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Do castes affect working conditions differently? Evidence from rural Punjab

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Abstract

The occurrence of discrimination on the labor market in the forms of wage/income disparities, occupational inequalities, and other forms is well-documented in the cases of race, color, and caste. However, a detailed investigation into the differences in working conditions has not been conducted. Through an analysis of unit-level data from the 68th round of the NSSO on employment-unemployment status as well as primary data collected in 2015–16, the current study seeks to understand this aspect of caste-based labor market discrimination in rural Punjab. The findings show that working conditions vary greatly between workers in rural Punjab who belong to different caste groups in society. The majority of scheduled caste (SC) workers perform physical labor in both agricultural and non-agricultural jobs as compared to non-scheduled caste laborers. They (SCs) work long hours per day and engage in more hazardous tasks than their non-SCs colleagues. Furthermore, SCs workers lack access to various contract jobs, paid leave, and social security benefits.

JEL Codes: J01, J15, J71, J81.

Keywords: Labour market discrimination, working hours and conditions, social security benefits, scheduled castes, rural Punjab

Introduction

Caste is one of the institutions used to separate people into distinct groups, alongside religion, race, and regionalism. It is connected to how people live their daily lives and the conditions that are related to the general well-being of society as a whole. In spite of popular opposition and provisions that are incorporated in the Indian Constitution, it is one of India's long-standing institutions that continue to exist and acts as the basis for discrimination. The issue of discrimination is primarily discussed in the context of market discrimination in the discipline of economics. Market discrimination refers to a situation in which market players (Employers, employees, customers, borrowers, lenders, etc.) consider demographic characteristics (such as race, ethnicity, caste, and gender) while making judgements about economic transactions (Such as wages, hiring practises, and access to credit) (Becker, 1957; Arrow, 1973; Akerlof, 1976; McConnell, Brue, & Macpherson, 2009) [6, 3, 1, 26]. Therefore, it leads to occupational segregation, variations in working conditions, and wage differentials between the groups of individuals who are discriminated in favour of and against. Theorist economists argue that the practise of discrimination is carried out for one of three reasons: enmity between majority and minority groups; cost concerns, whether they be nominal or real; or on the basis of the majority group's presumptions regarding the inefficiency of the minority group (Becker, 1957; Arrow, 1971, 1973, 1998; Phelps, 1972; Akerlof, 1976) [6, 2-4, 29, 1].

An Analysis of the Existing Research

Since Becker (1957) [6] brought up the subject of economic discrimination in his book 'taste for discrimination', it has received extensive development. With their statistical discrimination theory, Arrow (1973) [2], Akerlof (1976) [1], and Phelps (1972) [29] expanded the conversation. However, due to a lack of enough data, the empirical literature on the subject examined the theory of statistical discrimination's validity, whereas there is insufficient information on the validity of the theory of taste for discrimination (Krueger 1963; Heckman 1998; Neumark 1999; List 2004; Dickson & Oaxaca 2009) [22, 37, 28, 24, 13]. However, theories generally attempt and evaluate just explicit discrimination, leaving the

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amount of implicit discrimination and processes on how it influences it mostly unexplored. The majority of empirical evidence reveals that marginalized groups, including minorities, black people, and scheduled castes (SCs) frequently face market discrimination (Banerjee, Bertrand, Datta, & Mullainathan, 2009; Singh, 2009; Lang & Lehmann, 2011) ^[5, 30, 23]. Researchers noted that hiring or entry-level discrimination by employers is the most common. Many similar studies have demonstrated that they discriminate in wage payment, minority's ownership of assets, and so forth (Gwartney, 1969; Blinder, 1973; Darity & Nembhard, 2000) ^[16, 8, 10]. The occupational segregation of blacks into low-paying positions by whites results in wage discrimination against blacks (Gill, 1989) ^[14]. Depending on race and gender, non-cognitive abilities account for varying proportions of the racial pay difference (Hokayem, 2011) ^[17].

