The Impact of Diversity on the Performance of a Learning and Integration-Oriented Group Work: An Exploratory Study*

Eunsang Yoon**
Ohsoo Park***

ABSTRACT

Group work is widely employed for the purpose of enhancing student learning in market analysis and planning. This exploratory study reveals that the association between diversity, intra-group interaction, and group-work outcome is contingent upon the group's diversity characteristics and work orientation. In the case of MBA groups with a high degree of membership diversity and an orientation toward integration more than learning, functional diversity had a significant impact on the quality of

intra-group interaction, which in turn had a significant impact on the learning of individual members and the quality of the group project. In the case of undergraduate groups with a low degree of membership diversity and an orientation toward learning more than integration, neither the functional nor the demographic diversity had a significant impact on the quality of intra-group interaction, which had a significant impact on the quality of the group project but no impact on the individual's learning.

I. INTRODUCTION

Empirical findings have been inconclusive about the association between the membership diversity and the performance of a work group (Cohen and Bailey 1997, Webber and Donahue 2001). For example, Thomas and Ely (2001) report that a work group achieves performance gains attributable to diversity when it has an integration-learning perspective. In contrast, Harrison et al. (2002) find that a high level of functional diversity hinders group work due to increased conflicts among the group members. This inconclusiveness of research findings may be due to the lack of data for empirical testing (Milliken and Martins 1996) or the partial view of diversity dynamics (Webber and Donahue 2001). This paper re-examines the association between the diversity, interaction, and performance of a student group developing a comprehensive marketing plan as a course requirement. Discussion focuses on how to capitalize on the potential gains of membership diversity for accomplishing a group project effectively.

Section 2 reviews the literature addressing the impact of diversity on the process and performance of group work. Section 3 develops exploratory hypotheses that relate diversity and interaction to the performance of a group. Then, Section 4 reports the survey data compiled from undergraduate and MBA

classes in which students worked for developing a comprehensive marketing plan as a course requirement. Significant differences were observed between the undergraduate and MBA groups. For example, the MBA groups had a higher degree of diversity in demographic background and functional expertise than the undergraduate groups. For interaction among the group members, the MBA students relied more on e-mail exchanges than face-to-face meetings, while the undergraduate students favored face-to-face interaction. Regarding the main orientation of group work, MBA groups shared special emphasis on the integration of the members' industry experience for accomplishing the project effectively, while the undergraduate groups focused on individual learning from the project and completion of the step-by-step course requirements. The results of correlation analysis reveal that the association between membership diversity, intra-group interaction, and group- work performance is contingent upon the degree of membership diversity and the main orientation of group work. Section 5 summarizes the findings and discusses their implications. Section 6 concludes with suggestions on future research directions.

II. A REVIEW OF THE LITERATURE

Different attributes of diversity have different impacts on the functioning and performance of a work group (Mullen and Cooper 1994, Lawrence 1997, Harrison et al. 2002). The attributes of membership diversity are often sorted into two types: functional attributes and demographics-related cultural attributes (Jackson et al. 1995, Webber and Donahue 2001). Attributes of functional diversity include knowledge, experience, and skills that are closely related to the tasks of a work group (Sessa & Jackson 1995, Milliken and Martins 1996, Simons et al. 1999). Pelled (1996) and Gomes et al. (2003)

argue that these functional attributes tend to have a strong impact on the process and performance of a work group.

Attributes of cultural diversity include demographic characteristics such as age, gender, and race that are not directly related to the tasks of a work group (Cox 1991, Sessa and Jackson 1995, Pelled et al. 1999). Empirical findings have been inconclusive about the association between demographic diversity and performance of a work group (Cohen and Bailey 1997). For example, Simons et al. (1999) suggest that less job-related demographic diversity, such as age or gender, has a weaker impact on a group's work performance than more job-related demographic diversity, such as education or tenure. But Webber and Donahue (2001) report in their meta-analysis that the type of diversity in terms of job-relatedness has no clear relationship with the process or performance of a group, suggesting that this relationship may be conditional.

