

Group Dynamics, Leadership, and Influence

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Reference Data:

Leeming, P., & Cunningham, S. (2012). Group dynamics, leadership and influence. In A. Stewart & N. Sonda (Eds.), *JALT2011 Conference Proceedings*. Tokyo: JALT

Group work is central to most approaches to language teaching, and yet there is a very limited body of research in SLA which considers how group dynamics may impact on the processes of interaction and language learning. Within group dynamics leadership is an area of importance, but this topic has remained untouched by researchers in our field. This mixed-method study, conducted in a 1-week summer intensive English course for 3rd-year university science majors, considered factors which predict the emergence of leadership within the groups in the classroom, and also the impact of leaders on the learning experience of group members. Results suggest that predicting leadership is a complex process, and that the emergence of leadership may have a significant impact on the autonomy of individuals within the group.

外国語教育のほとんどのアプローチにおいて、グループは中心的な役割を果たしている。しかしながら、第二言語習得において、相互のコミュニケーションや語学学習に対し、グループダイナミクスがどのように影響しているかを考察する研究はほとんど行われていない。リーダーシップは、グループダイナミクスにおける重要な研究分野の1つであるが、外国語教育の領域においては、このトピックに対する研究は今に至るまで行われていない。本研究は、大学理工学部3年次の学生を対象とする1週間の英語の集中講義において、混合手法を用いて行われた。ここでは、授業でのグループ内でどのメンバーがリーダーとなるかを予測することのできる要因、およびグループメンバーの学習経験にリーダーが与える影響について考察した。この結果、リーダーの予測は複雑なプロセスであり、また、リーダーの出現はグループ内のメンバー各自の自律性に大きな影響を与える可能性があることが示唆されている。

DESPITE THE ubiquity of group work in second and foreign language pedagogy, understanding of group processes in the language classroom is limited. By placing students into groups teachers may feel that they are able to increase opportunities for participation, and facilitate teaching and peer learning. Webb and Palinscar (1996) provided a comprehensive review of research regarding groups in general educational contexts and stated, “It is hard to exaggerate the interest in group learning in today’s schools” (p. 841).

Group work is well established in the language classroom, and Long and Porter’s (1985) seminal article presented pedagogical arguments for the use of group work including increased student talk time, and more individualized instruction. They extended this to a psycholinguistic rationale for promoting student-student interaction in the language classroom, claiming that conversation between two non-native speakers can aid second language acquisition. It is generally believed that interaction allows students to develop communicative



competence and foster peer learning. Despite a lack of empirical research on how students are working together, small groups are commonplace in the language classroom.

This paper reports on a study which investigated group dynamics in SLA, focusing on student leadership within groups working together over a 1-week intensive English course. After a brief review of research concerning groups and SLA, the idea of emergent leadership is introduced through studies which have investigated this phenomenon in general psychology. The methodology of the study is described, including the measures used, and results are presented. Clear leaders emerged in each group, and the effectiveness of the predictors is discussed in relation to this. The paper then addresses the influence that these leaders had on the individual learning experiences of other members of the group.

Background

Group Dynamics Research in SLA

Language learning generally does not occur in isolation and students are part of a classroom group, and within this smaller groups are often used to increase opportunities for interaction. Many SLA researchers have looked at interaction between dyads and small groups from sociocultural and psycholinguistic perspectives (see Brooks & Donato, 1994 for example), and although studies have looked at how language can be acquired, and the interaction patterns between interlocutors, they do not address more general issues of group dynamics. Forsyth (2010, p. 2) defines group dynamics as “the influential actions, processes, and changes that occur within and between groups over time” and these processes have a direct impact on learning. In foreign language learning research there is a limited body of literature considering group dynamics, and a considerable amount of the published material provides practical advice and

suggestions on how to improve the group dynamics of classes to enhance learning and foster cooperative learning (Dörnyei, 1997; Ehrman & Dörnyei, 1998; Dörnyei & Malderez, 1997; Dörnyei & Murphey, 2003). These texts are useful, but provide only limited theoretical explanation of group processes, and are generally not based on SLA research.

Aside from theoretical discussion, SLA empirical research into group dynamics has a similarly narrow focus, with researchers seeking to determine the effects of group cohesion on group performance (Clément, Dörnyei, & Noels, 1994; Chang, 2010). SLA researchers and teachers have only a superficial understanding of how groups work together and factors that influence group processes in language-learning contexts, although research into groups is increasing. Kozaki and Ross (2011) showed that group context mediates the impact of motivation on proficiency gains, suggesting that differences in groups influence individual language learning experiences.