In case of India, the issue of caste-based labour market discrimination is examined in relation to employment opportunities, occupational mobility and segregation, disparities in wages, income, and wealth, etc. (Bhattacharjee, 1985; Jodhka, 2002; Thorat, 2002, 2009; Ito, 2009; Deshpande & Newman, 2012; Madheswaran & Attewell, 2012; Thorat & Attewell, 2012; Thorat & Negi, 2014, etc.) ^[7, 20, 31, 32, 19, 12, 25, 33, 34]. *Manu-Smriti*-based caste-occupation affinity was perpetuated historically and is still prevalent in many low rewarding occupations. The scheduled castes (SCs) and scheduled tribes (STs) were traditionally assigned menial, manual labour oriented, low-income-generating, and low-status bound occupations only and they kept performing these occupational activities through the generations (Gupta, 1991; Jodhka, 2002; Thorat, Mahamallik, & Sadana, 2012) ^[15, 20, 35]. Workers belonging to these discriminated groups were either paid lower wages for equal work or paid equal wages but were required to work for longer hours (Deshpande, 2019) ^[11]. Also, the minority workers may be asked to perform work activities involving more health hazards, and/or a higher degree of risk which the majority of workers are not willing to perform.

For the country as a whole and for the state of Punjab in particular, however, there is a paucity of evidence regarding differences in working conditions between caste groups. In addition, the issue has not been studied in the context of rural labour markets, despite the fact that the majority of the population lives in rural areas (Census of India, 2011). As a result, there is a wide range of concerns that need answering, such as whether or not workers of different castes in India experience different working circumstances. In rural Punjab, do the working conditions vary by caste? If so, what are the differences? Do the SC workers have to deal with more risky situations at work? If so, are they compensated for performing riskier tasks? Do SC employees have access to the applicable social security benefits, such as PF/pension, gratuities, health care, and maternity benefits?, etc. This article seeks to fill this vacuum in the existing literature by seeking answers to some of these research issues.

Objective and Hypotheses

The objective of this study is to examine caste-based market discrimination in rural Punjab by assessing caste group disparities in working conditions of SCs and non-SCs

workers in rural Punjab. The following hypothesis is offered to test in order to achieve the goal:

H₁: There are significant differences between the working conditions of SCs and non-SCs workers in rural Punjab.

Data and Methodology

The analyses incorporate both primary and secondary data. Unit-level data from the 68th round of the National Sample Survey Organization (NSSO) was utilised for the macro analysis of discrimination in the state of Punjab. The micro-analysis was carried out based on the data collected in the three districts- Jalandhar, Bathinda, and Rupnagar- of Punjab during the year 2015–16 utilising a primary survey and a well-structured schedule. The sample size was determined using the published tables, with a 5% precision level, a 95% confidence level, and a P-value of 0.50. (Cochran, 1963; Kish, 1965; Yamane, 1967; Miaoulis & Michener, 1976; Israel, 2009) ^[9, 21, 36, 27, 18]. Information from the selected families was gathered using both the structured questionnaire and the open-ended questionnaire. Following a multistage random sampling process, the sampled households were chosen.

In the initial phase, all of Punjab's districts were split into three strata, with the top third having the largest proportion of rural SCs, the middle third having about the average proportion of rural SCs in the State, and the bottom third having the lowest proportion of rural SCs in the State. From each of these three groups of districts, one was chosen at random. Among these three groups of districts, Jalandhar, Bathinda, and Rupnagar were chosen as the three districts to reflect the high, moderate, and low percentage of the rural SC population, respectively. The districts chosen provide as a good representation of various socioeconomic aspects of rural Punjab in addition to the distribution of rural SCs in the state. Additionally, the three districts that were chosen are dispersed across diverse geographical areas of Punjab, reflecting the state's population's diversity in terms of both geography and culture. At the second round of sampling, all of the blocks in each selected district were enumerated in order of the proportion of rural SCs population. From each district, two random blocks were selected, one with a high and one with a low percentage of rural SCs. Thus, Talwandi Sabo and Mour from the Bathinda district, Bhogpur and Adampur from the Jalandhar district, and Morinda and Rupnagar from the Rupnagar district were chosen for the study. Two villages were chosen at random from each selected block, one with a high proportion of the SCs population and the other with a low proportion. The twelve villages chosen for the field survey are as follows: Sangat Khurad and Fatehgarh Nouabbad from Talwandi Sabo Block; Ramnagar and Mansa Kalan from Mour Block; Ghorewahi and Jhafal Jhingran from Bhogpur Block; Sikanderpur and Lesriwala from Adampur Block; Kainour and Paprali from Morinda Block; Behrampur Zamindara and Kheri from Rupnagar Block.

