

DOCUMENT RESUME

ED 415 775

HE 030 921

AUTHOR Grayson, J. Paul
 TITLE Student Hardship and Support for a Faculty Strike.
 INSTITUTION York Univ., Toronto (Ontario). Inst. for Social Research.
 ISBN ISBN-1-55014-344-1
 PUB DATE 1998-01-00
 NOTE 35p.; For related documents, see ED 406 954 and HE 030 920.
 AVAILABLE FROM Institute for Social Research, York University, 4700 Keele St., Toronto, Ontario, Canada M3J 1P3.
 PUB TYPE Reports - Research (143)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Academic Achievement; Activism; *Anxiety; College Environment; *College Faculty; *College Students; Conflict Resolution; Foreign Countries; Higher Education; Organizational Communication; Stress Variables; *Student Attitudes; Student School Relationship; *Teacher Strikes
 IDENTIFIERS *York University ON

ABSTRACT

During a faculty strike at York University (Ontario), two telephone surveys were undertaken to assess its academic and economic impact on students. The first survey, taken during the fifth and sixth weeks of the strike, used a survey instrument that reflected issues raised in student focus groups. The second survey was undertaken five months after the strike to measure post-strike experiences and attitudes. Respondents for the first survey included 519 randomly selected full-time undergraduate students in several disciplines; in the second survey 83 percent of the original students were reinterviewed. This complete report documents the background, study design, support for the strike by students and by faculty during the strike, and its immediate academic and economic impacts on students. Also documented are the post-strike support for the strike, its short-term academic and economic impacts, students' ideological positions, and their integration with faculty. The surveys confirmed that students faced academic and economic hardships both during and after the strike; only a minority of students supported the strike. Interference with summer employment and summer school were major student concerns. Regression analysis, however, showed that academic and economic hardship explained little of the variance in student support for the strike; the best predictor of support for the strike were student attitudes about unions. (Contains 17 references.) (CH)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED 415 775

INSTITUTE FOR
SOCIAL
RESEARCH

STUDENT HARDSHIP AND SUPPORT FOR A FACULTY STRIKE

J. PAUL GRAYSON

BEST COPY AVAILABLE

AE 030 92-1

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL
HAS BEEN GRANTED BY

Institute for Social
Research, York Univ

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

**STUDENT HARDSHIP AND
SUPPORT FOR A FACULTY STRIKE**

**J. Paul Grayson
Institute for Social Research
York University**

January 1998

© J. Paul Grayson, 1998

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage or retrieval system, without permission in writing from the publisher.

Published by: **Institute for Social Research
York University**

ISBN: 1-55014-344-1

Institute for Social Research

Founded in 1965, the Institute for Social Research (ISR) is an Organized Research Unit of York University. The Institute's purpose is to promote, undertake and critically evaluate applied social research. The Institute provides consultation and support services to York faculty, students and staff conducting research in the social sciences, and, to a lesser extent, in the biological and physical sciences. For researchers from other universities, government agencies, public organizations and the private sector, the Institute provides consultation on research design and undertakes data collection, data processing and statistical analysis, on a fee-for-service basis.

ISR houses the largest university-based survey research unit in Canada, annually conducting twenty to thirty research projects ranging from small surveys in one locale to provincial and national surveys. The capabilities of the Institute include questionnaire and sample design, sample selection, data collection, preparation of machine-readable data files, statistical analysis and report writing.

ISR's Statistical Consulting Service provides consultation on research design and statistical analysis. The Service also sponsors short courses on statistical analysis, research methodology and the use of statistical software. The consulting service is partially supported by a grant from the Natural Science and Engineering Research Council (NSERC).

ISR's data archive provides public access to survey data collected by the Institute, to data sets from major Canadian surveys, and to official statistics, such as the census aggregate and public-use microdata files from the Canadian Census.

For more information, write to:

Institute for Social Research
York University
4700 Keele Street
Toronto, Ontario, Canada M3J 1P3
Telephone: (416) 736-5061; Fax (416) 736-5749

Foreword

The Institute for Social Research produces four types of articles in its publication series:

- Working papers;
- Reports on various technical and managerial aspects of the research process designed for technical support staff and research managers;
- Reports on topics of general interest to non-specialist readers; and,
- Reports on various methodological and substantive issues aimed at experts in the field.

The following is a working paper. Comments are welcome.

Acknowledgements

A number of individuals at the ISR contributed to various phases of the research on which the following report is based. In no particular order I would like to thank: Tammy Chi, Darla Rhyne, and David Northrup for their assistance in data collection; John Tibert, Bill Bruce, and Anne Oram for file preparation; and Anne Oram for proof reading. I would also like to thank Linda Grayson and David Northrup for comments on an earlier draft of the report.

Other Publications on York Students

Using Surveys to Measure Value Added in Four Faculties

J. Paul Grayson (1997)

Follow-up Survey of Strike Impact

J. Paul Grayson (1997)

The Strike from the Students' Viewpoint

J. Paul Grayson (1997)

Who Gets Jobs? Initial Labour Market Experiences of York Graduates

J. Paul Grayson (1997)

Racial Origin and Withdrawal From University

J. Paul Grayson (1997)

Under- and Over-Achievement in First Year

J. Paul Grayson (1996)

The Retention of First Year Students in Atkinson College: Institutional Failure or Student Choice?

J. Paul Grayson (1996)

Value Added in Generic Skills Between First and Final Year: A Pilot Project

J. Paul Grayson (1996)

Race and First Year Retention on a Canadian Campus

J. Paul Grayson (1996)

Place of Residence and First Year Marks

J. Paul Grayson (1995)

The College-University Linkage: An Examination of Transfer Students in the Faculty of Arts at York University

Stephen Bell (1995)

The First Generation at York University

J. Paul Grayson (1995)

The Health of First Year Students

J. Paul Grayson (1995)

Globe and Mail Reports, Student Experiences, and Negative Racial Encounters

J. Paul Grayson (1995)

Comparative First Year Experiences at York University: Science, Arts and Atkinson
J. Paul Grayson (1994)

A Characterization of Areas of Racial Tension Among First Year Students: A Focus Group Follow-Up to a Large Survey
J. Paul Grayson (1994)

Race on Campus: Outcomes of the First Year Experience at York University
J. Paul Grayson (1994)

'Racialization' and Black Student Identity at York University
J. Paul Grayson with Deanna Williams (1994)

The Social Construction of 'Visible Minority' for Students of Chinese Origin
J. Paul Grayson with Tammy Chi and Darla Rhyne (1994)

Who Leaves Science? - The First Year Experience at York University
J. Paul Grayson (1994)

The Characteristics, Needs, and Expectations of Students Entering York University
J. Paul Grayson (1993)

Gender and Minority Group Differences in Desired Outcomes of Adult Post-Secondary Education: The Student Perspective
J. Paul Grayson (1993)

Outcomes and Experiences of First Year Science in Two Universities
J. Paul Grayson (1993)

Improving First Year Science Education in a Commuter University
J. Paul Grayson (1993)

The Experience of Female and Minority Students in First Year Science
J. Paul Grayson (1993)

Response Effects: Variations in University Students' Satisfaction by Method of Data Collection
David A. Northrup and Michael Ornstein (1993)

Student Withdrawals at York University: First and Second Year Students, 1984-85
Gordon Darroch, David A. Northrup and Mirka Ondrack (1989)

Summary

From March 20 to May 13, 1997, faculty and librarians at York University in Toronto Canada went on a strike. In order to assess the academic and economic impacts of the strike on students, two telephone surveys were carried out with a panel of undergraduate students in the fifth and sixth weeks of the strike and in October, 1997, five months after the end of the strike. The surveys confirm that students faced academic and economic hardship both during and after the strike. Moreover, in both surveys, only a minority of students supported the strike. A regression analysis shows, however, that academic and economic hardship explain little of the variance in support for the strike. By contrast, attitudes toward unions in general are the best predictor of support.

