THE UNIVERSITY OF MANITOBA

THE EFFECTS OF COLLEAGUE SUPPORT IN THE CONVERSION OF ATTITUDES INTO BEHAVIORS

by

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ABSTRACT

This thesis attempted to identify and explain some of the sources of attitude-behavior inconsistency among professors in relation to a campus strike by other staff in a Canadian university. The formation of attitudes toward economic and political issues resulted more from socialization in certain non-professional statuses than from professional socialization. The conversion of attitudes into corresponding behaviors was affected by the presence, absence, or ambiguity of social support. Attitude-behavior consistency was greatest when a professor's personal attitude was conservative and corresponded to the behavioral norm in the university; or when the attitudes and behaviors of colleagues were perceived to be in accordance with personal attitude. Both ambiguous social support and colleague opposition increased the amount of inconsistency for attitudinally liberal professors, but had little effect on attitudinally conservative professors. In total, professors seemed to be more influenced by the actions than by the words of their associates. The importance of using specific measurement indices in relation to specific issues was indicated many times.

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CHAPTER I

INTRODUCTION

The problem explored in this thesis has concerned researchers in the field of social psychology for many years. It is the problem of identifying and explaining the sources of inconsistencies between attitudes and behaviors. Two types of approaches have been used to explain this failure of attitudes to accurately predict behaviors. In the first type of approach which has been called a probability conceptualization, inconsistency has usually been interpreted to mean that an attitude did not really exist. In the second type of approach which has been called an intervening variable conceptualization, researchers have ceased to assume a one-to-one relationship between attitude and behavior (Liska, 1974a:261). Rather, they have concentrated on identifying various conditions which affect the strength and direction of the attitude-behavior relationship (see for example DeFleur and Westie, 1963; Fishbein, 1966, 1967; Rokeach, 1967; Ehrlich, 1969; Warner and DeFleur, 1969; Ajzen, 1970; and Liska, 1974a, 1974b).

Since the present study was concerned with the latter approach, two distinct conceptual processes were considered in formulating the research. Consideration was directed first toward sources of specific attitudes, and second toward the conditions affecting the conversion of those attitudes into corresponding behaviors.

With respect to the second process, recent efforts in social psychology have focused on determining the role of social support which has been thought to be the major factor intervening between attitudes and behaviors (Warner and DeFleur, 1969; Cole, 1969; Cole and Adamsons, 1969; DeFriese and Ford, 1969; Albrecht et al., 1972; and Liska, 1974b). However, the conditions which accentuate or depress the effect of social support on the attitude-behavior relationship have not been sufficiently studied (Liska, 1974a). Therefore the present study attempted to determine the causes of specific attitudes for a specific group, university professors, and then to examine the conditions under which the presence or absence of social support from colleagues affected the relationship between those attitudes and the corresponding behaviors.

While much attitude-behavior research has been directed toward professors, some of the major studies included no measure of overt behavior, and only a few studies involved the emergence of any salient issue. Thus, the determinants of various attitudes held by professors and the conversion of those attitudes into corresponding behaviors have not frequently been studied (a) under actual conditions, nor (b) have the conditions been systematically investigated with respect to such variables as type of issue (Abramson and Wences, 1972:62).

With respect to the latter, there is reason to assume that the factors affecting attitude-behavior consistency among professors vary over the type of issue. For

example, Ladd and Lipset (1971a) found that correlations between academic success and liberal-left attitudes on national and international issues (such as the Vietnam war, legalizing marijuana, busing and school integration, etc.) did not hold for campus issues (such as student activism, student role in university affairs, and university policy toward blacks).

The present study was therefore an important contribution to the field in several ways. First, a salient issue occurred at the university in which this study was conducted, namely a campus strike by non-professional staff which provided both faculty and students with many opportunities to engage in various overt behaviors either supporting or opposing the strike. Second, previous studies in which the attitude-behavior relationship was explored in terms of some salient local campus issue have only dealt with faculty support of student activism in American universities (either in relation to student rights, or in relation to the Vietnam war). Since the present study concerned faculty attitudes and behaviors with respect to a campus strike by other university staff in a Canadian university, two additional dimensions have been added: a different type of issue, and a different setting.

As mentioned previously, two separate conceptual processes were involved, one concerning attitude formation and the other concerning the conversion of attitudes into behaviors. With regard to the former, attitudinal predispositions toward social issues have been held to result from the combined effect of two socialization processes, although various writers have differentially emphasized

the relative importance of each. On the one hand, socialization in non-professional or pre-professional statuses (measured by variables such as religion, political party affiliation, father's occupation, age, and sex) has been thought to result in a "general political orientation" from which attitudes toward specific issues were derived (for example, Cole, 1969; Cole and Adamsons, 1969). On the other hand, socialization in professional or occupational statuses (measured by variables such as academic discipline, tenure, rank, salary, eminence, orientation toward teaching vs. research, and job satisfaction) has been thought to be more important in determining attitudinal predisposition toward social issues (for example, Spaulding and Turner, 1969; Turner and Spaulding, 1969). The essential difference between these two models is the question of whether attitudes are formed prior to self-selection (or self-recruitment) into various academic disciplines, or whether once recruited faculty members are differentially socialized according to different concerns within their respective academic fields. While both types of explanations were tested in this study, it was expected that non-professional socialization would be more important in explaining attitudes toward a campus strike. This expectation was based on research which showed that correlations between a professional status, academic success, and liberalism on national and international issues did not hold for campus issues (Ladd and Lipset, 1971a).

Turning to the second process, the causes of attitude-behavior inconsistencies, social support was held to be the most important intervening variable. Two sources of social support and/or pressure were thought to determine whether or not

professors behaved in accordance with their own attitudes: these were colleagues' attitudes, and the attitudes of one's students. Generally attitude-behavior consistency has been greatest when the significant others in one's social environment agreed with one's position, and lowest when the significant others held the opposite opinion to the individual. Therefore, it seemed logical that a professor would be most likely to behave in accordance with his own attitude (either liberal or conservative) if the majority of his close colleagues and students shared that attitude, and least likely if the reverse was true. The present study focused only on colleague attitude as a source of social support or of opposition.

To summarize, this thesis attempted to identify and explain some of the sources of attitude-behavior inconsistency among professors in relation to a campus strike in a Canadian university. Two distinct conceptual processes were considered. The first concerned the sources of specific attitudes, and the second concerned the conditions affecting the conversion of those attitudes into corresponding behaviors. With respect to the attitude formation process, although two alternate explanations were tested, it was expected that the first would be more important. The first type of explanation was that socialization in certain non-professional statuses resulted in a general political orientation from which attitudes toward specific issues were derived. The second type of explanation was that socialization in certain professional statuses determined attitudinal predispositions toward social issues. With respect to the attitude conversion process, the effects of the presence or absence of social support from colleagues were explored. It was expected that

attitude-behavior consistency would be greatest when one's colleagues agreed with one's position, and lowest when they did not.

CHAPTER II

RELEVANT RESEARCH

During the past dozen years three groups of researchers have contributed the main body of literature concerning the attitudes and behaviors of professors. These were Turner and associates, Lipset and Ladd, and Cole and Adamsons.[1] The Turner et al. and Cole and Adamsons' studies included measures of overt behavior in addition to measures of attitudes. The major study by Lipset et al. (the Carnegie study) measured only attitudes but was still of great importance because it was based on a large national sample of professors who responded to attitude questions regarding local, national, and international issues. While other individual studies have been referred to where relevant, the main discussion of the literature centers around these three major groups of researchers.

THE TURNER ET AL. STUDIES

Turner and various associates conducted three smaller studies of specific academic groups — political scientists, sociologists, and psychologists (Turner et al., 1963a, 1963b; and McClintock et al., 1965 respectively); followed by a

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[1] Specific references to the works of these authors have been made under the respective sub-headings.

major study of nine academic groups (Spaulding et al., 1968; Turner and Spaulding, 1969; and Turner and Hetrick, 1972).

In the three earlier studies, samples were systematically selected from the membership of the respective professional organizations and useable questionnaires were returned by 59 percent (N=213), 64 percent (N=298), and 69 percent (N=362) of the respective samples. In the major study by Turner and his associates a questionnaire was sent to a probability sample of the membership of nine professional associations: botanists, engineers, geologists, historians, mathematicians, philosophers, political scientists, psychologists, and sociologists of whom 2,390 (or 54 percent) responded. In all four studies the questionnaire was approximately the same and requested information about political party affiliation (one type of overt behavior) and reasons for the preference, political activity, political ideology or attitude which was measured on a fourteen point "politico economic liberalism-conservatism" scale, previous voting history (a second type of overt behavior), plus a number of demographic characteristics.

On the basis of the three earlier studies, the authors concluded that the majority of academically affiliated political scientists, psychologists, and sociologists were political liberals,[2] and identified with the Democratic Party. This was true both of professors' political and social attitudes, and of their self-reported voting history. Of equal interest was the failure of background factors to explain this liberal political orientation for any of the three academic groups.

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[2] Liberal was defined as being in favor of change and reform while conservative was defined to mean supporting the status quo (Turner and Spaulding, 1969:312).

Some differences were found between the Democrats and the Republicans from study to study in terms of age, rank, size of the university in which they taught, degree of participation in politics, size of community of origin, religion and religiosity,[3] and the importance of parents as attitudinal influences. However, in general the overall liberal orientation of the three academic disciplines seemed to be largely the result of conscious political choices based on both the policies and leadership of their respective political parties, and on information gained as a result of their professional training and experience (Turner et al., 1963:665; Turner et al., 1963:273; and McClintock et al., 1965).

In the larger study once again a strong association was found between academic profession and political orientation (both in attitude or "politico economic liberalism-conservatism", and in party affiliation and voting history), which was independent of the effects of background or environmental factors.[4] Professors in the disciplines concerned with the application of knowledge in business and industry (geology, mathematics, and engineering) were much more conservative in both attitudes and behaviors than professors in the disciplines concerned with social and political problems (philosophy, sociology, and political science) (Spaulding and Turner, 1968; Turner and Spaulding, 1969). This variation in political orientation between disciplines was attributed to differences in perspective[5]

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[3] Lehman and Shriver (1968) argued that the religiosity of professors can be determined by their academic discipline: that is scholarly distance from religion affects cognitive differentiation of religion, while social support affects religiosity.

[4] When they standardized for certain background and environmental factors, the relationship between academic discipline and political orientation was increased, suggesting that the former were masking the strength of the relationship between the latter. (Turner and Spaulding, 1968:260-1).

[5] Studies by Becker and Carper (1956), Rosenburg (1957), and Davis (1965)

within the two types of academic groups. Support for this interpretation was found by examining the reasons for party choice given by professors in the two different types of disciplines. For academics in the liberal arts political orientation was primarily based on knowledge gained in their professions. For professors in the applied disciplines it was primarily based on party policies and leadership.[6] Further, the ". . . degree of association between profession and party preference was reduced very little by holding any factor constant." (Turner and Spaulding, 1969:327).[7]

The authors attributed their results to the influence of face-to-face peer groups. These peer groups were thought to be very important in influencing the

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found that academe as a profession had recruited heavily through the years from the more liberal undergraduates. Currie et al. (1968) found that undergraduates who had realistically considered becoming college professors were more frequently politically left. In addition, ". . . those who gave liberal responses to questions concerning the Bill of Rights, labor unions, and minority groups, are more likely than illiberal responders to have considered college teaching." (Currie et al., 1968:541).

Lipset and Schwartz (1966) suggested that liberalism-conservatism among professional groups was related to the type of clientele that the group served; and that the greater liberalism of the social sciences was partially explained because they are subject to attack from persons with vested interests (as a result of their academic role as social critic). In other words, social scientists see themselves as social critics while professors in applied disciplines see themselves as problem-solvers of the business community (Spaulding and Turner, 1968:250).

The most radical department politically in the social sciences and in the university is thought by some writers to be sociology (McClintock et al., 1965; Ladd, 1970). There is some evidence that a resurgent oppositional intellectual tradition in sociology is responsible for attracting persons of alienated dispositions in greater numbers than do the other social sciences (Selvin and Hagstrom, 1965: 512-3).

[6] Turner and Hetrick (1968) found that stated reasons for party choice held for both original choices and party changes.

[7] Eitzen and Maranell (1968) also found that the great majority of social scientists were Democratic (70 percent), while Ladd (1970) found that only 4 percent of social scientists supported the Republican Party.

political attitudes and behaviors of professors through the process of "interaction and communication which typically takes place between colleagues closely associated in academic departments." (Turner and Spaulding, 1969:336). An important implication of their findings is the influence of academic disciplines first in attracting members with similar attitudes,[8] then in refining and reinforcing those attitudes vis-a-vis interaction with colleagues.

In summary, the studies done by Turner and his associates dealt with four main variables: professional training (academic discipline); political liberalism-conservatism (attitudinal or ideological predisposition); colleague associations (social support); and political party affiliation and voting history (overt behaviors). Their main findings of importance to the present study were as follows: (1) social scientists were found to be politically liberal (attitudinal predisposition) and to vote Democratic (behavior); (2) political attitudes were found to be related to political behavior; (3) political party affiliation (behavior) was thought to result from the effect of three variables, namely ideology (attitude), professional training, and colleague associations (Turner and Spaulding, 1969:336).

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[8] This concept was referred to as the "selective ideological recruitment thesis" by Lipset and Ladd and will be discussed further in terms of their research.

THE LIPSET AND LADD STUDIES

Two studies by Ladd (1969, 1970) of anti-Vietnam war petitioners produced essentially the same results. Among professors who signed petitions in both studies, those of higher rank were better represented (that is associate and full professors). Professors in the social sciences signed most often (and were also overwhelmingly members of the Democratic Party), followed by professors in the humanities and natural sciences, then by professors in fine arts and engineering, and finally by those groups who did not sign the petitions, education, business, and agriculture[9] (Ladd, 1969:1429; 1970:554-5). In addition, petitioners tended to be productive scholars who were acquiring academic success (Ladd, 1969:547). Ladd also found that approximately 90 percent of the signers in his sample were active in one or more other ways of anti-Vietnam war support.[10] Further, professors who gave similar reasons for objecting to the war were similar in age, rank, quality of scholarly output, and type of university. However, they were different in type and amount of attitudinal support for war-related campus demonstrations by students. This same phenomenon, attitudinal and behavioral liberalism on national and international issues and relatively more conservatism amongst the same professors on campus issues, was found in the Carnegie study to be true of professors' attitudinal positions (Ladd and Lipset, 1971a).

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[9] The rank order of these disciplines on amount of behavioral liberalism was almost identical to that found by Ladd and Lipset (1971b:138-9) on attitudes alone. In the latter study the rank order from highest to lowest amount of attitudinal support on four issues (one national and three local) was as follows: social sciences, humanities, fine arts, education, natural sciences, business, engineering, and agriculture.

[10] This was contrary to a similar study conducted at about the same time in which Armor (1967:165) found that petition-signers were not engaged in other methods of protest.

The Carnegie study was a massive study which began in 1969 and involved a national sample of university professors of whom 60,028 or 60 percent returned useable questionnaires. Information was collected with respect to their social background, professional activities and achievements, attitudes toward various national and international political issues, and opinions on various local issues such as campus activism.[11] However the survey did not include any measure of overt behavior.

When all the attitude responses were factor analyzed the following four dimensions emerged: (1) a "liberalism-conservatism scale" which included questions regarding national issues (Vietnam, legalizing marijuana, Negro riots, busing and school integration, and self-reported political views); (2) a "campus activism scale" which included evaluations of student activism and prescriptions of appropriate university response; (3) a "student role scale" which included questions regarding student participation in faculty appointment and promotion, undergraduate admission, course content and curriculum, and student discipline; and (4) professors' perceptions of "university policy toward blacks" which included reactions to reverse discrimination in recruitment, to black studies programs, and to college racism (Ladd and Lipset, 1971b:137). Due to the consistency of professors' opinions on such diverse topics, Ladd and Lipset concluded that professors' attitudes were more highly structured and interrelated than those of the general public.

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[11] In their 1971a report Ladd and Lipset concluded that correlations between academic achievement and leftist or liberal views did not hold for campus issues.