The households for the survey were chosen from the chosen villages at the fourth step of sampling. In order to achieve this, comprehensive lists of every household in the chosen villages were created, together with basic information about each one, such as primary occupation, caste, land ownership, etc. Then, households in each chosen village were classified according to caste and occupation. Thus, the proportion to population sampling technique was used to select three-quarters of the sample of SCs households and

one-quarter of the sample of non-SCs households. A minimum of 35 households, including 25 SCs households and 10 non-SCs households, were randomly chosen and surveyed from each of the chosen villages. Thus, 303 SCs households and 128 non-SCs households were surveyed from the selected villages. The caste-based differences in working hours and conditions, job contract and methods of payment, and social security benefits in rural Punjab are analysed using univariate methods. The significance of caste-based differences was tested using Z statistics.

Results and Discussion

Caste and Working Condition

It is documented that approximately one-half of the SCs households are engaged in manual work in non-agricultural activities and one-fourth in manual work in cultivation in rural Punjab. On the other hand, approximately one-fourth of the non-SCs group households are engaged in manual

work in cultivation, other agricultural activities, and non-agricultural activities. Also, a relatively much larger proportion of the non-SCs household is engaged in non-manual work activities other than in cultivation (Singh, 2022) [38]. Given the observed differences in occupations and economic activities performed by the workers from the SCs and non-SCs groups (Singh, 2022) [38], it would be interesting to investigate the working hours and conditions confronted by the workers of two caste groups under consideration in identical activities. Therefore, the analysis in this section is presented in two sub-sections: 1. Caste and working hours; and 2. Caste and working conditions.

Caste and Working Hours

Broadly, the activities performed by the SCs and other caste group workers are recorded as agriculture sector activities and non-agriculture sector activities. Information in this context is presented in Table 1.

Table 1: Agricultural and non-agricultural work conditions across the caste groups in rural Punjab: 2015-16 (Percentage)

Working conditions		Caste groups		Z _{SC-NSC}	
		SCs	Non-SCs		
Agricultural work conditions					
Full-time employed on the Field		46 (46.9)	110 (95.7)	-9.063*	
Fixed working hours		51 (52.0)	26 (22.6)	4.610*	
Working hours per day	8	25 (49.0)	20 (76.9)	-2.576**	
	9	18 (35.3)	6 (23.1)	1.147	
	10	8 (15.7)	0 --	3.082*	
Who applies chemicals to the crops					
Only hired worker	Local	61 (62.2)	10 (8.7)	9.625*	
	Migrant	4 (4.1)	5 (4.3)	-0.073	
Only the landowner		6 (6.1)	20 (17.4)	-2.638*	
Both owner and the hired worker	Local	18 (18.4)	80 (69.6)	-8.817*	
	Migrant	9 (9.2)	0 --	3.151*	
The worker is chosen to apply chemicals to the crops					
Randomly		29 (29.5)	37 (32.2)	-0.426	
Rotation wise		0 --	0 --	--	
Only a particular selected worker does this		35 (35.7)	46 (40.0)	-0.646	
Voluntary		34 (34.7)	32 (27.9)	1.067	
Paid incentive wages to apply chemicals to the crops		31 (31.6)	57 (49.6)	-2.720*	
Non-Agricultural work conditions					
Working hours per day	Not fixed	81 (20.5)	35 (31.5)	-2.266**	
	2 - 7	8 (2.0)	16 (14.5)	-3.660*	
	8	265 (67.1)	52 (46.8)	3.835*	
	9	23 (5.8)	2 (1.8)	2.319**	
	10	16 (4.1)	6 (5.4)	-0.549	
	12 and more	2 (0.5)	0 --	1.409	
Supposed to do overwork	Yes	263 (66.6)	52 (46.8)	3.738*	
	No	57 (14.4)	24 (21.6)	-1.680*	
	N.A.	75 (19.0)	35 (31.5)	-2.588*	
Is overwork paid	Yes	249 (94.7)	50 (96.2)	-0.502	
	No	14 (5.3)	2 (3.8)	0.502	
Risk to life in activity engaged		Yes	262 (66.3)	53 (47.7)	3.507*
Type of risk in work activity					
Falling from the height		136 (51.9)	9 (17.0)	5.805*	
Working with	Fire	11 (4.2)	2 (3.8)	0.138	
	Chemical	7 (2.7)	2 (3.8)	-0.391	
	Electricity	31 (11.8)	5 (9.4)	0.536	
Other types of risks		77 (29.4)	35 (66.0)	-5.164*	
Have you worked in such a risky position		208 (79.4)	31 (58.5)	2.897*	

