schedules had a greater effect on couples

with children. Comparing Maume and Sebastian's (2012) study to the present study, it is clearly evident that all the employees who were surveyed (with the exception of a few) were concerned that their marital stability was being disrupted as they were facing a lot of problems in balancing their work and personal life. The results here show that all the factors : age, no of years since married, no of years of working in night shift indeed had a great effect on the marital life of the respondents as well as on the growth and development of their children.

## **Managerial Implications**

This research paper intends to be an eye opener for the top level management to understand the difficulties faced by the employees working in shift work. The article would enable the managers to get an insight into the marital difficulties caused due to working non-standard schedules and accordingly, implement reforms in their organization to enable a work culture or work climate that takes care of the needs of the employees so that they are comfortable in their work as well as are able to give time to their family needs. In any organization, it is very important that the employees are free from distractions and worries to be their productive best at work. Hence, if an organization understands the problems of shift workers, they can implement measures to bring about a balance in the work and family life of the employees. This will enable the employee to not only work productively, but they will get adequate time to take care of their homes and families as well.

## **Conclusion and Suggestions**

The article explores the effects of shift work on the married life of employees working in ITES, Chennai and revealed relevant findings on the effects of shift work. The article studied the various problems faced by employees with regard to night shifts, spousal relations, and taking care of children's needs.

Questions related to marital commitments, night shift difficulties, and taking care of children were included in the questionnaire. The employees revealed that they were not able to fulfill their family obligations and this increased their stress levels. The respondents felt that they were not able to take care of their families and were unable to spend quality time with their families. The study used multiple regression and finds a significant relationship between the difficulties faced by night shift workers and spousal relationship and children's growth. The independent variables such as age, gender, no of years of working in night shift, no of years of being married, and position of the employees were also used to find the relationship with spousal relationship and children's growth. Future research can use shift patterns and ascertain the relationship between shift patterns and their effects on spousal relationship and children's growth.

The article tried to ascertain whether there was a good relationship between the spouses who worked in shifts. The study revealed that most of the employees stated that shift work causes rift and disagreements and that their partners weren't happy about the shift hours. The respondents felt that the quality time with the spouse was neglected due to varying working hours. The respondents also felt that shift work could be the cause for divorce.

## **Limitations of the Study and the Way Forward**

The study did not go deep into identifying the conflicts that arise due to shift work. The study did not conduct an empirical study on the different issues that take place on account of shift schedules. The study just intended to find out if shift work affected employees and their families. A detailed study can be conducted to ascertain how child development is affected or how the cognitive development of the children gets affected with respect to the couples working in shifts. An in-depth study needs to be conducted to analyze whether night shift or shift work

causes divorce or increases the divorce rate. These studies are required in the Indian context since there are very few studies that have been conducted on the effects of shift work in the Indian context.

## References

- Bohle, P., & Tilley, A. J. (1998). Early experience of shift work: Influences on attitudes. *Journal of Occupational and Organizational Psychology*, 71 (1), 61-79. DOI: 10.1111/j.2044-8325.1998.tb00663.x
- Bradley, R.H., & Corwyn, R.F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53 (1), 371-399. DOI: 10.1146/annurev.psych.53.100901.135233
- Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, 34 (10), 844-850. DOI : <http://psycnet.apa.org/doi/10.1037/0003-066X.34.10.844>
- Bronfenbrenner, U.(2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: Sage Publications.
- Charlton, J., & Hertz, R. (1989). Making family under a shift work schedule: Air force security guards and their wives. *Social Problems*, 36(5), 491 - 507.
- Davis, K. D., Goodman, W. B., Pirretti, A. E., & Almeida, D. M. (2008). Nonstandard work schedules, perceived family wellbeing, and daily stressors. *Journal of Marriage and Family*, 70 (4), 991- 1003.
- Fenwick, R., & Tausig, M. (2001). Scheduling stress: Family and health outcomes of shift work and schedule control. *American Behavioral Scientist*, 44 (7), 1179 - 1198.
- Grosswald, B. (2004). The effects of shift work on family satisfaction. *Families in Society*, 85 (3), 413 - 423.
- Hill, M. S. (1988). Marital stability and spouses' shared time : A multidisciplinary hypothesis. *Journal of Family Issues*, 9(4), 427 - 451.
- Kingston, P. W., & Nock, S. L. (1987). Time together among dual-earner couples. *American Sociological Review*, 52 (3), 391 - 400.
- Maume, D.J., & Sebastian, R. A. (2012). Gender, nonstandard work schedules, and marital quality. *Journal of Family and Economic Issues*, 33 (4), 477-490.
- Parke, R.D & Buriel, R. (2006). Socialization in the family: Ethnic and ecological perspectives. In W. Damon & R. M. Lerner (Eds), *Handbook of child psychology* (5th ed). New York : Wiley.
- Presser, H. B. (2000). Nonstandard work schedules and marital instability. *Journal of Marriage and the Family*, 62(1), 93 - 110.
- Presser, H.B. (2003). Race-ethnic and gender differences in nonstandard work shifts. *Work and Occupations*, 30 (4), 412 - 439.
- Satinder, S. (2014). An empirical study on the status of work-life balance in oil and natural gas corporation Limited (ONGC). *Prabandhan: Indian Journal of Management*, 7(1), 27-36. doi:10.17010/pijom/2014/v7i1/59241
- Sroufe, L. A., & Waters, E. (1977). Attachment as an organizational construct. *Child Development*, 48(1), 1184-1199.
- Staines, G. L. (1980). Spillover versus compensation : A review of the literature on the relationship between work and nonwork. *Human Relations*, 33 (2), 111-129. doi: 10.1177/001872678003300203

- Staines, G. L., & Pleck, J. H. (1983). *The impact of work schedules on the family*. Ann Arbor: University of Michigan, Institute for Social Research.
- Veroff, J., Douvan, E., & Kulka, R. A. (1981). *Mental health in America: Patterns of help-seeking from 1957-1976*. New York : Basic Books.
- White, L., & Keith, B. (1990). The effect of shift work on the quality and stability of marital relations. *Journal of Marriage and the Family*, 52(2), 453 - 462.