In general the results of the Carnegie survey were similar to those in the Turner et al. studies:

> Social scientists . . . are the most critical and change-oriented in the university context — the most supportive of the student protests, the most receptive to a broadened student role in university governance, and the most willing to change university procedures to benefit disadvantaged groups. Next in degree of general liberalism and receptivity to the several dimensions of protest and change in the university are the faculties of the humanities and fine arts, and of the most social-problems-oriented professional schools, law and education. Clustered together at a nitch substantially less 'liberal' are the natural scientists — physical and biological, and the latter's related professional field, medicine. Finally, the most 'conservative' in academe, are the applied fields with a close link to business and agriculture. (Ladd and Lipset, 1971b:138).

In addition the authors examined three sets of characteristics thought to be associated with different political orientations: (1) social background; (2) age and academic generation; (3) career success. With regard to social background they found " . . . no significant class-related differences in political orientation within the professoriate." (Ladd and Lipset, 1971b:140). Only Jews were consistently more liberal but these differences were smallest in the social sciences, and on the issue of students' role.

With respect to the second set of characteristics, the authors found that age was the most powerful variable in discriminating political opinions. Younger academics were more liberal on three of the scales: the liberalism-conservatism scale, the campus activism scale, and the black support scale (Lipset and Ladd, 1972). Persons over age fifty were most conservative on all issues but more so on the campus activism and student role scales.

None of the variables associated with the third set of characteristics (career success as measured by status, salary, and professional achievements) was independently correlated with political views to the same extent as were age and religion. When age was controlled, rank and tenure were left with only a very modest effect upon political opinions (Lipset and Ladd, 1972:74). The authors concluded that the effect of rank was reduced because of its correlation with age. In addition, professors who were committed to research and were publishing at a high level were most liberal on the general liberalism-conservatism scale, while professors of lower rank than most of their colleagues of the same age cohort were more liberal on the campus activism scale (Ladd and Lipset, 1971b:143). The explanation given for this phenomenon was as follows:

> . . . scholarly members of the profession are pushed by their intellectuality to a more critical position in national controversies; but as more successful academic men have a greater stake in the university status quo and hence in campus politics are less 'liberal' (sic!) (Ladd and Lipset, 1971b:143-4).

The overall argument presented by these authors was twofold: first, that selective ideological recruitment was operative; and second, that greater intellectual commitment and career success resulted in liberalism. With respect to the former (and recalling the suggestion made by Selvin and Hagstrom, 1965, that the social sciences attracted more left students), Ladd and Lipset found support for the selective ideological recruitment theory on the basis of faculty recall of their politics while college seniors.[12] Of faculty in the social sciences 56 percent

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[12] Knapp (1962) found in his study of student perceptions of various occupations that professors were given " . . . a high score on radicalism" and on " . . . power in public affairs."

recalled being liberal, in business 28 percent, in engineering 26 percent, and in agriculture 17 percent. Also a higher proportion of both graduate and undergraduate students in the social sciences claimed to be oriented toward social reform (Lipset and Ladd, 1972:91).[13]

With respect to the second phase of their argument (intellectual commitment and career success), Ladd and Lipset found:[14]

> Intellectuals, as distinct from professionals, are concerned with the creation of knowledge, art, or literature. Status within the occupation accrues from creation, innovation, from being in the avante-garde. Inherent in the obligation to create, to innovate, is the tendency to reject the status quo, to oppose the existing or the old as philistine. Intellectuals are also more likely to be partisans of the ideal, of the theoretical, and thus to criticize reality from this standpoint. The need to express the inner logic of their discipline, of their art form also presses them to oppose the powers — the patrons — who seemingly are philistines, who prefer continuity rather than change. (Lipset and Ladd, 1972:85).

In summary, four major conclusions are relevant for the present study: (1) social background did not account for differences in political orientation (attitudes) and the greater liberalism of the social sciences; however age was the most important correlate of predisposition to an activist orientation, and religion was the distinguishing factor within the applied disciplines (Lipset and Ladd, 1972:88); (2) professors " . . . who possess dominant characteristics (particularly when age is held constant), who have done more as scholars and have been more rewarded, are to the left of the nondominants; and those who

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[13] Lipset and Ladd claimed that many students and young faculty entered sociology in order to enhance their political objectives (1972:98-9).

[14] This was supported by Lipset and Dobson (1972) who found that a general tendency existed among achieving intellectuals, as distinct from professionals, to support a politics of radical criticism.

emphasize research are to the left of those who focus on teaching." (Lipset and Ladd, 1972:94); (3) subject matter seemed to affect types of associates and identifications a professor had both inside and outside academe — "These features of subject matter — the area of activity it encompasses, the problems it involves one with, and the interests outside the university which it defines — together influence the type of person recruited into the field." (Ladd and Lipset, 1971b:136); (4) the direct relationship between academic achievement and attitudinal liberalism did not hold for campus issues but only for national and international issues.

THE COLE AND ADAMSONS STUDIES

Two studies by these authors have relevance for the present study. The first, by Cole, was a survey of the 1962 teachers' strike in which 22,000 out of 40,000 New York school teachers stayed off the job (Cole, 1968, 1969). In that study Cole examined the effect of the presence or absence of social support, cross-pressure, and fear of sanction on the consistency of the attitude-behavior relationship in order to determine the significance of reference groups. The second study, in which 1,061 faculty members responded, involved a student sit-in and strike in 1968 at Columbia University (Cole and Adamsons, 1969, 1970). In the latter study the authors examined the effects of both professional and non-professional socialization on attitudinal predisposition, and the effects of colleague support on the conversion of those attitudinal predispositions into behaviors. Professional socialization was measured by statuses such as rank, tenure, salary, orientation to teaching vs. research, professional eminence, and job satisfaction. Non-

professional socialization was measured by statuses such as religion, political affiliation, social class (father's occupation), age, and sex.

In the teachers' survey Cole found that:

> . . . two types of experience interact in determining attitudes toward the union movement. On the one hand, teachers' attitudes toward the movement were interpreted as a consequence of their occupational socialization and their positions within the school system. On the other hand, these attitudes were found to be influenced by conditions external to the school system and professional statuses. (Cole and Adamsons, 1969:316).

Turning to the faculty survey, the two conceptual and methodological processes, attitude formation and attitude conversion, are dealt with separately for the sake of clarity.

Causes of Attitudes Toward Student Demonstrations

Contrary to the conclusions reached by Turner and associates, Cole and Adamsons found that professional statuses (academic discipline, rank, productivity, and professional eminence) had little effect on attitudinal support of the student demonstrations (Cole and Adamsons, 1970). Instead these authors found that certain non-professional statuses, namely religion, political party affiliation, and social class (as measured by father's occupation), as well as political identification (an attitudinal measure of liberalism-conservatism) were all related to attitudinal support of the strike (Cole and Adamsons, 1969:318-9). Cole and Adamsons had hypothesized that socialization in non-professional statuses resulted in a general political orientation from which attitudes toward specific issues were derived, and that this attitudinal predisposition would only be converted into the corresponding behavior when social support from one's colleagues and/or students was present.

In other words, the expected causal sequence was as follows:

Figure 1. The expected causal sequence from attitude formation to behavior

(1)	(2)	(3)	(4)
socialization in non-professional statuses	general political orientation	attitudinal predisposition toward social issues	overt behavior as modified by colleague and student attitudes

When they standardized for political identification as an intervening variable in the attitude formation process (represented by steps (1), (2) and (3) on the preceeding diagram), Cole and Adamsons found that the effects of religion[15] and political party affiliation on attitudinal support of the strike were greatly reduced, but that the effect of social class on attitudinal support was only slightly reduced (Cole and Adamsons, 1969:320). They therefore concluded that socialization in non-professional statuses created a predisposition among professors " . . . to support a social change movement in their profession." (Cole and Adamsons, 1969:320).

The other two non-professional statuses to which these authors directed themselves were age and sex, both of which were found to be correlated with attitude toward the strike. The relationship between age and support was inverse (that is, older professors were less liberal), and between age and political identification it was inverse but weak. Further, this inverse age- support

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[15] For professors who claimed no religion, parents' religion was substituted but was found to have no relationship to attitudinal support of the strike (Cole and Adamsons, 1969:320).

relationship was not changed when political identification was standardized (Cole and Adamsons, 1969:320-1). The authors interpreted this to mean that older professors who rated themselves as "liberal" or "radical" were imputing different meanings to these words than were younger professors.

Women scored higher in attitudinal support than men. The authors concluded that this was a spurious relationship (or else the result of differences in the professional experiences of male and female professors) since the political socialization of male and female academics was not likely very different. Further analysis showed that for professors over fifty the relationship between sex and support was an artifact of age and further, that the sex-support relationship was inflated primarily by the greater number of women who had supported immediate withdrawal from Vietnam on one of the attitude indices. In the authors' words, " . . . sex status is more likely to influence professional attitudes by providing a frame of reference in which the individual evaluates his professional status." (Cole and Adamsons, 1969:322).[16] The authors also found that there was no relationship between sex status and job satisfaction, but great differences in terms of academic success between men and women. Men occupied higher ranks and had more publications. The authors' final interpretation of the sex status variable was that either success tempered liberalism, or that the sex-support relationship disappeared with age (Cole and Adamsons, 1969:323).

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[16] This interpretation was supported by Cole's survey of public school teachers' reactions to unionization mentioned previously (Cole, 1968) in which he found " . . . that men were more likely than women to support the union because men were less satisfied with teaching as a profession." (Cole and Adamsons, 1969:322).

The Conversion of Attitudes into Behaviors[17]

Cole and Adamsons operationally defined behavioral support as overt actions on the part of professors such as cancelling classes or relocating them off campus after the students set up picket lines.

Results indicated that approximately half of the professors in their sample were attitudinally supportive of the strike while about two-thirds were behaviorally supportive (as measured by eight items of overt behavior such as the two examples mentioned above). This discrepancy led the authors to conclude that " . . . it was clearly more difficult to convert a negative than a positive predisposition into behavior. The general context in the university was one of support for the demonstrators. Holding regular classes was negatively related to the support index . . ." (Cole and Adamsons, 1969:324).

Turning to the role of social support, the data confirmed the authors' expectation which was that to the extent one's colleagues were perceived to offer social support the attitude-behavior relationship would be more consistent than if colleagues were perceived to offer opposition. Cole and Adamsons found:

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[17]This is depicted by steps (3) and (4) in the diagram on page 19.

> . . . a strong association between a faculty member's own attitude and his perception of the attitudes of his friends. If a professor's friends agreed with his position, behavior was more likely to have corresponded with attitude than if they disagreed with him.
>
> It was interesting that if the attitudes of the respondent's friends were ambiguous (perceived as neutral or split)[18] and if his own attitudes favored the demonstration, he was little more likely than colleagues with similar attitudes but consistently unsupportive friends to have translated attitudes into behavior. Respondents whose attitudes were negative, however, were just as likely to have met regular classes if their friends' attitudes were ambiguous as they were if their friends agreed with their views . . .
>
> When we use political identification rather than the support index as an indicator of predisposition, there is an even stronger effect of attitudinal context . . . (W)hen attitudes of friends are held constant, the faculty member's own political identification had little effect on behavior. In fact, of those faculty members whose friends opposed the strike, those who said they were strongly liberal or radical were even more likely to hold regular classes than were their more conservative colleagues. Only when friends were neutral or split did one's own political identification become an important influence on behavior. The data ... suggest that social support and pressure from colleagues had a greater effect on behavioral support of the demonstration than did personal attitudes. (Cole and Adamsons, 1969:324-5).

Further, in schools such as engineering and agriculture where the attitudinal context was conservative, those professors who attitudinally supported the strike were most likely to have held regular classes. That is, the behavior of those professors was highly inconsistent with their own predispositions. Similarly Cole and Adamsons found that although only minor differences in attitudinal support existed among professors of political science, pure science, and philosophy, there were substantial differences among these groups in amount of behavioral support. Only with political science and philosophy professors was the attitude-behavior

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[18] The effect of social support when it is perceived as ambiguous will be discussed further in relation to the derivation of the hypotheses.

relationship consistent. Professors from the pure sciences held regular classes contrary to their attitudinal predispositions. This phenomenon was thought by Cole and Adamsons to reflect pressure to hold classes exerted on those professors by their relatively more conservative students.[19]

Other implications of these findings are discussed relative to the derivation of the hypotheses. For now it is sufficient to note that the results of the faculty study by Cole and Adamsons were consistent with the results of the teachers study by Cole (1968, 1969), and with the results of a much earlier study of a strike by union printers (Lipset et al., 1956). For all these groups of respondents the opinions of significant others in their social environment affected attitude-behavior consistency.

THE DERIVATION OF THE HYPOTHESES

The essential difference between the studies by Turner et al. and the studies by Cole and Adamsons was the type of social issue involved. While the latter authors attributed attitudinal predispositions on a campus issue to socialization in non-professional statuses, Turner and associates attributed attitudinal position on national politics to the influence of professional training. In contrast Cole and Adamsons found that occupational socialization had little effect on the attitudes of faculty members toward student demonstrations, and therefore concluded that professors were more influenced by what had happened to them before entering

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[19] Research previously mentioned indicated that students in disciplines other than the social sciences were much more conservative.

their profession than after. However Turner and associates found that pre-professional socialization was unable to account for differences in political party affiliation or in voting history. These studies which had seemingly divergent findings were based on two different types of issues, one national and one local. It therefore seemed that type of issue was a most important consideration. In accordance with that assumption most of the hypotheses that were tested in the present study were derived from Cole and Adamsons' research since both involved the emergence of a campus issue.

The Hypotheses Regarding the Attitude Formation Process

The First Hypothesis

Cole and Adamsons found that academic discipline was not a good predictor of professors' attitudinal position either for or against the student strike. Therefore, the first hypothesis was as follows:

> There will be no significant difference between professors in different disciplines in amount of attitudinal support for a campus strike.

The Second Hypothesis

Consistent with the first hypothesis and also based on Cole and Adamsons' findings, the second hypothesis was as follows:

> Socialization in non-professional statuses will be more highly correlated with attitudinal position on a campus strike than will socialization in professional statuses.

The Hypotheses Regarding the Attitude Conversion Process

Since the remaining hypotheses concerned the role of social support in the conversion of attitudes into behaviors, Cole and Adamsons' findings are discussed in more detail because their studies were the only two that attempted to specify the conditions under which attitudes corresponded with behaviors.

In Cole's study of a strike by public school teachers he found that " . . . teachers acted in accord with their own predispositions depending on their environment. Where social support, either positive or negative (i.e., in favor of or opposed to the strike), was present, 85 percent acted in accord with their own predispositions. When social support was not present, only 37 per cent acted in accord with their own predispositions." (Cole, 1969:509). Similar results were found in Cole and Adamsons' study of faculty support for student demonstrations: " . . . when social support for one's own attitude was present within the department, 69 per cent acted in accord with their own beliefs. When social support was not present, only 49 per cent acted in accord with their own beliefs." (Cole and Adamsons, 1969:325-6). Attitude-behavior consistency/inconsistency resulting from the presence or absence of social support was therefore not restricted to one type of environment or to one type of salient issue, even though the observed variation was smaller in the latter study.[20] Since the results of the above studies can be generalized to different social issues and different social environments, they are applicable to the present study.

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[20] The difference in observed variation between the two studies could have resulted from the crudeness with which behavioral support was measured in the faculty survey. Since the questionnaire included no direct measure of support, such as cancelling classes or holding them off campus, the authors used a measure of strike opposition — holding classes in the regular classrooms (Cole and Adamsons, 1969:323-4)

A first consideration in specifying some of the conditions under which attitude-behavior consistency would be affected by social support, was the general context in the university. In Cole and Adamsons' study the behavioral norm was support for the strike (half of their sample attitudinally opposed it, but only one-third behaviorally opposed it). They reported that " . . . it was clearly more difficult to convert a negative (or conservative) than a positive (or liberal) predisposition into behavior." (Cole and Adamsons, 1969:324). Stated differently this means that when the general context in the university was one of support or liberalism, professors who attitudinally opposed the strike were more likely to behave inconsistently than were professors who attitudinally supported the strike. In fact, these authors found that only 11 per cent of those who attitudinally supported the strike behaved inconsistently by holding regular classes, while 56 per cent of those who attitudinally opposed the strike behaved inconsistently by not holding regular classes (Cole and Adamsons, 1969:324). With the general liberal context in the university five times as much attitude-behavior inconsistency occurred among professors who attitudinally opposed the strike.