Introduction

From March 20, to May 13, 1997, faculty and librarians at York University were on strike. As a result, the final examination period was extended well into the period during which many students otherwise would have been employed in summer jobs. Moreover, until the end of the strike, students were unaware of how lost time would be made up, whether or not course requirements would change, and how they would balance commitments to courses with summer jobs.

The focus of this article will be on two related issues: What was the academic and economic impact of the strike on full-time undergraduate students at York? What is the relationship between the problems created by, and student support for, the strike? Answers to both questions were provided by responses to two telephone surveys of York undergraduates. The first was carried out in the fifth and sixth weeks of the strike. The second involved exactly the same students and was conducted five months after the strike, in October, 1997.¹

Background

Since 1976, 21 strikes have occurred in Canada's 55 universities (Desjardins, 1997). The longest strike, that lasted four months, took place in 1976 at Laval University located in Quebec City. The second longest took place at York University in Toronto where faculty and librarians withdrew their services for seven weeks from March 20, to May 13, 1997. From the union's point of view strike issues at York included compensation, retirement benefits, class size, and the introduction of new educational technology. The principal issue so far as the administration was concerned was unavailability of resources to meet the union's demands. As a result of the strike, the academic year was extended well beyond the point at which many students would otherwise have been working in summer jobs.

The incidence of faculty strikes in Canada is far higher than in the United States. While the latter has approximately 65 times more four year degree granting colleges and universities than Canada, from 1966 to 1994 it had only about 3 times more faculty strikes, the majority of which occurred in public sector colleges and universities (Annunziato, 1994). Part of the explanation for this strike rate is that the incidence of faculty unionism in the United States is relatively low and in many states faculty strikes are illegal (Rees, Kumar, and Fisher, 1995).

In both Canada and the United States there is a dearth of published information on the dynamics of, and support for, faculty strikes and their impacts on students, faculty and librarians, and administrators. This caveat aside, a study of a 1988 faculty strike at the University of Saskatchewan in Canada found that married faculty were more likely than others to vote against a strike (Ng, 1991). Those likely to vote in favour of the strike were drawn disproportionately (and paradoxically) from faculty who were satisfied with research facilities and who were loyal to the faculty association. Faculty opposed to the strike were satisfied with working conditions and the administration. Surprisingly, beliefs about unions did not affect faculty members' inclinations to vote for a strike.

¹For descriptive analyses of the surveys see Grayson (1997a, 1997b).

Two studies of a 1990 faculty strike at Temple University in the United States contribute further to an understanding of support for a faculty strike. In one study (McClendon and Klass, 1993), the focus was on three types of militancy: voting to continue the strike; voting to defy a court return to work order; and picketing and other activities associated with the strike. Whereas confrontational types of militancy (defying the court injunction and picketing etc.) were related to social support from other faculty and commitment to the union, these factors did not explain voting to continue the strike. Factors such as job dissatisfaction and a perceived instrumentality of strike action were more important in this regard.

In a second study the same authors examine the characteristics of faculty who crossed the picket line during the Temple University strike. Not surprisingly, they found that faculty were likely to cross the picket line if they were satisfied with the administration; were not committed to the union; if the costs to them of the strike were high; and if there were low departmental support for the strike (Klass and McClendon, 1995).

While no published studies of the impact of faculty strikes in Canada on pay and working conditions could be found, Rees, Kumar and Fisher (1995) show that for the period 1972 to 1991, overall, faculty unionization *per se* accounted for a 2.6% increase in compensation. The impact, however, was differential. At doctoral institutions unionization was associated with a 6% salary premium. Universities with 'special plan agreements' (i.e. they were not formally unionized but had reached agreement on procedures regarding dispute resolution and salary negotiations) had salaries 4% higher than would have been expected. In addition, in unionized universities, compensation attributed to unionization varied by rank: in descending order, increases in the salaries of professors, associate professors, and other ranks could be attributed to the effects of a union. At special plan universities the greatest increase in salaries were realized by faculty below the assistant professor rank. In the United States, the impact of unionization on faculty salaries has been lower than in Canada.

As pointed out by Fredman and Morris (1989), in a public sector strike, the strategy of unions is to generate third-party pressure for management to settle. In a university context, the third party most affected by, and most likely to react to, a strike is students. The greater the strike generated hardship for this group, the greater the pressure on the administration to bring the strike to a conclusion. As a result, from a union's point of view, a strike is likely to be most effective at points in the year when it can cause the greatest inconvenience for students and greatest embarrassment for the administration.

While there is little published research on the dynamics of faculty strikes and their impacts on faculty, there is even less on the implications of faculty strikes for students. In fact, a general literature search turned up only three published examinations of the impact of a faculty strike on students.

In the first study, Arnfield (1974) reports on a 14 day strike in September 1972 at Macomb County Community College, Michigan. One year after the strike, 225 students in introductory biology classes were asked to respond to a mail questionnaire, "in terms of recalling or remembering how they felt about the criterion variables in Autumn, 1972" (p. 55). It was found that while students in general were positive toward collective bargaining, they were negative toward strikes. Not surprisingly, students with a negative attitude toward strikes saw the Macomb strike as having a negative impact on their learning (p. 202).

In a later study, Barclay, Inn and Rosen (1982) surveyed (presumably in-class) 470 psychology students two weeks after what is described as a short strike in 'a large Midwestern university'. They found that students were more likely to support strikes in general than faculty strikes in particular and that students whose fathers belonged to unions were more likely than others to support both strikes in general and faculty strikes.

Finally, approximately four months after a November 1988, 18 day strike at Dalhousie University in Halifax, Amos, Day and Power (1993) approached 187 students at 20 different locations on campus and asked them to complete a questionnaire on various aspects of the strike. Although this methodology, and the small sample size, limits the extent to which generalizations can be made to Dalhousie's student body, the study provides some tentative insights into student reaction to the strike.

Among findings of interest are: a. although only a few classes were continued, few students avoided classes to show support for the strike; b. students reported slight negative emotional and academic effects of the strike; c. after the strike 85% of students had to make up for material 'missed' in their classes; d. while the strike engendered some negative feelings toward faculty in general, students were not negative toward their own professors; e. there was an increase in negative views toward the university; f. opinions of the university had only weak correlations with the emotional and academic effects of the strike. From the results of 31 interviews carried out 18 months after the strike, the authors conclude that in the intervening months students' negative opinions of the university had returned to their pre-strike levels. Unfortunately, students were not directly asked if they supported either unions or strikes in general or the faculty strike in particular.

From the foregoing three studies it is evident that the little knowledge we have of the impact of faculty strikes on students is based on retrospective research. Two focus on students in specific disciplines and the third employs a quota sample. From two of the studies it is possible to conclude that students are more supportive of collective bargaining and/or strikes in general than they are of faculty strikes. Also, from one study it is evident that students' attitudes toward unions and strikes are related to fathers' attitudes.

The general importance of parental attitudes in shaping students' opinions of unions has also been found in non-strike related studies of primarily university based youth. For example, general attitudes toward unions have been found to be the best predictors of willingness to join a union and that such attitudes are linked to positive parental attitudes toward unions, parental participation in union activities, and left-wing political orientations (Barling, Kelloway, and Bremermann, 1991; Barling, Fullagar, and Kelloway, 1992; Kelloway and Watts, 1994; Kelloway, Barling, and Agar, 1996).