Leadership and Emergent Leaders

Group dynamics research is broad, encompassing topics such as cohesion, structure, formation, and power. One central strand of research is interested in leadership, and most introductory texts on group dynamics devote a chapter to the topic. Leaders are considered to have a large influence over the success of groups, and their established importance has led to them to being the subject of extensive research. Teachers are aware of students who emerge to take on unofficial leadership roles within the classroom and seem to have a large influence on the norms of the classroom.

Leadership research can be divided into two strands considering leader types and effectiveness, and also the emergence of leaders or traits related to leaders. Emergent leaders are individual members of a group who, although given no official leader-

ship role, exert influence over other members through control of the norms for that group (Northouse, 2009). Forsyth (2010, p. 248) outlines the conditions necessary for the emergence of a leader, with the primary requirement being interdependence for task outcomes. Unofficial or emergent leaders have been subject to extensive inquiry in the social sciences, with researchers attempting to determine the factors that determine who adopts this role, and how emergent leaders influence the group. Put simply, who becomes a leader, and how do they influence their group?

Much of the leadership research has involved predicting leadership through personality, based on the assumption that there are certain personality traits which predispose people to take on leadership roles. Judge, Bono, Ilies, and Gerhardt (2002) conducted a meta-analysis of studies using the Big Five Model (Goldberg, 1992; McCrae & Costa, 2003) to predict leader emergence and leader effectiveness. This is the most commonly accepted and used model of personality used in general psychology, and posits that personality can be broken down into five discrete dimensions: extroversion, conscientiousness, emotional stability, agreeableness, and openness. Judge et al. (2002) looked at 78 studies considering personality and leadership and performed a correlation analysis. Results showed that extraversion has a moderate correlation with emergent leadership ($r = .31$), followed by conscientiousness ($r = .28$), and then neuroticism ($r = .24$) and openness to experience ($r = .24$). Agreeableness was the only personality trait showing very weak correlation with leadership ($r = .08$). Overall measures using the Big Five model were able to account for 54% of the variance in leadership emergence. This suggests that the Big Five model is effective in predicting leadership emergence.

Researchers have considered other traits assumed to predict emergent leaders. General intelligence has been shown to correlate with emergent leadership (Judge, Piccolo, & Kosalka,

2009), and other factors affecting leadership emergence include task related abilities and experience (Forsyth, 2010), the level of participation within the group, the gender of members (Neubert, 2004), and even physical appearance.

Despite the established importance of emergent leaders, a search of the literature revealed no studies in SLA considering students as leaders in the classroom or the emergence of leaders within groups in the language classroom, and the current study set out to answer the following questions:

- What factors predict emergent leadership within groups in an SLA context?
- Is there any evidence that emergent leaders influence learning experiences for individual members of the group?

The Study

Participants

Our study focused on two groups, each with 11 students, who were part of a larger cohort of 7 groups enrolled in an elective intensive summer English course for 3rd-year science students, in a highly-ranked private university in western Japan. Students were randomly assigned to groups, although care was taken to ensure a balance of gender, and different majors within each group (Group A: 8 male 3 female, Group B: 8 male 3 female). This meant that most students only knew one or two other members of their group prior to the course. No attempt was made to balance English proficiency within groups, and participants involved in the study included beginner to intermediate levels as evidenced by TOEIC scores ranging from 190 to 570.

The Course

The course was 7 days in total, with 2 days preparation on campus in August, followed by 5 days in September staying in

a university owned camp (see Appendix A for the schedule for the course). Total English lesson time was 26 hours, but students were in their group for various recreational activities, including a barbecue and sports games. English was used during lesson time, and encouraged during other activities, although for recreational activities Japanese was prevalent. Students were given the topic *leadership in science*, and provided with various discussion-based tasks designed to build familiarity with the topic, and fluency skills to be demonstrated in a group poster presentation given to other students taking part in the camp on the final 2 days. The structure of the presentation was decided by the students in each group, and presentations were 30 minutes, with each member required to participate. Each author was responsible as teacher for one group of 11 students. Although instruction and guidance were provided, decisions regarding roles and the specific focus for the presentation were made by students, who were encouraged to make work plans, and manage their own learning for the five days at camp. Students were given a lot of freedom throughout the course, with the teachers adopting a supportive role. This allowed for students to take on leadership roles, and to have significant control over the way in which the group would work together to achieve its goal.

Methodology

Qualitative Data

Both of the authors were with their respective groups for the duration of the course, and were able to gain a deep understanding of the group through participant observation. To supplement this observation, video and audio recordings were also taken of students working together as a whole group, in smaller groups, and also individually, allowing for subsequent analysis by both researchers. Behavior considered to indicate a leadership role included making decisions, dominating or controlling conversa-

tion, and advising other members of the group.

