# DETERMINANTS OF WILLINGNESS TO PAY FOR HEALTH INSURANCE OF THE INFORMAL INDUSTRIAL WORKERS IN COIMBATORE - TAMIL NADU

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**Abstract**

*The Urban Informal Sector Comprises the overwhelming majority of workers in the Country. Unlike workers in the organized sector, unorganized sector workers did not have steady employment, secured or sustainable incomes and were not covered by social security Protection. The situation was further worsened by the market failures – covering capital markets, insurance market, and Labour markets which are of particular importance for the security of the less well-off section in the society. Therefore the Government should play a fundamental role in raising the standards of living through various types of direct and indirect interventions which influence nutrition, health and other constituents of human well-being. But deprivation and vulnerability to vagaries of life were the major threats to the workers in the urban informal sector. The structural adjustment programmers initiated in India since 1991, have also contributed in some measure to the economic and emotional vulnerability of workers in the organized and unorganized sector. All these call for a sustainable and expanded coverage of promotional and protective social security programmes. The available research works, both theoretical and empiri¬cal, on the supply and demand sides of the labour market has been inadequate. Researchers have identified five form of social security Viz. employment, income education, health, food and women. The present study confines itself to the one form of social security i.e., Health security. Coimbatore District is well- known for its textile and engineering industry which consists of units turning out a variety of products needed by different types of industries, as input. Apart from supplying components to major units, many engineering units are engaged in producing consumer durables too. Using the number of units functioning and the size of workforce as the criteria, textile industry and three prominent engineering industries, namely, foundry, Pump and textile machinery industries were chosen for the purpose of the study. The result of the study would be of much interest and relevance to those who are serious about transforming the working environment of those engaged in the production process of the selected industries. No doubt, the government/policy makers would be the main beneficiary of the outcome of the present study. It would be able to understand the difficulties faced by workers, many of whom are engaged in hazardous work spots. Policy making bodies of the government machinery are sure to gain input when they think about schemes that would lessen the problems faced by the worker.*

*Keywords: social security, Health security, engineering units, government/policy makers, health sector, double burden of disease*

## Introduction

The health sector in India is at the crossroads.  India is experiencing a "double burden of disease". Many preventable communicable diseases are growing unchecked, nutrition-linked health problems continue to plague the country. Along

with it, chronic health conditions are rising menacingly.    While public healthcare infrastructure has been allowed to decay, private healthcare sector is wooed with a plethora of incentives, in keeping with the pro-market agenda of the ruling regime. Due to these developments, access and affordability of healthcare has suffered enormously, leading to our failure to achieve good health and provide financial risk protection to the population in general and the poor in particular. A nation aspiring to attain and sustain a double-digit economic growth cannot remain a mute spectator without a concomitant focus on its health of the workforce.  A productive workforce and a healthy population are necessary components of any development strategy, which could be ensured only by providing adequate health security to its society.  The casual link between health and economic development is well known (Thomas and Frankenberg 2002). Unfortunately, the "exclusive" growth strategy of the neoliberal variety followed since the early 1990s has exposed the population to extreme vulnerability in general, and health insecurity in particular.

Health security is a prime concern for the unorganized sector workers. Many studies in India have shown that reduced public health expenditure can have detrimental effect on the workers and their families. Illnesses requiring hospitalization could be catastrophic for poor workers. Out-of-pocket expenditure constitutes over three-quarters of the total health expenditure for all Indians. On average, a person in the poorest quintile is much less likely to receive treatment than those in the richest quintile, and women are even more likely to forego treatment. The health-related vulnerabilities mentioned above can be compounded, especially for the poor households, due to the fact that there has been a steep rise in the cost of treatment for healthcare in India in recent years.