While the existing studies of strikes are helpful in providing a perspective for the current study, they were based on retrospective analyses and may not represent students' attitudes or behaviours at the time of a strike. Similarly, although more general examinations of students attitudes toward unions may assist in understanding the relationship between parental and students' attitudes toward unions, with the exception of the retrospective study by Barclay, Inn and Rosen (1982), the studies were not carried out in settings in which students were experiencing the effects of a strike. As a result, it is important to explore further the possibility of a general relationship between positive attitudes toward unions and support for a strike during a strike.

Study Design

The primary objective of the current study is to document the academic and economic problems faced by students as a result of the strike of faculty and librarians at York University and to examine the relationship between these problems and support for the strike. Problems can be divided into those that occurred during the strike period prior to the completion of classes and difficulties that occurred after the strike because of the overlap between an extended school year and the period in which most students have summer jobs. In order to identify the first kind of difficulties focus group meetings were held with students during the strike. Many of the questions in a telephone survey carried out by the Institute for Social Research at York University during the fifth and sixth weeks of the strike (strike survey) were based on information collected in this fashion. Similar group meetings were held prior to the commencement of a second telephone survey of the same students carried out five months after the strike in October, 1997 (post-strike survey). Once again, many questions in the survey were based on information on students' problems provided in the focus group meetings.

The strike survey involved 540 randomly selected full-time undergraduate students in the faculties of Arts, Fine Arts, Environmental Studies, Pure and Applied Science, Education, the Schulich School of Business (SSB), and Glendon College at York University. (Only 21 students refused to participate in the study and the response rate was 75%.) Thirty eight percent of survey respondents were male and 62% were female. Administrative records indicate a similar gender distribution for the population from which the sample was selected. Also, administrative records show that the proportions of students in the survey coming from various faculties are comparable to the proportions in the total population.

The total number of full-time undergraduate students enrolled in the faculties from which the sample was taken was 19,287. Those not included in the study were enrolled at Atkinson College (the evening part-time operation of York University), Osgoode Law School, and in the Faculty of Graduate Studies. In essence, the survey focussed on typical full-time undergraduate students at York University.

For the post-strike survey it was possible to re-interview 83% of those who participated in the first survey for a sample size of 446. (Fifteen students refused to be interviewed a second time.) There were no statistically significant differences in terms of gender, level of study, and faculty of enrolment between the re-interviewed group and those who it was not possible to contact. As a result, the second sample can be seen as representative of the full-time undergraduate population at York.

In the main, York's students do not come from wealthy families. As in other surveys carried out with York students, in this study, 15% reported after-tax parental incomes of \$26,000 or less. A further 32% gave estimates between \$26,001 and \$50,000. In essence, a minimum of 47% of students came from families in which the average family income was below the provincial average. Forty three percent reported parental incomes between \$50,001 and \$100,000. Only 10% came from families with incomes over \$100,000. Seventy seven percent of students lived at home with their parents.

Strike Survey

Support for the Strike

In order to assess the degree of support for the strike, in the first survey, students were asked: "How do you feel about the strike? Would you say that you strongly support the strike, somewhat support the strike, somewhat oppose the strike, strongly oppose the strike, or are you neutral about it." In reply, 5.4% of students stated that they strongly supported the strike, 26.5% somewhat supported it, 22.4% were neutral, 20.2% were somewhat opposed, and 25.4% were strongly opposed to the strike. In essence, if categories are combined, 31.9% supported the strike, 22.4% were neutral, and 45.6% opposed the strike.

In terms of support for unions in general, 8.4% and 33.8% said that they were strongly and somewhat supportive respectively. 30.9% were neutral, and 16.0% and 11.0% were somewhat and strongly opposed to unions. If categories are collapsed, 42.2% supported unions in general, 30.9% were neutral, and 27.0% were opposed to unions in general. Consistent with the findings of Arnfield (1974) and Barclay, Inn, and Rosen (1982), students at York were more supportive of unions in general than of the strike of their professors and librarians.

The correlation between support for unions in general and support for the YUFA strike was a statistically significant (at the .001 level) .42.

Support for Strike by Faculty

While support for the strike did not vary at a statistically significant level with parental income, gender, and year of study, as seen from Table 1, when categories of support were collapsed to increase the number of observations in each cell into 'support', 'neutral', and 'oppose', there was a statistically significant relationship between faculty of enrollment and support for the strike. Although the numbers in some cells of the table are small, it seems clear that greatest support for the strike (66.7% support) came from students in the Faculty of Education. Depending upon one's perspective, this finding can be explained by the fact that students in this faculty hope to enter a profession that is unionized or the possibility that Education students have the best appreciation of the issues involved in the strike.

It is not surprising that only 22.7% of students in the Schulich School of Business (SSB) supported the strike. Indeed, in this faculty, classes and exams were held throughout the dispute.

It was not expected that so few students from Glendon College, only 25.0%, would support the strike. As this college is small and is in a different location than other York faculties, it might have been expected that there would have been a relatively close alliance between faculty and students. Still, the lack of support by Glendon students is consistent with the fact that they were the only ones to mobilize against the strike in a one day protest in which they prevented both faculty and administrators from entering their campus.

Immediate Academic Impacts

The potential impact of the strike on students was divided into its academic and economic

Table 1: Support for Strike by Faculty

	Support	Neutral	Oppose	Total	N
Science	16.4%	29.1%	54.5%	100.0%	55
Business	22.7%	27.3%	50.0%	100.0%	22
Glendon	25.0%	18.8%	56.3%	100.0%	32
Fine Arts	40.0%	28.6%	31.4%	100.0%	35
Environmental Studies	41.7%	16.7%	41.7%	100.0%	12
Education	66.7%	26.7%	6.7%	100.0%	15
Arts	33.0%	20.9%	46.2%	100.0%	364
Total					535

Chi-square sig. LE .05

components. In order to address the former, students were asked a number of questions in the following format: "Are you concerned that the nature of assignments and tests or exams might change because of class time lost in the strike?" If students answered 'yes', they were then asked: "Is this a minor concern, a medium sized concern, or a major concern for you?" When scores were developed for correlations and regression analysis, a score of 0 was applied if the student responded 'no' (i.e. that he or she was not concerned with the issue raised in the question). If the response was 'yes', and the student replied that the issue was a minor concern, a score of 1 was given. Scores of 2 and 3 were awarded for expressions of medium and major concern respectively.

The most serious problem created by the strike, noted as a major concern by 75.1% of all students, was simply not knowing when the strike would end. The possibility that the nature of assignments might change was a major concern to 60.5% of students. 58.5% had a major concern that they might forget important material before they had the opportunity to complete their courses. The related concern of not being able to earn sufficient marks to get, or stay, in a particular course of studies was identified as a major concern by 45.1% of students. Potential careless grading by faculty after the strike was a major concern for 38.4% of survey respondents. 35.9% of students had the major concern that important materials might not be covered in courses because of the time lost through the strike. The possibility that the strike might interfere with plans for summer school was a major concern to 34.5% of all students. 16.3% of students had a major concern that their academic self-confidence was negatively affected by the strike. 13.4% had as a major concern the possibility that the strike would interfere with graduation plans. This figure represents a high proportion of students who were about to finish their studies. The possibility that marks would be unavailable for other schools and potential jobs were major concerns respectively to 10.6% and 10.1% of students.

Immediate Economic Impacts

Economic problems created by the strike were assessed by a series of questions similar in format to those used to measure academic impact. In general, the economic consequences of the strike were less serious than academic difficulties. The most serious economic problem created for students by the strike was the possibility that the strike was interfering, or would interfere, with their plans for a summer job. Overall, 36.8% of students described this possibility as a major concern. The next most important problem, identified as a serious concern by 14.3% of students, was interference of the strike with part-time jobs held at the time of the survey. The cost of additional food was a major concern to 7.8% of students. 5.8% saw the cost of additional rent as a major concern. Interference of the strike with a potential full-time job was identified as a major concern by 5.2% of survey respondents. For 3.0% the possibility of losses associated with the inability to get refunds for bus, train, or air plane tickets that had to be cancelled because of the extension of the term was viewed as a major concern. Finally, 1.9% of students identified lease related problems as a major concern.

