



Classroom group dynamics and motivation in the EFL context

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This paper presents the results of a study exploring the relationships of L2 motivation, willingness to communicate (WTC), and classroom group dynamics among a group of 237 rural Japanese non-English-major university students. Two questionnaires were administered—one for L2 motivation and classroom group dynamics, and another for WTC. Among the several classroom group dynamics components that emerged, *Student-centered Approach* and *Intergroup Approach Tendency* showed significant influences on students' WTC.

本研究は、日本人の大学生を対象に、彼らの英語学習の動機づけ要因と、グループ活動などによるアクティビティや、学習方法などについて言及するグループ・ダイナミックスという二つの要因を調査した。ビジネスを専攻する一年生237名を対象にアンケート調査を行った。また、これらの要因と学生のWillingness to Communicate (WTC) との関係についても調査した。その結果、学習者の動機づけの要因としては、英語を学習したいという動機や、英語の重要性などから英語を学習するという結果が得られた。グループ・ダイナミックスについては、学習者のグループアクティビティについての態度や、学生間のつながりの重要性などが要因として挙げられた。WTCとこれら二種類の学習動機づけ要因については、学生主体の学習方法と、異文化に触れたいという動機づけがWTCと関係しているという結果が得られた。

Motivation is a complex psychological process that is subject to both internal and external influences. The quest to sort out this complexity and eventually understand motivation is worthwhile because it can help to predict and influence people's behavior. For this reason, student motivation has been long investigated in the field of SLA. While early studies on motivation emphasized identifying the reasons for learning L2 based on social attitudes, the results were often complex and inconsistent across different contexts. As one way to move beyond this conflicting data, Dörnyei (1990) suggested that researchers needed to take educational context into consideration in order to systematically include the influence of teachers, peers, and classroom activities.

This study, therefore, incorporates classroom related variables as well as motivation components among Japanese EFL learners. The first objective is to identify the relevant motivation and group dynamics which serve as classroom related variables specific to rural Japanese university students. The second objective is to investigate the relationship between the identified variables and students' Willingness to Communicate (WTC).

Group dynamics

Group dynamics most often refers to the scientific study of groups, including the analysis of group structure, group norms, interaction patterns, and group cohesion. Lewin (1948, 1995) first used the word *group dynamics* to explain the complex nature of human behavior in relation to other individuals and groups. Lewin assumes that a group is much more than a mere sum of individuals, and argues that the behavior of group members is a function of the interaction of their personal characteristics with environmental factors such as the group as unit, the group members, and the situation (Forsyth, 1998). Some of the important issues discussed in group dynamics are group structure, roles, norms, group cohesion, social identity (the part of the self-concept that derives from one's membership in social groups), and goals (Brown, 2000; Forsyth, 1998).

Group dynamics explains why humans behave as they do in relation to the other people in the group and the types of environments in which they interact. By analyzing the nature of group dynamics in the classroom, the researcher may reveal the complex process of how the teacher, peers, and small group interaction influence learners' attitudes,

motivation, and achievement (e.g., Dörnyei, 2001a, 2001b; Dörnyei & Malderez, 1997, 1999; Webb & Palincsar, 1996).

Group dynamics and motivation studies in L2

While motivation studies have a long history in the field of SLA, these studies have not addressed the importance of group dynamics until recently. When researchers started to consider situation-specific factors, they began to realize the importance of discussing the relationships among classroom participants, classroom goal structure, and other aspects of group dynamics, such as group norms and group cohesiveness (e.g., Clément, Dörnyei & Noels, 1994; Dörnyei & Murphy, 2003, Wen & Clément, 2003).

Dörnyei (1994) was the first to discuss the importance of educational context in relation to L2 motivation. He introduced group-specific motivational components that are found in educational contexts. These components included goal-orientedness, norm and reward systems, group cohesion, and classroom goal structure. These characteristics are often discussed in relation to group dynamics. Later, Dörnyei (1997) and Dörnyei and Malderez (1997) elaborated on how group dynamics influences motivation in L2 classroom contexts. These articles focused on the development of group cohesiveness and how groups can facilitate L2 learning through cooperative learning (CL). Dörnyei (2001a), and Dörnyei and Murphy (2003) then introduced how practical implications of group dynamics can be applied to the foreign language classroom.