Motivation has been examined as a factor moderating the impact of diversity on the functioning and performance of a work group (Williams and O'Reilly 1998, Thomas and Ely 2001). The literature has suggested that the motivation to achieve can heighten the feeling of effectiveness among the group members (Lind and Tyler 1998), lead to a high-degree of trust, risk taking, or psychological safety (Edmondson 1993), and stimulate a work group to build a learning environment (Page and Donelan 2003). Argyris and Schon (1978) and Lawrence (1997) suggest that a demographically diverse group shows a high learning atmosphere within the group. Sethi et al. (2002) also support that the motivation to work together is essential for a group to translate its functional diversity into increased effectiveness.

Diversity may lead to more beneficial outcomes when the members of a work group share common goals and values (Chatman et al. 1998, Jehn et al. 1999). Thomas and Ely (1996) propose that the impact of diversity on the functioning of a work group is influenced by the group's *diversity perspective* or the group members' normative beliefs and expectations about diversity and

its role in their work group. They identify three types of diversity perspectives for a work group: (a) *integration and learning perspective,* which links diversity to work processes in a manner that makes diversity a resource for learning and adaptive change; (b) *access and legitimacy perspective,* which utilizes diversity as a way of gaining access to and legitimacy with the constituencies of the work group, and (c) *discrimination and fairness perspective,* which believes a diverse workforce as a moral imperative to ensure societal justice and fairness. Thomas and Ely (2001) conduct an empirical study to examine how these three perspectives toward diversity are associated with the functioning of a work group. Among these three perspectives on diversity, they found that only the integration-learning perspective has achieved sustainable performance gains attributable to diversity. The members of this work group were found to have effectively utilized the diversity of their insights, skills, and experiences as a resource for enhancing the group's capability for learning, adaptability to changes in its work, and the sense of individual and group efficacy.

Aiming to explore the conditionality of the association between diversity and performance, Section 3 develops hypotheses, specifically for learning and integration-oriented group work.

Ⅲ. HYPOTHESES FOR AN EMPERICAL STUDY

3.1 Diversity and Interaction

The argument surrounding the association between diversity and the functioning of a work group is based on the notion that the heterogeneity of backgrounds among the group members leads to the generation of diverse approaches to problem identification, situation analysis, problem solving, and

decision making (Wanous and Toutz 1986, Pelled 1996, Page and Donelan 2003). The literature generally supports that functional heterogeneity in experience or skills facilitates group work by providing diverse task-related knowledge and expertise (Sessa and Jackson 1995, Simons et al. 1999, Gomes et al. 2003), despite the possibility of increased conflict among the group members at a very high level of functional diversity (Greening and Johnson 1996, Harrison et al. 2002). Diversity in knowledge and attitude may also strengthen a group's ability to evaluate environment, generate alternatives, process information, assess outcomes, and communicate with people outside the group (Murray 1989, Wiersema and Bantel 1992, Gomes et al. 2003). The following hypothesis is based on these theoretical propositions and empirical findings.

Hypothesis 1: Diversity in functional background among the members of a learning and integration-oriented work group is positively associated with the quality of interaction among the group members.

Attributes of demographic diversity have been reported as being loosely related to the functioning of a work group (Pelled et al. 1999, Sarker, Valacich and Sarker 2003). Simons et al. (1999) argue that more job-related diversity such as education or tenure has a greater impact on a group's outcome than less job-related diversity such as age or gender. In contrast, Webber and Donahue (2001) report that the type of diversity in terms of job-relatedness has no relationship with the cohesion or performance of a work group. Hambrick and Mason (1984) and Murray (1989) find that individuals of similar age tend to have similar values or perspectives and show a high level of cohesiveness. Wiersema and Bantel (1992) report that the benefits of increased age heterogeneity are greater at moderate levels and taper off in

extreme cases.

