

**NATIVE TRAINEES AND WHITE CO-WORKERS:  
A STUDY OF PREJUDICE IN AN INDUSTRIAL SETTING**

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ABSTRACT/RESUME

In 1974, a number of major petroleum companies in Canada organized the "Nortran Training Program" for training northern residents in the petroleum industry. Previous research indicates that working environments with minority-majority group interaction frequently tend to foster hostility and prejudice. Hobart concludes, however, that this type of environment is also capable of creating favourable relationships between northern trainees and non-native permanent workers. Many of the latter develop positive attitudes towards the trainees and favour improving the situation and training experiences of their new colleagues.

En 1974, plusieurs grandes entreprises pétrolières au Canada ont organisé un programme de formation de la main-d'oeuvre ("Nortran Training Program") pour permettre aux résidents du Nord de travailler dans l'industrie pétrolière. Dans le passé, les recherches effectuées ont montré que la présence de groupes minoritaires et majoritaires sur les lieux de travail engendre fréquemment des préjugés et aboutit à des conflits. L'auteur a trouvé au cours de sa propre étude que ce genre de milieu peut, au contraire, créer des relations favorables entre apprentis résidents du Nord, et ouvriers permanents non-autochtones. Un grand nombre de ces derniers font preuve d'une attitude positive à l'égard de leurs nouveaux confrères, et contribuent ainsi à l'efficacité du programme de formation offert à ceux-ci.

## INTRODUCTION

Much has been written in the popular media as well as in more scholarly publications about narrowmindedness, prejudice and discrimination among "hard hats", semi-skilled and skilled manual workers (MacKinnon & Centers, 1956; Lipset, 1959; Stouffer, 1955; Cohen & Hodges, 1963; Vander Zander, 1960). There are substantial theoretical reasons for expecting that this would be true. The widely reported observation that working class parents are more authoritarian than middle class parents, at least since World War II (Brofenbrenner, 1958; Wolfenstein, 1953), leads to the expectation that many "hard hat" workers might have authoritarian personality tendencies. For similar reasons, they could be expected to conform to Rokeach's "closed-minded syndrome" (Rokeach, 1960). Because of the more limited educational achievements and literary interests of workers, their greater tendencies toward prejudice and discrimination would be predicted in terms of Borhek's cognitive complexity hypothesis (1965). Their economic vulnerability would predispose them toward prejudice and discrimination against minority group competitions as Myrdal argues (1944).

On the other hand, there is a great deal of literature suggesting that egalitarian interaction is associated with the reduction of prejudice, and with the growth of feelings of social acceptance (Homans, 1951; Deutsch & Collins, 1951; Williams, 1964; Wilner, Walkley & Cook, 1955).

This paper reports on a study of a minority-majority group interaction situation where the potentials both for hostility and for good feelings are intensified. The study is based upon a worker training situation where Indian and Inuit native trainees receive a number of prerequisites and benefits not enjoyed by the white permanent workers responsible for their training, including accelerated promotion. The result of such promotion may be that native trainees will be promoted over the heads of those who had trained them. The intensified potential for hostility thus becomes apparent. On the other hand, the trainees were employed in the pipeline industry, a continuous-flow industry, which was then expanding rather rapidly. Thus, there is little concern about being laid off simply because advancement is relatively speedy. Work pressures are typically low as "work" usually involves monitoring automated equipment, and leaves much time for friendly casual interaction on the job. Thus, the work setting also facilitates the growth of good feelings (Blauner, 1967; Woodward, 1970).

In the following pages, after briefly outlining some of the features of the program, we present information on the reactions of white co-workers of the trainees to the training program, and their evaluations of the trainees and their work performances. The paper ends with an assessment of the patterns of interpersonal relationships which became established among the various categories of personnel involved in the program.