As the vast majority of York students live at home with parents, the costs associated with food and lodging were unaffected by the strike; however, 16.1% of students stated that they had to get money to deal with additional expenses associated with the strike and that the most frequent source of these funds were parents. The average amount of additional funds needed by these students was approximately \$500. Leaving aside potential losses associated with shortened summer jobs, at the time of the first survey the total cost of the strike to York students was

approximately \$1.6 million (Grayson, 1997b, p. 4).

Immediate Academic and Economic Effects

When correlations were run between the measures of the academic impact of the strike (0 means no problem and 3 means major problem, as discussed earlier) and support for the strike (where 1 means strongly oppose and 5 strongly support), the correlations were statistically significant at the .05 level and their magnitudes are as follows: not knowing when the strike would end, -0.20; concern that assignments might change, -0.10; concern with careless grading by faculty, -0.11; fearing that course material would be forgotten, -0.14; concern that marks might not be sufficient because of the strike to get into, or stay in, a desired program, -0.14; believing that academic self-confidence had been negatively affected, -0.17; and fearing that because of the strike important materials might not be covered, -0.09. While statistically significant, the correlations for these items are small.

When correlations were calculated between measures of the economic impact of the strike and support for the strike, correlations with assessments that the strike interfered with both part-time jobs and with plans for a summer job, -0.12 and -0.09 respectively, were statistically significant at the .05 level. Paradoxically, fearing that the strike would interfere with plans for a full-time job varied directly with support for the strike (.10) (sig. .001): the more concern students had that the strike would upset plans for a full-time job, the more they supported the strike. Overall, most of the economic impact measures do not correlate with support for the strike and the statistically significant correlations are weak.

As it made theoretical sense, the seven measures of academic impact with statistically significant correlations with support for the strike were summed into an overall measure called 'academic effect score' ($\alpha=.73$). The mean score calculated in this way was 1.86 on a four point scale. A score of this magnitude indicates that the academic items were of medium concern. An 'economic effect score' was created by summing the scores for measures of believing that the strike interfered with both part-time jobs and plans for summer jobs. Unfortunately, alpha for these two measures was only .59 (it had been a lower .42 with the third variable, interference with plans for a full-time job, included). The mean economic effect score was 1.11 suggesting that the scaled economic items were of minor concern. The correlation between the academic and economic effect scores were a statistically significant .38 (at the .05 level) and correlations between the academic and economic effect scores with support for the strike were -0.20 and -0.12 respectively (each was statistically significant at the .05 level).

Post-Strike Survey

Support for the Strike

As in the first survey, the primary objective of the post-strike survey was to assess the academic and economic impacts of the strike after the return to work and the relationships between the effects of the strike and support for the conflict. Accordingly, students were asked, "Looking back, how did you feel about the strike of faculty and librarians at York University?" 15.5% and 23.1% said very and somewhat opposed, 25.6% said they were neutral, and 28.9% and 7.0% replied somewhat and very supportive respectively. In essence, 38.6% were opposed, 25.5%

neutral, and 35.9% supportive. In actuality, however, in the survey carried out during the strike, 45.6% had opposed the strike, 22.4% had been neutral, and only 31.9% of exactly the same students had supported the conflict. Moreover, a t-test indicates that although slight, these differences are significant at the .001 level.

Results such as these can be interpreted in two ways. First, it may be that students' attitudes changed between the first and second surveys. This interpretation will be adopted for the following analyses. In essence, consistent with the fact that in many instances survey respondents interpret the past in terms of their present attitudes, etc., (Sudman, Bradburn, and Schwarz, 1996) the retrospective evaluation of the strike will be accepted as the students' current feeling for the strike.

Second, students in the post-strike survey may have had difficulty in recalling how they felt five months earlier. Whatever the case, these data suggest that retrospective analyses, such as those discussed earlier, may overestimate the extent to which students support faculty strikes.

In the strike survey the correlation between support for the strike and support for unions in general was .42. Five months later in the post-strike survey it was a relatively unchanged .44 (significant at less than the .001 level).

Short-Term Academic Impacts

As seen earlier, in the first survey, 60.5% of students expressed the fear that as a result of the strike course assignments might change. In the post-strike survey questions were asked that focussed on the extent to which course requirements actually had changed and, if they had, the amount of difficulty caused by the changes. For a derived variable (course change problems, S2) (S1 and S2 indicating survey one and survey two respectively), a score of 1 was given to students who had either no courses to complete (approximately 26% of the total) or who had no problems with finishing their remaining courses. Students with minor, medium, and major problems were given scores of 2, 3, and 4 respectively.

Overall, 86.1% of students had either no courses to complete or no problems with finishing their courses. Minor problems were experienced by 2.3%, medium problems by 5.5%, and major problems were reported by 6.2%.

As part of its efforts to deal with the academic aftermath of the strike, and in recognition of the fact that by the end of the strike many students had started summer jobs, the Senate of the University put in place a process whereby students could be given 'special accommodations' to complete their courses. For example, a student might be allowed to write an exam at an extraordinary time, or obtain a deferral for an exam.

Overall, 60.2% of students had either no courses to complete or did not request a special accommodation. In this case, they were given a score of 1 on a derived variable (special course accommodations, S2). 35.0% of students stated that they needed an accommodation and obtained it. These students were given a score of 2. The 4.8% of respondents who needed an accommodation but were denied it were given a score of 3. It is likely that the accommodations granted students lessened the potential academic impact of the strike considerably.

While special accommodations may have been helpful to some students in dealing with problems associated with completing the academic year and at the same time holding a summer job, the strike seriously delayed the receipt of final grades. Students usually have their grades by the end of May, but, because of the strike, only 1.6% reported receiving their grades by the end of June. An additional 20.8% received grades in July and a further 48.0% in August. 14.3% obtained their grades in September, and by the time of the survey in October, 15.2% were still without all of their grades. On a derived variable (when received marks, S2) scores of 1, 2, 3, and 4 were assigned for receipt of marks in June, July, August, and September respectively. Students who had not yet received all of their marks by the time of the survey in October were given a score of 5.