Heterogeneity in the length of job experience may result in a reduced search for information or solution and threat-rigidity such as inertia, cohesiveness, and conformity (Ancona and Caldwell 1992, Keck 1997). This so-called tenure heterogeneity may be beneficial for providing differing points of views and developing a larger set of alternative solutions (Wiersema and Bantel 1992), but may either add cognitive diversity, interfere with the communication process or cause inter-functional conflict (Bantel and Jackson 1989, O'Reilly, Snyder, and Boothe 1993, Smith et al. 1994). The impact of ethnic or language-background diversity is reported as situation specific, i.e. varying across the project type or degree of diversity (Cox, Lobel, and McLeod 1991, Watson, Kumar, and Michaelsen 1993), but often result in negative outcomes (Shaw 1983, Tsui et al. 1992). The following hypothesis is based on these mixed empirical evidences and theoretical explanations in the literature.

Hypothesis 2: Diversity in demographic characteristics of a learning and integration-oriented work group has no association with the quality of interaction among the group members.

3.2 Interaction and Performance

Effective interaction among the members of a work group is the key for enhancing the learning of individual members and completing the group project successfully (Song and Dyer 1995, Sivadas and Dwyer 2000). Interactive effort helps a work group achieve a better outcome through effectively monitoring how the internal and external forces evolve, estimating how changes in those forces would affect the progress and outcome of the project, and deciding how to modify the project schedules or the approaches to the project (Qureshi and Vogel 2001, Coute 2002, Gomes et al. 2003). Page

and Donelan (2003) argue that the interaction among the group members is critical for building a learning culture and enhancing the educational achievement. Yoon (2001) also reports that a successful work group is characterized as maintaining an efficient interaction mechanism that helps achieve optimal transitions through the whole process of project management. When the members of a work group share common goals and values, diversity is particularly beneficial to effective group work (Chatman et al. 1998, Jehn et al. 1999). The following two hypotheses are based on these theoretical propositions and empirical findings.

Hypothesis 3a: The quality of interaction among the members of a learning and integration-oriented work group is positively associated with the quality of individual learning.

Hypothesis 3b: The quality of interaction among the members of a learning and integration-oriented work group is positively associated with the quality of the group project.

3.3 Measures of Group-Work Performance: Learning and Integration

Previous research has suggested that the success of a work group hinges upon the group members' ability to employ their differences in knowledge and perspective (Bailyn 1993, Jehn et al. 1999). A work group can effectively integrate the outcomes of individual efforts through mutual learning among them, e.g. embracing others' knowledge and experience rather than avoiding disagreements (Gruenfeld et al. 1996, Jehn 1999). The literature in education has reported that group work is an important learning tool (Pascarella et al. 1996, Bowen et al. 1999). Gurin et al. (2002) points out that diversity in the classroom is essential for the student's learning of human relations and analytic skills. As mentioned earlier, Thomas and Ely (2001)'s study supports

that a learning and integration-oriented group achieves high performance attributable to mutual learning among group members. The following hypothesis is based on these reports in the literature regarding the association between individual learning and the group project.

Hypothesis 4: The quality of individual learning from group work is positively associated with the quality of the group project.

3.4 A Conceptual Model

⟨Figure 1⟩ combines the hypotheses proposed above into a conceptual model. The key proposition is that functional or demographic diversity has an impact on the quality of interaction among the members of a work group (Visart 1979) and the quality of interaction affects group performance in terms of individual learning and group-project quality (Payne 1990). The signs in the model indicate either positive (+) or no (0) association as specified in the hypotheses.

⟨Figure 1⟩ A Conceptual Model of Diversity-Interaction-Performance Association
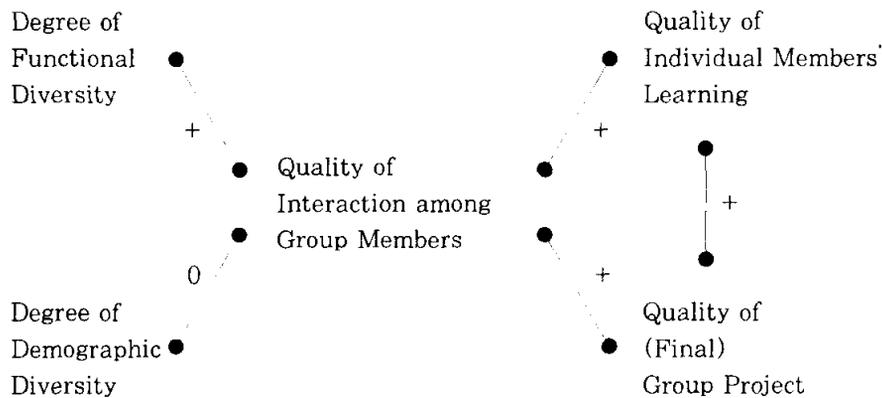
IV. AN EMPIRICAL STUDY