## Health Insurance: An Alternative Health Financing Mechanism

One possible solution to the above said problem is to reduce the financial barrier through **health insurance**. Unfortunately, currently only about 10 per cent of the population is protected under any health insurance coverage. Of this, most are for employees in the formal sector (Ellis et al 2000). The informal sector is totally unprotected and has to depend on the aforementioned poorly financed public sector or the expensive private sector to take care of its needs. The government is keen to increase the insurance coverage and has even introduced special health insurance packages for the poor (Times of India, 2003). However, these initiatives have not been acceptable to the citizens of this country (The Economic Times, 2003).

Health insurance is a mechanism of pooling resources and sharing risks or uncertain events among many people. It ensures some form of equity. The focus is on contributory arrangements. It is a system of assurance to make provision for contingencies of healthcare expenses, to provide protection against financial loss by unforeseen sickness and to meet cost of good medical care and relieves anxiety and tension.  Health insurance is

an emerging important financial tool in meeting healthcare needs of the people of India. In recent years, there has been a lot of interest globally in health insurance which is now being seen as the most promising option for extending health coverage to a majority of the population in the country. The justification for extending social protection, especially to the most vulnerable population, is no longer necessary; it is now widely understood that one reason for the impoverishment and reduced well-being of households is the lack of protection from economic consequences of disease and death. It is more important to understand why social, rather than other forms of insurance, is being seen as the most relevant option. There are, of course, other forms of social protection; pure welfare measures in the form of employment benefits or social security for indigents are offered in many countries, on the assumption that the state has the primary responsibility of looking after its citizens. Free or subsidised healthcare is another way the state fulfils its responsibility in a majority of countries, especially in the developing world.

## Significance of Health Insurance in India

Health insurance significance in India as the public cost of financing health care in the country has been significantly increasing due to several factors such as population size, improvement in medical technology and challenges of simultaneously tackling communicable and non-communicable diseases. With a limited public budget the government is unable to cope with rising costs and is therefore, encouraging alternative sources for financing the expanding health care system, which currently is financed mainly form private out-of-pocket. The failure of the public sector to respond to client needs (non-availability of functionaries, shortages of drugs consumables, etc.) leaves little option for both the rich and the poor but to seek private care. With almost one-third of the public sector to cater to the needs of everyone, it becomes important for funds to be organized in some other ways, such as community financing, social insurance or private insurance. Insurance could enable the individuals to cover the costs of treatments for those events that would otherwise be difficult to afford at the time of need. It is presumed that larger the number of people utilizing the health services of the private sector (through health insurance), the lesser the burden will be on government resources to finance secondary and tertiary care.

The existing health insurance schemes in India points to the fact that almost all the programmes cater either to the organised workforce or to the economically upper section of the population. The private health care expenditure is more than four times that of public and there is very little preference for government health delivery system vis-à-vis the private. The latter is primarily because of poor quality service in the government-managed facilities. There is coverage of both inpatient and outpatient care in the government-sponsored health insurance schemes – CGHS and ESIS. The quality of services under the ambit of both is poor. The voluntary health insurance plan

(Mediclaim), which covers only hospitalization expenses, is too expensive for the informal sector workers to get enrolled.  There are various community-based and self-financing schemes but, give the massive health care needs, the coverage of population by them is just not adequate.  The proportion of population covered by any health insurance scheme is minuscule, let alone those employed in unorganised sector.

## Objectives of the Study

The study was conceived to be carried out in an urban unorganised set up, with the following objectives:

1. To study the nature and composition of unorganised labour market of textile and engineering industries in Coimbatore.
2. To measure the extent of awareness of workers on  health insurance and estimate the willingness to pay for health insurance and

