

ETHNIC COMPOSITION AND PERFORMANCE IN MARKETING STUDENT GROUP PROJECTS

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ABSTRACT

Students often complain that they have more difficulties working with students of different ethnic heritage in group projects. However, a comparison between the group project grades and individual work grades of 518 students in 96 international marketing project groups over five years reveals that student group performance does not appear to be adversely affected by the ethnic mix of group members.

INTRODUCTION

Universities in Canada have a substantial number of visible ethnic minority students. In the author's Faculty 15 years ago, there were about 15 to 20% of students being visible minorities. Over the years, this percentage has steadily increased, and has now doubled to between 30 and 40%. Among visible minority students, about one-half is of Chinese ethnic origin (from China, Hong Kong, Singapore and Taiwan), one quarter of other Asian origin (from India, Korea, Malaysia, Pakistan, and the Philippines) and the remaining one-quarter of Latin American, African, Eastern European and Middle-Eastern origins.

Fifteen years ago when the author first joined the Faculty, most of the visible ethnic minority students were foreign students. But today this is no longer the case. Instead, the majority of visible minority students in the classroom are naturalized or second generation Canadians who are registered as local students. In Canada visible ethnic minorities constitute a substantial proportion of the population. Because of an open door policy, a large number of new immigrants were admitted into Canada in the 1970s and 1980s, and this contributed to the rapid increase in ethnic minority students in Canadian universities in the last several years. On top of that, the drive toward more internationalization in its curriculum and in its student population has resulted in the author's Faculty getting into formal student exchange programs with close to a dozen foreign universities in the last five years. In the course instructed by the author (International Marketing) about 10 to 15% of students are foreign exchange students.

The presence of so many visible minority students in the course has drawn the author's interest on how

well they work together with local students in group projects. The purpose of this paper is to examine whether student group project performance is affected by the ethnic mix of group members.

BACKGROUND AND LITERATURE

Group projects are widely used in teaching marketing courses. As an instruction tool group projects have certain benefits and limitations, and these have been well discussed in marketing, education and socio-psychology literature. There have also been numerous studies comparing group behavior of individuals with different socio-cultural backgrounds. For example, when compared to individual behavior, group productivity in groups from collectivist societies is found to be either the same or higher (Earley 1989, 1993; Gabrenya, Latane and Wang 1983). In contrast, compared to individual productivity, group productivity is diminished in groups formed in individualistic cultures. Even within individualistic cultures, individual group members' inclinations toward collectivism or individualism affect intra-group cooperation. Wagner's (1995) study using U.S. students found that differences among individual students with respect to their individualism-collectivism have both main and moderator effects on cooperation in those groups. Students attending competitive business schools in individualistic cultures may lack the necessary interpersonal skills and cooperative attitudes needed to make group work successful (Sutton 1995). While diverse groups may produce higher quality solutions, these groups generally have greater interpersonal and communication problems to overcome (Kirchmeyer 1993). Weighing the pros and cons of diversity in groups, Bass (1980) suggests that if a task requires a single skill, then a homogeneous group will perform better. However, if a group's task is more complex and requires multiple skills and creativity, a heterogeneous group is preferable.

There is also no shortage of discussions on what affects group project quality and how to improve group performance. Because group project quality is strongly affected by problems of specialization of labor and collective actions, McCorkle et al. (1999) suggest that instructors should re-examine the effectiveness of group projects in developing discipline related knowledge and skills. To better monitor group project work, they recommend the use of interim reports,

individually assigned roles, personal contribution files, progress reports, peer evaluations and time sheets. As to how individual members' characteristics are related to group project quality, the study by Bacon, Stewart and Stewart-Belle (1998) reveals that group size and gender diversity have little or no effect on group performance. Among graduate student groups, those with moderate amount of national diversity outperform those with high or no national diversity. Also, and not surprisingly, group performance can be predicted by the average ability of the group members.

In the study by Bacon, Stewart and Stewart-Belle (1998), the second hypothesis states that: "The relationship between nationality diversity and team performance will follow an inverted U-shaped pattern where teams with a moderate level of nationality diversity will outperform teams with high or no nationality diversity." This hypothesis is based upon the beliefs that increased diversity offers direct experiential benefits to students by exposing them to different points of views (Mello 1993), by enabling them to have a multicultural experience (Williams, Beard and Rymer 1991) and by generating more alternatives to consider in problem solving. According to Bacon, Stewart and Stewart-Belle (1998), this hypothesis is supported at the graduate level, but not at the undergraduate level. Among the graduate groups, a slight level of diversity (with about 17% foreign students) results in greater team performance than does a high level of diversity, while no diversity at all (0% foreign students) is associated with a lower performance level than a moderate or high level of diversity. A high level of diversity (e.g., 100% international) is not significantly associated with higher or lower performance.