4.1 The Database

The samples for this empirical study were drawn from the students who took a course, *Market Analysis and Planning*, offered for MBA and undergraduate programs. At the closing of each semester between the 1999 and 2002 academic years, the students evaluated the process and outcome of their group work for developing a comprehensive marketing plan as a course requirement. The data was compiled from the responses of 120 students in five senior undergraduate classes and 128 students in five advanced-core MBA classes to a survey questionnaire (Appendix).

⟨TABLE 1⟩ reports the descriptive statistics of the database, showing that undergraduate students were less diversified than MBA students in both demographic and functional diversity. The age ranged from 20 to 35 averaging 22.4 years in the case of undergraduate groups, in comparison with from 22 to 49 averaging 30.7 years in the case of MBA groups. The length of job experience ranged from 0 to 18 averaging 4.4 years in the case of undergraduate groups, in comparison with from 0 to 30 averaging 7.6 years in the case of MBA groups. ⟨TABLE 2⟩ reports how students evaluated the membership diversity of their project group, using a scale of 1 to 7 (1=very different, ..., 4=somewhat different, ..., and 7=not at all different). The averages of these diversity measures ranged from 2.42 to 4.75 in the case of MBA students and from 3.37 to 5.49 in the case of undergraduate students, implying that the MBA groups were (perceived as) more diversified than the undergraduate groups in every area of evaluation. Two-mean (two-tail) test indicated that the difference between undergraduate and MBA groups was statistically significant regarding academic background and job experience at 1% level and career plan at 5% level.

〈TABLE 1〉 Comparison of Demographic and Functional Background between the Undergraduate and MBA Sample Data

Descriptors		Undergraduate	MBA	Total
Sample Size:		120	128	248
Age:	Mean (Range)	22.4(20-35)	30.7(22-49)	26.9(20-49)
Sex:	Male	77	93	170
	Female	43	35	78
Ethnicity:				
	White (non-Latino)	102	95	197
	Asian	9	23	32
	Latino	6	6	12
	Others	3	4	7
Primary Language:				
	English	107	100	207
	Non-English	13	28	41
Area of Major Job Experience:				
	Business	77	25	102
	Engineering	4	43	47
	Administration	30	54	84
	Others	9	6	15
Length of Job Experience (# of Years):				
	Mean (Range)	4.4 (0-18)	7.6 (0-30)	6.3 (0-30)

〈TABLE 2〉 Evaluation of Membership Diversity

"How would you evaluate the membership diversity of your project group?
(1 = very different, …, 4 = somewhat different, …, 7 = not at all different)" Average of the

7-point measures

Areas of Membership Diversity	Undergraduate	MBA
Academic background**	4.77	3.39
Job experience**	3.37	2.42
Career plan*	3.76	2.88
Research skills	3.96	3.63
Ethnic background	4.73	4.05
Second language	5.49	4.75

Two-mean test indicated that the difference between undergraduate and MBA groups was significant at 0.01** or 0.05* level at two-tail.