A plausible explanation for this difference in both the direction and the amount of inconsistency could be that a type of "tipping phenomenon" was occurring, similar to that suggested by Bart (1970). While Bart's study included no attitude indices, behavior was measured relative to a salient international issue — signing an anti-Vietnam war petition which was sent to the President

of the United States and to Congress. With respect to the tipping phenomenon, Bart hypothesized that " . . . once a certain percentage of members of a department signed, . . . almost everyone would sign." (Bart, 1970:341). She expected tipping to occur as a result of the general context in individual departments and concluded it had not occurred because the highest rate of petition-signing within any department was only 63 per cent. What she failed to consider was that the behavioral norm in her university as a whole was conservative since less than 41 per cent of her sample behaved liberally and signed the petition. In contrast, in Cole and Adamsons' study the behavioral norm in the university as a whole was decidedly liberal since two-thirds of their sample supported the strike by not holding regular classes. Both the above-mentioned surveys therefore support the proposition that departments are not homogeneous entities, and that the important variable affecting "tipping" may be the general context in the whole university rather than in individual departments.[21]

The Third Hypothesis

As one aspect of social support, general university context may determine the direction in which the greatest amount of inconsistency could be expected. Specifically, if the general context or behavioral norm in a university was supportive of a given salient issue, the greatest amount of consistency would be

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[21] Another reason why tipping would not occur until a majority of faculty had supported a given salient issue was suggested by Cole and Adamsons when they pointed out that not holding regular classes was against traditional academic practice. Therefore when the supportive or liberal behavior in question involved cancelling classes, those professors who attitudinally opposed the issue but behaviorally supported it would also be overcoming the influence of traditional academic practice, and would be breaking the terms of their teaching contract with the university. (Cole and Adamsons, 1969:324).

expected to occur among professors who attitudinally supported the issue, and the greatest amount of inconsistency among professors who attitudinally opposed the issue. In contrast, if the general context or behavioral norm in the university was lack of support (or opposition) toward the issue, the greatest amount of inconsistency would be expected to occur among professors who attitudinally supported the issue, and the greatest amount of consistency among those who attitudinally opposed the issue. The third hypothesis was therefore as follows:

> If the direction of the behavioral norm in the university as a whole is liberal, the greatest amount of attitude-behavior inconsistency will occur among attitudinally conservative professors, and if the behavioral norm is conservative the greatest amount of inconsistency will occur among attitudinally liberal professors.

The Fourth Hypothesis

An additional consideration is specifying some of the conditions under which attitude-behavior consistency would be affected by social support concerned measurement indices. When Cole and Adamsons used political identification rather than a strike support index (see Cole and Adamsons, 1969:317-8 for the four questions used to construct the index) to measure professor's personal attitudes, and perceived attitudes of close friends to measure social support, they found that:

> . . . when attitudes of friends are held constant, the faculty member's own political identification had little effect on behavior. In fact, of those faculty members whose friends opposed the strike, those who said they were strongly liberal or radical were even more likely to hold regular classes than were their more conservative colleagues. Only when friends were neutral or split did one's own political identification become an important influence on behavior. The data . . . suggest that social support and pressure from colleagues had a greater effect on behavioral support of the demonstrations than did personal attitudes. (Cole and Adamsons, 1969:325).

To avoid problems of validity such as value homophily or respondent's misperceptions of friend's attitudes, the authors also used a measure of social support computed from actual responses within departments in which ten or more members responded. Using this measure of social support the authors found that:

> . ... professors who themselves favored the demonstration but worked in departments in which the majority opposed it were just as likely to hold regular classes as were their counterparts who opposed the strike but worked in departments in which the majority favored the strike. (Cole and Adamsons, 1969:325).

These results suggested the importance of determining the relative importance of both perceived and actual measures of colleagues' attitudes as indicators of social support. Cole and Adamsons seemed to be of the opinion that perceived attitudes were more important when they stated: " . . . we note a strong association between a faculty member's own attitude and his perception of the attitudes of his friends. If a professor's friends agreed with his position, behavior was more likely to have corresponded with attitude than if they disagreed with him." (1969:324). Therefore the fourth hypothesis was that:

When close colleagues' attitudes toward the strike are perceived as being in opposition to personal attitude, professors will behave more inconsistently than when close colleagues' attitudes are perceived as being the same as personal attitude.

The Fifth Hypothesis

The final factor (referred to previously) which was considered was the effect of friends' attitudes when these were perceived as being neutral or split. As quoted previously Cole and Adamsons found that:

> . . . if the attitudes of a respondent's friends were ambiguous (perceived as neutral or split) and if his own attitudes favored the demonstration, he was little more likely than colleagues with similar attitudes but consistently unsupportive friends to have translated attitudes into behavior. Respondents whose attitudes toward the demonstration were negative, however, were just as likely to have met regular classes if their friends' attitudes were ambiguous as they were if their friends agreed with their views. (Cole and Adamsons, 1969:324).

When friends were perceived as offering ambiguous social support, the effect on a professor's behavior was similar to that of conservative friends, regardless of a professor's own personal attitude. Cole and Adamsons' explanation was that " . . . even ambiguous social support sufficed to encourage traditional behavior, while such ambiguity tended to discourage behavior that broke with convention." (1969:324). An alternate explanation could be that when friends' attitudes were ambiguous, the person was freed to act in accordance with his own beliefs (Hirschi, 1969; Box, 1973). Professors who attitudinally opposed the issue would be expected to behave conservatively and professors

who attitudinally supported the issue would be expected to behave liberally.

In that case, the failure of those professors who were attitudinally liberal to behave consistently must be explained in relation to Cole and Adamsons' study. That failure could have resulted from any or all of the factors already mentioned — namely the general context in the university; the method of measuring the presence, absence, or ambiguity of social support; the effect of traditional academic practice; or the degree of obligation to uphold one's teaching contract with the university. The first two factors would seem most unlikely explanations given that in Cole and Adamsons' study the general context in the university was liberal, and that perceived attitudes of friends were probably more important than actual attitudes. However the latter two factors combined, namely the effect of tradition and the felt contract obligation considered in conjunction with the ease of negating a specific attitude as opposed to the difficulty of motivating a given behavior, could have affected consistency for those attitudinally liberal faculty who did not cancel classes. Support for this interpretation was found in a preliminary study (conducted by the writer) among professors in the same university in which the present study was conducted. Regardless of their attitudinal position toward the strike 95 percent of respondents who did not cancel classes (that is, behaviorally support the strike) stated that their teaching obligation and/or contract with the university was the main reason for not doing so. The fifth hypothesis was therefore as follows:

<u>When colleagues' attitudes toward the strike are perceived as ambiguous professors will behave in accordance with their own attitudes</u>.

The overall hypothesized effect of social support on strike behavior involved a three variable interaction between behavioral norm in the university, personal attitude, and colleagues' attitudes. These expected correlations are depicted in the following diagrams in which "S" means strike support, "NS" means no strike support (or opposition), "+" means degree of attitude-behavior consistency, and "-" means degree of attitude-behavior inconsistency.

Figure 2. The expected effects of social support on strike behavior: A diagramatic representation of the interrelationships between general context in the whole university, personal attitudes, and colleague attitudes.

A. General context in the university liberal:

Strike Behavior by Personal Attitude and Colleague Attitude			
	Colleague Attitude		
Personal Attitude	Liberal	Ambiguous	Conservative
Liberal	S^{++}	S^{+}	NS^{-}
Conservative	S^{--}	NS^{+}	NS^{++}

B. General context in the university conservative:

Strike Behavior by Personal Attitude and Colleague Attitude			
	Colleague Attitude		
Personal Attitude	Liberal	Ambiguous	Conservative
Liberal	S^{++}	S^{+}	NS^{--}
Conservative	S^{-}	NS^{+}	NS^{++}

In summary, studies by three major groups of researchers were reviewed in this chapter. The first two groups, Turner et al. and Lipset and Ladd, both found strong relationships between academic discipline and certain political attitudes and behaviors. In addition, Lipset and Ladd found that the relationship between academic achievement and liberalism on national or international issues did not hold for campus issues. The third group, Cole and Adamsons, found that socialization in certain non-professional statuses was related to additional predispositions toward local issues. Further, social support from colleagues had a greater effect on the conversion of attitudes into corresponding behaviors than did personal attitudes. In other words, the first two groups of researchers attributed the formation of professors' attitudes to professional socialization, while the latter group attributed attitude formation to non-professional socialization. All three groups indicated that social support was important in the conversion of attitudes into corresponding behaviors, but only Cole and Adamsons attempted to specify the conditions. The essential difference between the two models was the type of issue. In the studies by the first two groups which found professional socialization to be more important, the issues were national or international; while in the studies by the latter group which found non-professional socialization to be more important, the issues were local. Since the present study involved a local issue the hypotheses were based primarily on Cole and Adamsons' research. Two hypotheses regarding the formation of attitudes and three hypotheses regarding the role of social support in the conversion of attitudes into corresponding behaviors were derived from the literature.

CHAPTER III

RESEARCH METHODOLOGY

The Sample

One-third of the full-time academic staff teaching in Administrative Studies, Agriculture, Arts, Education, Engineering, and Science were drawn in a random sample stratified by Faculty. In addition, one-half of the full-time academic staff teaching in each of three affiliated colleges were randomly selected. Full-time staff included any professor who had taught the equivalent of two-thirds of a regular teaching load or more during the 1973-74 academic year (a regular teaching load was three full-credit courses). Excluding 21 of the 321 professors in the original sample who did not meet the teaching requirement, the distribution of the remaining 300 was as follows:

TABLE I

DISTRIBUTION OF RESPONDENTS AND NON-RESPONDENTS BY AFFILIATION

Faculty	Refusal	Non-Response	Response	Percent Response
College I	1	7	13	61.9
College II	1	6	8	53.3
College III	5	3	19	70.4
Administrative Studies	0	7	13	65.0
Agriculture	2	2	35	89.7
Arts	10	10	43	68.3
Education	2	8	21	67.7
Engineering	2	3	19	79.2
Science	7	9	44	73.3
Totals	N = 30	N = 55	N = 215	71.1

With respect to the 28.3 percent of the sample who failed to respond, information was available from university records as to their faculty and departmental affiliation, rank, longevity of teaching at this university (date of appointment), and sex status. A comparison of the respondents and non-respondents on the basis of those

four criteria produced the results shown in Tables II and III.[22]

It would appear that there were no differences in terms of sex between respondents and non-respondents. However the difference between the highest and lowest response rates by rank was 15.2 percent; by longevity it was 25 percent; and by academic discipline it was 30 percent. The relationship between rank and rate of response was inverse with 80.5 percent of lecturers responding, 74.7 percent of assistant professors responding, 69.1 percent of associate professors responding, and 65.3 percent of full professors responding. Similarly the relationship between longevity and rate of response was inverse with 82.6 percent of those who had taught at this university for three years or less responding, 74.2 percent of those who had taught between four and eight years responding, 62.8 percent of those who had taught between nine and fourteen years responding, and 57.6 percent of those who had taught fifteen years or more responding. By academic discipline the proportional rate of response was as follows: Agriculture - 89.7 percent, Engineering - 79.2 percent, Social Sciences - 73.9 percent, Natural Sciences - 73.5 percent, Education - 67.7 percent, Administrative Studies - 65.0 percent, and Humanities - 59.7 percent.

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[22] While both faculty and departmental affiliation were available, due to the small number of both respondents and non-respondents by department this was not used. Instead, the measurement index used was "academic discipline." The difference between this and "faculty affiliation" was that the Faculty of Arts was divided into the Social Sciences and Humanities. The Social Sciences included the departments of Anthropology, Economics, Geography, Political Studies, Psychology, and Sociology. The Humanities included all other departments in the Faculty of Arts.

TABLE II

DIFFERENCES BETWEEN RESPONDENTS AND NON-RESPONDENTS
BY SEX, RANK, AND LONGEVITY (in percent)

	SEX		RANK				LONGEVITY			
	Male	Female	Lecturer	Assistant	Associate	Professor	0-3 yrs	4-8 yrs	9-14 yrs	15 yrs +
Respondents*	90.2 (194)	9.8 (21)	15.4 (33)	34.4 (74)	34.4 (76)	14.9 (32)	26.5 (57)	52.1 (112)	12.6 (27)	8.8 (19)
Non-Respondents**	89.4 (76)	10.6 (9)	9.5 (8)	29.8 (25)	40.5 (34)	20.2 (17)	14.8 (12)	48.1 (39)	19.8 (16)	17.3 (14)
Rate of Response	71.9	70.0	80.5	74.7	69.1	65.3	82.6	74.2	62.8	57.6
	*N=300	**N=85		*N=299	**N=84			*N=296	**N=81	

TABLE III

DIFFERENCES BETWEEN RESPONDENTS AND NON-RESPONDENTS
BY ACADEMIC DISCIPLINE (in percent)

	Agriculture	Engineering	Social Sciences	Natural Sciences	Education	Administrative Studies	Humanities
Respondents*	16.3 (35)	8.8 (19)	15.8 (34)	23.3 (50)	9.8 (21)	6.0 (13)	20.0 (43)
Non-Respondents	4.7 (4)	5.9 (5)	14.1 (12)	21.1 (18)	11.8 (10)	8.2 (7)	34.1 (29)
Rate of Response	89.7	79.2	73.9	73.5	67.7	65.0	59.7
	*N=300	**N=85					

The non-response bias was greater by academic discipline than it was by either rank or longevity. It was possible to draw some tentative conclusions as to the reasons for this by examining the relationship between academic discipline and rank, and academic discipline and longevity for non-respondents.[23]

As shown in Tables IV and V, Agriculture and Engineering had the two lowest rates of non-response by both rank and longevity, and as shown in Table VI their low rates of non-response did not result from an underrepresentation of professors within categories of those variables. Since the sample was stratified by faculty affiliation (and the only difference between faculty affiliation and academic discipline as previously defined was that the Faculty of Arts was divided into Social Sciences and Humanities), an examination of the relationships between academic discipline (coded as a dummy variable) and both rank and longevity for respondents should be a good indication of the distribution of those characteristics in the total population of the various faculties. The Pearson correlation coefficients indicated that Agriculture and Engineering had the two highest positive relationships with both rank and longevity.

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[23] Rank and longevity were naturally highly correlated and therefore a comparison of the two was of no value in attempting to explain the non-response bias. For that reason these data have been excluded.

TABLE IV

ACADEMIC DISCIPLINE BY LONGEVITY FOR NON-RESPONDENTS (in percent)

Longevity	Agriculture	Engineering	Social Sciences	Natural Sciences	Education	Administrative Studies	Humanities	Totals
0-3 years	0.0 (0)	0.0 (0)	18.2 (2)	18.2 (2)	27.3 (3)	0.0 (0)	36.7 (4)	13.8 (11)
4-8 years	5.1 (2)	10.3 (4)	17.9 (7)	17.9 (7)	10.3 (4)	10.3 (4)	28.2 (11)	48.8 (39)
9-14 years	6.3 (1)	0.0 (0)	6.3 (5)	31.3 (5)	6.3 (1)	12.5 (2)	37.5 (6)	20.0 (16)
15 years +	7.1 (1)	7.1 (1)	7.1 (1)	28.6 (4)	7.1 (1)	7.1 (1)	37.5 (5)	17.5 (14)
Totals	5.0 (4)	6.3 (5)	13.8 (11)	22.5 (18)	11.3 (9)	8.8 (7)	32.5 (26)	N=80*

* Longevity was unavailable for one non-respondent in the Social Sciences, one in Education, and three in the Humanities.