Note: 1. The caste group SCs includes the Majhbi/Balmiki/Bhangi/Chuhra, Ravidasiye/Ramdasiye/Chammar, and Addharmi. 2. The caste group non-SCs include castes other than SCs i.e., BC/OBC and General. 3. Z_{SC-NSC} is the computed value of the test statistics for the difference of proportion between the SCs and non-SCs. 4. *, ** and ***-indicates value significant statistically at 1%, 5% and 10% levels of significance respectively.

Source: Field Survey.

Looking for the working hour information, it is reported that approximately one-half of the SCs and three-fourths of the non-SCs group workers work for eight hours a day in agricultural activities. While none of the non-SCs group workers has reported it, approximately 16 percent of the SCs workers reported that they generally work for ten hours a day on the field. However, the situation is not much different between workers from non-SCs and SCs workers categories so far as the working hours in case of non-agriculture sector activities are concerned. Two-thirds of the SCs and approximately 47 percent of the non-SCs group workers have reported that they work for eight hours a day. At the same time, while one-fifth of the SCs workers informed that they are engaged in activities with no fixed timing, approximately 32 percent of the non-SCs group workers have acknowledged the same. It comprises a majority of the workers who have reported as running their own shop/business and part of the workers engaged in other occupations such as rickshaw puller, woodcutter, daily wager (others), etc. where the working hours are not defined or fixed as such. Working hours differ significantly across the two caste groups in the case of the two hours to seven hours category and the nine hours category. While only two percent of the SCs workers have reported that their working hours vary between two hours a day to seven hours a day, approximately 15 percent of the non-SCs group workers reported the same. Similarly, a significantly larger proportion of the SCs workers have acknowledged that they are supposed to work for nine hours a day. This all signifies that the working hours per day differ significantly among the SCs and non-SCs groups.

A relatively larger proportion of the SCs workers are supposed to work for longer hours i.e. nine and more hours a day whereas a relatively larger proportion of the non-SCs group workers are working for fewer hours, between two and seven hours per day. It needs further enquiry regarding the overwork or overtime on the job. While two-thirds of the SCs workers reported overwork, approximately 47 percent of the non-SCs group workers reported the same. Hence, a larger proportion of the non-SCs workers are working in those occupations where the concept of overwork or overtime is not relevant. The corresponding percentage of the SCs workers engaged in such occupations is just 19 percent. When asked about the payment for overtime, approximately 95 percent and 96 percent of the SCs and non-SCs workers respectively reported that they are paid additional wages for the same.