〈TABLE 3〉 reports students' evaluations of the importance of diversity for accomplishing their group project, using a scale of 1 to 7 (1=very important, ..., 4=somewhat important, ... and 7=not at all important). The average measures ranged from 2.46 to 5.48 for MBA students and from 2.10 to 5.61 for undergraduate students, implying that job experience, research skills, academic background and career plan were (perceived as) important, but ethnic and language background were not (perceived as) important. No significant difference was observed between the MBA and undergraduate groups about the importance of membership diversity in most aspects of diversity other than job experience. For accomplishing the group project, job experience was evaluated as being highly important by the MBA students, but as being moderately important by the undergraduate students. Two-mean (two-tail) test indicated that the difference between the two groups regarding the importance of job experience was statistically significant regarding job at 1% level.

〈TABLE 3〉 Evaluation of the Importance of Membership Diversity

"How important was the membership diversity for accomplishing your group project? (1=very important, ..., 4=somewhat important, ..., 7=not at all important)

| | Average of the 7-point measures | |
Areas of Membership Diversity	Undergraduate	MBA
Academic background	3.43	3.26
Job experience**	3.50	2.48
Career plan	3.60	3.52
Research skills	2.10	2.46
Ethnic background	5.33	5.12
Second language	5.61	5.48

Two-mean test indicated that the difference between undergraduate and MBA groups was significant at 0.01** level at two-tail.

4.2 Measures of Diversity, Interaction, and Performance

In order to develop appropriate measures of membership diversity, intra-group interaction, and project outcomes, an exploratory factor analysis was conducted on the survey data. ⟨TABLE 4⟩ reports the two factors that were identified as underlying the diversity of group membership. Factor 1 consisted of four aspects of functional diversity: academic background, job experience, career plan, and research skills, while Factor 2 consisted of two aspects of demographic diversity: ethnic background and second language.

⟨TABLE 4⟩ Dimensions of Membership Diversity

"How would you evaluate the membership diversity of your project group?
(1=very different, ..., 4=somewhat different, ..., 7=not at all different)"

	Factor Loadings			
Areas of Membership Diversity	Undergraduate		MBA	
	Factor 1	Factor 2	Factor 1	Factor 2
Academic background		.641		.594
Job experience	.811		.847	
Career plan	.844		.828	
Research skills	.564		.445	
Ethnic background		.906		.888
Second language		.914		.891
Variance explained	39.3%	25.3%	35.6%	24.5%

⟨TABLE 5⟩ reports the single factor that was identified as underlying the quality of interaction among the group members. It consisted of all five areas of group activity requiring intra-group interaction: project planning, information search, information analysis, written reporting, and oral presentation. Similarly, single factors were identified as underlying the individual learning ⟨TABLE 6⟩ and the group project ⟨TABLE 7⟩ respectively. The structure of factor loadings for these single factors was similar between the MBA and undergraduate groups across various group-work activities.

〈TABLE 5〉 Dimensions of Intra-Group Interaction

"How would you evaluate the interaction (communication, coordination, and cooperation) among your group members throughout the process of accomplishing your group project? (1=very satisfactory, ..., 4=somewhat satisfactory, ..., 7=not at all satisfactory)"

| | Single Factor Loadings | |
Areas of group interaction	Undergraduate	MBA
Project planning	.851	.924
Information search	.910	.920
Information analysis	.926	.943
Written reporting	.890	.880
Oral reporting	.956	.969
Variance explained	79.6%	86.0%

〈TABLE 6〉 Dimensions of Individual Learning

"How would you evaluate the level of your individual learning from your group project? (1=very satisfactory, ..., 4=somewhat satisfactory, ..., 7=not at all satisfactory)"

| | Single Factor Loadings | |
Areas of individual learning	Undergraduate	MBA
Project planning	.867	.813
Information search	.854	.822
Information analysis	.916	.830
Written reporting	.829	.881
Oral reporting	.767	.865
Variance explained	71.9%	71.0%

〈TABLE 7〉 Dimensions of (Final) Group Project

"How would you evaluate the quality of your (final) group project? (1=very satisfactory, ..., 4=somewhat satisfactory, ..., 7=not at all satisfactory)"