## BACKGROUND

In 1973, a number of major petroleum companies in Canada organized a

Training Task Force to develop a comprehensive program training northern workers for employment in the petroleum industry. Decisions in respect to planning the policies and program development of the Training Task Force were made by a Steering Committee of the companies involved. This was the beginning of the "Nortran" petroleum industry training program for northern residents. As the planning evolved, it was decided that the program would depend on apprenticeship procedures to train the Nortran trainees. However, it would also utilize formal course training in community colleges and other training institutions when it became apparent that a trainee generally had good potential for continued advancement, but lacked certain skills or educational background prerequisites to continued mobility. The trainees were given the status of permanent - not casual or seasonal - employees within the participating companies, with all the benefits appropriate to that status.

Following its inception in the fall of 1974, the Nortran program took over a pre-existing Alberta Gas Trunk Line Company training program, assuming responsibility for the 22 trainees who were enrolled in the program at that time. The other participating companies each assigned a number of permanent employment positions to Nortran trainees so that by the time this study was conducted, in September of 1974, there was a total of 96 training positions in the Nortran program, 77 of which were actually filled with trainees.

Table 1 shows the training positions open to northern trainees in the Nortran program with the participating companies as of the fall of 1974.

TABLE 1: Training Positions For Northern Trainees in Nortran

Training Position	Number
Accounting Clerk	16
Clerical	2
Clerk Expediter	4
Compressor Station Operator	16
Computer Maintenance	1
Controls Technician	3
Cost Analyst	1
Drilling Operations	14
Electrician	2
Equipment Operator	3
Gas Controller	1
Gas Plant Operator	9
Heavy Duty Mechanic	2
Instrument Mechanic	1
Materials Supervisor	2
Measurement Technician	1
Millwright	4
Pipeline Operation & Maintenance	5

Production Operator	4
Refueller	1
Surveyor	2
Welder	2
Total	96

The Nortran training organization consisted of a Manager to whom two Industry Training Co-ordinators and a Training Supervisor were directly responsible. The Industry Training Co-ordinators helped to select trainees, assessed trainees' educational levels, suggested possible courses they might take to upgrade their education, and introduced them to the training program. The Training Supervisor was responsible for the general well-being of the northern trainees, supervising four Supervisor Counsellors, and often serving as "trouble shooter" when problems involving trainees arose. The Supervisor Counsellors were each responsible for 15 to 20 trainees, assisting them in finding suitable quarters in the southern industrial environment, and helping them adapt to a wage economy and to their new living conditions.

The actual training was provided within employment contexts, in the same manner as an apprenticeship program. There were three broad types of employment situations: gas plant and pipeline operation, oil and gas well drilling, and clerical and office work. All of the trainees in the first context were posted to training locations in southern Canada, all but two of which were in Alberta. The drilling training sites were all in the Mackenzie Delta, and all but one of the office work trainees were located in Calgary, Alberta.

While the supervisor was responsible for planning the training of the Nortran trainees, the actual training was in fact provided by the co-workers in the work group or work context to which the trainee was assigned. The attitudes and cooperation of the co-workers were thus critical to the success of the program.

The explicit goal of the program was to train a staff of northerners to operate gas fields, gas plants, and the proposed Mackenzie Valley gas pipeline, in anticipation of the construction of this line. Accordingly, the goal was to develop the wide range of skills needed in the Nortran trainees as quickly as possible. In order to maximize the probability of reaching this goal, a decision was made to accelerate the training and promotion of the Nortran trainees as rapidly as the progress and achievements of the individual trainees warranted. Southern white supervisors and co-workers were usually informed of the nature and the goals of the program and of the accelerated promotion feature as well. In consequence, the co-workers and supervisors who were involved in the training of trainees knew that fast-learning and competent trainees could be promoted over the heads of their trainers.

Although this feature was threatening enough in itself, it was exacerbated by the fact that there was no guarantee that the Mackenzie Valley pipeline would ever be built. Even if it was built, there was no provision in the Nortran program which required trainees to take positions in the north, if they preferred

living in the south. Thus, the program inevitably posed a threat to the advancement opportunities of the men who were asked to train the Nortran candidates.