Working Conditions

Like the working hours, working conditions for workers from different caste groups are also analysed for both agriculture and non-agriculture sectors (see Table 1). However, in the case of the agriculture sector, information is available only regarding the application of chemicals to the crops which is considered risky for the health of handlers. About three-fifths of the SCs workers accepted that they are hired to apply chemicals to the crops individually, whereas only 17.4 percent of the non-SCs workers-cum-farm owners have reported that they apply chemicals to the crops themselves. Another 18.4 percent of the SCs acknowledged that they apply chemicals to the crops along with the owner of the farm. All in all, approximately four-fifths of the total SCs workers engaged in farm activities in the study area reported that they apply chemicals to the crop. In brief, it is

evident from the data that while one-third of the SCs are individually hired to apply chemicals to the crops, approximately 70 percent of the non-SCs apply the same along with the hired local labour that primarily comprises the majority of the SCs community. Thus, it establishes the fact that the SCs labour is hired in the agriculture sector to undertake risky activities such as the application of chemicals to the crops. It is worth noting that while one-half of the non-SCs group workers reported that they are paid incentive wages for the application of chemicals to the crops, only approximately 32 percent of the SCs workers have acknowledged receipt of the incentive wages for the same. This implies that there exists not only a difference in the working conditions of the SCs and non-SCs group workers but also they are paid differently for the same kind of job.

In the case of the non-farm or non-agriculture sector, while two-thirds of the SCs workers acknowledged that they are engaged in occupations that involve risk to life, only 47.7 percent of the non-SCs workers reported the same (see Table 1). When asked about the nature of risk, a majority (approximately 52 percent) of the SCs workers reported that they are engaged in activities where they are even supposed to work at height and there is always the risk of falling. Only 17 percent of the non-SCs workers have reported the same. It comprises the construction workers and a relatively much larger proportion of the SCs workers are engaged in it than the non-SCs workers. In the occupations that involve working with fire, electricity, and chemical, and having other types of risks, no significant differences are observed among the SCs and non-SCs group workers. Nonetheless, the differences become clear if we look at the response to the question that whether or not they have worked in such risky positions. While approximately 80 percent of the SCs workers have acknowledged that they worked/working in such risky positions, about 59 percent of the non-SC workers reported so. Thus, there is nothing wrong to conclude that like the farm sector; even in the case of the non-farm sector, a relatively larger proportion of the SCs workers are working in more risky conditions than the non-SCs workers.

Job Contract and Methods of Payment

Besides the risk, working conditions in terms of differences in the type of job contract, methods of payments, availability of social security benefits, and paid leave in rural Punjab are equally important in the well-being of workers. The relevant information is presented in Table 2. This section is presented in two sub-sections: job contracts, and methods of payments.

Job Contract

A majority (93.0 percent and 82.2 percent respectively) of the SCs and non-SCs workers reported that their employment involves no written job contract. No significant differences are observed among the two caste groups in the case of jobs with more than one year and up to three years of written job contracts. On the other hand, the information reveals that a significantly lower proportion of the SCs workers are employed in jobs with a written contract for either up to one year or for more than three years. It implies that relatively non-SCs group workers are more secure at their jobs since the written job contracts not only define their duties but rights too. Hence, the SCs workers are more

prone to various kinds of exploitation at the hands of their employers in terms of frequent hiring and firing, longer working hours, low payments, and various activities on the job, etc.

Method of Payment

The differences are much wide in the case of the method of payment (see Table 2). Similar to the work activities analysis, it is found that approximately one-half of the SCs workers are engaged in employment involving daily

payments, meaning thereby that they are working as daily wage employees. Contrary to this approximately one-fourth of the non-SCs group workers are working as daily wagers. While three-fifths of the non-SCs group workers are receiving a regular monthly salary, only two-fifths of the SCs workers fall in this payment group. No significant differences are observed in the case of the remaining methods of payment such as regular weekly payment and piece rate payment.