## Data Sources and Methodology

Coimbatore District is well- known for its textile and engineering industry which consists of units turning out a variety of products needed by different types of industries, as input. Apart from supplying components to major units, many engineering units are engaged in producing consumer durables too. The records available with various entities like District Industries Centre (DIC), South Indian Engineering Manufacturers' Association (SIEMA), Indian Institute of Foundry Men (IIFM), South Indian Mills' Association (SIMA), South Indian Textile Research Association (SITRA), South Indian Small Spinners' Association (SISSIPA) and Coimbatore District Small Scale Industries Association (CODISSIA) showed that there were in operation 550 textile units and nine major engineering industries encompassing foundry industry (755 units), Pump industry (497 units), textile machinery manufacturing industry (524 units), auto component manufacturing industry (484 units), furniture manufacturing industry (170 units), gear industry (140 units), jewellery manufacturing industry (1200 units), sheet metal and fabrication industry (235 units), and engineering outsourcing industry (7000 units).

Using the number of units functioning and the size of workforce as the criteria, textile industry and three prominent engineering industries, namely, foundry, Pump and textile machinery industries were chosen for the purpose of the study. The foundry industry of Coimbatore corporation consisted of 490 units that could further be classified into small (410 units), medium (61 units), and large (19 units). Statistics of this kind were obtained from associations like Indian Institute of Foundry Men (IIFM), South Indian Engineering Manufacturers' Association (SIEMA), Coimbatore District Small Scale Industries Association (CODISSIA), Coimbatore Foundry Industry Owners' Association (COFIOA), and Coimbatore Tiny, Small and Medium Foundry owners' Association (COSMAFEN), The Pump insustry functioning, within the  boundary of Coimbatore Corporation, had 312 units spread across small (191 units), medium (91 units), and large (30 units), as

found out from the maintained by South Indian Engineering Manufacturers' Association (SIEMA), Coimbatore Small Scale Industries Association (CODISSIA), Tamil Nadu Pump and spares Manufacturers' Association (TNPSMA), and Kovai Pump Manufacturers' Association (KOPMA). Textile Machinery Manufacturing units numbering 221(small -139; medium - 61; large - 21) had a worker strength of 11,335 as revealed by the documents kept by South Indian Engineering Manufacturers' Association (SIEMA), Coimbatore District Small Scale Industries Association (CODISSIA), and Textile Machinery Manufacturers' Association (TIMMA). It was further discovered that the foundry industry employed the highest number of workforce amounting to 17910 followed by textile industry with 17592 and pump industry with 16,258. Adequate care was exercised in deciding the sample size – both for the units and workers as well. By the case of engineering and textile units, 10 per cent of the population was considered for the study. As for the workers, 30 per cent of the workers were chosen, through random sampling method thus, a total of 2464 workers were included for the purpose of the study. The sample workers consisted of 537 from foundry industry, 485 from Pump industry, 333 from textile machinery manufacturing industry and the rest 1109 from textile industry.

Interview method was followed for collection of data from the sample workers. The interview schedule consisted sections dealing with personal and household details, earnings level, status of occupational mobility and extant social security mechanism. To prevent the schedule containing any consistent and ambiguous questions and also to check the comprehensiveness of aspects covered, a pilot study was taken up. Several modifications had to be made in the questions, based on the difficulties encountered during pilot study. The schedule was further fine-tuned based on the suggestions of workers, trade union leaders and subject experts, with whom separate discussions were held at length with a focus to improve the structure of the schedule so that the information obtained through the instrument could be extensively exploited for the purpose of drawing meaningful and reliable inference. Special efforts were also made to hold discussions with women workers so that questions on women – centric problems could also be raised in the schedule, thus making the instrument free from gender-bias. Data collected through such a carefully developed instrument were suitably supplemented with information obtained through deliberations held with workers, Trade union leaders, Supervisors, Managers and Proprietors. Descriptive statistics, such as, mean and standard deviations were used to have the feel of the nature of data collected. Logit Model was administered to understand to what extent the workers were willing to pay for health insurance schemes.

