

The Effects of District-Level Union Status on the Job Satisfaction of Teachers

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Abstract

It is the purpose of this study to examine the effects of the unionisation status of US school districts on teacher job satisfaction. Using an ordered probit analysis and a sample of public school teachers, results of the present study suggest that teachers working in unionised districts are, overall, less satisfied with their jobs than are teachers in non-unionised districts. However, teachers in unionised districts were less likely to leave for better pay and were more enthusiastic about teaching than teachers in non-unionised districts. Hence, even though teachers in unionised districts were generally less satisfied with their jobs, they were more satisfied with regards to certain specific aspects of their positions.

JEL Codes: J2, J51

Keywords

Job satisfaction; teachers; unions.

Introduction

Many studies have examined the relationship between union membership and job satisfaction. The following are the opening lines from a select sample of papers on this topic:

Surveys of employees' opinions typically reveal that union members' reported job satisfaction is lower than non-members'. (Bryson, Capellari and Lucifora 2010: 357)

Past research often finds that union workers have lower job satisfaction, yet this research has not recognised the heterogeneity of non-union workers. (Artz 2010: 387)

In particular, the strand of labour economics that focuses on differences in job satisfaction between union and non-union members has attracted much attention. (Garcia-Serrano 2009: 91)

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Job satisfaction and satisfaction with pay are often used by economists to explain a number of labour market stylised facts such as job shopping, job tenure, and quit behavior, as well as unionisation and strike activity. (Bryson, Capellari and Lucifora 2004: 439)

The general consensus of this broad body of research is that union members have lower job satisfaction than non-union members (Borjas 1979; Berger, Olson, and Boudreau 1983; Steele and Ovalle 1984; Meng 1990; Lillydahl and Singell 1993; Heywood and Clark 1998; Siebert and Wei 2002; Gazioglu and Tansel 2006; Garcia-Serrano 2009; Artz 2010). This result holds regardless of the model estimated, the functional form used, or the data set examined. Given that most unionised workers earn more and have better benefits, on average, than non-unionised workers, it would seem odd to find that unionised workers would be less satisfied with their jobs. Several theories have been proposed to explain this seeming anomaly.

One theory, proposed by Freeman and Medhoff (1984), suggests that unionised workers are not really that dissatisfied; if they were, they would just quit. Rather, it is in the nature of unions and unionised workers to be dissatisfied and to even exaggerate problems in the workplace so that they could argue for more pay and better benefits (Borjas 1979). This theory is known as the exit-voice hypothesis (Heywood, Siebert and Wei 2002; Hammer and Avmgar 2005).

Another explanation for the unsatisfied unionised worker is that unions usually arise in occupations and industries that are dangerous and unpleasant. Hence, becoming unionised is a response to the characteristics of the job; the workers were dissatisfied long before they became union members (Duncan and Stafford 1980; Premack and Hunter 1988; Heywood, Siebert and Wei 2002; Hammer and Avmgar 2005).

A third reason for worker dissatisfaction is that union leaders may unrealistically raise workers' expectations about job characteristics and potential compensation. Workers become dissatisfied because their union leaders keep telling them that their jobs should be better, but they aren't getting any better (Kochan and Helfman 1981; Gordon and Denisi 1995; Heywood, Siebert and Wei 2002; Hammer and Avmgar 2005).

Another possible explanation is that unions typically compartmentalise workers and their tasks. Union work rules reward seniority over talent or skill. Some workers may feel that their abilities are not being fully utilised and rewarded. Hence, those workers are dissatisfied (Super and Hall 1978; Hackman and Oldham 1980; Hammer and Avmgar 2005).

A fifth theory is that unionised workers have different preferences than non-union workers. Union leaders may stress certain aspects of a job, such as pay and benefits, while ignoring other aspects, such as the duties of the job. Hence, unionised workers may be unhappy not because they are not paid well, but because they are unfulfilled (Hammer and Avmgar 2005).

Other recent explanations include an industrial relations theory (the naturally adversarial role of unions leads to dissatisfaction in the workplace), an expanded utility theory (workers include many factors or aspects of a job in their utility

functions), and finally, a personal characteristic theory (people with certain attributes are naturally drawn to unions and sort themselves into union jobs) (Heywood, Siebert and Wei 2002; Hammer and Avgar 2005).