Students completed an open-ended questionnaire in Japanese (Appendix B), in which they were asked to identify a leader that may have emerged in their group, and provide reasons to support their selection. The option of no leader was also provided. Although aware that leaders may not emerge, it was felt that the interdependent nature of the final task, with students working towards a common goal of a poster presentation, would make it likely that one or more members of the group would assume a leadership role. Students were assured that other group members would not have access to the results. We translated comments into English, and our translation was checked by a native speaker of Japanese familiar with the research project.

Quantitative Data

English Proficiency

The TOEIC test is designed as a measure of English proficiency, particularly in a business environment. Students' TOEIC scores were available, however the test is zero stakes in this context, with all students required to take the test at the end of their second year, but results having no bearing on grades. As a result some students do not take the test seriously, undermining its usefulness. In order to compensate for this, the students were given a dictation exercise of 80 words in length to act as the primary indicator and serve as a more accurate measure of their English proficiency (Oller, 1971).

Personality

Dimensions of the Big Five model were assessed using a questionnaire based on the International Personality Item Pool (IPIP), and developed by Murakami and Murakami (1997). The questionnaire was in Japanese, with 12 items measuring each

of the five dimensions, requiring students to respond to items on a 4-point Likert scale ranging from *not at all* to *very strongly*. The N-size of 22 for the current study is insufficient for Rasch analysis, and therefore 159 students from the same cohort completed the questionnaire. Rasch analysis (Rasch, 1960) was used to ensure the unidimensionality of each dimension of personality, and to convert the raw scores to a scale. Agreeableness and Openness to Experience did not meet the criteria for unidimensionality given by Linacre (2007) (over 50% of the variance explained by measures, and eigenvalues lower than 2 in the first contrast), and were therefore excluded. The other three dimensions satisfied the criteria. Scores for each dimension are shown in Table 1 and Table 2 and are given in logits, with high positive scores indicating a strong reading on that dimension. A score of zero would be considered neutral, and negative scores indicate that the person is low on the trait.

Leadership

Students were asked to rate all members of their group based on how much leadership they displayed. This measure was adapted from the Group Leadership Index (GLI), originally developed by Cronshaw and Lord (1987), and designed to allow for the measurement of leadership on a scale rather than as a dichotomy. This means students are not classified as leader or non-leader, but are put on a scale for leadership. High values indicate that other students perceived this person to be relatively high in leadership traits. The questionnaire was translated into Japanese and the translation was checked by a native speaker of Japanese familiar with the research project (see Appendices C and D for the Japanese and English versions). The GLI was designed to supplement the questionnaire that asked students to name the group leader(s).

Results and Discussion

Leader

The predictive measures of personality and English proficiency, and results of the GLI and leadership voting for the two groups are shown in Tables 1 and 2 below. Underlined names indicate female students, and X indicates missing data.

Table 1. Group A Results

Name	TOEIC Read	TOEIC List	Dictation /80	Extraversion	Conscientious	Neuroticism	GLI /240	Votes
Tad	240*	190*	54	2.21	-0.18	-0.37	167	
Jun	250	155	40	1.26	-2.07	0.11	199	5
Kei	230	155	51	-4.19	0.87	3.56	151	
Ryo	105	80	40	2.21	-0.18	0.56	146	
Yo	190	110	39	1.73	0.33	0.56	190	1
Hir	120	70	43	-0.84	-0.18	1.01	119	
<u>Ets</u>	220	205	51	2.21	1.46	3.56	191	7
<u>Yuk</u>	195	160	48	2.21	-2.07	0.86	154	
Mak	225	110	47	-2.89	-2.56	-0.37	172	
Haru	X	X	48	3.83	0.87	0.56	177	1
<u>Ka</u>	245	150	49	-0.23	-0.18	-3.7	164	

* Score from test taken 2 years previously.