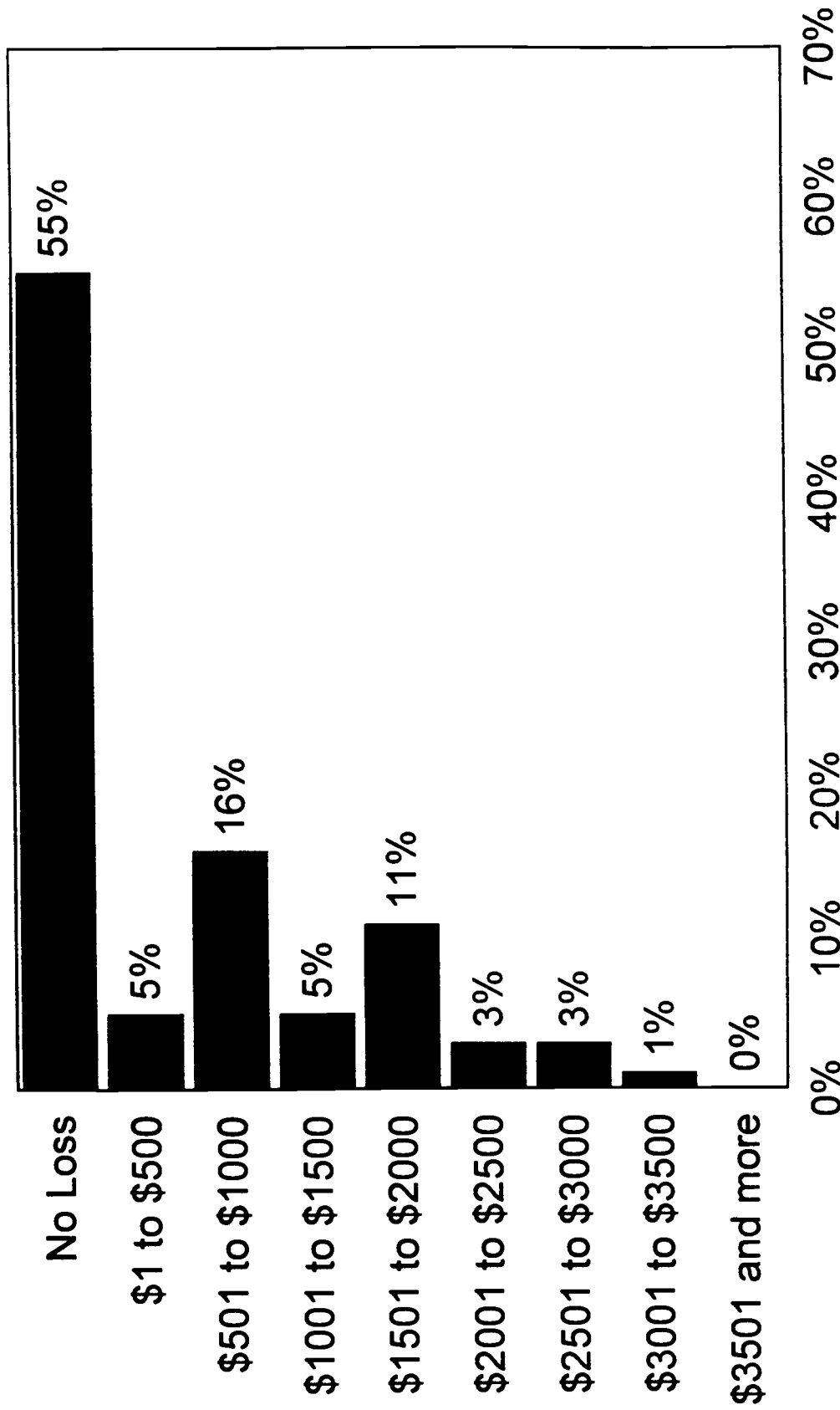
The lateness of grades was particularly hard on students who had applied to other schools or who had planned to graduate. Overall, 84.4% of students had no plans for other schools. Of the remainder, 4.7% needed their grades and they were available on time. For 10.8% of the undergraduate population, however, grades were needed yet unavailable for applications to other schools. On a derived variable (marks ready applications other schools, S2) the scores given to students in each of these positions was 1, 2, and 3 respectively.

Students who had hoped to graduate were similarly affected. While 80.0% of students were not in a position to graduate, 5.2% did manage to complete their courses and graduate on time (the business faculty, for example, held classes during the strike). 14.8% of the undergraduate population, however, had planned to graduate but were unable to because of the strike. On a derived variable (negative effect strike on graduation plans, S2), scores of 1, 2, and 3 were given for students in these respective positions.

In the first survey, 34.5% of students stated that potential interference of the strike with summer school was a major concern. In the post-strike survey, students who had no plans for summer school were given a score of 1 on a derived variable (negative effect strike on summer school, S2). Such individuals made up 53.6% of the undergraduate population. Students who had summer school plans that were unaffected by the strike were given a score of 2 and comprised 19.1% of all students. Those who had plans that were affected by the strike were scored 3. This last group included 27.4% of the population. Thus, while the actual number of students whose summer school plans were upset by the strike is lower than the number who had a major concern that the strike would interfere with their summer school plans, a large minority of students were affected by the disruption of summer school.

Although in one way or another the strike caused short-term academic problems for students, correlations between the problems analysed above and support for the strike as expressed in the post-strike survey were both low and not statistically significant. More specifically, the correlations between support for the strike and specific variables are as follows: course change problems S2, -0.04; special course accommodations S2, .04; when received marks S2, -0.05; marks ready applications other schools S2, -0.01; negative effect strike on summer school S2, .00; negative effect strike on graduation plans S2, .06. Moreover, it is not possible to give an overall score of academic effect as in survey one because of an unacceptable alpha level for these variables.

Graph 1: Cost of Time Lost from Summer Jobs



Short-Term Economic Impact

In the survey carried out during the strike, the most serious strike related economic problem identified by students was the potential impact of the strike on their ability to get summer jobs. 36.8% of students identified this possibility as a major concern. As a result, it was not surprising in the focus group meetings conducted in preparation for the post-strike survey that interference of the strike with summer jobs was a dominant theme.

In an effort to assess the cost of the impact of the strike on summer jobs students were asked, "By any chance did the strike mean that you spent less time working in a summer job than you had planned?" If the answer was 'yes', students were then asked, "How much money do you think you lost because of the shorter time you spent at a summer job as a result of the strike?" Options ranged from less than \$500 to a maximum of more than \$4,000 with an interval width of \$500.

The economic losses reported by students are summarized in Graph 1. While 55% reported no loss, 23% reported losses of over \$1,000. For students from low income households, this is a considerable amount of money. Moreover, on the basis of the information in Graph 1 it can be estimated that the total loss to full-time undergraduate students at York because of the way the strike affected summer jobs was approximately \$12 million.

Despite the fact that economic losses associated with the strike were reported by many students, the correlation between losses and support for the strike as measured in the post-strike survey was a very low and non-statistically significant -0.01.

Ideological Position

Earlier cited work has identified having a left-wing ideological orientation as a factor that contributes to positive attitudes of university students toward unions (Kelloway and Watts, 1994). As a result, in the post-strike survey students were asked whether they agreed or disagreed that, "The work of the labouring class is exploited by the rich for their own benefit." 24.0% either strongly or somewhat disagreed (scores of 1 and 2), 23.7% were neutral (score = 3); and 57.5% either somewhat or strongly agreed (scores of 4 and 5). Moreover, the correlation between this measure and support for the strike as determined in the post-strike survey was a modest yet statistically significant (.001) .16. In essence, while, as seen earlier, the academic and economic problems caused by the strike bore little relationship to attitudes toward the strike as measured in the post-strike survey, both support for unions in general and having a left-leaning ideology correlate positively with support for the strike.

Integration with Faculty

It is a sociological truism that social integration contributes to shared values. As a result, in the post-strike survey students were asked the extent to which they agreed with the statement that, "If I have a problem, there is at least one faculty member to whom I can turn for help." 22.9% either strongly or somewhat disagreed (scores of 1 and 2) with the statement and 11.8% said they neither agreed nor disagreed (score = 3). The remaining 65.4% either somewhat or strongly agreed (scores = 4 and 5) with the statement. It was reasoned that the more students felt that they had a faculty member to whom they could turn for help, the more likely they would have been to

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Prop./Mean	Std. Deviation
Arts	446	0	1	.69	
Science	446	0	1	.10	
Business	446	0	1	.05	
Glendon	446	0	1	.05	
Fine Arts	446	0	1	.06	
Env. Studies	446	0	1	.02	
Education	446	0	1	.03	
Academic Effect Score, S1	422	0	3	1.85	.71
Economic Effect Score, S1	442	0	3	1.11	1.02
General Support for Unions, S1	445	1	5	3.13	1.13
Course Change Problems, S2	438	1	4	1.32	.84
Special Course Accommodations, S2	440	1	3	1.45	.59
When Received Marks, S2	427	1	5	3.21	.99
Marks Ready Applications Other Schools, S2	443	1	3	1.26	.64
Negative Effect Strike on Summer School, S2	446	1	3	1.74	.86
Negative Effect Strike on Graduation Plans, S2	445	1	3	1.35	.72
Losses Due to Shorter Work Summer, S2	429	0	8	1.42	1.91
Labouring Class Exploited by Rich, S2	435	1	5	3.50	1.08
Rely on Faculty Support, S2	442	1	5	3.67	1.36
Valid N (listwise)	358				

BEST COPY AVAILABLE

express support for the strike. A weak yet statistically significant (.001) correlation of .22 between the variables supports this hypothesis.