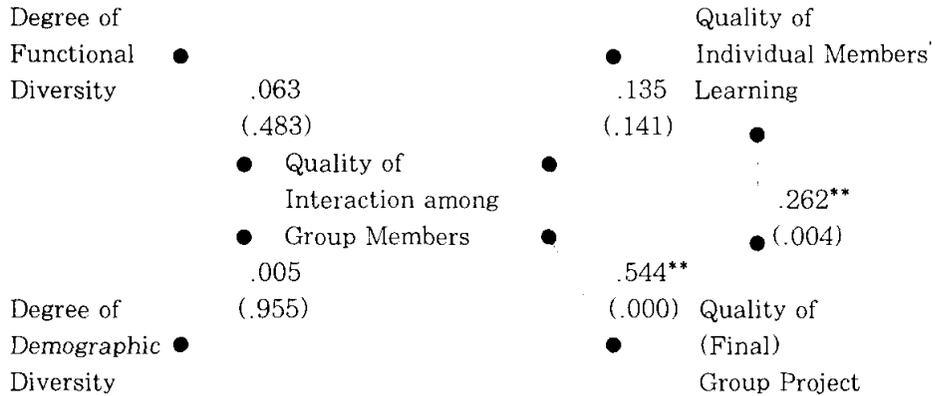| | Single Factor Loadings | |
Areas of project evaluation	Undergraduate	MBA
Project planning	.802	.850
Information search	.909	.862
Information analysis	.861	.853
Written reporting	.896	.910
Oral reporting	.752	.786
Variance explained	71.6%	72.7%

4.3 Correlation Analysis

In order to calibrate the conceptual model in ⟨Figure 1⟩, correlation analysis was conducted on the factor-score data for the key dimensions of the five variables: functional diversity, demographic diversity, intra-group interaction, individual learning, and group-project quality. ⟨Figure 2⟩ reports that the correlation between the learning of individual members and the quality of group project was significant at 1% level for both the undergraduate (0.262) and MBA groups (0.338).

in the case of MBA groups, the correlation was significant between functional diversity and intra-group interaction (0.193) at 5% level. Intra-group interaction was significantly correlated at 1% level with individual learning (0.295) and group-project quality (0.629). In the case of undergraduate groups, the correlation was not significant between functional or demographic diversity and intra-group interaction, but significant between intra-group interaction and group-project quality (0.544) at 1% level. The correlation was significant at 1% level between individual learning and group-project quality for both MBA and undergraduate groups. The results of correlation analysis led us to accept or reject the hypotheses in Section 3 as follows.
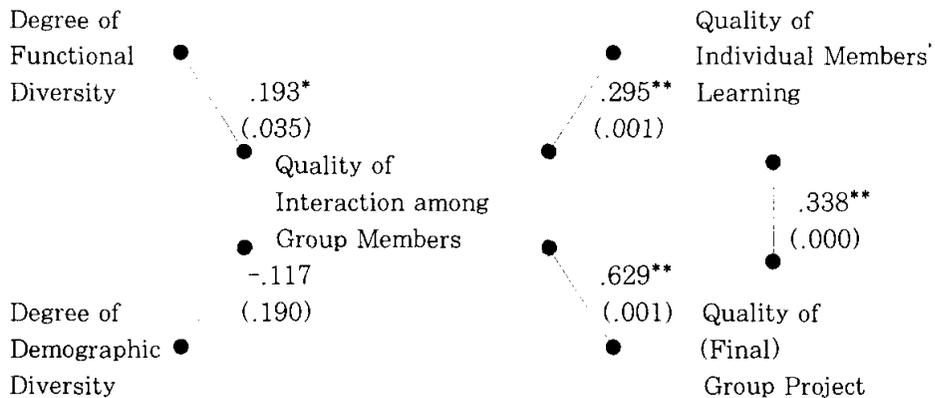
- Hypothesis 1 -- Diversity in functional (often job-related) backgrounds is positively associated with the quality of interaction among the group members — is *rejected* for undergraduate groups, but *accepted* for MBA groups.
- Hypothesis 2 -- Diversity in demographic characteristics has *no* association with the quality of interaction among the group members -- is *accepted* for undergraduate and MBA groups.
- Hypothesis 3a -- The quality of interaction among the members of a work group is positively associated with the quality of individual learning -- is rejected for undergraduate groups, but accepted for MBA groups.