Although all of the above theories propose reasonable explanations for the unhappiness of unionised workers, some research has shown that unionised workers are no less happy than their non-union counterparts (Gordon and Denisi 1995), and some has even shown that union members are more satisfied than non-union members (Pfeffer and Davis-Blake 1990). According to Pfeffer and Davis-Blake (1990), unions increase job satisfaction because they reduce wage inequality, give workers a sense of control over the functioning of their workplace, and increase worker commitment to both work and the firm.

One problem with much of this research, however, is that it only examined the membership status of individual workers. In the US, a firm that is unionised may have both union members and non-union members. In states that have right-to-work laws, workers are not required to join a union or pay any type of 'agency' fee to a union; workers in these states who work in unionised firms, however, are still covered by the negotiated collective bargaining agreement. Thus, a non-union worker enjoys the same pay and benefits as a union member but does not pay union dues or any other type of 'agency fee' to the union. Hence, these non-union workers are enjoying most of the benefits of union membership without incurring any of the costs. In states that do not have right-to-work laws, workers may not have to join a union, but they may still be required to pay an 'agency' fee to the union; nonetheless, all workers in any unionised firm are covered by the negotiated collective bargaining agreement.

Given the above, it is reasonable to assume that job satisfaction does not differ by individual-level union membership but rather by the unionised status of the firm where the workers are employed. Since all workers in a unionised firm are covered by the collective bargaining agreement, it may not be relevant whether or not an individual worker is a union member. Rather, the important distinction is whether or not a firm is unionised. This distinction more clearly highlights the potential wage and benefit disparities between union and non-union firms and any potential difference in job satisfaction due to these differences in workplace conditions.

It is the purpose of this study to examine the effects of the unionisation status of school districts on teacher job satisfaction. No prior study on US labour markets has examined the effects of firm-level unionisation on individual-level worker satisfaction. Using an ordered probit analysis and a sample of public school teachers, results of the present study suggest that teachers working in unionised districts are generally less satisfied with their jobs than are teachers in non-unionised districts. However, teachers in unionised districts were less likely to leave for better pay and were more enthusiastic about teaching than teachers in non-unionised districts. Hence, even though teachers in unionised districts were in general less satisfied with their jobs, they were more satisfied with regards to certain specific aspects of their positions.

Empirical Technique and Data

As noted above, it is reasonable to assume that job satisfaction varies based upon the unionised status of the firm. If workers are covered by a collective bargaining agreement, then it should be immaterial as to whether or not an individual worker is a union member. Rather, what should matter is the unionised status of the firm. If a firm is unionised, then all employees of that firm are exposed to the same workplace conditions and are covered by the same collective bargaining agreement, regardless of the individual workers' union status.

In analysing the relationship between union membership and worker satisfaction, it would be desirable to examine only one industry so that some of the factors, such as certain workplace conditions that may be responsible for some of the reported differences in satisfaction are controlled for. Although prior research has noted that looking at only one profession or industry may lead to results that cannot be extrapolated to a wider population, it is reasonable to assume that many of the more generic attributes of workers, such as age and sex, have similar effects on satisfaction regardless of industry or occupation (Bryson et al. 2004).

In this study, only teachers will be examined. Teaching is an excellent occupation to use in studying the impact of unions on worker satisfaction because most teachers do the same jobs, unionisation is prevalent but not universal, and there has been substantial research on the job satisfaction of teachers (Cooke 1982; Kowalczyk 1982; Chapman and Lowther 1982; Eberts and Stone 1984). Results of this research on teacher satisfaction have been mixed. Some studies have shown that teachers suffer from dissatisfaction with their jobs (Cooke 1982; Eberts and Stone 1984), while others have arrived at different conclusions and found that unionised teachers are not any more dissatisfied with their jobs than non-unionised teachers (Kowalczyk 1982). Chapman and Lowther (1982) also conducted a study in the early 1980s on teacher job satisfaction. Their research, however, examined only the graduates from the University of Michigan and only looked at satisfaction in general and not the relationship between union membership and satisfaction; hence, the applicability of their results is somewhat limited. None of the above research examined the distinction between unionised districts and non-unionised districts with regards to worker satisfaction.