Though studies on motivation and group dynamics in SLA are very limited, there is one empirical investigation focusing

on the construct related to group dynamics and L2 learner motivation. Clément, Dörnyei and Noels (1994) investigated the relationship among orientations, attitudes, linguistic self-confidence, anxiety and the role of classroom dynamics (measured by group cohesion and classroom cohesion) in Hungarian secondary L2 learners. The researchers used a perceived classroom cohesion scale and self-evaluation as an achievement measure. The results indicated positive effects for group cohesiveness on self-confidence among Hungarian secondary L2 learners, and that English achievement was significantly related not only to self-confidence and motivational indices, but also to the quality of the learning environment. Though questions remain about the accuracy of measurement because perceived and self-evaluated measures were used, the study was important in its incorporation of group dynamics in L2 motivation research. From this study, Clément et al. began to realize the potential of group dynamics to illuminate our understanding of L2 motivation.

L2 motivation research in Japan

As in many other countries, researchers within the Japanese EFL context have investigated motivation in a wide variety of learning situations, from middle school to adult education (Brown, Robson & Rosenkjar, 2001; Irie, 2003, 2005; Matsubara, 2004, 2006; Yashima, 2000, 2002). Many of these researchers have used instruments previously tested with ESL learners in their attempts to identify the motivational components among Japanese students. As well as similarities to previous studies, some previously-identified components have emerged for the first time among Japanese learners.

Yashima (2000) investigated motivational components among non-English major university students and found that intercultural friendship was the most important component, providing the highest means among all motivational components. In her later study (Yashima, 2002), she investigated the interrelationship among *International Posture* (which she claims is similar to integrative orientation, but specific to Japanese learners), *Communication Confidence*, *Learning Motivation*, *L2 Proficiency* and *WTC*. The results showed that *International Posture* and *Communication Confidence* had a direct relationship with *WTC*, while *Learning Motivation* was indirectly related to *WTC* moderated by *Communication Confidence*.

Other studies conducted in Japanese university EFL contexts have yielded *Integrative Orientation* and *Instrumental Orientation* as the clearest components of motivation among Japanese university students (Brown et al., 2001; Matsubara, 2001). The past studies conducted in the Japanese context have provided some directions toward understanding motivational components among Japanese students. Integrative and instrumental orientation and other components, such as international posture, were identified as motivational components in the Japanese EFL context (Yashima, 2000, 2002).

WTC as an Effect of Motivation

The concept of WTC was introduced by McCroskey and Richmond (1991) with reference to native language use. Later, MacIntyre, Clément, Dörnyei, and Noels (1998) conceptualized WTC for L2 learners. Their model incorporated social and psychological variables as well

as linguistic and communicative variables that may affect one's WTC. Since the introduction of the L2 WTC model, a growing number of researchers have used WTC as an outcome variable, trying to determine what influences it (e.g., Clément, Baker, & MacIntyre, 2003; Wen & Clément, 2003).

Several researchers have used variations of the WTC model proposed by MacIntyre, Clément, Dörnyei, and Noels (1998), in which L2 confidence, communication competence, and anxiety are hypothesized to affect L2 WTC (Clément et al., 2003; MacIntyre, MacMaster, & Baker, 2001; Yashima, 2002). Yashima (2002) also adapted the L2 WTC model to a Japanese EFL context in her investigation of WTC among non-English-major Japanese university students. Her structural equation model (SEM) indicated that L2 communication confidence and international posture had direct paths to L2 WTC.

Classroom Dynamics and Motivation Studies in L2

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Statement of Purpose

The present study investigates aspects of motivation and classroom group dynamics among Japanese university EFL learners who reside in rural area of Japan. The study inquires about the relationship between identified variables of motivation and classroom group dynamics with L2 WTC in an EFL context.

Research Questions

1. What are the components of motivation, L2 classroom group dynamics, and WTC in rural Japanese university students?
2. How do motivation and group dynamics influence these students' WTC?

Method

Participants

The participants in this study are 237 Japanese university students majoring in business. The university is located in a rural area of Japan where the students have little contact with foreigners. The students' entering proficiency levels are relatively low (mean 350 on TOEIC, range 200-600) compared with those who major in English or language-related subjects.