Bacon, Stewart and Stewart-Belle's (1998) graduate sample consists of 49 groups of 122 graduate students over a 7-year period. This averages only 2.5 students per group, 7 groups a year. Because of the small numbers, one may question how valid are the findings. Also missing in the analysis is the students' age, work experience and family status that may conceivably have a greater impact on their behavior and attitudes in graduate student groups than nationality or gender. Finally, 'nationality' is not a useful variable in this context in the U.S. environment. The U.S. students, though they are of the same nationality, may be of different ethnicity. It would be somewhat dubious to assume that they have the same individual behavior and attitudes when they work in groups because they are of U.S. nationality.

The examination in this paper is parallel to but not the same as the one by Bacon, Stewart and Stewart-Belle (1998) in their second hypothesis. Instead of

'nationality', what is examined here is 'ethnicity'. The belief is that, if at all, what influences one's work attitude, behavior and effectiveness in groups within a national environment is 'ethnicity', not 'nationality'. This is particularly true in the Canadian environment. Canada has a multicultural society and, unlike the U.S., encourages its people to maintain their ethnic cultural heritage and does not adopt policies to enhance or enforce cultural assimilation.

SAMPLES

The samples used in the analysis consist of 518 students in project groups in an international marketing course taught by the author from 1995/6 to 1999/2000. The group project forms part of the course requirements. With few exceptions, all students in this course are final year students in the B.Comm. program and they are quite homogenous in age, work experience and family status. Though the group project requirement details changed somewhat during the years, it is essentially an examination of the business environment in a selected foreign country, its prospect as a market for Canadian products, and the marketing mix considerations for Canadian companies marketing to/in that country. The work requires mostly library research. Field work is not required though the groups are not precluded from interviewing government officials or company executives who are familiar with the foreign country or have had experience marketing to/in that country. The group project constitutes 25% of the final grade. Students self-select their group mates, but the instructor has the right to assign students to groups when they cannot form their own, or when it is necessary to make up a group.

In the author's institution, senior marketing courses have an enrollment cap of 35 students. Each group is supposed to have five members each. Because the actual class size may be more or fewer than 35 and students may drop out of the course after project groups are formed, some groups have ended up with having four or six members, and a few with only three members. In order that group performance comparisons are not affected by group size, only project groups with either five or four members are included in the sample. (In the study by Bacon, Stewart and Stewart-Belle (1998), group size does not seem to have a significant effect on group performance; but in their sample of 221 groups, there are 39 groups with only one member, and 51 groups with just two members.) The samples used in the analysis are given in Table 1.

TABLE 1
Samples

	Class Sections	Students	Project Groups
95/96	3	98	17
96/97	3	89	18
97/98	3	113	18
98/99	2	72	19
99/00	4	146	29
Total	15	518	96

Note: There are a total of 105 project groups, but 9 groups are excluded in the sample because they have more than five or less than four group members.

ANALYSIS AND RESULTS

In analysing the association between group project performance and the ethnic mix of group members, the project groups are classified into three types -- local student groups (LSGs) with all members being of Western European origin mostly locally born and educated, mixed ethnic groups (MEGs) having at least one visible ethnic minority member in the group, and ethnic minority groups (EMGs) with all group members being of visible ethnic minorities. The nationality of the ethnic minority members is not considered, and there is no distinction made between MEGs with one, two or three ethnic minority members. In the final sample of 96 project groups, 29 are LSGs, 54 are MEGs and 13 are EMGs.

In order to eliminate the effect of intellectual qualities and abilities of individual members on group work performance, a weighted group performance score is used in comparing group performance. This score is obtained by dividing the group project mark by the average of the individual members' marks in quizzes, mid-term test and the final examination that together comprise 65% of the final grade. (The remaining 10% of the final grade is for attendance and participation.) For example, if the average of the individuals' marks is 80% and the group project mark is 80%, then the group performance score would be 1.0. Any group performance score greater than 1.0 would indicate that the group as a whole has performed better than the members as individuals, and vice versa if it is less than 1.0. A higher group performance score does not mean the individuals in the group have received a final grade higher than those in a group with a lower group performance score. For instance, if the average of the individuals' marks is 70% and the group project mark is 77%, then the group performance score is 1.1. This is

higher than the 1.0 in the previous example, but it only indicates that the second group on the whole performs better in group work than as individuals compared to the first group with a group performance score of 1.0. The group performance scores for all the groups in the sample are given in Table 2.