In the United States (US), teachers' unions are organised at the district level. These locals are typically affiliated with a national union, such as the National Education Association or the American Federation of Teachers. These national unions are engaged more in lobbying and recruitment efforts than they are in labour contract (collective agreement) negotiations. Contract negotiations are the responsibilities of the local unions at the district level. In the present study, any district that has a teachers' union is considered to be a unionised district, and it is assumed that all teachers in a unionised district are covered by a labour contract.

This article uses five different measures of satisfaction that are measured on a four-point scale. The five measures are as follows:

- (1) **SATIS**: teacher generally satisfied
- (2) **WORTH**: teacher believes teaching is important
- (3) **ENTHU**: teacher is enthusiastic
- (4) **LEAVE**: teacher would not leave school for better pay
- (5) **TRANS**: teacher would not transfer to other school.

The four possible outcomes are 'strongly agree', 'somewhat agree', 'somewhat disagree', and 'strongly disagree.' In the data set used in this article, some of the above questions were reverse coded; in order to make the results consistent and easier to understand, the coding on all variables was revised so that 'strongly agree' (3) means that the teacher was most satisfied and 'strongly disagree' (0) means that the teacher was least satisfied.

Using prior research as a guide (Chapman and Lowther 1982; Meng 1990; Lillydahl and Singell 1993; Gordon and Denisi 1995; Clark 1998; Heywood, Siebert and Wei 2002; Donohue and Heywood 2004; Bryson et al. 2004; Gazioglu and Tansel 2006; Garcia-Serranco 2009; Artz 2010; Bryson et al. 2010), explanatory variables intended to capture both individual and job-related characteristics were included. Given that only one occupation was examined, most of the explanatory variables used in this study were individual in nature.

All data used in the present study was obtained from the Schools and Staffing Survey (SASS) which is compiled by the US Department of Education. This survey, which is conducted every three years, collects data on teachers, administrators, schools, and districts from a randomly-selected sample. The present study only uses data from the 2007 SASS. In addition, only full-time, public school teachers were included in the sample. Any teachers with any missing data were excluded. The final sample used in the present study contains about 32,020 observations. Sample sizes were rounded to the nearest ten due to the use of restricted data.

Results

Given that the satisfaction variables are measured on a four-point scale, an ordered probit analysis was used to determine the effects of the school district's unionisation status on teacher job satisfaction. Descriptive statistics are presented in Table 1. Regression results are presented in Tables 2–6.

For the sample used in this study, 55.7 per cent of teachers worked in union districts, and 92 per cent of teachers 'strongly agreed' or 'somewhat agreed' with the statement that they were 'generally satisfied' with their jobs. However, 20 per cent felt that teaching wasn't worth it, and 39 per cent said that they were not very enthusiastic about teaching. Furthermore, 28 per cent said that they would leave for better pay, and 29 per cent said that they would transfer to another school given the opportunity. Hence, it appears that teachers were giving conflicting answers regarding their overall satisfaction with teaching.

Regarding the regression results, teachers in union districts were generally less satisfied with their jobs than teachers in non-union districts. As noted previously, most prior research has found that union members are less satisfied with their jobs than non-members. Hence, the results of this study suggest that the union status of a school district may be as good of an indicator of teacher satisfaction as the individual-level union status of a teacher. Given that all teachers in a union district are covered by the same collective bargaining agreement, regardless of union membership status, teacher job satisfaction may be more a reflection of the specifics of the labour agreement than any personal characteristics or attributes that union members may possess. In addition, it may be possible that teachers who favor unions may be more inclined to work in a union district than are teachers who do not prefer unions. Although some teachers are constrained from having that option given the lack of teacher unions in certain states, one may still assume that a certain degree of self-selection is occurring which may explain at least partly the negative effect of district union status on teacher satisfaction that is observed in the present study.

Regarding the other measures of satisfaction, several interesting results are worth noting. First, teachers in union districts are more likely to be enthusiastic about teaching and are less likely to leave their school for better pay. One possible reason for their lack of interest in leaving may be because union contracts typically reward seniority; the longer a teacher is at a school, the greater is their pay. Hence, they may not be able to find a job with similar pay in another district. Therefore, even though teachers in union districts are less satisfied overall than teachers in non-union districts, union district teachers appear to be more satisfied in two areas of their careers. Second, for the other two measures of satisfaction, there were no significant differences between teachers in union districts and teachers in non-union districts. Both types of teachers are equally likely to believe teaching is important, and both are equally likely to transfer to another school.