Materials

The motivation questionnaire was a revised version of items from previously developed instruments. Motivation items were originally developed by Gardner and Lambert (1972), and previously used with Japanese EFL learners by Yashima (2002) and Matsubara (2006). The total questionnaire consisted of 44 items measured by six-point Likert scale, ranging from very strongly agree (six) to very strongly disagree (one). The questionnaire contained five categories related to motivation questions and four categories related to classroom group dynamics. Motivation items included (a) Instrumental orientation, (b) Integrativeness, (c) Motivational intensity, (d) Desire to learn English, and (e) Intergroup approach tendency. Classroom dynamics items included (a) Attitude towards group work, (b) Attitude towards the structure of group, (c) Preference for student-centered approach, and (d) Group cohesion.

The original L1 WTC scale developed by McCroskey (1992) was modified and adapted to match the EFL context. The instrument was extensively modified to match learning context in Japan by Sick and Nagasaka (2000), and was revised again by the author to match this population. This

version of the WTC questionnaire consisted of 25 items. Students were asked to rate their willingness to communicate on a three-point scale format, ranging from three as absolutely willing to do so to zero as wishing to avoid communication if possible. The range of total scores for WTC scale was 0 to 75.

Data Collection

The questionnaire was administered at the beginning of Fall semester of 2005. All instruments were administered in the same order in all classes. The questionnaire was filled out in class and took approximately 15 to 20 minutes of class time.

Procedure

In order to answer the research questions, I conducted analyses in the following order. First, descriptive statistics were computed for all questionnaire items and WTC items. Then, Principal Component Analysis (PCA) was conducted on motivation and classroom group dynamics items in order to answer research question one. Finally, Multiple Regression Analysis was conducted on the extracted factors as independent variables and WTC scores as the dependent variable in order to answer research question two.

Results

Principal Components Analysis

Principal factor extraction with promax rotation was performed on 44 items. Although 11 factors were extracted first, there were some complex loadings across factors.

Therefore, items that exhibited complex loadings greater than .40 were eliminated and 39 items were entered for the second analysis. As a result, seven factors were extracted, accounting for 59.6% of the variance.

Factor 1 received loadings from 11 items. Most items were related to motivational intensity and desire to learn English. Thus, this factor was labeled as *Motivational Intensity*. Factor 2 received loadings from four items. These items were related to instrumental orientation. Since these items measured attitude on how important English is and how necessary it is to learn English, this factor was labeled as *Necessity of English*.

Factor 3 received loadings from five items. These items were related to a Student-centered approach, thus this factor was labeled as *Preference for Student-centered Approach*. Factor 4 received loadings from four items. These items were related to group activity. This factor was labeled as *Preference for Group Activity*. Factor 5 received loadings from four items. These items were labeled as *Group Cohesion*. Factor 6 received loadings from four items. These items were labeled as *Intergroup Approach Tendency*. Finally, Factor 7 received loadings from four items. These items were related to students' attitude towards the effectiveness of group work. Thus, these items were labeled as *Effectiveness of Group Activity*.

Table 1. Descriptive Statistics for PCA-Derived (N = 237)

	FACTOR	Mean	SD	k
WTC	WTC scores	28.60	14.14	25
FA1	Motivational Intensity	3.50	0.82	11
FA2	Necessity for English	5.04	0.76	4
FA3	Student-centered approach	3.90	0.85	5
FA4	Preference for Group Activity	4.07	0.87	4
FA5	Group Cohesion	4.51	0.81	4
FA6	Intergroup Approach Tendency	3.78	1.02	4
FA7	Effectiveness for Group Activity	4.12	0.77	4

Multiple Regression Analysis

In order to answer research question two, hierarchical regression was conducted. The seven PCA-derived factors were entered as independent variables (IV). The total WTC score was entered as the dependent variables (DV). The goal of regression analysis is to identify if there is any significant relationship between IVs and DV. In this study, the purpose was to reveal the relationship between motivation and group dynamics components and WTC scores.