TABLE V

ACADEMIC DISCIPLINE BY RANK FOR NON-RESPONDENTS (in percent)

Rank	Agriculture	Engineering	Social Sciences	Natural Sciences	Education	Administrative Studies	Humanities	Totals
Lecturer	0.0 (0)	0.0 (0)	25.0 (2)	25.0 (2)	12.5 (1)	0.0 (0)	37.5 (3)	9.5 (8)
Assistant	8.0 (2)	0.0 (0)	8.0 (2)	24.0 (6)	20.0 (5)	8.0 (2)	32.0 (8)	29.8 (25)
Associate	5.9 (2)	11.8 (4)	17.6 (6)	8.8 (3)	11.8 (4)	5.9 (2)	38.2 (13)	40.5 (34)
Professor	0.0 (0)	5.9 (1)	5.9 (1)	41.2 (7)	0.0 (0)	17.6 (3)	29.4 (5)	20.2 (17)
Totals	4.8 (4)	6.0 (5)	13.1 (11)	21.4 (18)	11.9 (10)	8.3 (7)	34.5 (29)	N=84*

* Rank was unavailable for one non-respondent in the Social Sciences.

TABLE VI

ACADEMIC DISCIPLINE BY RANK AND BY LONGEVITY FOR RESPONDENTS
(Correlation coefficients)

Discipline	By Rank	By Longevity
Engineering	.26	.16
Agriculture	.10	.15
Education	.09	-.06
Social Sciences	-.04	-.16
Natural Sciences	-.05	.04
Administrative Studies	-.16	-.13
Humanities	-.17	-.03

N = 215

In both Agriculture and Engineering there were proportionally more respondents of higher rank, and more respondents who had taught for a longer period of time in this university than in any other academic discipline. It therefore seemed that some factor associated with academic affiliation was responsible for the non-response bias, and that the relationships between non-response and both rank and longevity were spurious.

Further analysis showed that non-respondents were not randomly distributed within academic disciplines but were concentrated in certain departments.

Collectively three departments within the Humanities accounted for 29.4 percent of the total number of non-respondents. In the English department, 12 out of 20 professors did not respond (or 60 percent of the sample for that department); in the History department, 7 out of 21 did not respond (or 33.3 percent); and in the Romance Language department, 6 out of 11 did not respond (or 54.4 percent). Similarly three departments in the Natural Sciences together accounted for 14 percent of the total number of non-respondents. In the Chemistry department 5 out of 12 professors did not respond (or 41.7 percent of the sample for that department); in the Computer Science department 4 out of 11 professors did not respond (or 36.4 percent); and in the Microbiology department 3 out of 4 professors did not respond (or 75 percent). Within the Social Sciences two departments showed patterns of non-response accounting for 10.6 percent of the overall number of non-respondents. In the Geography department 6 out of 9 professors did not respond (or 66.7 percent of the sample for that department), and in the Political Studies department 3 out of 5 professors did not respond (or 60 percent). In total the eight departments mentioned above accounted for 54.1 percent of the non-respondents (N=46), but only 31 percent of the sample (N=93). In the other four academic disciplines, that is Engineering, Agriculture, Education, and Administrative Studies, non-response did not appear to be related to departmental affiliation.

With respect to the effect of department affiliation on non-response in the Social Sciences and Humanities and not in the Business and Professional faculties, a possible explanation was suggested by Turner and associates. As previously

mentioned, these authors argued that pure and applied types of disciplines had different professional philosophies. The latter were thought to be concerned with the application of knowledge in business and industry, while the former (on the basis of their professional training and experience) were thought to be concerned with social and political problems. Therefore, professors in the Social Sciences and Humanities may have been more concerned with the implications of the strike, more likely to have discussed it with their colleagues, and therefore more likely to have been aware of their colleagues' attitudes toward the strike. Similarly, they may have been more likely to have discussed the survey instrument itself with their colleagues, and to have reached a group decision not to complete it and return it because of their professional vested interests as translated into real or imaginary criticisms of the questionnaire or the project.

While arguments of this nature may explain the pattern of non-response in the Social Sciences and Humanities, in the Natural Sciences an applied discipline, (according to Turner and his associates), professors would not likely have intensive interaction with colleagues relative to social science research. However in the university within which the present study was conducted, professors from the Social and Natural Sciences and Humanities had offices in close proximity to each other within a complex of connected buildings. The Faculties of Agriculture, Engineering, Education, and Administrative Studies were each located in separate buildings. Thus it was possible that professors in the Natural Sciences may have discussed issues concerning the strike with their counterparts in the Faculty of Arts. Decisions

made by the natural scientists with respect to the questionnaire, and also with respect to behavior during the strike, may reflect the influence of colleagues in the Social Sciences and Humanities.

In summary, it seemed that the non-response bias was the result of factors associated with department affiliation. While other variables (such as rank or longevity) may have had an effect, and other explanations were possible, it seemed that colleague associations within and between departments produced the bias. In terms of further analysis of the data, only the Humanities were greatly underrepresented proportionally in the final sample. Therefore, any generalizations based on the effect of department affiliation must be advanced cautiously.

The Questionnaire and the Follow-up

Initially introductory letters were sent to all the professors in the sample informing them that their name had been drawn, briefly describing the survey, requesting their assistance, and assuring them of the confidentiality of their responses. During the next week, research assistants personally delivered the majority of the questionnaires,[24] again requesting each professor's co-operation and emphasizing confidentiality. At regular intervals of approximately every four working days reminder notices were sent to each non-respondent.[25] In total four

[24] Professors in the Faculty of Education received their questionnaires and subsequent follow-up reminders about two weeks after all other professors because they were out in the field supervising practice teachers during the initial data collection period.

[25] Questionnaires were numbered for the purpose of following up non-responses and this purpose was made clear to those in the sample.

reminders were sent, the second of which had another questionnaire and a copy of the introductory letter enclosed, with a second letter to the effect that obviously the first questionnaire had not been received or had been mislaid and therefore another one was being sent.[26]

On the basis of the total number of questionnaires returned, the response rate in relation to each follow-up phase was as follows: initial response - 45.4 percent, first reminder - 13.7 percent, second reminder - 5.0 percent, third reminder - 3.0 percent, and fourth reminder - 4.7 percent.

Operationalizing the Variables

The first section of the questionnaire requested that each respondent indicate faculty, department, rank, longevity of teaching (both at this university and in total), sex, age, political identification and orientation, religion, and father's occupation. The second section of the questionnaire included questions of a more sensitive nature about tenure, salary, orientation to teaching vs. research, publications, and job satisfaction. The third section of the questionnaire dealt with type, amount, and intensity of each respondent's interaction with colleagues.[27]

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[26] See Appendix A for sample copies of the introductory and follow-up letters, and Appendix B for a sample copy of the questionnaire.

[27] Colleague was not pre-defined for the respondents, but in the introduction to that section of the questionnaire reference was made to "department colleagues". The first question in that section asked each respondent to identify "usual associates" as being either from own department, from other departments, from both, or from neither. All other questions referred only to "your colleagues".

The final section requested that each respondent react to ten political-economic type statements, and then that each respondent estimate how his close colleagues would react to the same statements. This section concluded with one question asking each respondent about personal behavior during the strike,[28] and one question asking about the behavior of close colleagues.

Non-Professional Statuses

The non-professional statuses that were measured in this study were those thought to result in a "general political orientation" as a result of pre-professional socialization. They were sex, age, political party identification, religion, and father's occupation.

Sex was determined by the statement "Please indicate your sex:" to which responses were "female" and "male". Since the response categories were dichotomous, they were used to create a dummy variable with female being scored as 0 and male as 1.

Age was measured by the question "How old were you on your last birthday?" Responses were placed into the following categories: under 25, 25 - 29, 30 - 34, 35 - 39, 40 - 44, 45 - 49, 50 - 54, 55 - 59, 60 or over.

Political party identification was measured by asking the following question:

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[28] The strike took place on the University of Manitoba campus in the fall of 1973, and involved the withdrawl of all services (which included food services and garbage disposal) by the Canadian Association of Industrial, Mechanical, and Allied Workers. The union picketed the campus boundaries for approximately three weeks, but did not physically prevent persons from entering or leaving the campus.

"With which political party do you identify? Please complete the appropriate column."

Canadian citizen	American citizen
Progressive Conservative	Republican
Liberal	Democratic
New Democratic	Independent
Social Credit	None
Communist	
Other (specify)	
None	

Since not enough respondents answered the American column, these were combined with the Canadian column and four dummy variables were created. Progressive Conservative and Republican respondents were combined to create one variable since philosophically those two parties were roughly equal. Liberal and Democratic respondents were combined to create the second variable since philosophically those two parties were similar. New Democratic Party respondents composed the third variable, and the fourth variable was composed of respondents who claimed no political party identification. Since only 8 respondents claimed "other" or "Independent", and 2 each claimed Social Credit and Communist, these categories were not used to create a dummy variable.

Religion was measured by asking the question "What is your religion?" Response categories were: "Protestant", "Anglican", "Catholic", "Jewish", "Mennonite", "other", "none". Four dummy variables were created from these response categories. The first included all the Protestant religions (that is, those who claimed they were Protestant, Anglican, or Mennonite). The second dummy

variable included only those who claimed they were Catholic. The third included those respondents who claimed no religious affiliation, and the fourth included respondents who claimed to be other religions (to which the thirteen Jewish respondents were added).

In order to measure social class during childhood the following question was asked:[29]

> "Which of the following categories best describes the usual occupation of your father?"
>
> Professional - income from fees: e.g. doctor, lawyer
>
> Professional - income from salary: e.g. teacher, clergyman
>
> Proprietor or Manager: e.g. farm owners, assistant executives
>
> Sales (other than sales manager or administrator): e.g. auto salesman, real estate salesman
>
> Clerical: e.g. bank clerk, bookkeeper, secretary
>
> Skilled worker: e.g. electrician, plumber, carpenter
>
> Semi-skilled worker: e.g. plumber's helper, assembly line worker, truck driver
>
> Service worker: e.g. policeman, barber, bartender
>
> Unskilled worker: e.g. janitor, farm and heavy laborer

Four dummy variables were created from these response categories based on the similarity of groups and on the distribution of responses. The first dummy variable included the two professional groups; the second included only respondents who

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[29] This is a modified version of a Canadian occupational scale used by Henry (1971) in a study of university influence on student opinion.

claimed that their fathers were proprietors or managers; the third included the sales, clerical, and skilled worker groups; and the fourth included the semi-skilled, service, and unskilled worker groups.

Professional Statuses

The professional statuses that were measured in this study were those thought to be important in the occupational socialization process. The first type of professional status was location within the university as measured by faculty affiliation, department affiliation, college affiliation, academic rank, position relative to tenure, longevity of teaching university, and salary. The second type of professional status was position within the professional field or professional eminence as measured by orientation to teaching vs. research, number of publications, professional activities, and job satisfaction.

The following eight variables were used to measure location within the university. Faculty affiliation was determined by asking the question "In what Faculty do you teach?" The six dummy variables that were created from the responses were: Administrative Studies, Agriculture, Arts, Education, Engineering, and Science.

Departmental affiliation was determined by asking the following question: "What is your major department?" Seven dummy variables that were used to measure "academic discipline" were created from the responses, and differed from faculty affiliation only in that Arts was divided into Social Sciences and Humanities. The first dummy variable included the following departments in

the Social Sciences: Anthropology, Geography, Political Studies, Psychology, and Sociology. The second dummy variable included the following departments in the Humanities: Classical Studies, English, German, History, Icelandic Studies, Judaic Studies, Philosophy, Religion, Romance Languages, and Slavic Studies. The third dummy variable included the following departments in the Faculty of Science: Astronomy, Biology, Botany, Chemistry, Computer Science, Earth Science, Mathematics, Microbiology, Physics, Statistics, and Zoology. The fourth dummy variable included the following departments in the Faculty of Administrative Studies: Accounting and Finance, Actuarial and Business Mathematics, Business Administration, and Public Policy. The fifth dummy variable included the following departments in the Faculty of Education: Curriculum:Humanities and Social Sciences, Curriculum:Mathematics and Natural Sciences, Educational Administration, Educational Foundations, and Educational Psychology. The sixth dummy variable included the following departments in the Faculty of Agriculture: Agricultural Economics, Agricultural Engineering, Animal Science, Entomology, Plant Science, Soil Science, and the School of Agriculture. The final dummy variable included the following departments in the Faculty of Engineering: Civil Engineering, Electrical Engineering, and Mechanical Engineering.

Respondents who were affiliated with one of the three colleges were asked to reply to the statement "If you are a member of a College, please state which one." Since only 40 respondents in total claimed to be members of one of the three colleges, responses were placed into dichotomous dummy variable categories:

those who were not members of a college, and those who were members.[30]

Two questions were used to measure longevity of teaching, one in relation to total longevity and the other in relation to longevity of teaching at this university. The first question was "How many years including this year have you been teaching full-time at a college or university?" The second question was "How many years including this year have you been teaching full-time at this university?" For both questions responses were placed into categories equal to the number of years. In the case of total longevity the range was from one to thirty-two years, and in the case of longevity at this university the range was from one to twenty-seven years.

With respect to rank, the question asked was: "What is your present rank? The responses were placed into the following categories: "lecturer or instructor", "assistant professor", "associate professor", "professor",

Each respondent's position relative to tenure was determined by asking the following question:

"What is your position relative to tenure?"

do not have tenure

will be considered for tenure in the next academic year

received tenure this academic year (1973-74)

received tenure two or more years ago

Three dummy variables were created from these response categories. The first included respondents who did not have tenure; the second included respondents

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30 Of the college members, 34 were also members of the Social Sciences and Humanities, and 6 were also members of the Faculty of Science.

who were either about to be considered for tenure or who had just received tenure; and the third included those who claimed they had received tenure two or more years ago.

Salary was measured according to the following question:

"What is your present salary?"

$10,999 or less	17,000-18,999
11,000-12,999	19,000-20,999
13,000-14,999	21,000-22,999
15,000-16,999	23,000 and over

The following four variables were used to measure position within the professional field or professional eminence. The first step was to determine whether a respondent's orientation was primarily toward teaching or toward research. The question was:[31]

"Do your interests lie primarily in teaching or in research?".

very heavily in teaching

in both, but lean toward teaching

in both, but lean toward research

very heavily in research

other (specify)

Responses were dichotomized in order to create a dummy variable. Respondents who chose either of the teaching options were placed into one category (and coded 0),

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[31] This was a modified version of the question used by Cole and Adamsons to measure the same thing (1970:392n).

and respondents who chose either of the research options, plus those who chose "other" (all of whom specified their interests were equal), were placed into the second category (and coded 1).

One of the measures of professional eminence used by Cole and Adamsons (1970) was the number of publications. The question used in the present study to measure publications was taken from the application for research funds used by this university and modified slightly.

"Would you please indicate the number of publications, including those in press, that you have in each of the following categories?"

books or monographs of which you are author or co-author

books to which you have contributed editorial services or signed chapters

papers contributed to learned journals of national or international reputation

papers of more general interest contributed to periodicals of recognized cultural standing

review and review articles in learned journals

contributions to published government reports

extension bulletins; contributions to trade journals; published proceedings of conferences, committees, and other organizations; and published abstracts

contributions to literary and professional periodicals of local rather than national or international reputation

papers published by a university research center or institute

Since the sample in the present study included respondents from six different faculties each with different criteria regarding publications, there was no simple method of weighting the above categories. It was finally decided to follow a procedure similar to that used by Cole and Adamsons (1970). A total of four indices were computed as follows. Responses with respect to books were dichotomized by placing respondents who claimed none in one category (coded 0), and those who claimed one or more books in the other category (coded 1). Responses with respect to chapters were similarly dichotomized. Contributions to learned journals were placed into three categories as follows: respondents who claimed none, respondents who claimed one to nine, and respondents who claimed ten or more. For all other periodicals and papers collectively, responses were placed into the same three categories. That is, respondents who claimed none were placed in the first category, respondents who claimed from one to nine in the second category, and respondents who claimed ten or more in the third category. By treating all papers as equal except those published in learned journals it was hoped that biases created by the propensity of different disciplines to value different types of publications would be somewhat neutralized.

Professional activity (as an indicator of professional eminence) was measured by asking "Have you ever held office in a professional association?" A dummy variable was created by dichotomizing respondents into those who claimed they had and those who claimed they had not.

The final question with respect to professional statuses had to do with job satisfaction. The question asked was as follows:

"In general, how satisfying do you find your present job?"

very satisfying

generally satisfying

ambivalent or undecided

somewhat dissatisfying

A dichotomous dummy variable was created by placing respondents who claimed they were generally satisfied or very satisfied in one category (coded 0), and respondents who claimed they were ambivalent or somewhat dissatisfied in the other category (coded 1).