Concluding Remarks

The purpose of this study was to determine if teacher job satisfaction was affected by the union status of the school district in which they worked. Using a sample of public school teachers and an ordered probit analysis, the results of this study suggest that teachers in union districts are generally less satisfied than teachers in non-union districts. However, teachers in union districts are more enthusiastic about teaching and are less likely to leave their schools than are teachers in non-union districts.

One possible reason for the difference in satisfaction may be that teachers self-select into union districts. If a teacher has a preference for unions, than they may be more willing to work in union districts, thus bringing their personal characteristics and their proclivities regarding job satisfaction to their jobs in the union districts. Given that most prior research has found that union members are less satisfied with their jobs than are non-union members, this self-selection may result in lower job satisfaction in the union districts.

This article is first of its kind on job satisfaction that looks at the differences between union and non-union districts. Although other studies have examined the effects of union coverage and job satisfaction in Europe, the unique laws and characteristics of the European labour market limit the applicability of their results to the US labour market (Garcia-Serrano 2009; Bryson, Cappellari and Lucifora 2010). This study is unique in the way in which districts and teachers are examined, and the results of the study should contribute to the literature on job satisfaction and unions.

Tables

Table 1: Descriptive statistics

Variable	Mean	Standard Deviation
Mean score — 4-point Likert scale		
Teacher is generally satisfied	2.48	0.68
Teacher believes teaching is important	2.24	0.84
Teacher is enthusiastic	1.85	1.035
Teacher would not leave school for better pay	2.02	0.977
Teacher would not transfer to other school	2.13	1.00
Mean number		
School enrolment	861	666
Student-teacher ratio	14.87	4.42
Age of teacher	42.4	11.6
Teacher's years of experience	13.9	10.38
Mean percentage		
District is unionised	0.557	0.497
Elementary school	0.321	0.467
Charter school	0.023	0.149
School located in urban area	0.197	0.397
Teacher has advanced degree	0.486	0.499
Percentages of teachers in school who are of a racial/ethnic minority	0.127	0.212
Hispanic	0.041	0.198
African-American	0.056	0.23
Asian-American	0.016	0.125
Percentages of students in school who are of a racial/ethnic minority	0.368	0.343
Percentage of teacher's students with an Individualised Education Program (IEP)	0.13	0.198
Percentage of teacher's students who are Limited English Proficient (LEP)	0.0462	0.133

Observations: 32,020

NB (3) Scores for responses to the five questions (dependent variables) were each on a 4 point scale: from 'strongly agree' (3), meaning that the teacher was most satisfied, to 'strongly disagree' (0), meaning that the teacher was least satisfied.

Table 2: Ordered probit results: Teacher is generally satisfied

Variable	Coefficient	Test Statistic
Constant	2.032	51.588***
Male	-0.0228	-1.535
Hispanic	0.176	5.032***
African-American	0.0953	3.051***
Asian-American	0.0122	0.232
School enrolment	0.000023	1.852 [†]
Percentage of teacher's students with an IEP	-0.000367	-1.099
Percentage of teacher's students who are LEP	-0.00174	-3.372***
Student-teacher ratio	0.00376	2.208**
Percentages of teachers in school who are of a racial/ethnic minority	-0.341	-8.486***
Percentages of students in school who are of a racial/ethnic minority	-0.26	-10.658***
Teacher's years of experience	0.00117	1.183
Charter school	-0.129	-2.953***
School located in urban area	-0.0162	-0.958
Teacher has advanced degree	-0.0472	-3.456***
Elementary school	0.175	10.676***
Age of teacher	0.0032	3.655***
District is unionised	-0.0597	-4.36***