The trainees enjoyed other benefits besides accelerated promotion, including fully subsidized housing at the training site, an extra week of annual leave time to cover travel time between the training site and the trainee's home in the Northwest Territories, and a travel subsidy to cover the costs of travel home. Neither the other employees, nor the non-Nortran trainees of the participating companies, received any of these desirable benefits.

#### SOURCES OF DATA

The data for this study were obtained from a wide variety of employment records and from formal interviews. Background information is available on 111 people who had been involved in the program, and 71 of the 77 trainees enrolled in the program as of September 1974 were interviewed. In all but a few cases, the interviews were conducted by a native person. Sixty-one of the trainees' co-workers were interviewed by white interviewers to determine such things as their perceptions of the trainees, their assessments of their motivation, their rate of progress, their satisfaction with the trainees as co-workers, and their judgment of the extent to which they posed a safety threat. Interviews with trainees took about an hour, and those with co-workers took slightly less time. Informal interviews were also conducted with the Supervisor Counsellors. These men were in frequent contact with the trainees, seeking to facilitate their adjustment to the situations in which they found themselves, and to spot incipient or developing problems in order to precipitate appropriate corrective action. They provided us with a certain amount of information useful in understanding the subjective situations in which the trainees found themselves, the difficulties which they experienced, and the kinds of resolutions which were achieved, or which on occasion fell through.

#### CHARACTERISTICS OF THE TRAINEES AND THE CO-WORKERS

The trainees were of course young, with over half aged 24 or less, only 18 percent over 28 years of age, and the oldest 43 years old. In terms of ethnic origin, 38 were treaty Indian, 34 were Inuit, 25 were non-treaty status Indian or Metis, and 13 were white. No information was available on the ethnic origin of 1 trainee. When they joined the program, 11 were from settlements on the Arctic coast, 37 were from the Mackenzie Delta, 45 were from settlements further south in the Northwest Territories and 17 were from outside the N.W.T. Thirty-seven were married, 69 were single, and one was widowed. No data on marital status was available for four men.

Twenty-two of the trainees had entered the training program when it was operated by the Alberta Gas Trunk Line Company. Fifty entered in 1973 (31 during October of that year alone), and 39 entered during the first nine months of 1974. Most of the men in the program (66), had some high school training, and 23 of these had completed grade 12. Only three had less than six years of

schooling. Forty-one had had a variety of upgrading or specialized training experiences, ranging from low level courses such as "basic job readiness training" and upgrading to grade eight, to highly specialized courses such as telecommunication and electronics, accounting and business management.

Most of these men were in training for such positions as gas plant operators (22), gas transmission operators (20) or as roughnecks, motormen or derrickmen on drilling rig crews (16). Ten were in training for technician's jobs, and 12 for white collar jobs. Forty-six men were assigned to locations in the Northwest Territories, eight men were in Saskatchewan, and the remainder were in Alberta, with the largest number of those (17) located in Calgary.

We were able to interview 61 co-workers of the trainees. A number of the co-workers stationed in the North were unavailable however, as many of them worked on seasonally employed drilling crews which had dispersed by the time our interviewers arrived in the Mackenzie Delta.

About two-thirds (39) of the co-workers interviewed were skilled workers, nine were semi-skilled, nine were clerical, and three were semi-professional workers. In terms of age, 13 were under 25 years of age, 32 were aged 25 to 35, and 16 were over 35 years of age. Forty-seven of them were married. The largest proportion of co-workers had been with their employing companies for between one and three years (38 percent), or between four and six years (33 percent). Twenty percent had worked for less than a year at their then current locations, 44 percent had worked for between one and three years, and 36 percent for at least four years. Most of the men, 45, reported experience with only a single trainee.

## THE FINDINGS

The findings to be presented in this section include information on co-workers' perceptions of the Nortran training program, their perceptions and assessments of the Nortran trainees, and the trainees' perceptions of their co-workers and how the latter treated them.