〈Figure 2〉 Correlation Coefficients and Significance Levels

(A) Undergraduate Database

Degree of
Functional ●
Diversity
　　　　.063
　　　　(.483)

● Quality of
　Interaction among
● Group Members
　.005
　(.955)

Degree of
Demographic ●
Diversity

●
　.135
　(.141)

●

●
.544**
(.000)

●

Quality of
Individual Members'
Learning
●
　　.262**
　●(.004)

Quality of
(Final)
Group Project

(B) MBA Database

Degree of
Functional ●
Diversity
　　　　.193*
　　　　(.035)
● Quality of
　Interaction among
● Group Members
　-.117
　(.190)

Degree of
Demographic ●
Diversity

●
.295**
(.001)

●

●
.629**
(.001)

●

Quality of
Individual Members'
Learning

●
　　.338**
　　(.000)
●

Quality of
(Final)
Group Project

Measures of the Variables used for Correlation Analysis

Functional diversity: academic background, job experience, career plan and research skills.
Demographic diversity: ethnic background and primary language.
Group interaction: single-factor of the evaluations of the group interaction in five areas.
Individual learning: single-factor of the individual learning in five aspects.
Group project performance: single-factor of the final group project in five aspects.

●————● : Significant at 0.05 (*) or 0.01 (**) level.
●--------● : Not significant at 0.05 level.

- Hypothesis 3b -- The quality of interaction among the members of a work group is positively associated with the quality of their (final) group project -- is *accepted* for undergraduate and MBA groups.

- Hypothesis 4 -- The quality of individual learning is positively associated with the quality of the group project -- is *accepted* for undergraduate and MBA groups.

Ⅴ. IMPLICATIONS

The results of this exploratory study reveal that the association between membership diversity, interaction, and performance in a learning and integration-oriented group work was contingent upon the level of diversification and the orientation of the work group. MBA students were more diversified demographically or functionally and more oriented toward sharing their industry experience than undergraduate students. This combination of high membership diversity and integration orientation may have been credited to (a) the significant impact of functional diversity on the quality of interaction among the group members, (b) the strong association between the quality of interaction and the performance of group work, and (c) the close correlation between the individual- and group-level work performance.

In contrast, undergraduate students were relatively homogeneous in their functional experience or demographic background and were mainly oriented toward individual learning. This combination of low membership diversity and more of an orientation toward learning than integration may have been credited to (a) the insignificant impact of functional diversity on the quality of interaction among the group members, and (b) the mixed association between the quality of interaction and the performance of group work, i.e. a strong association between the intra-group interaction and the individual learning

and a weak association between the intra-group interaction and the project quality.

The results of this exploratory study also help clarify the proposition by Thomas and Ely (2001), "the members of a work group having a learning and integration-oriented perspective seem to effectively utilize the diversity in their insights, skills and experiences so as to enhance the group's capability for learning, adaptability to changes in its work, and sense for individual learning or group efficacy." This proposition is correctly applicable to the functionally diversified and more integration- than learning-oriented (e.g. MBA) groups that are able to fully capitalize on the potential benefits of the members' functional diversity. In such circumstances, diversity is instrumental for an efficient accomplishment of a group project. However, the same proposition by Thomas and Ely (2001) is not applicable to the demographically or functionally homogeneous and more learning- than integration-oriented (e.g. undergraduate) groups that are not yet well prepared to fully utilize the benefits of membership diversity for accomplishing their group work.

The literature on the functioning of diversity in a classroom environment (Pascarella et al. 1996, Bowen, Bok and Burkhart 1999, Gurin et al. 2002, Page and Donelan 2003) has suggested several guidelines for a group work to inspire the students to make the most of their membership diversity. They include: (a) assisting the students to organize their project groups to be as diversified as possible, (b) leading them to fully recognize the potential benefits of membership diversity, (c) motivating them to appreciate the value of the background and expertise diversity, and (d) encouraging them to capitalize on the inter-group interaction.