Personal Attitudes

Two types of personal attitudes were measured — attitudes toward political issues, and attitudes toward economic issues. The first, general political attitude or orientation, was measured by the same question used by Cole and Adamsons (1969), except they referred to it as political identification. The question was:

"Which do you consider yourself to be?"

strongly conservative

moderately conservative

middle-of-the-road

moderately liberal

strongly liberal

radical

The second type of personal attitude was measured by an index of ten items taken from the "economic conservatism scale" developed in 1936 by Rundquist and Sletto to measure " . . . attitudes toward control of the economic institution by government, labor, and management." (Shaw and Wright, 1967:311-3). The instructions were as follows:

> "For each of the following statements, please select the response that best represents your feeling and place the appropriate symbol in the space provided. The response categories to all statements are:"
>
> Strongly Agree (SA) — Disagree (D)
>
> Agree (A) — Strongly Disagree (SD)
>
> Undecided (U)

These instructions were followed by a list of ten statements (which may be referred to in the sample questionnaire contained in Appendix B). The items were scored from 5 to 1 respectively; that is from "strongly agree" to "strongly disagree" with conservative items being reversed. Also, blanks were scored as "undecided" and assigned a value of 3 making the total range for possible scores from 10 to 50. Higher scores indicated economic liberalism.

Initially ten items were used in the question but stepwise regression showed that five of the items explained 91.3 percent of the variance in total score. Therefore five items were dropped from the scale. The remaining items, in rank order as they were selected by stepwise regression, were as follows:

"Labor does not get its fair share of what it produces."

"Legislatures are too ready to pass laws to curb business freedom."

"Labor should have much more voice in deciding government policies."

"Private ownership of property is necessary for economic progress."

"Large incomes should be taxed more than they are now."

Using only five items the range in total score was from 5 to 25. An inspection of the data suggested the following dichotomy on the basis of equal distribution: scores that fell between 5 and 14 inclusive, which included 49.8 percent of the respondents, were interpreted to mean that respondents were economically conservative. Scores that fell between 15 and 25 inclusive, were interpreted to mean that respondents were economically liberal.[32]

Colleague Attitudes

Perceived colleague attitudes were measured by having respondents answer the way in which they thought the majority of their colleagues would answer the same ten items from the "economic conservatism scale" described above. The instructions were as follows:

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[32] The same procedure for establishing cutting points was used by Turner and Hetrick who stated: "The cutting points were established by inspection of the frequency distributions contained in the tables. As such a procedure is often suspect on the grounds that the cutting points may have been chosen to emphasize the conclusions expected, the fact that a deliberate effort was made to avoid such bias should be stated." (1972:571n).

"For each of the same statements would you now please select the response that you feel best represents the attitude of the majority of your colleagues, and place the appropriate symbol in the space provided. The response categories are the same as before:"

Scoring procedures were the same as those used for personal attitudes with possible total scores ranging from 10 to 50. Higher scores were interpreted to mean respondents perceived that the majority of their colleagues were economically liberal, and lower scores were interpreted to mean the reverse. Stepwise regression showed that five of the ten items explained 90.2 percent of the variance in total score. Therefore five items were dropped from the index. The remaining items, in rank order as they were selected by stepwise regression, were as follows:

"Poverty is chiefly the result of injustice in the distribution of wealth."

"Labor does not get its fair share of what it produces."

"Private ownership of property is necessary for economic progress."

"For people to do their best, there must be the possibility of unlimited profit."

"Labor should have much more voice in deciding government policies."

Total scores using only the five items could range from 5 to 25. An inspection of the data suggested the following cutting points on the basis of frequency distribution: scores that fell between 5 and 14 inclusive were interpreted to mean respondents perceived that their colleagues were economically conservative. Scores that fell between 15 and 17 inclusive were interpreted to mean that respondents were undecided as to their colleagues' attitudes, or that respondents perceived their colleagues' attitudes were split (in either case, colleagues' attitudes were ambiguous). Scores that fell between 18 and 25 inclusive were interpreted to mean respondents perceived that their colleagues were economically liberal.

No measurement of actual colleague attitudes within departments was possible. The original intention had been to compute department attitudes from personal attitudes in departments were more than ten professors responded since this was the procedure used by Cole and Adamsons (1969). However, in the present study there were only four departments which had ten or more respondents. Since the method of measuring colleague attitudes was very indirect (perceived rather than actual attitudes), responses from the following direct question (which encompassed both perceived colleague attitudes and behaviors) were used to test measurement validity.[33]

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[33] This was a modified version of the question used by Cole and Adamsons to measure attitudes of colleagues (1969:324n).

"During the CAIMAW strike, were most of your colleague friends:"

active in support of the strike

sympathetic with the causes of the strikers

neutral

sympathetic with those in opposition to the strike

active in opposition to the strike

split into some favoring and some opposing the strike

Responses were placed into three categories. The first included respondents who perceived that their colleagues were actively or attitudinally opposed to the strike. The second included respondents who perceived that their colleagues were neutral or split (ambiguous) in their attitudes toward the strike. The third included respondents who perceived that their colleagues were actively or attitudinally supportive of the strike. These three categories corresponded to the three categories created by the cutting points on the five item economic liberalism index.

Social Support

Social support was measured by a total of six items. The first question identified with whom the respondent usually associated:

"Do you usually associate with colleagues from your own department or from other departments?"

don't associate with either

mostly with own department

mostly with other department(s)

about half and half

Since only eight respondents claimed that they associated with neither their own nor other departments, this category was not used to construct a dummy variable. Three dummy variables were created on the basis of the other three categories.

The remaining questions were used to construct a social support index based on three aspects of the intensity of each respondent's relationship with his colleagues, and therefore the amount of colleague influence. The three aspects were the respondent's perception of (a) the closeness of the relationship between himself and his colleagues; (b) the visibility of his actions to his colleagues; (c) the responsiveness of his colleagues to him in terms of the amount of professional esteem they accorded to him. The assumption was that to the extent professors valued the approval and esteem of their close colleagues they would be motivated to behave in ways consistent with maximizing that approval and esteem (Linden, 1974). With respect to the five questions which follow, the first was used to measure closeness, the second and third were used to measure visibility, and the fourth and fifth

were used to measure responsiveness .

(1) "To what extent would you take into account the reaction of your colleagues before trying a new idea such as an innovative teaching technique?"

considerable extent

somewhat important

of little concern

would not matter

(2) "How many of your colleagues know of any special interests you may have in teaching or research?"

almost all

many

a few

almost none

(3) "Do you discuss your professional ideas or opinions with your colleagues?"

almost always

frequently

occasionally

almost never

(4) "How many of your colleagues seem to recognize your expertise in your areas of specialty?"

almost all

many

a few

almost none

(5) "How many of your colleagues ask your opinion or advice in regard to their own special projects?"

almost all

many

a few

almost none

For all five questions, responses were assigned a value on each question ranging from 4 to 1 respectively for the different response categories. Total scores on the support index were computed by summing the values assigned to the individual items. In other words, scores on the support index could range from 5 to 20. The higher the score the more intense the respondent's relationship with his colleagues and the greater the susceptibility of the respondent to the influence of his colleagues in his efforts to maximize their approval and esteem. Lower scores were interpreted to mean the reverse.

The Dependent Variable

The dependent variable in this survey was overt behavior during the strike. The question was:

"During the strike by CAIMAW that we had on this campus last fall, what was the extent of your involvement? Please check as many as are relevant."

did nothing, carried on as usual

read some literature that circulated

attended some of the meetings or debates held

cancelled one or more classes

gave money to the strike support fund

helped write or distribute pamphlets or literature

worked on the picket line

refused to cross the picket line at all

other (specify)

Responses were used to create two variables. On the assumption that the items would be scaleable, the first variable was created by placing responses into the highest category on the list. However, an examination of the resulting frequency distribution showed that responses were concentrated in the second category (read literature). Therefore, rather than attempting to scale the items in the list, a dichotomous variable was created (no support vs. support). Respondents who claimed to have done nothing and respondents who claimed to have only read literature were placed into one category (and coded 0). Respondents who claimed to have taken any overt action in support of the strike were placed into the other category (and coded 1).

The second variable was created by counting the number of different overt behaviors that the respondent claimed to have engaged in during the strike and placing those into categories which ranged from 0 (did nothing, or did only one thing) to 5.

Validity and Reliability

All the data collected in this survey were self-reported meaning that respondents could have under- or over-reported. Empirically the probability of under-reporting was found to be about three times as great as the reverse (Clark and Tifft, 1966). This being the case, any error introduced from inaccurate self-reporting would have tended to reduce rather than to increase the amount of variance explained in the dependent variable.

Further, research plays a part in the professional role of all academics. While decisions about whether or not to respond to the questionnaire may have been determined in part by their professional opinions regarding the survey itself, once having decided to participate in the survey professors could logically be expected to do so more conscientiously and honestly than the general public.

Wherever appropriate, the measurement indices used by previous researchers have been adopted in whole or in part in formulating the research questions. Also, multiple indices have been used to measure many of the variables. If the measurement indices are valid, multiple indictors

will be highly correlated with each other and will have comparable correlations with other variables.

Summary

This chapter described sampling procedures, the sample and the non-respondents, the follow-up procedures, the method of operationalizing the variables, and discussed the questions of validity and reliability. Briefly, the sample was stratified by Faculty affiliation and was randomly selected. The non-response bias which occurred appeared to be related to departmental affiliation. Professors in the Humanities were somewhat under-represented among the respondents. Four follow-up reminders were used resulting in a net response rate of 71.7 percent. Measurement indices were based on those used by previous researchers when appropriate, and multiple indices were used to measure many of the variables in order to assure measurement validity.

CHAPTER IV

RESULTS AND CONCLUSIONS

In total, approximately one-half of the respondents attitudinally supported the strike, but only about one-third of them behaviorally supported the strike as shown in Tables VII and VIII respectively.

The hypotheses were tested by using correlation and regression analysis. Pearson Product Moment Correlation Coefficients measure the degree of association or the linear relationship between two variables and are usually referred to as zero-order correlation coefficients. Multiple regression measures the linear relationship between a set of independent variables and a dependent variable while taking into account the interrelationships between the independent variables. Multiple regression may be thought of as the prediction of values of the dependent variable from the linear combination of independent variables. The relationship between the independent variables and the dependent variable is usually expressed as variance explained. This means that a certain combination of independent variables together explain a certain percentage of the variation in the dependent variable. Partial correlation measures the degree of association between two variables while

controlling for the effects of one or more additional variables. In all types of correlation and regression analysis the control is statistical rather than literal, and is based on the assumption of linearity among the variables. In other words, the effect of intervening or control variables is removed from the relationship between the independent and dependent variables without reducing the cell frequencies in the raw data.

TABLE VII

DISTRIBUTION OF PERSONAL ATTITUDES AS MEASURED BY THE ECONOMIC LIBERALISM AND POLITICAL LIBERALISM INDICES
(in percent)

Economic Conservatism		
(Index scores between 5 and 14)	49.2	(N=107)
Economic Liberalism		
(Index scores between 15 and 25)	50.8	(N=108)
Political Liberalism Index*		
Strongly Conservative	1.9	(N=4)
Moderately Conservative	10.0	(N=21)
Middle-of-the-Road	24.4	(N=51)
Moderately Liberal	35.4	(N=74)
Strongly Liberal	17.7	(N=37)
Radical	10.5	(N=22)

* Six respondents did not answer the question

TABLE VIII

DISTRIBUTION OF STRIKE BEHAVIOR AS MEASURED BY
(1) HIGHEST LEVEL OF ACTIVITY AND
(2) BY NUMBER OF DIFFERENT ACTIVITIES
(in percent)

(1) HIGHEST LEVEL OF ACTIVITY			
TOTAL NON-SUPPORT . . .	67.5	(N=143)	
Did nothing, carried on as usual		17.5	(N=37)
Read some literature that circulated		50.0	(N=106)
TOTAL SUPPORT	32.5	(N=69)	
Attended some of the meetings or debates		6.1	(N=13)
Cancelled one or more classes		6.6	(N=14)
Discussed the strike in class		2.8	(N=6)
Gave money to the strike support fund		13.3	(N=24)
Helped write or distribute pamphlets or literature		1.4	(N=3)
Spoke or debated on behalf of the strikers		2.4	(N=5)
Worked on the picket line		1.9	(N=4)
(2) BY NUMBER OF DIFFERENT ACTIVITIES			
NUMBER OF WAYS IN WHICH STRIKE SUPPORT GIVEN (N=212)*			
None		17.0	(N=36)
One		53.8	(N=114)
Two		14.6	(N=31)
Three		9.4	(N=20)
Four		3.8	(N=8)
Five		0.5	(N=1)
Six		0.9	(N=2)

*Three respondents did not answer the question

THE FIRST HYPOTHESIS

There will be no significant difference between professors in different disciplines in amount of attitudinal support for a campus strike.

In order to test the first hypothesis, both the economic liberalism index and the political liberalism index (political orientation) were dichotomized on the basis of frequency distribution into "liberals" and "conservatives". The cutting point (previously described) for the economic liberalism index was as follows: conservatives - scores between 5 and 14; liberals - scores between 15 and 25. The political liberalism index was dichotomized as follows: conservatives - professors who rated themselves as strongly conservative, moderately conservative, or middle-of-the-road (N=78 or 36.4 percent); liberals - professors who rated themselves as moderately liberal, strongly liberal, or radical (N=133 or 63.6 percent). The percentage of professors in each academic discipline who were economically liberal and the percentage who were politically liberal is shown in Table IX.

Both types of personal attitude varied according to academic discipline, however there was more variation in economic liberalism. The Humanities were the most economically and politically liberal discipline, followed by the Social Sciences. Next in degree of economic and political liberalism were the Natural Sciences, Engineering, and Education which were clustered together.

Finally, the most economically conservative groups were Agriculture and Administrative Studies, although they were not any less politically liberal than were the three groups preceding them. The first hypothesis was therefore disconfirmed.

TABLE IX

ACADEMIC DISCIPLINE BY PERSONAL ATTITUDES
(in percent)

	Economic Liberalism	Political Liberalism
Humanities	74.4 (N=32)	78.0 (N=32)
Social Sciences	64.7 (N=22)	68.8 (N=22)
Natural Sciences	54.0 (N=27)	59.2 (N=29)
Engineering	52.6 (N=10)	57.9 (N=11)
Education	52.4 (N=11)	60.0 (N=12)
Agriculture	31.4 (N=11)	54.3 (N=19)
Administrative Studies	30.8 (N=4)	61.5 (N=8)

To some extent the relationship between academic discipline and personal attitudes may have been due to the non-response bias (the Humanities were under-represented). The greatest difference in personal attitudes occurred

between the Humanities and the other disciplines. No doubt a large number of the non-respondents were economically and politically conservative. Therefore, differences in personal attitudes between disciplines would likely have been much smaller if they had replied.

The data presented in Table IX initially appeared to support the argument put forth by Turner and associates that different disciplines have different perspectives, and/or the argument put forth by Lipset and Ladd that different disciplines selectively recruit members on the basis of ideology. Either or both of these interpretations must be qualified. The indices used in the present study to measure personal attitudes were both of a general rather than a specific nature. In Cole and Adamsons' study in which they found no relationship between attitudinal position and academic discipline, they measured personal attitudes by a four item index which referred directly to the strike. Therefore, indirectly the present study may support Ladd and Lipset's conclusion (1971a) that correlates of attitudinal liberalism on national and international issues did not hold for campus issues. In other words, had personal attitudes specific to the strike been measured in the present study, differences according to academic discipline would likely have been negligible. Although the first hypothesis must be disconfirmed, the error was probably in the measurement indices and not in the conceptual framework.

THE SECOND HYPOTHESIS

Socialization in non-professional statuses will be more highly correlated with attitudinal position on a campus strike than will socialization in professional statuses.