### Co-Workers' Reactions to the Training Program

During the interviews, the co-workers were first asked how much they knew about the Nortran program generally, and about the special benefits which the Nortran trainees received. Thereafter they were asked about their reactions to the training program, and their assessment of its consequences for themselves and for the trainees. Generally our data show that most of the co-workers knew little about the training program, but most tended to believe that it was beneficial for northerners, and accordingly that it was justifiable.

The interview schedules show that only a few of the co-workers had much detailed or specific knowledge about the Nortran Program. Thirty percent knew only that it provided training for employment in the gas industry, and 21 percent knew only that it was a program to train northerners for such employment. Thirteen percent knew that northern trainees from this program were expected

to return to the north once the pipeline was built. Sixteen percent mentioned some of the special benefits which the trainees received.

In response to the question, "Do you think that northern trainees get benefits which regular workers do not get?", three-fourths said that they did, and one-fourth said they did not. Table 2 indicates their responses when asked to identify the benefits of which they were aware.

TABLE 2: Co-Worker Awareness of Nortran Trainee Benefits

Benefits Mentioned*	Respondents	
	N	Percent
Longer holiday periods	37	61
Subsidized living accommodations	24	59
Subsidized holiday travel	8	13
Accelerated promotion	6	10
Medical benefits	2	3
Attendance at training schools	1	2
Transportation benefits	1	2
Total Respondents	61	100

\*Many men mentioned more than one benefit.

This tabulation suggests that although most of the co-workers were aware that the trainees receive some special benefits, many were not aware of the number and variety of benefits which they could receive. The men were then asked if they thought it was fair for the trainees to receive these special benefits. Of those who were aware of the benefits, 64 percent said that it was fair, and the remainder said it was not.

In response to another question asked, "Do you think that the northern trainees receive special treatment on the job from foremen, supervisors, or the company?", fifty-nine percent responded that they did, 39 percent that they did not, and one man said he did not know. Those who felt that there was special treatment were asked what special treatment the trainees received. Replies included lenient treatment of infractions on the job (14 men), toleration of absenteeism (seven), more time-consuming and patient instruction by supervisors (six), and provision for off-the-job needs (three). Again we asked if they felt that this special treatment was fair. Thirteen who answered the preceding question failed to answer this one, but of those who did, half said they felt it was fair, and half said it was not.

The co-workers were asked if their company had a regular training program. About three-fourths said that it did, 18 percent said it did not, and 8 percent did not know. Those men working for companies which had training programs

TABLE 3: Co-Workers' Perception of Differences Between  
Nortran Trainees and Regular Trainees

Differences Mentioned	Respondents	
	N	Percent
Northerners have less education	15	44
Northerners have less motivation	10	29
Northerners have less ability	8	24
Northerners have more motivation	4	12
Total Respondents	34	100

were asked, "Can you think of any difference between the methods, content and scope of the regular training program as compared with the Northern Training Program?" Of the 49 men who answered this question, 28 said that there was no difference. The remaining 21 men mentioned one or more differences each, including less being expected of northerners (nine), the northern program involving more intensive training (seven), the northerners being given a broader experience (five), and northerners receiving special benefits (four). Again we asked, "Do you think these differences are fair?" Among the 24 respondents to this question, 14 said that they were, seven said they were not fair, and three were unsure.

We asked further, "Are there any differences between northern trainees and regular trainees in regard to ability, motivation, education, etc.?" Twenty-three men, 38 percent of the total, said that there were no differences, and four failed to answer. The remainder mentioned one or more of the differences listed in Table 3.

The preceding questions were designed to stimulate the co-workers to think about the Nortran program. Thereafter we asked them if they felt the Nortran program was justified. Almost all, 85 percent, said it was; only four men said it was not and the same number said they did not know. Thirty men volunteered reasons, including half who said it gives northerners the kind of chance that they need. Nine said it would provide trained men to operate the northern pipeline, and four said this kind of training program is needed. Three men gave various other responses.