TABLE 2
Group Performance Scores

Scores	LSGs	MEGs	EMGs	Total
Below 0.850	4	4	0	8
0.850 - 0.899	1	2	0	3
0.900 - 0.949	2	4	4	10
0.950 - 0.999	5	7	4	16
1.000 - 1.049	7	14	3	24
1.050 - 1.099	2	9	1	12
1.100 - 1.140	3	6	1	10
Above 1.140	5	8	0	13
Total	29	54	13	96

Note: LSGs -- local student groups; MEGs -- mixed ethnic groups; EMGs -- ethnic minority groups.

A couple of observations can be made on these scores. For 40 groups, or more than 40% of all the groups, the group project marks are within 5% of the individual members' average marks. Another 22 groups are between 5% and 10%. Taken together, this means that 62 groups, or about two-thirds of all groups, have group project marks that do not deviate from the individual members' average marks by more than 10%. In other words, group performance is closely related to group members' individual intellectual qualities and abilities, and this is consistent with the finding by Bacon, Stewart and Stewart-Belle (1999; Hypothesis 1).

There is even greater tendency for the EMGs to have comparable group project marks and individual average marks. Only one out of 13 groups has a deviation of more than 10%. On the whole, group members in these EMGs perform not as well in groups as they are as individuals -- there are 8 groups with scores below 1.000 versus 5 groups with scores above 1.0. For the LSGs and MEGs the group project marks are on the whole higher than individual members' average marks, indicating that members in these groups as a whole perform better in groups than as individuals. This is particularly true for the MEGs. Thirty-seven out of 54 or more than two-thirds of the MEGs have group performance scores above 1.0, compared to 17 with below 1.0 scores.

Statistical tests on the distribution of the group performance scores for the three different groups reveal that the scores for the MEGs are significantly better than those of the EMGs. And even though the differences between the MEGs and the LSGs are not statistically significant, the scores are also clearly better in the former than in the latter. Hence, the results lend support to the belief that increased diversity on balance contributes positively to group work (Mello 1993; Williams, Beard and Rymer 1991; Kirchmeyer 1993).

LIMITATIONS AND CONCLUDING REMARKS

There is an obvious limitation to the preceding analysis that poses a question mark on its validity. This concerns how the ethnicity of a student is identified and how a group is classified. Because of the crude identification of ethnicity, even those visible ethnic minority students who were born in Canada and have fully assimilated into the local culture are considered as ethnic minority students. At the same time, a new immigrant from the U.K., for example, would be considered as 'local'. Even though such incidence is rare, it can be argued that the sample subjects are not 'pure'. Unfortunately, probing further into the degree of cultural assimilation and the different ethnic origin of students is an impossible task given the proprietary nature and sensitiveness of the information that is required. In the end, the author only relied on the appearance, the family name and registration record (for exchange students) to identify whether or not a student is an ethnic minority student.

In these days of heightened political correctness, ethnicity is a sensitive subject of investigation especially when one tries to associate it with abilities and performance. But there is no hiding from the fact that one's ethnicity, and consequently one's cultural heritage, has significant influence on one's mentality and behavior in work groups. It also affects whether one works better as individuals, or in groups.

In the many years as instructor of an international marketing course that has attracted many students of different ethnicity, the author's interest on this subject was aroused by the comments he received from students on group work and on their group mates. These comments are either expressed orally in private conversations, or in confidential peer evaluations (submitted before the group project marks and final grades are posted). For project groups with members of different ethnicity, the comments are more often negative, and are complaints on the difficulties of working together with group mates of different cultural mentality. Clearly,

there have been more conflicts in these heterogeneous groups than in groups with ethnic homogeneity. This has prompted the author to look into the grades to see if such conflicts have a negative effect on group project performance. This does not appear to be the case. Instead, in most instances the conflicts have motivated the group members to put more effort into the group project and to do a better job. From the teaching perspective what the author has learned from this exercise is that project groups with members of different ethnicity are often a good learning experience for students and should be encouraged.

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