Regression Analysis

For the foregoing analyses it seems as though in both the first and second surveys support for the strike is related to students' support for unions in general. During the strike, support for the conflict was also related to faculty of enrolment and the immediate academic and economic effects of the strike. After the conflict, however, the academic and economic effects of the strike bear little connection to support for the strike. There was, however, a slight post-strike connection between support for the strike and ideological orientation and integration with faculty.

In order to determine the independent effect of variables examined so far, three regression models were created with support for the strike as measured in the strike and post-strike surveys as the dependent variables. The independent variables used in the analyses, as discussed in earlier sections, are identified in Table 2. With listwise deletion, 358 cases are available for use in the regression analysis.

The results of the regression analyses are summarized in Table 3. Column 1 identifies the variable in question. Model 1 has as its dependent variable support for the strike as determined in the first survey. For this model, with Arts as the reference category, dummy variables for faculty of enrolment were entered as a block, followed by academic effect score, economic effect score, and support for unions in general as measured in the first survey, each entered separately. For each model, cumulative R-square is recorded at the point of the last variable entered for a given block.

In model 1 (F sig. .001; power = 1.0), faculty of enrolment explains only 2% of the total variance in support for the strike in survey one. Moreover, only enrollment in the Faculty of Education has a statistically significant impact on support for the strike ($\beta = .12$). Despite the academic and economic hardships faced by students, neither the academic nor the economic effect score has a statistically significant relationship to support for the strike although these variables increase the explained variance to 4%. Perhaps most important is the positive relationship between support for unions in general ($\beta = .48$) and support for the strike. This variable increases explained variance from 4% to 27%. In essence, in terms of the objectives of this study, while it is clear from previous analyses that many students experienced academic and economic difficulties as a result of the strike, such experiences were not related in a statistically meaningful way with whether or not they supported the strike. More important in this respect were enrollment in the Faculty of Education and being supportive of unions in general.

Model 2 (F sig. .001; power = 1.0) includes the same independent variables as model 1 but takes support for the strike as measured in the post-strike survey as the dependent variable. As in model 1, faculty of enrolment explains 2% of the variance; however, this time being a student in the Business School ($\beta = -0.11$) is statistically significant. The negative sign of the regression coefficient indicates that business students were less likely than others to support the strike. This finding is consistent with the fact that during the strike the business school stayed open and business students graduated on schedule. As in model 1, the academic effect score did not have a statistically significant impact on support for the strike; however, the relationship between the

Table 3: Regression Analyses

	Model 1			Model 2			Model 3		
	b	Beta	Cum. R sq.	b	Beta	Cum. R sq.	b	Beta	Cum. R sq.
Constant	1.39***			1.86***			1.01**		
Science	-0.17	-0.04		0.11	0.02		0.14	0.03	
Business	-0.01	0.00		-0.64**	-0.11		-0.48	-0.08	
Glendon	-0.26	-0.05		0.00	0.00		0.02	0.00	
Fine Arts	0.27	0.05		0.31	0.07		0.15	0.03	
Envir. Studies	0.04	0.00		-0.17	-0.02		-0.26	-0.03	
Education	0.85**	0.12	0.02	0.41	0.06	0.02	0.47	0.07	
Academic Effect Score, S1	-0.13	-0.08	0.04	-0.01	0.00	0.03	-0.02	-0.01	
Economic Effect Score, S1	-0.11	-0.09	0.04	-0.3***	-0.26	0.08	-0.26***	-0.22	
General Support for Unions, S1	0.53***	0.48	0.27	0.44***	0.42	0.26	0.40***	0.38	0.23
Course Change Problems, S2							-0.08	-0.06	
Special Course Accom., S2							-0.02	-0.01	
When Received Marks, S2							0.00	0.00	
Marks Ready Applications Other Schools, S2							0.06	0.03	
Negative Effect Strike on Summer School, S2							0.09	0.06	
Negative Effect Strike on Graduation Plans, S2							-0.01	-0.01	0.23
Losses Due to Shorter Work Summer, S2							0.00	0.00	0.23
Labouring Classes Exploited by Rich, S2							0.09	0.08	0.23
Rely on Faculty Support, S2							0.15***	0.17	0.25

Sig t: *.05; **.01; ***.001

economic effect score and support for the union was negative and statistically significant ($\beta = -0.30$): the greater the immediate economic problems faced by the student during the strike, the less likely he or she was in the post-strike survey to support the strike. The inclusion of the economic effect score increases the explained variance in this model to 8%. As in model 1, however, general support for unions has the greatest impact on support for the strike as measured in the second survey ($\beta = .42$). With the inclusion of this variable the variance explained by the model increases from 8% to 26%.

Despite differences, the information in models 1 and 2 indicates that how students felt about unions in general at the time of the first survey was the best indicator of their support for the strike in both surveys. In essence, general attitudes toward unions were more important than academic and economic hardship in determining support for the strike.

Model 3 (F sig. .001; power = 1.0), that has support for the strike in the post-strike survey as the independent variable, includes all of the independent variables of models 1 and 2. In addition, it includes short-term measures of academic and economic effects as measured in survey two, economic losses incurred after the strike, and political orientation and faculty integration as measured in the post-strike survey.

As in model 2, the economic effect score remains statistically significant in explaining support for the strike ($\beta = -0.22$) as does general support for unions as measured in the first survey ($\beta = .38$): the greater the economic hardship during the strike, the less the support for the strike five months later; the more supportive the student was of unions in general during the strike, the greater the support for the strike in the post-strike survey. Table data indicate that all of the variables measured in survey one explain 23% of the variance in support for the strike in the second survey.