## Willingness to Participate for Health Insurance

The purpose was to know the awareness of the health insurance among the sample respondents and the extent to which they considered it is worth taking risk cover and

the extent to which they were willing to contribute to cover the risk to their health. The Government of India is planning to introduce some of the schemes for the unorganized sector workers based on the report of National Commission for Enterprises in the Unorganised Sector (May 2006) submitted to Government of India, under the Chairmanship of Dr. Arjun Senguptha. Based on this report, the researcher got the opinion from the sample respondents about the awareness/willingness to pay for health insurance. Table1 presents a view of the willingness of workers to pay for health insurance.

Three-fourth of the total workers was ready or willing to pay for health insurance. The workers face occupational hazards/injuries in their workplaces though the degree of risks may be varying depending on the industry and the nature of work they perform.

Realising this, workers in high risk jobs of foundry and pumps to the levels of 95.0 and 98.6 per cent respectively were willing to pay for health insurance. It is in the textile industry that the percentage that was not ready to insure for their health was high at 46.5 per cent. And to some extent the percentage of workers in the textile machinery industry too was 17.7 per cent. It could be concluded from the observation of the researcher during the field visit those workers who were experiencing risks and were conscious of their health had positively responded to participate in the health insurance scheme and also expressed their willingness to pay for health insurance.

## Insurance Premium/Amount Willing to Pay for Health Insurance

The researcher attempted to assess the response of the sample workers on their willingness to participate in health insurance cover against risk from the occupational diseases. Almost all the processes and health hazards studied, the workers of those units were exposed to have ill health. Hence, at least some of the workers would have taken insurance policies and accordingly questions were asked. Their responses have been recorded. After identifying the workers who are willing to pay for health insurance and the capacity to pay for health insurance, the information has been grouped into four categories as presented in Table 2. About 75.3 per cent sample workers had expressed their willingness to participate in a contributory insurance scheme to protect themselves from risks and uncertainties. The observations of the researcher from the sample workers was this: when they are not protected by social security cover like ESI, then it is for them to make their own arrangement for their security. They felt that plight of workers like them who were unorganised and prone to occupational diseases is not taken cognizance by the government. Therefore, in the absence of social insurance, they were willing to join a scheme proposed by the State. Those workers who were in favour of a scheme had well understood the importance of a scheme that would provide health security to them. They admitted that their continued work in the process in which they work causes damage for their health and that cannot be halted so long as they work in the processing units. Therefore, they expect at least a health insurance scheme, even if it were to be contributory. Regarding the amount of money willing to pay for health insurance, more

than 33.0 per cent of the workers were ready or willing to pay between Rs. 51and Rs.100 per year. 21.0 per cent of the workers were willing to pay within Rs. 151-200 per year. An amount of more than Rs. 200 was ready to be paid by 17.8 per cent of the sample respondents. Premium amounts of Rs 101-150 and less than Rs. 50 was possible to be contributed by 14.3and 13.8 per cent workers. Among the foundry workers, the amount willing to be paid towards premium was Rs.51 to 100 by 34.7 per cent, Rs. 101-200 by 48 per cent, above Rs.200 by 14.5 per cent and below Rs.50 by 2.7 per cent workers. The amount willing to be set aside for the insurance premium by 44.1, 23.0, 19.2, 11.3 and 2.3 per cent, pump industry workers was Rs.51-100, Rs. 151-200, Rs. 101-150, above Rs. 200 and less than Rs. 50 respectively. Higher amounts (more than Rs. 100) of premium per year were willing to be paid by nearly three-fourth of the textile machinery manufacturing workers. The picture for textile workers presents 38.6 per cent willing to pay an amount of less than Rs. 50 and another major chunk respondents (32.5 per cent) contribution would be in the range of Rs.51-100.