The co-workers were then asked how they felt about the Nortran program. Most, 60 percent, said it was a good idea, 7 percent felt that there were good and bad aspects to the idea, 16 percent (10 men) responded negatively, and eight did not respond. When asked, "What do you think is good about it?" 45 men mentioned one or more advantages, as shown in Table 4. These responses are noteworthy in reflecting a strong tendency to identify with northern peoples and to be concerned with their welfare, as well as with the welfare of the whole society.

When the workers were asked what criticisms they had of the program, 15



TABLE 4: Co-Workers' Perceptions of Nortran Program Advantages

Advantages Mentioned	Respondents	
	N	Percent
Generally beneficial to individuals	15	33
It assists northern Native peoples	18	40
Cultural advantages to northerners and/or southerners	9	20
The effectiveness of the training that was provided	12	27
Productivity of the workers who are trained	4	9
Benefits to the trainers from the teaching experience	2	4
Total Respondents	45	100

men said they had no criticisms, including eight who said they did not know enough about the program to criticize it. The remaining 48 specified the criticisms shown in Table 5.

While the most frequent single criticism, of preferential treatment, reflected the vested interests of the co-workers, most of the other criticisms are "unselfish", reflecting concern for the effectiveness of the program, and such things as its effects on the northern trainees.

The co-workers were asked, "Do you feel personally affected by the Northern Training Program?" Over 70 percent answered "no", 24 percent answered "yes", and the remainder said they did not know. In response to a further question, "How do you feel affected?", 12 identified beneficial consequences including enjoyment of teaching or opportunities which teaching gave to review their own knowledge (eight), and enjoyment of contact with northerners (four). Ten men reported negative consequences, including more work as a result of the program (eight) and resentment at the preferential treatment

TABLE 5: Co-Workers' Criticisms of the Nortran Program

Criticisms Made	Respondents	
	N	Percent
Preferential treatment of northern trainees	12	27
Lack of supervision and discipline	8	18
Training was ineffective because it was disorganized, too rushed	9	20
It should be open only to northern Natives	4	9
Requires northerners to make a difficult adjustment	7	15
Other criticisms	5	11
Total Repondents	45	100

northerners receive (two). The latter group were asked further, "What should or could be done to change matters so that you are not personally affected?" Only five suggestions were received: equal treatment of northerners and non-northerners (three), equal benefits for both (one), and the provision of extra help on the job (one).

All were asked "Do you feel that having a northern trainee in the group affects your work crew in any way?" Sixty percent said that it did not, 35 percent said that it did, and the remainder failed to answer. Those who answered affirmatively were also asked how the crew was affected. The eighteen co-workers who responded mentioned detrimental effects on work (seven) and on morale (eleven). Eight mentioned positive effects, six saying they enriched or livened up the crew, and five reported that the northerners were good workers.

The co-workers were further asked, "If you had your choice, would you prefer to work in a group without northern trainees?" Forty-three percent said that they would not prefer that, 7 percent said they would prefer a group without a northern trainee, 21 percent said they would prefer a crew without any trainees (northern or southern), and 26 percent said they did not care. Thus, only one-fourth reported preferring a group without trainees, and among these only one in four explicitly rejected northern trainees.

We further asked the co-workers if they thought there were any disadvantages in the training program for the northern trainees. Surprisingly, 23 men said that there were, 32 said there were not, and the remainder did not answer. The disadvantages all reflect concern for the northerners' situation, including their lack of familiarity with the dominant culture (nine), their relative lack of experience and education (seven), the discrimination they experienced (three), their unchallenging training experiences (two), and the training failure two co-workers feared the northerners would experience.

In order to further ascertain the reactions of the co-workers to the Northern Training Program and to the individual trainees they worked with, we asked for their agreement or disagreement with a number of provocative statements posing sensitive issues for workers generally. These issues, and the co-workers responses, are shown in Table 6. These responses show that most of the co-workers interviewed expressed little hostility toward the trainees, or their effects on the work situation.