The second hypothesis was tested by using stepwise regression analysis. Both of the personal attitude indices in turn were declared to be the dependent variable, first with the independent variables used to measure non-professional statuses, then with the independent variables used to measure professional statuses.[34]

For the non-professional statuses, with the economic liberalism index dependent, nine variables explaining 34.6 percent of the variance were selected into the regression equation within the F-level (.01) and the tolerance level (.001) allowed. These data are presented in Table X. The same procedure was repeated with the political liberalism index dependent (political orientation). Ten variables entered the regression equation within the F-level and the tolerance level allowed. These variables explained 22.1 percent of the variance as shown in Table XI.

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[34] Due to the non-singularity constraint, the dummy variables that were suppressed were as follows: (a) the non-professional statuses: for political identification - identifying with the Progressive Conservative party; for religious affiliation - having an affiliation with other than a Protestant or Catholic religion; for father's occupation - those who claimed their fathers were semi-skilled, service or unskilled workers; (b) the professional statuses: for academic discipline - affiliation with Administrative Studies; for position relative to tenure - about to be considered for tenure or having just received tenure.

TABLE X

ECONOMIC LIBERALISM BY NON-PROFESSIONAL STATUSES (N=208)

Variable	Simple R	Multiple R	Beta	Variance Explained
identify with NDP party	.53	.53	.55	27.8
no religious affiliation	.27	.56	.08	31.7
sex	-.16	.57	-.12	32.9
religion Protestant	-.29	.58	-.15	33.8
identify with Liberal party	-.20	.58	.10	34.0
no political identification	-.17	.59	.08	34.4
father's occupation professional	-.01	.59	-.04	34.5
religion Catholic	-.02	.59	-.04	34.6
father's occupation proprietor or manager	-.12	.59	-.01	34.6

TABLE XI

POLITICAL LIBERALISM BY NON-PROFESSIONAL STATUSES (N=208)

Variable	Simple R	Multiple R	Beta	Variance Explained
identify with NDP party	.36	.36	.49	13.0
no religious affiliation	.28	.43	.23	18.3
identify with Liberal party	-.06	.44	.24	19.7
no political identification	-.11	.46	.17	21.0
sex	-.10	.47	-.08	21.6
father's occupation proprietor or manager	-.05	.47	.08	21.8
age	.02	.47	.03	21.9
father's occupation professional	.03	.47	.05	22.0
religion Protestant	-.22	.47	-.03	22.0
father's occupation sales, clerical or skilled worker	.05	.47	.03	22.1

The similarity of the two tables suggests that the index used to measure personal attitudes toward economic issues was valid. The fact that essentially the same variables explained more variance in attitudes toward economic issues than in attitudes toward political issues suggests the importance of using specific rather than general indices since the issue in the present study was more economic than political. As previously mentioned, the failure of the data to support the first hypothesis was thought to have resulted from this type of error in measurement indices.

As shown in Tables X and XI, political party identification and religious affiliation were the two most important types of non-professional socialization associated with personal attitudes toward economic and political issues. Identifying with the New Democratic party was strongly positively related to both economic and political liberalism, while identifying with the Liberal party or having no identification with any party was somewhat negatively related to both. With respect to religious affiliation, professors who had none were economically and politically liberal, while professors who were affiliated with a Protestant religion were economically and politically conservative. Having an affiliation with a Catholic religion was slightly negatively related to economic liberalism, but was not related to political liberalism. In total, political party affiliation explained 28.4 percent of the variance in attitudes toward economic issues, and 15.7 percent of the variance in attitudes toward political issues. Religious affiliation explained a total of 4.9 percent of the variance in attitudes toward economic issues, and a total of 5.3 percent of the variance in attitudes toward political issues. Political party identification was

the single most important variable accounting for personal attitudes toward economic and political issues. The only interaction between political party identification and religious affiliation that could have suppressed the effect of the other was that identification with the Liberal party was positively related to affiliation with a Protestant religion (R=.23), and with having no religious affiliation (R=.19). However, in both regression equations, the rank order in which those three variables entered was the same. Having no religious affiliation entered before identifying with the Liberal party which entered before affiliation with a Protestant religion. Therefore suppression due to an interaction between the independent variables was unlikely.

The remaining non-professional statuses were much less important in explaining either economic or political attitudes. With respect to social class (as measured by father's occupation), professors whose fathers were proprietors or managers were slightly conservative both economically and politically, while professors whose fathers were professionals were slightly conservative economically and were slightly liberal politically. Since all relationships were small, it was unlikely that they reflected differences in pre-professional socialization according to social class. Rather, they appeared to reflect parental influence on choice of academic discipline for professors whose fathers were managers or proprietors (which included farm owners). Having a father who was a proprietor or manager was positively related to affiliation with the discipline of Agriculture (R=.27), and negatively related to affiliation with the Natural Sciences (R=-.23). In other

words, it seemed likely that professors in Agriculture whose fathers were farm owners had been influenced during their childhood socialization to choose that discipline. Since Agriculture was the most politically conservative discipline and the second most economically conservative discipline (as shown in Table IX), this probably accounted in part for the spurious differences between the two types of personal attitudes as related to the first two levels of social class. The third level of social class, having a father who was a salesman, clerical or skilled worker was slightly positively related to political liberalism, but was unrelated to economic liberalism. Only one category of social class was related to any other non-professional status which could have suppressed its effect. Having a father who was a proprietor or manager was somewhat negatively related to identifying with the NDP party (R=-.22), which probably also contributed to the spurious relationship between personal attitudes and levels of social class. In total, social class only explained an additional .1 percent of the variance in economic attitudes, and an additional .4 percent of the variance in political attitudes.

With respect to sex, male academics were more conservative on both indices than female academics. However, the relationships were weak since sex only explained an additional 1.2 percent of the variance in economic attitudes, and an additional .6 percent of the variance in political attitudes. Also the number of females in the study was small making the correlations unreliable. With respect to age, it was only slightly positively related to

political liberalism, and was unrelated to economic attitudes. Further, neither sex nor age were suppressed due to an interaction with some other non-professional status. The zero-order correlation coefficients showed that neither of them was associated with any of the other independent variables nor with each other. Both seemed unimportant in the formation of personal attitudes toward social and political issues.

Turning to the variables used to measure the professional statuses, these were declared to be independent variables (for stepwise regression analysis) first with the economic liberalism index dependent, then with the political liberalism index dependent. With the economic liberalism index dependent, seventeen variables explaining 25.9 percent of the variance were selected into the regression equation within the F-level and tolerance level allowed. However, ten of those variables explained 24.3 percent of the variance as shown in Table XII. The remaining variables were considered to be unrelated to personal attitudes toward ecomonic issues since the additional variance explained was negligible. The procedure was repeated with the political liberalism index dependent. All nineteen variables entered the regression equation within the F-level and the tolerance level allowed. They explained 14.6 percent of the variance. However, since the primary purpose for using the political liberalism index was to test the validity of the economic liberalism index, only the first ten variables (which explained 13.4 percent of the variance) are shown in Table XIII for comparison with the variables shown in Table XII. Only half of the first ten variables selected to explain economic liberalism were also among the first ten variables

selected to explain political liberalism. Both in terms of the variables selected and the rank order in which they entered the regression equation, the non-professional statuses associated with economic and with political attitudes were more similar (Tables X and XI), than the professional statuses associated with economic and with political attitudes (Tables XII and XIII). This will be discussed later.

Academic affiliation and longevity were the only two professional statuses that were related to both economic and political attitudes; the former being the most important professional status associated with either type of personal attitude. Affiliation with the Humanities was strongly positively related to both economic and political liberalism, however as mentioned previously, professors in the Humanities were under-represented in the respondents. Affiliation with the Social Sciences was slightly positively related to both economic and political liberalism, while affiliation with Engineering was slightly positively related to political liberalism, and slightly negatively related to economic liberalism. Affiliation with any of the three remaining disciplines was not related to political attitudes, but was negatively related to economic liberalism: affiliation with Agriculture was strongly related, while affiliation with either Education or the Natural Sciences was slightly related. Affiliation with three of the disciplines, the Humanities, Social Sciences, and Agriculture was not significantly related (R=.20 or greater) to any other professional status. However, affiliation with Engineering was positively related to rank (R=.26), to holding office in a

TABLE XII

ECONOMIC LIBERALISM BY PROFESSIONAL STATUSES (N=206)

Variable	Simple R	Multiple R	Beta	Variance Explained
affiliated with Humanities	.34	.34	.51	11.6
affiliated with Agriculture	-.26	.39	.06	15.2
dissatisfied with job	.14	.41	.15	17.1
affiliated with Social Sciences	.08	.43	.23	18.1
high rate of publishing in other than learned journals	-.09	.43	-.10	18.8
affiliated with Education	-.01	.44	.20	19.1
affiliated with Natural Sciences	-.05	.44	.19	19.5
affiliated with Engineering	-.04	.45	.17	20.6
longevity teaching at this university	-.14	.46	-.41	21.0
total teaching longevity	-.01	.49	.49	24.3

TABLE XIII

POLITICAL LIBERALISM BY PROFESSIONAL STATUSES (N=206)

Variable	Simple R	Multiple R	Beta	Variance Explained
affiliated with Humanities	.24	.24	.38	5.8
oriented toward research	-.14	.28	-.15	7.6
affiliated with Social Sciences	.03	.29	.19	8.7
longevity teaching at this university	-.08	.31	-.33	9.3
total teaching longevity	-.00	.32	.32	10.4
affiliated with Engineering	.02	.33	.21	11.2
academic rank	-.14	.35	-.26	12.4
tenured for 2 or more years	-.05	.36	.06	13.0
high rate of publishing in learned journals	-.11	.36	.06	13.3
held office in professional association	.01	.37	.07	13.6

professional association (R=.25), and to having a high salary (R=.20). Similarly, affiliation with Education was negatively related to orientation to research (R=-.20), and negatively related to publishing in learned journals (R=-.22), the latter being positively related to affiliation with the Natural Sciences (R=.25). This interaction between the variables used to measure professional statuses could have led to suppression of the one explaining the least additional variance. In total, academic affiliation explained 18 percent of the variance in economic attitudes, and 7.7 percent of the variance in political attitudes.

The only other professional status that was related to both economic and political attitudes was longevity. Both total longevity and local longevity were inversely related to liberalism. An inspection of the zero-order correlation coefficients showed that in addition to a high inter-correlation between the two types of longevity (R=.85), both were related to certain other professional statuses as follows: positively related to salary (R=.71 and .60 respectively), to rank (R=.60 and .51 respectively), to having tenure for two or more years (R=.52 and .49 respectively), to holding office in a professional association (R=.40 and .38 respectively), to publishing at a high level in learned journals (R=.27 and .23 respectively), and to publishing at a high level in other than learned journals (R=.27 and .21 respectively). In total, longevity explained 3.7 percent of the variance in economic attitudes, and 1.7 percent of the variance in political attitudes. Longevity was not a good predictor of either economic or political attitudes, and its effect was not suppressed due to interaction with other

professional statuses since only one other variable with which it was correlated entered the equation ahead of it in each case.

The professional statuses that were related to economic attitudes but not related to political attitudes were: feeling dissatisfied with one's job (slight positive relationship), and publishing at a high rate in other than learned journals (slight negative relationship). Conversely the professional statuses that were related to political attitudes but not to economic attitudes were: having an orientation to research rather than to teaching, academic rank, and publishing at a high rate in learned journals all of which had a slight negative relationship. In addition, holding office in a professional association had a slight positive relationship.

The second hypothesis was supported. The variables used to measure non-professional statuses explained 34.6 percent of the variance in attitudes toward economic issues, while the variables used to measure professional statuses explained only 24.3 percent of the variance. Similarly, the variables used to measure non-professional statuses explained 22.1 percent of the variance in attitudes toward political issues (or political orientation), while the variables used to measure professional statuses explained only 13.6 percent of the variance. The consistent differences between the amount of variance in each attitude explained by the two sets of independent variables (approximately 10 percent), suggests the validity of the measurement indices. Socialization in certain non-professional statuses, namely political party identification and religious affiliation, was more important in the formation of attitudes toward economic and political issues than was socialization in professional statuses.

Of interest with respect to the professional statuses was the lack of similarity between the two sets of independent variables association with the two types of personal attitudes. With the exception of salary which was unrelated to either type of personal attitude, political attitudes seemed to be more affected by position within the professional field (or professional eminence), and economic attitudes seemed to be more related to location within the university system. Three of the four indices of professional eminence were related to political attitudes, namely orientation to research vs. teaching, number of publications, and activities in professional associations, while the fourth variables, job satisfaction, was not. Having an orientation to research rather than teaching was negatively related to political liberalism, contrary to previous research in which it was found to have no effect (Cole and Adamsons, 1970:392). As expected, publishing at a high rate was negatively related to political liberalism, but contrary to previous findings holding office in a professional association was positively related to liberalism (Cole and Adamsons, 1970:393). However, the correlation in the latter case was extremely small (R=.01).

By contrast, economic liberalism was more closely related to location within the university system than to professional eminence. All of the six dummy variables used to measure academic affiliation plus both of the indices of longevity entered the regression equation. In addition, two of the variables used to measure professional eminence were also related to economic attitudes in the expected direction. Dissatisfaction with one's job was positively related,

while publishing at a high rate was negatively related to economic liberalism (Cole and Adamsons, 1970:393-4). Of the two different types of professional statuses, location within the university sytem (especially academic discipline) was a better predictor of personal attitudes toward both economic and political issues than was position within the professional field (or professional eminence). Perhaps this occurred because the issue involved in the present study was local rather than national or international, and economic rather than political.

THE THIRD HYPOTHESIS

> If the direction of the behavioral norm in the university as a whole is liberal, the greatest amount of attitude-behavior inconsistency will occur among attitudinally conservative professors, and if the behavioral norm is conservative the greatest amount of inconsistency will occur among attitudinally liberal professors.

Since the behavioral norm in the university as a whole was conservative (with only 32.5 percent of the respondents actively supporting the strike), the greatest inconsistency between attitudes and behaviors was expected among professors who were attitudinally liberal. Personal attitudes as measured by both the economic liberalism index and the political liberalism index were again dichotomized on the basis of frequency distribution into "liberals" and "conservatives". Economic liberals included professors whose scores were between 15 and 25 on the economic liberalism index (N=107 or 49.8 percent), and economic conservatives included professors whose scores were between 5 and 14 on the index (N=108 or 50.2 percent). Political liberals included professors who rated themselves as moderately liberal, strongly liberal, and radical (N=133 or 63.6 percent), and political conservatives included professors who rated themselves as strongly conservative, moderately conservative, and middle-of-the-road (N=76 or 36.4 percent). Strike behavior

was dichotomized as previously described into professors who did not support the strike ("did nothing" or "only read literature") and professors who did support the strike in any way. In addition, the number of ways in which professors supported the strike was dichotomized into low support (those who did nothing or only one thing to support the strike), and high support (those who did two or more things to support the strike). The distribution of each of these indices of strike behavior was shown previously in Table VIII.

As shown in Table XIV which compares both economic and political attitudes to both indices of strike behavior, professors who were attitudinally conservative behaved more consistently with their own attitude than professors who were attitudinally liberal. With respect to economic attitudes, 16.5 percent of attitudinally conservative professors behaved inconsistently by supporting the strike, whereas 53.9 percent of attitudinally liberal professors behaved inconsistently by not supporting the strike, a difference of 37.4 percent. Similarly, in terms of amount of strike support, (Behavior II), 12.4 percent of attitudinally conservative professors behaved inconsistently by supporting the strike at a high level, whereas 56.5 percent of attitudinally liberal professors behaved inconsistently by not supporting the strike at a high level, a difference of 44.1 percent. Similar relationships were found with respect to political attitudes. Only 13.5 percent of attitudinally conservative professors behaved inconsistently by supporting the strike, whereas 57.6 percent of attitudinally liberal professors behaved inconsistently by not supporting the strike, a difference of 44.1 percent. The greatest difference

(50.6 percent) occurred with respect to amount of strike support and political attitude: 10.8 percent of attitudinally conservative professors behaved inconsistently by supporting the strike at a high level, whereas 61.4 percent of attitudinally liberal professors behaved inconsistently by not supporting the strike at a high level. The third hypothesis was confirmed.