Table 2 displays the results of analysis. R for regression was significantly different from zero, $F = 28.46, p < .001$. R^2 was .46 and adjusted R^2 was .45, indicating 45% of the variability was predicted by the scores on these seven IVs. Only two of the IVs, Factor 3 (*Student-centered Approach*), and Factor 6 (*Intergroup Approach Tendency*), contributed significantly to prediction of WTC. Both of them displayed significance at the $p < .001$ level.

Table 2. Contribution of Factors to WTC According to Regression Analysis (N = 237)

	B	SE B	β
(Constant)	-14.14	5.76	
FA1	-0.61	1.07	-.04
FA2	-0.90	1.16	-.05
FA3	5.30	0.92	.32*
FA4	1.10	0.96	.07
FA5	0.61	1.05	.03
FA6	7.05	0.93	.51*
FA7	-1.23	1.03	-.07

$R^2 = .465$ * $p < .001$.

Discussion

RQ1: What are the components of motivation, L2 classroom group dynamics, and WTC in rural Japanese university students?

The present study revealed that several motivational factors and classroom group dynamics factors were identified as a result of PCA. The total of seven factors was identified. Three factors were identified from motivation items, and four factors were identified from classroom group dynamics items. Both *Motivational Intensity* and *Intergroup Approach Tendency* were previously identified in Yashima's (2002) study. This study obtained a similar result in terms of motivational components among rural students. The other motivation factor was *Necessity of English*. This factor included items similar to instrumental orientation, but the

focus was on the importance of English as a subject, area of knowledge, and tool. Therefore, I decided that it was most accurate to focus on the importance of English language itself, instead of labeling it as instrumental orientation.

This study also revealed four factors of classroom group dynamics. In a previous study, Matsubara (2004, 2006) identified *Student-centered Approach* as a classroom dynamics factor in a similar population. The present study revealed similar results. In addition, two factors concerning attitude towards group work were identified. These two identified factors, *Preference for group activity* and *Effectiveness for group activity* provided information on the students' attitude towards group activity within the classroom. One more factor that was identified as a classroom dynamics factor was *Group Cohesion*. Clément et al. (2003) used these items to show the relationship of motivation and group dynamics among Hungarian students. The present study also identified *Group Cohesion* as a classroom dynamics factor among Japanese students. This factor included items related to the attitude towards group members and the feeling of cohesiveness within the group. Since classroom dynamics include teacher, students, and tasks that are conducted within the classroom, the results of this study provided more detailed understanding of the students' attitude towards group work, group cohesiveness, and group structure.

The average WTC scores among Japanese students were 28.6 out of 75. This represented only 38% of the total possible score. Thus, this population's WTC scores were not very high. However, since the WTC items were revised and no previous study has been conducted using the same

questionnaire, this assessment must remain speculative pending corroborating research.

RQ2: *How do motivation and group dynamics influence these students' WTC?*

The present study revealed that two factors were significantly associated with students' WTC scores. They were *Student-centered Approach* and *Intergroup Approach Tendency*. The rest of factors did not show any significant relationship with WTC scores. In Yashima's (2002) study, she found that *International Posture* directly influenced WTC in the structural equation model. *Intergroup Approach Tendency* was part of *International Posture* and these two factors were composed of similar items. This study also indicated that *Intergroup Approach Tendency* had an association with WTC scores. It is understandable that if students were open-minded and showed interest in foreigners and were willing to talk to them, their WTC scores should also be high.

This study also indicated that when students preferred a student-centered approach, their WTC scores were high. Their WTC also corresponded to their preference for teaching method. Thus, classroom learning structure may have an effect on the students' attitude towards communication and as a result, their WTC in L2.

Conclusion

The present study analyzed motivation and classroom group dynamics components among rural Japanese university students. This study added new perspectives on

motivation research by adding classroom group dynamics to the analysis. The results identified several classroom dynamics components, including teaching approach, attitude towards group work, and group cohesion. These identified components are clearly important aspects of classroom dynamics which can be expected to have relationships with learner motivation and WTC. In the regression analysis, the study revealed that two components, one from classroom dynamics items (*Student-centered Approach*) and the other one from motivation items (*Intergroup Approach Tendency*), had significant associations with students' WTC scores. This suggests that there is relationship between students' attitudes toward teaching approach and their WTC. Students who prefer a student-centered approach tend to be also active outside the classroom in terms of using English. Thus, the student-centered approach may enhance their WTC. Students who showed interest in knowing non-Japanese also had high WTC. This may suggest that students who have more experience with meeting and talking to non-Japanese have higher WTC scores. Though other classroom dynamics items did not show any association with WTC, the results of this study provide suggestions for teaching. One is that a student-centered approach can enhance students' WTC. Further research is necessary, however, to support the current findings, and continuous investigation will further help classroom instructors to understand the dynamics of their students' motivation and group processes in the classroom.