**Table 1 Willingness to Participate for Health Insurance**

| Willingness | Engineering Industry | | | Textile Industry | Total |
|---|---|---|---|---|---|
| | Foundry Industry | Pump Industry | Textile Machinery | | |
| Willing | 510[95.0] (27.5) | 478[98.6] (25.8) | 274[82.3] (14.8) | 593[53.5] (32.0) | 1855[75.3] (100.0) |
| Not Willing | 27[5.0] (4.4) | 7[1.4] (1.1) | 59[17.7] (9.7) | 516[46.5] (84.7) | 609[24.7] (100.0) |
| Total | 537[100.0] (21.8) | 485[100.0] (19.7) | 333[100.0] (13.5) | 1109[100.0] (45.0) | 2464[100.0] (100.0) |

**Table 2 Amount of Monthly Premium Willing to Pay-Industry-wise (per month**

| Willingness to Pay | Engineering Industry | | | Textile Industry | Total |
|---|---|---|---|---|---|
| | Foundry Industry | Pump Industry | Textile Machinery | | |
| Below 50 | 14[2.7] (5.5) | 11[2.3] (4.3) | 2[0.7] (0.8) | 229[38.6] (89.5) | 256[13.8] (100.0) |
| 51-100 | 177[34.7] (28.9) | 211[44.1] (34.4) | 32[11.7] (5.2) | 193[32.5] (31.5) | 613[33.0] (100.0) |
| 101-150 | 115[22.5] (43.2) | 92[19.2] (34.6) | 9[3.3] (3.4) | 50[8.4] (18.8) | 266[14.3] (100.0) |
| 151-200 | 130[25.5] (33.4) | 110[23.0] (28.3) | 82[29.9] (21.1) | 67[11.3] (17.2) | 389[21.0] (100.0) |
| Above 200 | 74[14.5] (22.4) | 54[11.3] (16.3) | 149[54.4] (45.0) | 54[9.1] (16.3) | 331[17.8] (100.0) |
| Total | 510[100.0] (27.5) | 478[100.0] (25.8) | 274[100.0] (14.8) | 593[100.0] (32.0) | 1855[100.0] (100.0) |

**Willingness to Pay for Health Insurance**
**Logistic Regression Model**

In the course of analysing the factors determining the willingness to pay for health insurance among the workers in Coimbatore textile and engineering industry, it has to be understood whether worker has willing to pay for health insurance or not.

Accordingly workers have been categorised into two, as those who had willing to pay health insurance who did not. Those who willing to pay health insurance take up value 1 and those who have not willing to pay health insurance are assigned value '0'. That is

   W = 1

   if W*<Z  and W = 0 otherwise

   The dependent variable, whether the worker has willing to pay for health insurance 'y', takes on values of one and zero. A simple linear regression of y on x is not appropriate, among other things, the implied model of the conditional mean places inappropriate restrictions on the residuals of the model. Furthermore, the fitted value of y from a simple linear regression is not restricted to lie between zero and one. Instead, a specification that is designed to handle the specific requirements of binary dependent variables is adopted. The following functional form is commonly used, known as "Logit"

   $\ln[p/(1-p)] = \alpha + \beta X + e$

   where, p is the probability that the event y occurs, p (y=1)

   p/(1-p) is the "odds ratio"

   ln[p/(1-p)] is the log odds ratio, or "logit"

   The categorical dependent y reflects an underlying qualitative variable and uses the binomial distribution so one can adopt a logit model for this situation. The logistic distribution constrains the estimated probabilities to lie between 0 and 1.

The estimated probability is:

   **p = 1/[1 + exp(-r - s X)]**

   If you let $\alpha + \beta X = 0$, then p = 0.50

   as $\alpha + \beta X$ gets really big, p approaches 1

   as $\alpha + \beta X$ gets really small, p approaches 0

   The estimated equation is given below:

## Estimated Equation

   DEPWILL $=C + \beta_1 AGE + \beta_2 HEP + \beta_3 GEN + \beta_4 EDUI + \beta_5 EDUA + \beta_6 TECH + \beta_7 RURAL + \beta_8 RELI + \beta_9 MIG + \beta_{10} BC + \beta_{11} MBC + \beta_{12} SCST + \beta_{13} MRSTS + \beta_{14} FAEDU + \beta_{15} FOCC + \beta_{16} MOEDU + \beta_{17} MTUPRJ + \beta_{18} LAPRJ + \beta_{19} WORC + \beta_{20} ITS + \beta_{21} ITML + \beta_{22} FOUN + \beta_{23} PUM + \beta_{24} TEXM + \beta_{25} TEXI + \beta_{26} INCOME + \mu$

## Determinants of Willingness to pay for Health Insurance

   According to the estimate of willingness to pay for health insurance of the industrial workers in Coimbatore, as per the Logit Estimates for willingness to pay for health Insurance Scheme, age has a positive association with willingness to take up health insurance but not significant. Male workers are more willing to join health insurance schemes. Married workers are having opinion that they are ready to participate and willing to pay for health insurance than the unmarried worker. Educated workers are more willing to join the health insurance scheme than illiterate workers. It reveals that

educated workers are known about their health status and health expenditure involved in the present day situation and also they are aware of the insurance policies or policies related to health (mediclaim policies) issued by both the government-based insurance companies and the private players. The variable income has positively influences the worker's willingness to join the health insurance plan, it implies that income increases and willingness to pay for health insurance is also increases. Capacity to pay is undoubtedly a major consideration in the decision to insure or not to insure. Therefore a positive coefficient is expected between income level and willingness to pay for health insurance.

The estimated coefficient income has positive sign and significant at one per cent level. The result indicates that higher income level workers have a stronger willingness to join and pay for health insurance. The variable Training has positive influence on willingness to pay for health insurance. It reveals that trained workers are aware of the impact of the health insurance than the untrained workers in the engineering and textile workers of Coimbatore. The coefficient of rural workers has negative sign indicating that their unwillingness to join health insurance while the workers of urban area they are willingly come forward to associated themselves with health insurance plans. Illiterate workers and community to which a worker belongs Backward / Scheduled Tribal / Scheduled Caste have influence on one's willingness to come under a health plan. Trade Union membership has also negative influence on willingness to pay for health insurance because very less number of workers joined trade union in the both industrial category. Migrated workers working in the Coimbatore engineering and textile industry are willing to join health insurance than the native industrial workers. The workers in the small scale industry, the co-efficient has positive sign and highly significant to express their willingness to join health insurance. It implies that the workers from the small scale industry, they are aware of health insurance schemes. The variable labour law and casual workers have positive approach on health insurance. In the foundry industry workers category, the co-efficient has negative sign, this shows that foundry industry workers are not having much awareness about the health insurance. Foundry industry workers are facing more health problems and their work has more hazardous, but still they are not having awareness and not willing to joint health insurance. The pump industry workers are more aware of health status and the health expenditures incurred in the day to-day life. The results shows that pump industry workers are willing to join health insurance scheme then the textile machinery workers and textile industry workers. The result shows that if the government come forward to introduce a insurance scheme with less insurance premium, most of the informal sector workers are ready to join such insurance schemes.

### Table3 Descriptive Statistics of All Workers

| Variables | Mean | Std. Deviation | N |
|---|---|---|---|
| **Dependent** | | | |
| Willing to pay health insurance (Yes=1; No=0) | .7524 | .43169 | 2464 |
| **Independent Variables** | | | |
| Income | 3.528692 | .1588732 | 2464 |