TABLE XIV

PERSONAL ATTITUDES BY STRIKE BEHAVIORS
(in percent)

	PERSONAL ATTITUDES			
	Economic Attitude		Political Attitude	
BEHAVIOR I	Conservative	Liberal	Conservative	Liberal
No Support	83.5	53.9	86.5	57.6
Support	16.5	46.1	13.5	42.4
Total N	(96)	(115)	(74)	(132)
BEHAVIOR II				
Low Support	87.6	56.5	89.2	61.4
High Support	12.4	43.5	10.8	38.6
Total N	(97)	(115)	(74)	(132)

THE FOURTH HYPOTHESIS

> When close colleagues' attitudes toward the strike are perceived as being in opposition to personal attitude, professors will behave more inconsistently than when close colleagues' attitudes are perceived as being the same as personal attitude.

The fourth hypothesis was tested by partial correlation analysis. Zero-order correlation coefficients were computed for both indices of personal attitudes and both indices of overt strike behavior. These were compared to the partial correlation coefficients controlling first for the respondent's usual associates, second for the intensity of the relationship between respondents and colleagues, and third for colleague attitudes and colleague behaviors. Personal attitudes were measured by both the economic liberalism index and the political liberalism index. Overt strike behavior was measured by both the indices described in Table VIII (that is, highest level of strike support, and number of different support activities). The only type of "usual associates" for whom attitude measures were available was for department colleagues. Therefore only respondents who claimed that they usually associated with colleagues from their own department were considered. The intensity of the respondent-colleague relationship was measured by the social support index (computed from five items) as previously described. Colleague attitudes were measured by the second economic liberalism

index (perceived colleague attitudes). In addition, colleague behaviors during the strike were measured by the direct question previously described which asked respondents about the behavior of their colleagues.

For professors who usually associated with colleagues from their own department it was expected that those who had a high-intensity relationship with their colleagues would attempt to maximize the approval and esteem of those colleagues. Therefore those professors would be more likely to behave in accordance with their perception of the attitudes (and/or behaviors) of their close colleagues regardless of their own personal attitudes. The greatest inconsistency between attitude and behavior was expected when a respondent had a high-intensity relationship with colleagues whose attitudes (and/or behaviors) were contrary to the professor's own personal attitude (either liberal or conservative). On the other hand, a professor who had a low-intensity relationship with his department colleagues was not expected to attempt to maximize the approval and esteem of his colleagues, and would therefore be free to behave in accordance with his own personal attitude. Table XV shows the zero-order partial correlation coefficients for each index of strike behavior and each index of personal attitude, and the first-order partial correlations controlling for each of the following: usual associates, intensity of the respondent-colleague relationship, perceived colleague attitudes, and perceived colleague behaviors. Table XVI again shows the zero-order partial correlations between strike behavior and personal attitudes; plus the second-order partial correlations (controlling for usual associates plus each of the following: intensity of relationship, colleague

attitudes, and colleague behaviors); and the third-order partial correlations (controlling simultaneously for usual associates and intensity of relationship, plus colleague attitudes and colleague behaviors respectively).

TABLE XV

STRIKE BEHAVIOR BY PERSONAL ATTITUDES CONTROLLING FOR USUAL ASSOCIATES, INTENSITY OF RELATIONSHIP, AND COLLEAGUES' ATTITUDES AND BEHAVIORS

(First order partial correlations)

	Zero-Order Partials		First Order Partial Correlations Controlling For: Usual Associates		Intensity of Relationship	
	PERSONAL ATTITUDES					
Behavior	Economic Liberalism	Political Liberalism	Economic Liberalism	Political Liberalism	Economic Liberalism	Political Liberalism
Strike Support	.44	.47	.43	.46	.43	.47
Amount of Strike Support	.51	.50	.50	.49	.49	.50

	First Order Partials Controlling For: Colleague Attitudes		Colleague Behaviors	
	PERSONAL ATTITUDES			
Behavior	Economic Liberalism	Political Liberalism	Economic Liberalism	Political Liberalism
Strike Support	.42	.48	.33	.44
Amount of Strike Support	.50	.51	.42	.47

N=206

TABLE XVI

STRIKE BEHAVIOR BY PERSONAL ATTITUDES BY COLLEAGUES' ATTITUDES AND BEHAVIORS CONTROLLING FOR USUAL ASSOCIATES AND INTENSITY OF RELATIONSHIP

(Second and third order partial correlations)

	Zero-Order Partials		Second Order Partial Correlations Controlling For Usual Associates And					
			Intensity of Relationship		Colleague Attitudes		Colleague Behaviors	
	PERSONAL ATTITUDES							
Behaviors	Economic Liberalism	Political Liberalism	Economic Liberalism	Political Liberalism	Economic Liberalism	Political Liberalism	Economic Liberalism	Political Liberalism
Strike Support	.44	.47	.43	.46	.40	.47	.32	.43
Amount of Strike Support	.51	.50	.49	.49	.48	.50	.41	.47

	Third Order Partial Correlations Controlling for Usual Associates, Intensity of Relationship, And			
	Colleague Attitudes		Colleague Behaviors	
	PERSONAL ATTITUDES			
Behaviors	Economic Liberalism	Political Liberalism	Economic Liberalism	Political Liberalism
Strike Support	.40	.46	.32	.43
Amount of Strike Support	.47	.49	.41	.46

N=206

As shown by the zero-order correlation coefficients, both types of personal attitudes were related to strike behavior in the expected direction. Economic and political liberalism were strongly associated with having supported the strike, and with the amount of strike support. All relationships were significant at the .001 level.

However, of the four variables thought to be associated with the effect of social support on the attitude-behavior relationship, only perceived colleague behavior had any effect regardless of which combination of variables was controlled. Perceived colleague behaviors had a moderate effect in the expected direction on the relationship between personal attitudes toward economic issues and either of the indices of strike behavior (the correlations were reduced by about .10, but were still significant at the .001 level). However, perceived colleague behavior had no effect on the relationship between political attitudes and strike behavior. Further, controlling for any combination of the remaining variables (namely, usual associates, intensity of relationship, and perceived colleague attitude) produced essentially no change in any of the correlation coefficients. In fact, the coefficients between both of the indices of personal attitude, and both of the indices of strike behavior were amazingly stable even when the four possible intervening variables were simultaneously controlled. The fourth hypothesis was therefore disconfirmed.

The clue for explaining these unexpected results would seem to be connected to the effect of colleague behavior on the relationship between economic attitudes and strike behavior, while having no effect on the relationship between political

attitudes and strike behavior. Both attitude indices were measured by items of a general nature rather than items relating specifically to the issue. However, since the issue was a strike for higher wages by non-professional university staff, it was more of an economic than a political issue. In that sense, the economic liberalism index probably measured attitudes related more specifically to the issue, and having greater relevance to the respondents. This could explain why only the relationship between economic attitudes and strike behaviors was affected by colleague behaviors. This, taken together with the failure of any of the other three indices of social support to affect the attitude-behavior relationship would seem to indicate that professors are not influenced by what their colleagues think, and are only influenced by what their colleagues do when it concerns a salient issue with which they are confronted.

These results point to the importance of using specific rather than general measures of personal attitudes, and to the importance of studying the attitude-behavior relationship relative to the emergence of some salient issue.

THE FIFTH HYPOTHESIS

When colleague attitudes toward the strike are perceived as ambiguous professors will behave in accordance with their own attitudes.

The fifth hypothesis was tested by comparing the amount of inconsistency in the attitude-behavior relationship, as computed in Table XIV to test the third hypothesis, to the amount of inconsistency in the same relationship controlling for each of the following: (1) ambiguous colleague attitudes; (2) ambiguous colleague behaviors. Personal attitudes, measured by both the economic liberalism index and the political liberalism index were dichotomized as previously described into "liberals" and "conservatives". Colleague attitudes were again measured by the second economic liberalism index (perceived colleague liberalism). As previously described, scores which fell between 15 and 17 on the index were interpreted to mean that either respondents were undecided as to their colleagues' attitudes, or that respondents perceived that their colleagues' attitudes were split. In either case, colleagues' attitudes were ambiguous. Perceived colleague behaviors were measured by a direct question (previously described) which asked respondents about the behaviors of their colleagues during the strike. Respondents who claimed that their colleagues were either neutral or split with respect to strike support were considered to have perceived that their colleagues behaved ambiguously.

As shown in Table XVII, (and considering only the first index of behavior since the results for both were very similar), a total of 83.5 percent of economically conservative professors and 46.1 percent of economically liberal professors behaved in accordance with their own personal attitudes; a difference of 37.4 percent. Controlling for ambiguous colleague attitudes, the difference in attitude-behavior consistency between economically conservative and economically liberal professors was increased by 9.8 percent (87.2 percent and 40.0 percent respectively behaved in accordance with their own personal attitudes). Controlling for ambiguous colleague behaviors, the difference in attitude-behavior consistency between economically conservative and economically liberal professors was increased by 2.9 percent (83.6 percent and 33.3 percent respectively behaved in accordance with their own personal attitudes). Contrary to the expected effect, when colleagues' behaviors were perceived as ambiguous (and to a slight extent, when colleagues' attitudes were perceived as ambiguous), economically liberal professors were even less likely to behave in accordance with their own personal attitude. The only effect on economically conservative professors was a very slight increase in the expected direction (attitudes and behaviors were more consistent).

TABLE XVII

PERSONAL ATTITUDES BY STRIKE SUPPORT CONTROLLING FOR THE EFFECTS OF AMBIGUOUS COLLEAGUE ATTITUDES AND BEHAVIORS
(in percent)

	Behavior	Economic Conservatism	Economic Liberalism	Political Conservatism	Political Liberalism
1.	No Support	83.5	53.9	86.5	57.6
	Support	16.5	46.1	13.5	42.4
	Total N	(97)	(115)	(74)	(132)
2.	Low Support	87.6	56.5	89.2	61.4
	High Support	12.4	43.5	10.8	38.6
	Total N	(97)	(115)	(74)	(132)

Controlling for Ambiguous Colleague Attitude

	Behavior	Economic Conservatism	Economic Liberalism	Political Conservatism	Political Liberalism
1.	No Support	87.2	60.0	90.0	66.7
	Support	12.8	40.0	10.0	33.3
	Total N	(47)	(40)	(30)	(54)
2.	Low Support	89.4	62.5	90.0	70.4
	High Support	10.6	37.5	10.0	29.6
	Total N	(47)	(40)	(30)	(54)

Controlling for Ambiguous Colleague Behavior

	Behavior	Economic Conservatism	Economic Liberalism	Political Conservatism	Political Liberalism
1.	No support	83.6	66.7	87.8	68.3
	Support	16.4	33.3	12.2	31.7
	Total N	(55)	(51)	(41)	(63)
2.	Low Support	89.1	68.6	90.2	73.0
	High Support	10.9	31.4	9.8	27.0
	Total N	(55)	(51)	(41)	(63)

With respect to political attitudes (and again considering only the first index of behavior), 86.5 percent of politically conservative professors as compared to 42.4 percent of politically liberal professors behaved in accordance with their own attitudes; a difference of 44.1 percent. Controlling for ambiguous colleague attitudes, the difference in amount of attitude-behavior consistency between politically conservative and politically liberal professors was increased by 12.6 percent. Controlling for ambiguous colleague behaviors, the difference in amount of attitude-behavior consistency between politically conservative and politically liberal professors was increased by 12.0 percent. Again contrary to the expected effect, when either colleagues' attitudes or colleagues' behaviors were perceived as ambiguous, politically liberal professors were even less likely to behave in accordance with their own personal attitude. The only effect on politically conservative professors was a very slight increase in consistency as expected. The fifth hypothesis was therefore disconfirmed because of the unexpected effect of ambiguous colleague support on professors who were attitudinally liberal.

In attempting to explain this unexpected effect, it is necessary to examine the effect of both "liberal" and "conservative" colleagues on the consistency of the relationship between respondent's attitudes and behaviors. The results are shown in Table XVIII. In total, 83.5 percent of economically conservative respondents and 46.1 percent of economically liberal respondents behaved in accordance with their own attitudes. When colleague attitudes were conservative there was little effect on conservative respondents, however as expected, more liberal respondents behaved inconsistently (9.3 percent on the economic liberalism index, and 9.1 percent on the political liberalism index). When

colleague attitudes were liberal an additional 14.7 percent of economically conservative respondents and 7.6 percent of politically conservative respondents behaved inconsistently; while an additional 16.1 percent of economically liberal respondents and 27.3 percent of politically liberal respondents behaved consistently. When colleague behaviors were liberal the results were similar with an additional 16.8 and 11.5 percent of conservative respondents behaving inconsistently, respectively; while an additional 23.3 and 28.4 percent of liberal respondents behaved consistently respective to the two attitude indices.

In general, liberal colleagues had a greater effect on both liberal and conservative respondents. When colleagues were perceived as supporting the strike, liberal professors were much more likely to behave in accordance with their own attitudes, while conservative professors were much more likely to behave contrary to their own attitudes. When colleagues were perceived as ambiguous or as opposing the strike, liberal professors were less likely to behave in accordance with their own attitudes, while conservative professors were slightly more likely to behave consistently. Rather than having the effect of freeing professors to act in accordance with their own personal attitudes, ambiguous social support had the same effect on liberal professors as colleague opposition. Cole and Adamsons also found this type of effect, and thought that even ambiguous social support encouraged traditional academic behavior and discouraged non-conventional behavior such as cancelling classes.

Other explanations, which were previously discussed, are also possible. First, since the general context or behavioral norm in the university as a whole

TABLE XVIII

PERSONAL ATTITUDES BY STRIKE SUPPORT CONTROLLING FOR THE EFFECTS OF CONSERVATIVE AND LIBERAL COLLEAGUES (in percent)

Behavior	Economic Conservatism	Economic Liberalism	Political Conservatism	Political Liberalism
No Support	83.5	53.9	86.5	57.6
Support	16.5	46.1	13.5	42.4
Total N	(97)	(115)	(74)	(132)

Controlling for the Effect of Conservative Colleague Attitude*

Behavior	Economic Conservatism	Economic Liberalism	Political Conservatism	Political Liberalism
No Support	85.3	63.2	88.0	66.7
Support	14.7	36.8	12.0	33.3
Total N	(34)	(38)	(25)	(45)

Controlling for the Effect of Liberal Colleague Attitude

Behavior	Economic Conservatism	Economic Liberalism	Political Conservatism	Political Liberalism
No Support	68.8	37.8	78.9	30.3
Support	31.3	62.2	21.1	69.7
Total N	(16)	(37)	(19)	(33)

Controlling for the Effect of Liberal Colleague Behavior

Behavior	Economic Conservatism	Economic Liberalism	Political Conservatism	Political Liberalism
No Support	66.7	30.6	75.0	29.2
Support	33.3	69.4	25.0	70.8
Total N	(21)	(49)	(20)	(48)

* Conservative colleague behavior has been excluded since all professors behaved conservatively regardless of their economic or political attitudes (that is, 8 economically liberal respondents, and 15 politically liberal respondents).

was conservative, the lack of clear social support for liberalism could have suppressed that type of behavior. This was unlikely since in Cole and Adamsons' study in which the same effect resulted from ambiguous social support, the behavioral norm in the university was liberal. A second explanation could be that the method of measuring the presence, absence, or ambiguity of social support was invalid. This was also unlikely since both indices (that is, colleagues' attitudes and colleagues' behaviors) produced essentially the same results as shown in Tables XVII and XVIII. A third explanation, related to Cole and Adamsons' explanation, was that without clear social support for deviating from traditional academic practice, professors feel a high degree of obligation to uphold their teaching contract with the university. However, it was not possible to test this explanation. A fourth explanation involved the ease with which an attitude may be negated as opposed to the difficulty of motivating a behavior. This, combined with the effect of traditional academic practice, could well explain the unexpected effect of ambiguous social support on attitudinally liberal professors.

CHAPTER V

SUMMARY AND CONCLUSIONS

This thesis attempted to identify and explain some of the sources of attitude-behavior inconsistency among professors in relation to a campus strike by other staff in a Canadian university. The two conceptual processes which were considered were the attitude formation process, and the attitude conversion process. With respect to the former, socialization in certain non-professional statuses (namely political party identification and religious affiliation) was found to explain more variance in attitudinal predispositions toward economic and political issues than was explained by socialization in professional statuses. However, contrary to expectations, attitudinal predispositions toward both types of issues were found to vary according to academic affiliation. This probably occurred due to the generality of the indices with which personal attitudes were measured rather than due to error in the conceptual framework.