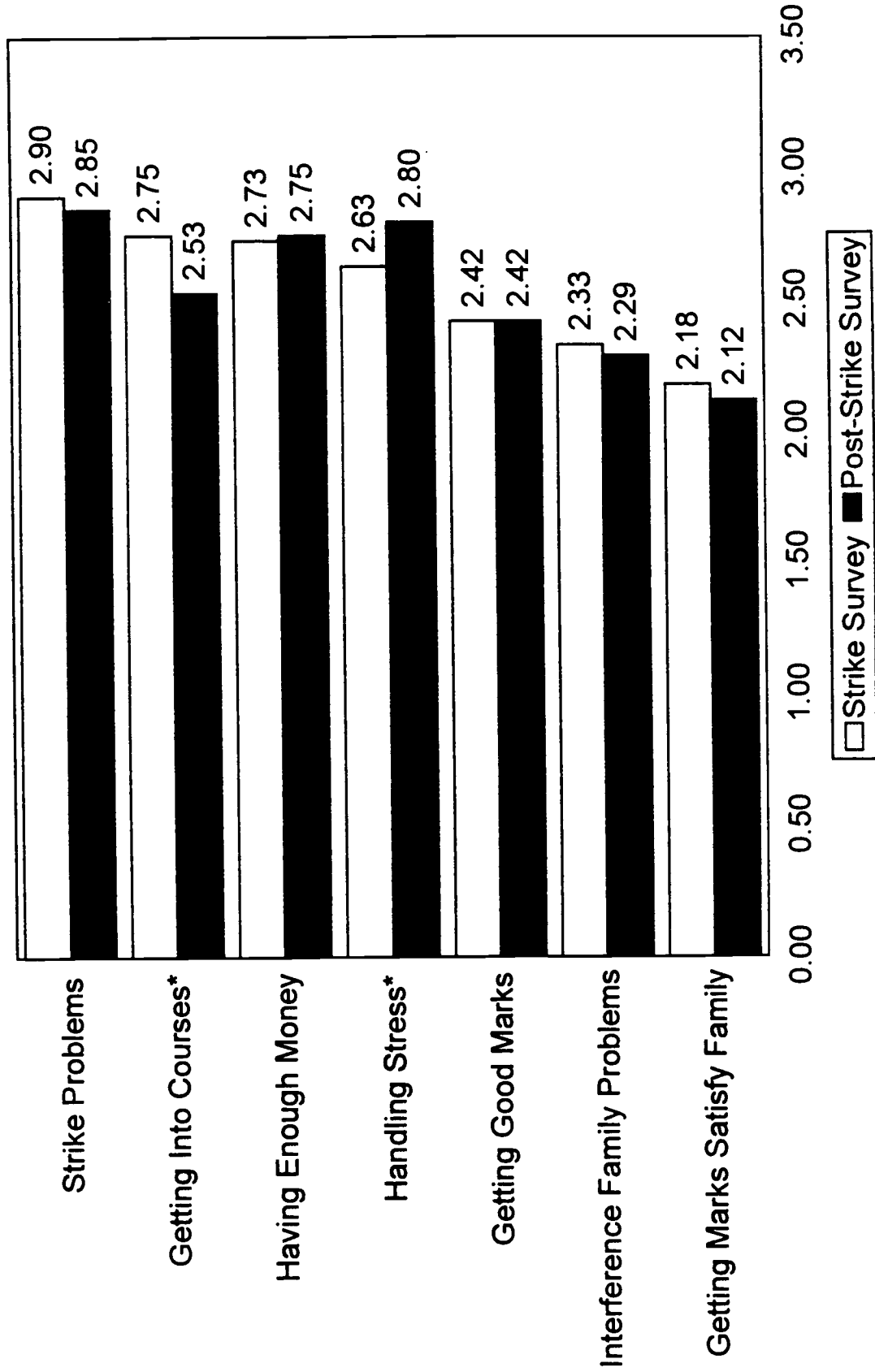
An examination of the remaining data in model 3 indicates that the academic problems faced by students after the strike (course change problems S2, to negative effect strike on graduation plans S2) have no statistically significant effect on support for the strike. Moreover, these variables do not increase the explained variance at all. The same is true for economic losses students sustained as a result of a shorter work summer and any left-wing leanings they might have. Neither of these variables makes a statistically significant contribution to the regression nor do they increase the explained variance beyond 23%.

The only measure from survey two used in model 3 that is significant is the extent to which students felt that they could rely on faculty if they had a problem ($\beta = .17$). The inclusion of this variable increases explained variance slightly from 23% to 25%.

The information in models 1, 2, and 3 indicates that overall the academic and economic hardships that were caused by the strike had relatively little impact on student support for the strike as measured in either survey one or survey two. Nor did ideological orientation. By comparison, support for unions in general as expressed during the strike had considerable impact on support for the strike as measured in both surveys. The influence of faculty of enrolment was variable, yet interpretable, and integration with faculty had an impact on support for the strike in the second survey.

Graph 2: Problems Faced by Students

(Maximum 4 point scale)



*t sig. .001

Magnitude of Strike Problems

The results of the regression analysis lead to an obvious question: did the academic and economic problems caused by the strike have little impact on support for the strike because compared to other events in students' lives, strike related problems were not seen as serious? In order to answer this question, in the first survey, students were given the following lead-in to a number of questions focussing on specific problems they may have had over the academic year: "I would now like to read you a list of problems that students sometimes have that are not related to the strike. Could you please tell me how much of a problem each has been for you over the past academic year?" Students were then asked how problematic they had found the following issues: getting into the courses they wanted, having enough money to meet expenses, handling stress, getting good marks, interference of family problems with studies, getting good enough marks to satisfy the expectations of family, and, finally, "handling problems created by the strike of faculty and librarians." Response options ranged from 1, definitely not a problem, to 4, big problem.

In the post-strike survey students were asked about exactly the same problems with identical response options; however, the lead-in was changed to read: "I would now like to read you a list of problems that students sometimes have. I would like you to think not of this current year but the *last* academic year in 1996-97." In addition, after the statement of each problem, students were asked, "Would you say that *last* year this was a big problem..." As a result of this wording, we have an assessment at two points in time of the importance of problems faced by students in 1996-97. This is important as it could be that strike related problems would be ranked high in the first survey simply because they were the most immediate problems students had to confront.

Answers to the questions on problems from the two surveys are summarized in Graph 2. The first thing of note is that in both surveys, students rated strike related problems higher than any other problems. A second important observation is that a t-test indicates that there are no statistically significant differences in the mean scores of students between the first and second surveys. Five months after the strike, relative to other problems, students still saw strike related problems in the same way as they had during the conflict. As a result, the fact that in the regression analysis strike related academic and economic factors had little impact on student support for the strike cannot be attributed to the fact that these issues were not seen as serious by students.

From Graph 2 it can be seen that there is a statistically significant difference between the two surveys in terms of students' assessments of the difficulty of getting into the courses they want and in handling stress. For the first item, students reported more problems during the strike and for the second students reported more stress in the post-strike than in the strike survey. Faulty recall is one explanation for these discrepancies.

Conclusion

As noted in the Introduction, the main objective of the current study was to examine the academic and economic impact of a strike on students at York University and to look at the relationship between such problems and support for the strike. Unfortunately, there was little in the way of

previous studies to guide this endeavour. At best, previous research, none of which was carried out during an actual faculty strike, suggested that students might be more supportive of unions and strikes in general than of faculty strikes and that students from homes with parents who supported unions would be more likely than other students to support unions and strikes. Both the survey carried out during the strike and the post-strike survey at York support the idea that students are more supportive of unions in general than of a faculty strike. While information was also collected on the attitudes of parents toward unions, an examination of the relationship between parents' and students attitudes was beyond the scope of the current endeavour.

Information collected for the current study also suggests that when recalling how they felt about the strike five months after faculty and librarians returned to work, students expressed more support for the strike than they had during the strike. As a result, it is reasonable to assume that retrospective analyses of strikes somewhat overestimate the amount of student support for faculty and librarian strikes. Rather than revealing feelings held during the strike, retrospective analyses of this phenomenon likely reflect how students feel at the time of the survey.

To turn to the main objective of the current study, an examination of survey data indicates that students experienced varying degrees of academic and economic hardship both during and after the strike. While it is difficult to make precise comparisons, it also appears that the academic consequences of the strike may have been more problematic for students than the economic impacts. This generalization should not blind us to the possibility that for a minority of students the strike had considerable economic implications.

Despite the problems caused by the strike, results of regression analyses show that the lack of support for the strike at York University is best explained not by the academic and economic problems it caused, but by York undergraduates' attitudes toward unions in general. Independent of academic and economic problems, faculty of enrolment, and integration with faculty, students who were supportive of unions in general were more inclined to support the York strike than those who in general were opposed to unions. What can be described as socialisation variables are far more important in explaining support for the strike than situational variables.

The fact that academic and economic problems played relatively minor roles in explaining support for the strike cannot be attributed to the possibility that such factors were relatively unimportant to students. In both surveys students revealed that problems they had with strike related issues were more difficult to deal with than a number of other possible problems they may have encountered over the course of the year.