Observations: 32,020

Significant at 10 per cent level = *

Significant at 5 per cent level = **

Significant at 1 per cent level = ***

Table 3: Ordered probit results: Teacher believes teaching is important

Variable	Coefficient	Test Statistic
Constant	1.886	50.951***
Male	-0.0448	-3.173***
Hispanic	0.0637	1.937 [†]
African-American	0.0331	1.117
Asian-American	-0.177	-3.574***
School enrolment	0.0000262	2.228**
Percentage of teacher's students with an IEP	0.00012	0.378
Percentage of teacher's students who are LEP	-0.0021	-4.237***
Student-teacher ratio	-0.00073	-0.455
Percentages of teachers in school who are of a racial/ethnic minority	-0.337	-8.759***
Percentages of students in school who are of a racial/ethnic minority	-0.217	-9.326***
Teacher's years of experience	-0.0029	-3.089***
Charter school	-0.0552	-1.303
School located in urban area	-0.031	-1.935 [†]
Teacher has advanced degree	-0.0028	-0.217
Elementary school	0.133	8.581***
Age of teacher	0.00243	2.922***
District is unionised	0.021	1.582

Observations: 32,020

Significant at 10 per cent level = *

Significant at 5 per cent level = **

Significant at 1 per cent level = ***

Table 4: Ordered probit results: Teacher is enthusiastic

Variable	Coefficient	Test Statistic
Constant	1.375	38.351***
Male	0.0724	5.257***
Hispanic	0.139	4.271***
African-American	0.0945	3.225***
Asian-American	0.046	0.929
School enrolment	0.000039	3.439***
Percentage of teacher's students with an IEP	0.000125	0.405
Percentage of teacher's students who are LEP	0.0000033	0.007
Student-teacher ratio	-0.0066	-4.231***
Percentages of teachers in school who are of a racial/ethnic minority	-0.259	-6.854***
Percentages of students in school who are of a racial/ethnic minority	-0.0942	-4.146***
Teacher's years of experience	-0.0152	-16.638***
Charter school	0.0772	1.841*
School located in urban area	-0.00655	-0.423
Teacher has advanced degree	-0.0242	-1.932*
Elementary school	0.088	5.917***
Age of teacher	0.00248	3.064***
District is unionised	0.0488	3.886***

Observations: 32,020

Significant at 10 per cent level = *

Significant at 5 per cent level = **

Significant at 1 per cent level = ***

Table 5: Ordered probit results: Teacher would not leave school for better pay

Variable	Coefficient	Test Statistic
Constant	1.28	35.692***
Male	-0.14	-10.162***
Hispanic	-0.101	-3.138***
African-American	-0.079	-2.709***
Asian-American	-0.155	-3.164***
School enrolment	0.000053	4.589***
Percentage of teacher's students with an IEP	-0.000297	-0.956
Percentage of teacher's students who are LEP	-0.000241	-0.491
Student-teacher ratio	-0.001	-0.637
Percentages of teachers in school who are of a racial/ethnic minority	-0.25	-6.586***
Percentages of students in school who are of a racial/ethnic minority	-0.0195	-0.856
Teacher's years of experience	-0.0042	-4.589***
Charter school	-0.0192	0.456
School located in urban area	-0.0248	-1.594
Teacher has advanced degree	0.0138	1.093
Elementary school	0.119	7.92***
Age of teacher	0.00257	3.168***
District is unionised	0.0553	4.367***

Observations: 32,020

Significant at 10 per cent level = *

Significant at 5 per cent level = **

Significant at 1 per cent level = ***

Table 6: Ordered probit results: Teacher would not transfer to other school

Variable	Coefficient	Test Statistic
Constant	0.932	25.235***
Male	-0.0852	-5.982***
Hispanic	0.162	4.865***
African-American	0.191	6.269***
Asian-American	0.1107	2.169**
School enrolment	0.000078	6.52***
Percentage of teacher's students with an IEP	-0.00081	-2.524**
Percentage of teacher's students who are LEP	-0.00215	-4.316***
Student-teacher ratio	0.0035	2.114**
Percentages of teachers in school who are of a racial/ethnic minority	-0.274	-7.028***
Percentages of students in school who are of a racial/ethnic minority	-0.247	-10.506***
Teacher's years of experience	0.012	12.494***
Charter school	-0.174	-4.132***
School located in urban area	0.03	1.851*
Teacher has advanced degree	-0.0761	-5.798***
Elementary school	0.132	8.409***
Age of teacher	0.0096	11.478***
District is unionised	0.00373	0.285

Observations: 32,020

Significant at 10 per cent level = *

Significant at 5 per cent level = **

Significant at 1 per cent level = ***

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