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Appendix

Motivation and Classroom Group Dynamics Questionnaire Items

(1) Instrumental Orientation (5 items)

1. English ability would help me to get a better paying job.
 2. Studying English will be useful when I travel.
 3. Studying English will help me get a good job.
 4. Knowledge of English would make me become a broad-minded person.
 5. English is world language and is necessary to study.
- ($\alpha = .82$) Revised items from Dörnyei and Csizér (2002).

(2) Integrativeness (5 items)

1. Learning English is important in order to learn more about the culture and life of its speakers.
2. I like English very much.
3. I would like to become similar to native speakers of English.
4. I would like to meet foreigners who speak English.

5. I would like to understand the people who reside in English speaking country.

($\alpha = .82$) Revised items from Dörnyei and Csizér (2002).

(3) Motivational Intensity (6 items)

1. Compared to my classmates, I think I study English relatively hard.
2. I often think about the words and ideas which I learn about in my English classes.
3. If English were not taught at school, I would study it on my own.
4. I think I spend fairly long hours studying English.
5. I really try to learn English.
6. After I graduate from college, I will continue to study English and try to improve.

($\alpha = .83$) Revised items from Gardner and Lambert (1972).

(4) Desire to Learn English (6 items)

1. When I have assignments to do in English, I try to do them immediately.
2. I try to read English newspapers or magazines outside my English course work.
3. During English classes I'm absorbed in what is taught and concentrate on my studies.
4. I would like the number of English classes at school increased.

5. I find myself studying English more than other students.

6. I believe absolutely English should be taught at school.

($\alpha = .68$) Revised items from Gardner and Lambert (1972).

(5) Intergroup Approach-Avoidance Tendency (4 items)

1. I want to make friends with international students studying at my school.
2. I would like to participate in the activity where there are international exchange experiences at school.
3. I want to participate in a volunteer activity to help foreigners living in the neighboring community.
4. I would help a foreigner who is in trouble communicating in a restaurant or at a station.

($\alpha = .76$) Revised items from Yashima (2002).

Classroom Dynamics Items (18 items)

(6) Attitude Towards Group Work (4 items)

1. I get more work done when I study with an assigned group.
2. I enjoy working on an assignment with two or three classmates.
3. I prefer studying with others to studying alone.
4. I enjoy making something for a class project as a group (e.g. presentation and research project).

($\alpha = .76$) Revised items from Matsubara (2004).

(7) Attitude Towards the Structure of the Group (4 items)

1. I learn better when I have one leader in a group.
2. I learn better if I have the same group member for a semester.
3. I learn better if the members of a group have assigned roles.
4. I learn better when my group exchanges opinions with other group member about the goal and purpose of studying.

($\alpha = .58$) Revised items from Matsubara (2004).

(8) Preference for a Student-Centered Approach (5 items)

1. In English class, the teacher should do most of the talking and the students should only answer when they are called upon. (Reverse coded)
2. The students should only speak when the teacher addresses the student in class. (Reverse coded)
3. I prefer to sit and listen, and don't like to being forced to speak in English in class. (Reverse coded)
4. I learn better when I ask questions.
5. I prefer an English class in which there are lots of activities that allow me to participate actively.

($\alpha = .76$) Revised items from Matsubara (2004).

(9) Group Cohesion (5 items)

1. It is effective to study as a group, which is composed of people who fit together.

2. I enjoy studying with a group, which is composed of people who fit together.
3. I want to remain a member of a group, which I have worked together previously.
4. I come to like the members of a group while interacting with that particular group.
5. There was a feeling of unity and cohesion when working as a group which was composed of people who fit together.

($\alpha = .76$) Revised items from Rosenfeld & Gilbert (1989).

Total items (44)