| | | | |
|---|---|---|---|
| Age in Years | 31.9740 | 9.83944 | 2464 |
| Gender – Male = 1, else O | .4838 | .49984 | 2464 |
| Education All Educated = 1, else O | .8823 | .32231 | 2464 |
| Education Illiterate =1, else O | .1177 | .32231 | 2464 |
| Training =1, else 0 | .2650 | 0.3717 | 2464 |
| Region Rural = 1, else O | .6603 | .47370 | 2464 |
| Religion – Hindu =1, else O | .9485 | .22115 | 2464 |
| Migration =1, else O | .3819 | .48595 | 2464 |
| Backward caste =1, else O | 1.1615 | .99363 | 2464 |
| Most Backward caste = 1, else 0 | .1652 | .37792 | 2464 |
| SC/ST caste = 1, else 0 | .2293 | .42047 | 2464 |
| Marital Status – Married = 1, else 0 | .5670 | .49560 | 2464 |
| Father Education – Illiterate =1, else O | .6035 | .48927 | 2464 |
| Father Occupation – Textile/Engineering =1, else O | .1262 | .33216 | 2464 |
| Mothers Education – Illiterate = 1, else 0 | .7106 | .45356 | 2464 |
| Trade Union Membership, Member =1, else O | .0986 | .29821 | 2464 |
| Labour Law, Labour Law applied =1, else O | .3198 | .46650 | 2464 |
| Nature of Job – Casual = 1, else 0 | .9079 | .28926 | 2464 |
| Type of Industry – Small = 1, else 0 | .5231 | .49957 | 2464 |
| Type of Industry – Medium/Large = 1, else 0 | .5231 | .49957 | 2464 |
| Health Problem =1 , else 0 | 1.5280 | .59776 | 2464 |
| Foundry | .2179 | .41293 | 2464 |
| Pump | .1968 | .39769 | 2464 |
| Textile Machinary | .1351 | .34195 | 2464 |
| Textile Industry | .4501 | .49760 | 2464 |

### Table 4 Determinants of Willingness to pay for Health Insurance – All Industry Workers

| Variables | β | S.E | Sig. | Exp(β) Odds |
|---|---|---|---|---|
| **Dependent**:          Willingness to pay Health Insurance  Yes -1, No – 0 | | | | |
| **Independent** | | | | |
| **Human Capital Variables** | | | | |
| Income | .097 | .053 | .000** | .263 |
| Age | .167 | .005 | .131 | .007 |
| Male | .025 | .031 | .492 | .022 |
| Marital Status | -.048 | .016 | .008*** | -.042 |
| Educated | .052 | .024 | .004*** | .069 |
| Illiterates | .354 | .072 | .247 | .478 |
| Training | 1.179 | 0.363 | 0.007*** | 3.391 |
| **Workers Background Variables** | | | | |
| Rural | -.108 | .016 | .000** | -.098 |
| Religion | .006 | .033 | .716 | .012 |
| BC | -.126 | .018 | .003** | -.055 |
| MBC | .019 | .040 | .585 | .022 |
| SC/ST | -.116 | .040 | .003** | -.119 |
| Trade Union | -.062 | .026 | .001** | -.090 |
| Migration | .104 | .017 | .000** | .093 |
| Fathers Edu | .025 | .019 | .252 | .022 |
| Fathers Occ | .011 | .023 | .513 | .015 |
| Mothers Illit | .010 | .020 | .643 | .009 |
| **Industry, Job Specific Variables** | | | | |
| Labour Law | .173 | .018 | .000** | .160 |
| Work Casual | .124 | .027 | .000** | .185 |

| | | | | |
|---|---|---|---|---|
| Type of Ind (S) | .247 | .008 | .000** | .174 |
| Type of Ind (M/L) | -.009 | .016 | .639 | -.007 |
| Health problem | .031 | .015 | .121 | .023 |
| Foundry | -.042 | .014 | .248 | .314 |
| Pump | .057 | .028 | .025* | -.062 |
| Textile Machinery | -.211 | .033 | .000** | -.267 |
| Textile Industry | -.545 | .037 | .000** | -.474 |
| Constant | | .202 | .354 | -.188 |

\* $p<0.10$; \* \*$p<0.05$;\*\*\* $p<0.01$

**Note:** -2 Log likelihood = 1335.507 (Nagelkerke) R Square = .650

Chi-square= 3037.537 df = **25** Sig. = **.000**

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