### Assessments of the Trainees

A number of questions were asked the co-workers probing their perceptions and their assessments of the trainees. Such information was obtained for 65 of the 77 trainees still in the program, and for 17 of the 34 trainees who had dropped out of the program as of September 1974.

Our data show generally that the co-workers found the trainees to be friendly (52 percent), considerate (62 percent), trying hard to do well (53 percent) and interested in the operation (55 percent). There were virtually no differences in the perceptions or ratings of the trainees who were continuing, and those who had dropped out of the program. On the basis of the answers

TABLE 6: Co-Workers' Responses to Provocative Statements Concerning Nortran Trainees

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total Respondents
"I have to work harder because we have a Northern trainee in our group."	3%	16%	5%	50%	25%	60
"The trainee sometimes threatens the safety of our group."	8%	20%	8%	41%	23%	49
"The field foreman has to spend too much time with the trainee."	0%	5%	2%	63%	30%	56
"I prefer the trainee's company to working alone."	13%	55%	14%	11%	7%	55

given to the specific questions which were asked, and the comments which were volunteered about specific trainees, we conclude that the trainees were favorably seen and quite well accepted by the co-workers in their work situations.

Co-workers who had known a trainee who had dropped out of the program were asked if they were "sorry to see him go, or was it sort of good riddance?" Ten men said they were sorry, three said it did not matter, and three said they were glad. Those who said they were sorry gave as their reason that he showed good promise (5), that he was passing up a good opportunity (2), that the co-worker was sorry to see him go because he liked the trainee (2), and the co-worker was sorry the trainee got "mixed up in something questionable" (1). Two men said they tried to encourage the trainee to stay on the job, and five said they had no chance to do so. Of the three who said they were happy to see him go, one gave as his reason that it was better for the trainee and the crew for him to leave, and the other two mentioned his unpleasantness on the job. These answers generally suggest sympathetic concern on the part of many co-workers for trainees who dropped out.

The co-workers were given an opportunity to make comments reflecting a general assessment of the trainees, including both those continuing and those

TABLE 7: General Assessments of Trainees in the Program and of Terminated Trainees Given By Their Co-Workers

Assessment Comment	N	%
Positive Personal Characteristics	40	11.7
Negative Personal Characteristics	38	11.1
Personal Problems	22	6.4
Positive Adjustment to Work Location	95	27.8
Negative Adjustment to Work Location	17	5.0
Positive Work Performance	91	26.6
Negative Work Performance	25	7.3
Miscellaneous	14	4.1
Total Comments	342	100.0

who had dropped out of the program. A tabulation of these comments, found in Table 7, shows that positive comments were consistently more numerous than negative ones, particularly in respect to the trainees' adjustment to the work location and their work performance.

#### Suggestions of Co-Workers

At the end of the interview, the co-workers were asked if there were any other observations or suggestions they would like to make about the program. Forty-two men made a total of 75 comments. The largest single number (22) were comments concerning arrangements which worked well, or suggestions for improving the training program. Nineteen comments were essentially extraneous, eighteen were generally positive about the program, eight described problems in the operation of the program which the co-workers had observed or believed to be true. Five men made comments which were sympathetic to the situation faced by the trainees, three men identified communication problems, and one made a protesting comment.

A total of 22 improvements in the program were suggested by the co-workers. Seven had to do with improvements in the training program, six dealt with the screening of trainees, six with the orientation of trainees, four with the special benefits which the trainees received, and three with the time or pacing of the program. It is noteworthy that the vast majority of these suggestions had to do with improving the quality of the training program or the situation of the trainee. Few were concerned with defending the vested interests of the white co-workers, or easing the demands made on them.