Table 2: Distribution of workers by the caste group and type of job contract, methods of payment, availability of social security benefits and paid leave in rural Punjab: 2011-12 (percentage)

Work conditions- usual principal activity		Caste group		Z _{SC-NSC}
		SCs	Non-SCs	
Type of job contract				
No written job contract		93.0	82.2	4.950*
Written job contract	for 1 year or less	0.6	4.1	-3.403*
	more than 1 year to 3 years	0.2	1.0	-1.523
	more than 3 years	6.2	12.7	-3.344*
Methods of payment				
Regular monthly salary		40.4	60.0	-6.082*
Regular weekly payment		6.6	7.3	-0.418
Daily payment		48.5	26.8	7.038*
Piece rate payment		1.2	1.5	-0.393
Others		3.3	4.4	-0.864
Available social security benefits				
Eligible for	Only PF/ pension (i.e., GPF, CPF, PPF, pension, etc.)	0.4	5.2	-4.278*
	only gratuity	0.0	0.0	--
	only health care and maternity benefits	0.2	0.6	-0.939
	only PF/ pension and gratuity	2.0	0.3	2.538**
	only PF/ pension and health care and maternity benefits	0.8	2.2	-1.712***
	only gratuity and health care and maternity benefits	0.0	0.0	--
PF/ pension, gratuity, health care, and maternity benefits		5.0	12.8	-4.117*
Not eligible for any of above social security benefits		90.7	77.9	5.338*
Not known		0.9	1.0	-0.156
Eligible for paid leave	Yes	9.1	27.6	-7.323*
	No	90.9	72.4	7.323*

Note: 1. The caste group SCs includes all the scheduled castes of Punjab State. 2. The caste group non-SCs include BC/OBC and General. 3. Z_{SC-NSC} is the computed value of the test statistics for the difference of proportion between the SCs and non-SCs. 4. *, ** and *** indicates value significant statistically at 1%, 5% and 10% levels of significance respectively.

Source: Calculated from unit-level data, National Sample Survey Organization (NSSO) 68th Round (2011-12).

Availability of Social Security Benefits

The differences in the two caste groups (i.e., SCs and non-SCs) become even more clear when available social security benefits to the workers in their usual principal activity are analysed (see Table 2). About 91 percent of the SCs and 78 percent of non-SCs group workers have reported that they are not eligible for any type of social security benefits. Statistically significant differences among the SCs and non-SCs groups are observed even in the case of activities where the workers are eligible for social security benefits. For example, except for the case of only provident fund (PF)/ pension and gratuity, for the rest of the social security benefits (such as only PF/ pension (i.e., GPF, CPF, PPF, pension, etc.); only PF/ pension and health care and maternity benefits; and PF/ pension, gratuity, health care, and maternity benefits), the proportion of the non-SCs group beneficiaries exceed the SCs counterpart. Similarly, the condition of the SCs workers proves worst when we look at their eligibility for paid leave. While only 9 percent of the SCs workers are eligible for paid leaves, compared with approximately 28 percent of non-SCs are eligible for the same. This all proves that the labour market discrimination against the SCs workers is more pronounced in form of

differences in the terms of occupations, work conditions, and limited access to paid leaves and basic social security benefits in rural Punjab.

Conclusion

The results of the analysis provide support for the hypothesized hypothesis that the working circumstances of SCs and non-SCs in rural Punjab differ significantly. The analysis of working hours and conditions by caste group demonstrates that there are differences between them. Compared to workers from the non-SCs category, SCs employees are expected to put in more hours at work in both the agricultural and non-agricultural sectors. Also, a significantly larger proportion of them (SCs) is engaged in jobs with high life risk than the non-SCs group. It has been discovered that SCs workers face discrimination in terms of access to various contract positions, as well as eligibility for paid leave and social security benefits. The majority of SCs group workers are engaged in daily wage employment, whereas the majority of non-SCs group workers are engaged in regular monthly income job. They (SCs) even lack access to social security benefits compared to the non-SCs group workers. Keeping in view these findings, there is nothing

wrong to conclude that in the present scenario of COVID-19, workers engaged in manual casual work and daily wage activities would suffer the most. Since the majority of SCs workers are involved in these activities, they would be the most negatively affected segment of the population. Thus, there is an urgent requirement to implement suitable policy measures to safeguard their legal rights.

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