With respect to the attitude conversion process, the effects of social support (or colleagues' attitudes) on the consistency of the attitude-behavior relationship was examined in relation to three conditions: the behavioral norm in the university as a whole, colleagues' attitudes when these were perceived to be in opposition to personal attitudes, and colleagues' attitudes when these were

perceived to be neutral or split. The relevance of social support to each respondent was considered in relation to his self-identified usual associates, and in relation to his perception of the intensity of the relationship with those associates (as measured by closeness, visibility, and responsiveness). It was expected that to the extent a respondent had a high-intensity relationship with his colleagues he would be motivated to maximize the approval and esteem of those colleagues by behaving in ways consistent with his perception of their attitudes regardless of his own personal attitude.

In terms of the first condition, the behavioral norm in the university as a whole was conservative, and as expected,the greatest amount of attitude-behavior inconsistency occurred among attitudinally liberal professors. It appeared that a type of tipping phenomenon related to the general context in the university had occurred.

In terms of the second condition, contrary to expectations, controlling for the effects of any combination of colleagues' attitudes, usual associates, or intensity of relationship produced no change in the correlations between either index of strike behavior and either index of personal attitudes. However, controlling for the effects of colleagues' behaviors (a measurement index used to test the validity of the index used to measure colleagues' attitudes) produced a moderate change in the expected direction in the correlation between strike behavior and economic attitudes, but not in the correlation between strike behavior and political attitudes. This change in the relationship between strike behavior and economic

but not political attitudes probably occurred because of the greater generality of the index used to measure political attitudes. Further, it would seem to indicate that professors are more influenced by what their colleagues do than by what they say, but only when confronted with a specific salient issue. Once again the importance of using specific attitude indices, and of examining the attitude-behavior relationship in relation to some salient issue must be stressed.

In terms of the third condition, when colleagues' attitudes were perceived to be ambiguous, as expected attitudinally conservative professors behaved somewhat more consistently, but contrary to expectations, attitudinally liberal professors behaved somewhat more inconsistently. When colleagues' behaviors were perceived to be ambiguous, there was no effect on attitudinally conservative professors, but contrary to expectations, attitudinally liberal professors behaved much more inconsistently. Due to the unexpected effect of ambiguous social support on attitudinally liberal respondents, consideration was directed toward the effects of colleagues' attitudes and of colleagues' behaviors when these were perceived as liberal, and as conservative.

When colleagues' attitudes were perceived to be conservative there was no effect on attitudinally conservative professors, and as expected attitudinally liberal professors behaved somewhat more inconsistently. When colleagues' behaviors were perceived to be conservative, all professors behaved conservatively, contrary to the expectation for attitudinally liberal professors.

When colleagues' attitudes were perceived to be liberal, as expected attitudinally conservative professors behaved much more inconsistently, and attitudinally liberal professors behaved much more consistently. When colleagues' behaviors were perceived to be liberal, there was an even greater effect in the expected direction on both liberal and conservative professors.

In other words, only when colleagues' attitudes or behaviors were perceived to be liberal did professors behave as expected. Contrary to expectations, ambiguous social support had the same effect as colleague opposition on attitudinally liberal professors. It seemed probable that in the absence of clear social support for deviation, professors acted in accordance with traditional academic practice and with the terms of their teaching contracts with the university. One further point, in general the effects of colleagues' behavior (either liberal, ambiguous, or conservative) were greater than the effects of colleagues' attitudes on the relationship between strike behavior and personal attitudes.

As previously mentioned, this would seem to indicate the importance of using specific measurement indices in relation to specific issues. It would also support the proposition that professors are more influenced by what their colleagues do than by what they say. These two propositions are the most important recommendations which can be made on the basis of this study. Further research should take both into consideration, not only with respect to the attitudes and behaviors of professors, but also with respect to any population, since people in general may be more influenced by the actions than by the words of their associates.

APPENDIX A

The University of Manitoba

Department of Sociology
Winnipeg, Canada R3T 2N2

15 March, 1974

Dear Faculty Member:

Your name has been drawn as part of a sample of academic staff teaching in the major departments on this campus. The present study evolved out of a survey of faculty attitudes regarding the strike by CAIMAW last fall.

The present study will be of interest to many disciplines in terms of both its theoretical and practical value. Some previous research has been conducted in regard to faculty attitudes. However, this study is unique for two reasons. First, previous studies have been carried out in American universities; and second, previous research has focused on faculty support of strikes or demonstrations by students.

For these reasons, your assistance in this research is of the utmost importance. A research assistant will be contacting you shortly, and will deliver a questionnaire which you will be asked to complete and return as soon as possible. Your co-operation in this respect will be appreciated.

We fully realize the demands on your time, especially at this time of year. However, I sincerely hope that you will take a few minutes to make your contribution to this study. If you have any questions or difficulties, please do not hesitate to contact Dr. Stuart Johnson (474-9673) or myself (474-8495).

Thank you.

Yours truly,

Diane A. Dilling
Sociology Graduate Student

DAD/lk

The University of Manitoba

Department of Sociology
Winnipeg, Canada R3T 2N2

15 March, 1974

Dear Faculty Member:

Enclosed is a questionnaire about your background; your profession; the type of interaction you have with your department colleagues; and your reactions to the strike we had last fall.

The purpose of this study is to attempt to understand the way in which attitudes are formed and acted upon in respect to social issues such as a strike. As mentioned in our previous letter, we are interested in patterns of behavior.

This questionnaire is annonymous in the sense that no names or other identifying information will be used in any resulting publications. The number which appears on your questionnaire is for the purpose of following up non-responses. All your answers will be treated as confidential information.

Again, let me stress the importance of your participation in this study. We would certainly appreciate your co-operation in completing and returning your questionnaire as soon as possible (preferrably before March 29, 1974). As you know, research funds and computer time must be used before the end of the fiscal year.

Thank you for your co-operation.

Yours truly,

Diane A. Dilling
Sociology Graduate Student

DAD/lk
enclosure

If you have questions or further information is needed call Dr. Stuart D. Johnson at 474-9673 or Diane Dilling at 474-8495.

The University of Manitoba
Department of Sociology
Winnipeg, Canada R3T 2N2

March 26, 1974

Dear Faculty Member:

Recently you received a questionnaire from us requesting your participation in a study about the formation of attitudes toward social issues. Since I appreciate the demands on your time and realize that you may have forgotten about the questionnaire, this letter is to remind you that I would appreciate your response before March 29, 1974.

Thank you again for your cooperation.

Yours truly,

Diane A. Dilling
Sociology Graduate Student

DAD:ar

The University of Manitoba
Department of Sociology
Winnipeg, Canada R3T 2N2

March 28, 1974

Dear Faculty Member:

Last week we sent you a letter and a questionnaire about the formation of attitudes toward social issues. As we have not yet heard from you we expect that the material never reached you or has been mislaid.

Since our sample was carefully drawn and is therefore representative of the faculty, we would appreciate your co-operation in responding. We are sending you a copy of our original letter, another questionnaire, and an envelope. We hope that you will be able to spare a few minutes to complete and return your questionnaire.

If you have any questions or would like further information please contact Dr. Stuart Johnson at 474-9673 or Diane Dilling at 474-8495.

Thank you for your cooperation.

Yours truly,

Dr. Stuart D. Johnson
Associate Professor of Sociology

Diane A. Dilling
Sociology Graduate Student

SDJ/DAD/ar
encl.

The University of Manitoba

Department of Sociology
Winnipeg, Canada R3T 2N2

April 1, 1974

Dear Faculty Member:

We would still like you to participate in our study. All but 49 of the 320 faculty members to whom we sent a questionnaire regarding the formation of attitudes toward social issues have replied. Soon we must tabulate our results which may not be representative of the faculty on this campus if you do not help us. We would like to maximize our returns so as to reduce the chances of making serious errors in our conclusions.

Your cooperation in completing and returning your questionnaire immediately would be greatly appreciated. Be assured that your answers will be treated confidentially.

Yours truly,

Dr. Stuart D. Johnson
Associate Professor of Sociology

Diane A. Dilling
Sociology Graduate Student

SDJ/DAD/ar

The University of Manitoba

Department of Sociology
Winnipeg, Canada R3T 2N2

April 3, 1974

Dear Faculty Member:

Now all but 26 of the 320 faculty members to whom we sent questionnaires regarding the formation of attitudes toward social issues have replied. We are hoping to get a 100 per cent response to our questionnaire. Therefore, we are again requesting your cooperation. Your reply will add to the value of those already received.

It would most certainly be appreciated if you would take a few minutes to contribute to our study by completing and returning your questionnaire.

Thank you for your cooperation.

Yours truly,

Dr. Stuart D. Johnson
Associate Professor of Sociology

Diane A. Dilling
Sociology Graduate Student

SDJ/DAD/ar

APPENDIX B

I. This section of the questionnaire contains questions about your background. Please answer all questions.

1. In what Faculty do you teach?

Arts	___1	Agriculture	___4
Science	___2	Engineering	___5
Education	___3	Administrative Studies	___6

2. What is your major department? _____

3. If you are a member of a College, please state which one?

_____

4. Where is your office located?

Building _____ Floor _____

5. What is your present rank?

Professor	___1
Associate Professor	___2
Assistant Professor	___3
Lecturer or Instructor	___4

5.a If you hold an administrative position, please specify which one?

Associate Head	___1
Head or Chairman	___2
Associate Dean	___3
Dean	___4

6. How many years including this year have you been teaching full-time at a college or university?

_____

7. How many years including this year have you been teaching full-time at this university?

_____

8. Please specify your sex: Male _____1 Female _____2

9. How old were you on your last birthday?

under 25	___1	45 - 49	___6
25 - 29	___2	50 - 54	___7
30 - 34	___3	55 - 59	___8
35 - 39	___4	60 or over	___9
40 - 44	___5		

10. With which political party do you identify? Please complete the appropriate column.

Canadian citizens:		American citizens:	
Progressive Conservative	___1	Republican	___1a
Liberal	___2	Democratic	___2a
New Democratic	___3	Independent	___3a (specify)
Social Credit	___4	None	___4a
Communist	___5		
Other (specify)	___6		
None	___7		

11. Which do you consider yourself to be:

strongly conservative	___1
moderately conservative	___2
middle-of-the-road	___3
moderately liberal	___4
strongly liberal	___5
radical	___6

12. What is your religion?

Protestant	___1	Mennonite	___5
Anglican	___2	Other	___6 (specify)
Catholic	___3	None	___7
Jewish	___4		

13. Which of the following categories best describes the usual occupation of your father?

___ Professional - income from fees: e.g. doctor, lawyer

___ Professional - income from salary: e.g. teacher, clergyman

___ Proprietor or Manager: e.g. farm owners, assistant executives

___ Sales (other than sales manager or administrator): e.g. auto salesman, real estate salesman

___ Clerical: e.g. bank clerk, bookkeeper, secretary

___ Skilled worker: e.g. electrician, plumber, carpenter

___ Semi-skilled worker: e.g. plumbers helper, assembly line worker, truck driver

___ Service worker: e.g. policeman, barber, bartender

___ Unskilled worker: e.g. janitor, farm and heavy laborer

II. This section deals with various aspects of your profession. Please answer all questions.

1. What is your position relative to tenure?

do not have tenure ___1
will be considered in the next academic year ___2
received tenure this academic year (1973-74) ___3
received tenure two or more years ago ___4

2. What is your present salary?

$10,999 or less	___1	17,000 - 18,999	___5
11,000 - 12,999	___2	19,000 - 20,999	___6
13,000 - 14,999	___3	21,000 - 22,999	___7
15,000 - 16,999	___4	23,000 and over	___8

3. Do your interests lie primarily in teaching or in research?

very heavily in research ___1
in both, but lean toward research ___2
in both, but lean toward teaching ___3
very heavily in teaching ___4
other (specify _____) ___5

4. Would you please indicate the number of publications, including those in press, that you have in each of the following categories?

books or monographs of which you are author or co-author ___1
books to which you have contributed editorial service or signed articles or chapters ___2
papers contributed to learned journals of national or international reputation ___3
papers of more general interest contributed to periodicals of recognized cultural standing ___4
review and review articles in learned journals ___5
contributions to published government reports ___6
extension bulletins; contributions to trade journals; published proceedings of conferences, committees, and other organizations; and published abstracts ___7
contributions to literary and professional periodicals of local rather than national or international reputation ___8
papers published by a university research center or institute ___9

5. Have you ever held office in a professional association?

yes ___1 no ___2

6. In general, how satisfying do you find your present job?

very satisfying ___1
generally satisfying ___2
ambivalent or undecided ___3
somewhat dissatisfying ___4

III This section deals with the type and amount of interaction you have with your department colleagues.

1. Do you usually associate with colleagues from your own department, or from other departments?

don't associate with either ___1
mostly with own department ___2
mostly with other department(s) ___3
about half and half ___4

2. To what extent would you take into account the reaction of your colleagues before trying a new idea such as an innovative teaching technique?

considerable extent ___1
somewhat important ___2
of little concern ___3
would not matter ___4

3. How many of your colleagues know of any special interests you may have in teaching or research?

almost all ___1
many ___2
a few ___3
almost none ___4

4. Do you discuss your professional ideas or opinions with your colleagues?

almost always ___1
frequently ___2
occassionally ___3
almost never ___4

5. How many of your colleagues seem to recognize your expertise in your areas of specialty?

almost all ___1
many ___2
a few ___3
almost none ___4

6. How many of your colleagues ask your opinion or advice in regards to their own special projects?

almost all ___1
many ___2
a few ___3
almost none ___4

IV The last section deals with your attitudes to social issues such as strikes, and with your reactions to the strike we had on this campus last fall (Canadian Association of Industrial, Mechanical, and Allied Workers or CAIMAW).

1. For each of the following statements, please select the response that best represents your feeling and place the appropriate symbol in the space provided. The response categories to all statements are:

Strongly Agree (SA) Disagree (D)
Agree (A) Strongly Disagree (SD)
Undecided (U)

____ The government should take over all industries.
____ Labor should have much more voice in deciding government policies.
____ Legislatures are too ready to pass laws to curb business freedom.
____ For people to do their best, there must be the possibility of unlimited profit.
____ Poverty is chiefly a result of injustice in the distribution of wealth.
____ The government ought to guarantee a living to those who can't find work.
____ Large incomes should be taxed more than they are now.
____ Private ownership of property is necessary for economic progress.
____ Labor does not get its fair share of what it produces.
____ A person should strike in order to secure greater returns to labor.

2. For each of the same statements would you now please select the response <u>that you feel</u> best represents the attitude of the majority of your colleagues, and place the appropriate symbol in the space provided. The response categories are the same as before:

Strongly Agree (SA) Disagree (D)

Agree (A) Strongly Disagree (SD)

Undecided (U)

____ The government should take over all industries.

____ Labor should have much more voice in deciding government policies.

____ Legislatures are too ready to pass laws to curb business freedom.

____ For people to do their best, there must be the possibility of unlimited profit.

____ Poverty is chiefly a result of injustice in the distribution of wealth.

____ The government ought to guarantee a living to those who can't find work.

____ Large incomes should be taxed more than they are now.

____ Private ownership of property is necessary for economic progress.

____ Labor does not get its fair share of what it produces.

____ A person should strike in order to secure greater returns to labor.

3. During the strike by CAIMAW that we had on this campus last fall, what was the extent of your involvement? Please check as many as are relevant.

did nothing, carried on as usual	___1
read some literature that circulated	___2
attended some of the meetings or debates held	___3
cancelled one or more classes	___4
gave money to the strike support fund	___5
helped write or distribute pamphlets or literature	___6
worked on the picket line	___7
refused to cross the picket line at all	___8
other (specify _____)	___9

4. During the CAIMAW strike, were most of your colleague friends:

active in support of the strike	___1
sympathetic with the causes of the strikers	___2
neutral	___3
sympathetic with those in opposition to the strike	___4
active in opposition to the strike	___5
split into some favoring and some opposing the strike	___6

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