Cross-tabulation analyses show that there are differences in how co-workers perceived the Nortran program in terms of their background characteristics, specifically their age, marital status, occupational group, years of employment,

region in which their work site was located, and their knowledge of the Northern Training Program.<sup>1</sup> We found, generally, that those with the most negative attitudes toward the program tended to be between the ages of 30 and 34, married, employed in the Delta region, working in semi-skilled occupations, had been working for their current employer for between four and six years, and knew little about the program. These attitudes toward the program seem to reflect the different involvement patterns of various kinds of co-workers, and the consequences which the Nortran Training Program may have on their career patterns, their occupational activities, and the authority structure under which they work. That is, it is probably the older men in semi-skilled occupations, who were working in the North when the study was conducted, who were most vulnerable to displacement by the northerners they were helping to train. The long 12 hour work shift found in the Delta left little time for socializing after work, and their lack of knowledge about the program meant that they were usually unaware of the reasons for its existence.

### The Trainees' Reports

Data from interviews with the trainees themselves tend to substantiate the reports of the co-workers by showing that the trainees indeed perceived their co-workers as helpful and friendly: As their answers to a number of questions demonstrate, almost all the trainees reported that they enjoyed very good relationships with their work mates. Specifically, the trainees said that when they started work on the job, they found their co-workers to be cooperative (75 percent "very much", 18 percent "somewhat"), and friendly (80 percent "very much", 20 percent "somewhat"). Very few found the co-workers to be indifferent (10 percent "somewhat"), hostile (6 percent "somewhat") or suspicious (4 percent "very much", 8 percent "somewhat"). Thus, at least three-fourths felt that they received a friendly, cooperative reception from their new work mates. Hostility and suspicion were apparently encountered by very few.

This impression is further supported by answers to the question, "How many of the crew seemed to accept you as one of them when you first started work?" Eighty-five percent said they felt accepted by all (40 percent) or almost all (45 percent). Eight percent felt accepted by some, 7 percent by a few, and one trainee reported that no one had accepted him. Ninety-eight percent said they now felt accepted by all (63 percent) or almost all (35 percent) of the work crew. One man said he now felt accepted by some, and one felt accepted by one of his work crew members.

When asked, "Do you feel that you can relax and joke with your fellow workers?", 50 percent said "definitely yes", 47 percent said "yes" and three percent said "no". To the question, "How many of your fellow workers do you really like?", 46 percent said "all", 44 percent said "most", 6 percent said "some", one said "none" and two did not respond.

### SUMMARY AND DISCUSSION

The literature provides a clear basis for anticipating that when certain

employees are given special material benefits and special promotional advantages in contrast to other workers, the latter will react with hostility against the privileged recipients. We have presented data on an employment situation where there were differentials in benefits and promotional opportunities favoring native workers, but where the expected hostile, prejudicial response was not commonly found among the co-workers denied these special advantages. This is particularly noteworthy as very few of the co-workers interviewed knew the rationale for the Nortran Training Program.

Our data show that while most of the co-workers did not have comprehensive knowledge of the benefits which the trainees received, most were aware of at least one or two. Furthermore, most co-workers felt the trainees received a variety of forms of special treatment on the job. Nevertheless, the data show that the co-workers were generally favorably disposed towards the privileged trainees, and were so perceived by the latter. When interviewed, the co-workers generally described the trainees as considerate, trying hard to do well, and interested in the operation. A strong majority of the co-workers expressed favorable reactions towards the Nortran program. While many voiced criticisms of it, most of these reflected concerns about the effectiveness of the program, rather than a defence of the vested interests of the co-worker. Almost all felt that the program was justified.

Similarly, a majority of the responding co-workers felt that the special benefits and special treatment which trainees received were justified. Rather than seizing the opportunity to embrace plausible criticisms, strong majorities denied that they had to work harder when there was a northern trainee in their crew, that the trainees threatened the safety of the group, or that the field foreman spent too much time with the trainee. Most said they preferred working with a trainee to working alone.