As Mills (2003) points our in an exploratory group-work research, successful cooperative learning requires *positive interdependence* that can be established through having students share goals, rewards, and structured tasks and *individual accountability* that can be managed by the instructor using a

consistent grading system. Changing the student's role or responsibility over the process of group work may also foster student participation, collaboration and coordination, and ultimately, enhanced learning and integration.

VI. CONCLUDING REMARKS

Current research is subject to at least two limitations. One is related to the theoretical validity of the suggested model and the other is related to the empirical validity of the data. Future research may resolve these by revising the conceptual correlation model in 〈Figure 1〉 to a path-analytic model that can capture both direct and indirect interactions among the relevant variables. Specifically, diversity variables may have a direct impact on the learning and performance variables as well as an indirect impact through intra-group interaction. Calibration of this model would require a large database. Future research may also expand the current exploratory study into variety of groups in an industry environment. This research will require cross-sectional or longitudinal data from an industry survey to support the project management in the business world.

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Appendix: Questionnaire for a Study of Group Project Process

1. How would you evaluate the membership diversity of your project group?

Areas of evaluation	Highly different		Somewhat different			Not at all different	
Academic major/minor							
Job experience							
Career plan							
Research skills							
Ethnic background							
Personality							
Second language							

2. How important was the membership diversity for accomplishing your group project?

Areas of evaluation	Very important		Somewhat important			Not at all important	
Academic major/minor							
Job experience							
Career plan							
Research skills							
Ethnic background							
Personality							
Second language							

3. How would you evaluate the interaction among your group members throughout the process of accomplishing your group project?

Areas of evaluation	Very satisfactory	Average	Not at all satisfactory
Project planning			
Information search			
Information analysis			
Written reporting			
Oral reporting			

4. How would you evaluate the level of your individual learning from your group project?

Areas of evaluation	Very satisfactory	Average	Not at all satisfactory
Project planning			
Information search			
Information analysis			
Written reporting			
Oral reporting			

5. How would you evaluate the quality of your (final) group project?

Areas of evaluation	Very satisfactory	Average	Not at all satisfactory
Project planning			
Information search			
Information analysis			
Written reporting			
Oral reporting			

6. Information about the Respondent

    (1) Academic field: Major: _____   Minor: _____

    (2) Ethnic background: __ White (non-Latino) __ Asian/Asian American

                                    __ African American __ American Indian

                                    __ Latino   __ Other

    (3) Spoken language: Primary: _____ Secondary: _____

    (4) Job experience: __ Sales/Marketing __ Marketing Research

                                    __ Engineering/Design __ Production

                                    __ Finance/Accounting __ Strategic Planning

                                    __ Own business   __ Others

        Total # of years in those jobs: _____ years

    (5) Sex: __ Male __ Female

    (6) Age: _____

다양성이 학습 및 통합중심의 집단작업 성과에 미치는 효과에 대한 탐색적 연구

윤 은 성*
박 오 수**

요 약

집단작업은 시장분석 및 계획과 관련된 학생 교육 효과 증진 목적으로 많이 사용된다. 본 탐색적 연구는 다양성, 집단 내 상호작용, 집단작업 결과 간의 연관성이 집단의 다양성 특성과 작업 지향성에 따라서 달라진다는 점을 밝힌다. 구성원의 다양성이 높고 학습보다는 통합지향적인 MBA 집단의 경우에는 기능 다양성이 집단 내 상호작용의 질에 유의하게 영향을 미쳤고, 구성원 개인의 학습과 집단 프로젝트의 질 향상에 유의한 효과를 보였다. 구성원의 다양성이 낮고 학습지향적인 MBA 집단의 경우에는 기능 다양성과 인구통계학적 다양성 중 어느 것도 집단내 상호작용의 질 향상에 유의한 영향을 주지 못했고, 프로젝트의 질적 향상에 유의한 영향을 미쳤으나 개인학습에 그러하지 못하였다.

*   University of Massachusetts Lowell.
** 서울대학교 경영대학 교수