It is not possible to argue that the impact of the strike at York University is typical of the impacts of strikes on other campuses. For one thing, the strike at York came just before the end of classes - absolutely the worst time of year for students. As a result, for many, problems with completing school work were compounded by difficulties associated with finding, and holding down, a summer job. For another thing, the strike at York was seven weeks long. It is unlikely that on either Canadian or American campuses strikes of this length will occur in the future. Indeed, in some jurisdictions both north and south of the border faculty have been ordered back to work after only a few days on the picket line. Had the strike been shorter (say less than a week) comments made in focus groups suggest that it would have received more support than it actually did by the time of the first survey. A short breather of a few days or so before the end of term

would have been welcomed by many students concerned with catching up on end-of-year assignments.

This said, concerns raised in the first survey relating to the completion of courses, grading practices, and so on, likely would apply to strikes on campuses independent of when they were called, or, beyond a few days that might provide students with a reprieve from the pressure of assignments, how long they lasted. As a result, although some colleagues would disagree, it is imperative that steps be taken by faculty and administrators before a potential strike to minimize the number of student casualties by making information on matters of concern available in advance of the cessation of work. At York, unfortunately, this did not occur. As a result, for several weeks students had little idea of what would happen to them. When the strike was finally concluded, many experienced considerable difficulty in picking up where they left off.

References

Amos, M., Day, V. and Power, E. (1993). Student reactions to a faculty strike. *Canadian Journal of Higher Education* 23(2): 86-103.

Annunziato, F. (1994). Faculty strikes in higher education: 1966-1994. *National Center for the Study of Collective Bargaining in Higher Education and the Professions Newsletter*. 22(Nov./Dec.).

Arnfield, E. A. (1974). A study of the relationship between collective bargaining impasse and the attitudes and performance of biology instructors and biology students in two urban community colleges in Michigan. Ph.D. Dissertation, Department of Education, The Ohio State University.

Barclay, L., Inn, A. and Rosen, H. (1982). Student attitudes toward faculty strikes in higher education. *Journal of Collective Negotiations* 11(4): 373-381.

Barling, J., Kelloway, E. and Bremermann, E. (1991). Preemployment predictors of union attitudes: the role of family socialization and work beliefs. *Journal of Applied Psychology* 76(5): 725-731.

Barling, J., Fullagar, C. and Kelloway, E. (1992). *The Union and Its Members*. New York: Oxford University Press.

Desjardins, L. (Canadian Association of University Teachers). Personal letter to J. P. Grayson, May 5, 1997.

Fredman, S. and Morris, G. (1989). *The State as Employer*. London: Mansell Publishing Co.

Grayson, J. P. (1997a). *The Strike from the Students' Viewpoint*. Toronto: York University, Institute for Social Research.

Grayson, J. P. (1997b). *Follow-up Survey of Strike Impact*. Toronto: York University, Institute for Social Research.

Kelloway, E. and Watts, L. (1994). Preemployment predictors of union attitudes: replication and extension. *Journal of Applied Psychology* 79(4): 631-634.

Kelloway, E., Barling, J. and Agar, S. (1996). Preemployment predictors of children's union attitudes: the moderating role of identification with parents. *The Journal of Social Psychology* 136(3): 413-415.

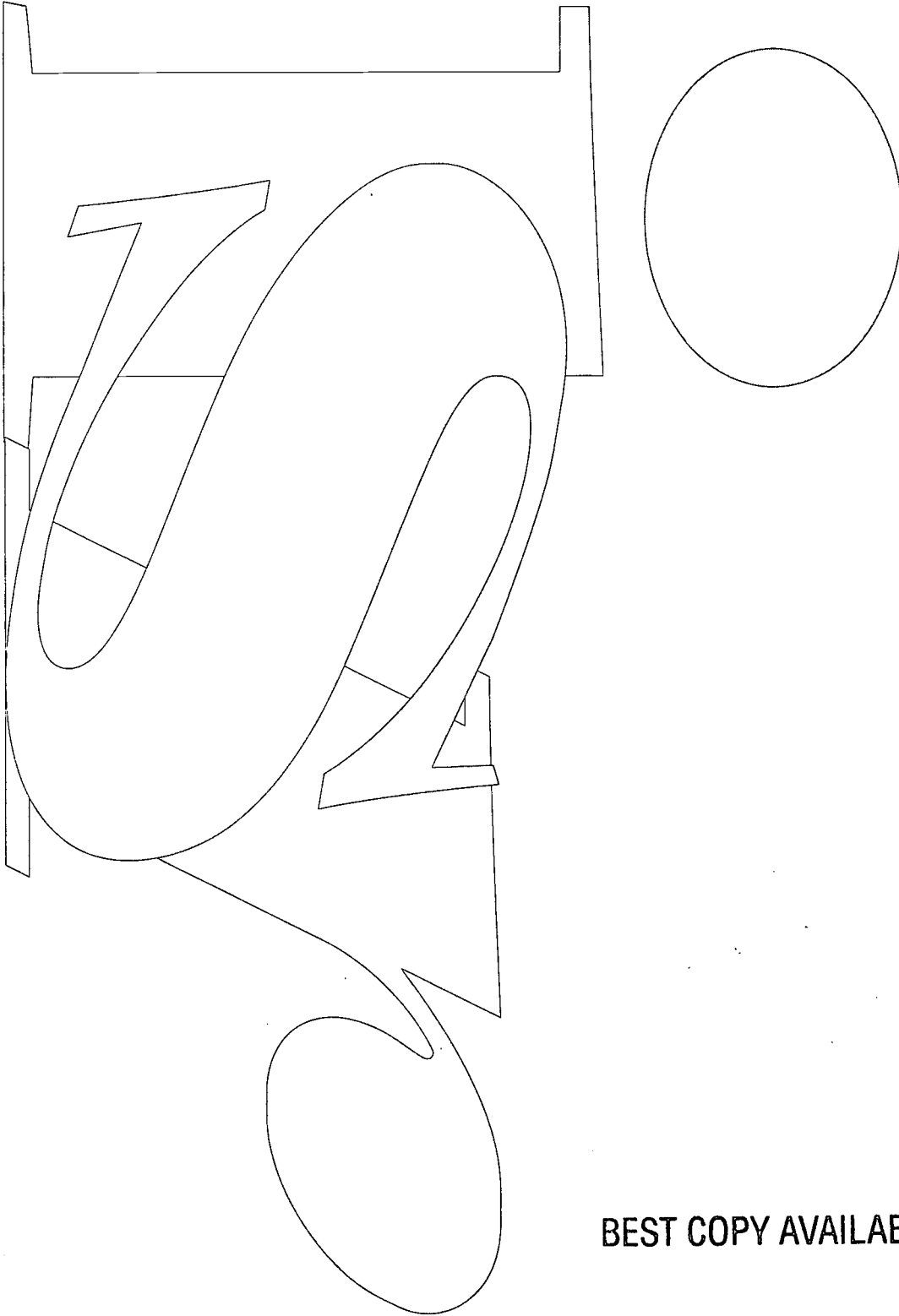
Klass, B. and McClendon, J. (1995). Crossing the line: the determinants of picket line crossing during a faculty strike. *Journal of Labor Research* 16(3): 331-346.

McClendon, J. and Klass, B. (1993). Determinants of strike related militancy: an analysis of a university faculty strike. *Industrial and Labor Relations Review* 46(3): 560-573.

Ng, I. (1991). Predictors of strike voting behaviour: the case of university faculty. *Journal of Labor Research* 12(2): 123-134.

Rees, D., Kumar, P. and Fisher, D. (1995). The salary effect of faculty unionism in Canada. *Industrial and Labour Relations Review* 48(3): 441-451.

Sudman, S., Bradburn, N. and Schwarz, N. (1996). *Thinking About Answers: The Application of Cognitive Processes to Survey Methodology*. San Francisco: Jossey-Bass.



BEST COPY AVAILABLE





U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)



NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").