When co-workers made suggestions relating to the program, which they did with surprising frequency, a large majority of them related to improving the situations and the training experiences of the trainees. Few sought to safeguard the vested interests of the co-workers which are, objectively, jeopardized by key aspects of the Nortran program.

We must conclude that, generally, this training program has not elicited the prejudicial, hostile reactions from the co-workers who were, in fact, responsible for most of the actual training, which the literature would lead us to expect. What is the reason for this surprising finding?

We can begin by identifying a number of possible reasons which are not valid. The acceptance of the program and the trainees by the co-workers cannot be explained by their having been very well oriented to the goals and procedures of the Nortran program, for in many cases the co-workers received little, if any, briefing prior to the arrival of the trainee on the scene. Nor is it explained by the fact that co-workers were paid "training bonuses" for their part in the training program; no such bonuses were paid. The prospect of accelerated advancement is not a relevant explanation either. Indeed, not only were they not told by management that their success in training the northerners would be a basis for speedy promotion, but some were aware that the more effective they

were in training the northerners, the greater the probability that these northerners would be promoted ahead of the co-workers.

Rather, the explanation appears to lie in certain aspects of continuous process industries in general, and of the hydrocarbon industry in particular. These aspects include the then current economic prospects, the size of the work group, the nature of training procedures, and the nature of work schedules and work pressures within the gas and pipeline industries. Each of these will be discussed briefly.

It is certainly relevant that the gas industry was expanding rather rapidly at the time that this study was made. Experienced workers, whether skilled or unskilled, were in relatively short supply, and advancement came rapidly. Thus, the co-workers had no basis for fearing that they might be displaced from their jobs, and indeed had little basis for fearing loss of advancement opportunities as a result of the Nortran program. Myrdal remarked of working class prejudice that "when the feed trough is empty, the horses will bite each other" (Myrdal, 1944). It is important that at the time this study was made, the "feed trough" in the gas industry in Alberta was far from empty.

There is substantial research to suggest that the quality of interaction is very significantly affected by the size of the interacting group. Groups of four to six members appear to be particularly satisfactory in terms of friendliness, intimacy, emotional support, and providing an optimum climate for socialization and informal instruction of members (Homans, 1951). Over three-fourths of the trainees for whom we have data were assigned to work groups which fell within this range.

A large proportion of the blue-collar work positions within the gas industry are positions demanding a great deal of experience. The reason is that many of them involve monitoring gauges, and it is important to know what to do, quickly, in the event of an emergency. Other positions involve tending well-head equipment, where again a wealth of experience is desirable in knowing what kinds of adjustments to make under various conditions. As a result, there is heavy dependency on apprentice-like training, where new men are assigned to a crew of some sort to learn from working with the crew. Because all of the others in the crew learned the same way, and many may indeed be still learning, there is typically little overt concern with status differences, and there is usually easy acceptance of the new recruit into the fellowship of the group.

The nature of work schedules in the gas industry is particularly consequential here, and is characteristic of other continuous process industries as well. Very frequently there is little immediately pressing work to be done by a crew. Its most important obligation typically is to serve as a standby crew in case of breakdown or emergency. It also commonly performs preventive maintenance, equipment adjustment, and inspection or cleaning chores. As a result, a crew often has quite a bit of leisure time available to sit around, drink coffee, and "shoot the bull". In effect then, its task preoccupation is frequently minimal, thus minimizing the visibility of the subordinate status of the trainees, and maximizing the probability that friendly relationships will emerge and strengthen.

All of these features of the gas industry - the economic prospects, the size of the work group, the nature of training procedures, and the relaxed work pressures - tend to interact and strengthen the probability that adequately personable trainees, even northern trainees under the discriminatory auspices of the Nortran program, will be given a friendly welcome and helpful guidance.

The implication of this research is to reiterate the importance of many variables in the structural context of majority group-minority group interaction, in determining whether the consequence is an increase in hostility, or friendly association.

#### NOTES

1. The six tables on which this discussion is based could not be reproduced here, but the author will send them to interested readers on request.

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