Table 2. Group B Results

Name	TOEIC Read	TOEIC List	Dictation /80	Extroversion	Conscientious	Neuroticism	GLI /280	Votes
Yas	155	145	49	1.73	-1.59	-1.38	114	
Yuu	X	X	33	-1.53	-0.66	-0.37	138	1
Koh	205	220	29	1.73	-1.13	-0.37	155	
Yus	165	130	9	2.21	2.05	0.11	146	
Yuk	200	185	48	-0.84	-2.56	-3.03	157	1
<u>Noz</u>	305	265	62	-1.53	0.33	-3.7	190	
Mas	125	80	38	-0.84	-0.66	-1.38	139	
<u>Kas</u>	215	155	45	0.79	-0.66	4.45	159	
So	195	255	38	-1.53	2.05	2.94	172	
<u>Ris</u>	240	240	43	-0.23	-0.18	1.47	228	9
Dai	185	120	9	4.71	-1.46	-3.03	220	7

Two measures were used to indicate leadership. The GLI was a sociometric measure providing a numerical value for the degree of leadership perceived by peers. Supplementary to this, students voted for who they believed to be the leaders in the group. In each group a clear leader emerged, and in both cases it was a female student. GLI scores (out of a possible 280) were highest for that student in group B, and second highest in group A, supporting the perception that they displayed the most leadership behavior. In both groups a male student emerged as the deputy leader, again with high scores on the GLI questionnaire,

and endorsement from their peers in voting for group leaders. The members identified as leaders by the group were also considered to be the leaders by the authors, based on our extended interaction with each group, and observation of the video data. They could be seen controlling conversation, and heavily influencing the decisions made by the group.

Student comments from the questionnaire suggested that the leaders in both groups had created a positive working environment, and been proactive. The most common reason given for selecting them as leaders was that they brought the group together and made decisions, enabling the group to progress.

A surprising aspect of these findings is that in both cases, despite being in the minority, a female emerged as the leader of each group. This contradicts much of the research on leadership conducted in psychology, where it has been found that even when factoring in task-relevant ability and personality, men are more likely to be perceived as the leader (Kolb, 1997). Although this is an area requiring further investigation, perhaps it is the nature of the subject being studied that means that women are more likely to become leaders. Most studies into leadership are conducted with business or psychology students completing puzzles or tasks in their first language. Although these were science students, this was an English course and it is generally accepted that female students tend to perform higher in language proficiency tests, and are usually more motivated to study language than their male counterparts in the Japanese context. This may partially explain why they are perceived as leaders within this predominantly male group (for issues related to perceptions of leadership see Lord, Foti, & de Vader (1984). Language proficiency seemed to be a gate-keeper. Students who spoke weak English could not become leaders but once students were close to the average of the group it seemed to be irrelevant. These leaders were dominant even when Japanese was the medium of communication.

Predicting Leadership

As mentioned previously, Judge et al. (2002) found that personality had strong correlations with leadership, and our study set out to investigate this in a language-learning context.

When considering the relative scores on all three dimensions of personality in Tables 1 and 2, it becomes clear that personality cannot accurately predict leadership in this context. Although in group A Ets would be predicted to be a candidate for leadership based on extroversion, her neuroticism score is comparatively high for strong leadership potential. Jun, who was chosen as deputy leader, would not be predicted to have any leadership role, as he is not extroverted in this group, and also seems relatively unconscientious. Despite this, he has the highest score on the GLI. Haru, who received only one vote for leadership and a modest GLI score, has reasonable language proficiency, is the most extroverted, and seems more likely to be the leader based on personality.

There are also difficulties accurately predicting leadership in group B, where Ris, the leader of the group, has average scores for all three dimensions of personality, and is even slightly introverted. She is not predicted to have any leadership role, and yet observation, votes and GLI score all show her to be the leader. Although task-relevant ability is low, personality predicts that Dai would have a leadership role, as he is the most extroverted member, and is low in neuroticism. Personality clearly is not a reliable measure with which to predict leadership in this context, and other factors must be considered.

Another factor that has been shown to influence emergence of leadership is proficiency for the task (Forsyth, 2010). As mentioned, the TOEIC is of limited reliability, and therefore the dictation scores were considered the primary indicator of task proficiency. In group A, there is only a small difference in the overall proficiency of students, and the leader does have the second highest score for the group. The highest scoring member in

dictation, Tad, is also reasonably extroverted, and yet received no votes for leadership. Conversely, Jun, who was deputy leader, had one of the lowest English proficiency scores. Group B has a far wider range of abilities, and yet Dai, who along with another student had the lowest proficiency in the group, had a leadership role. The fact that Noz was the most proficient language speaker by far and yet received no votes for leadership suggests that language proficiency is not what determines leadership here. In this context, task-related proficiency also seems to be unhelpful in predicting emergent leadership.

In both groups, the leader had higher proficiency scores than the deputy, and it is possible, particularly in group B where the difference was large, that proficiency acts as a barrier to leadership, so that even when personality drives a member towards leadership, if their proficiency is significantly lower than other members they cannot emerge in a leadership role. This may have prevented both Jun and Dai from becoming leaders. Conversely Ets and Ris had reasonably high proficiency which, along with other factors, allowed them to take on the role of leader.

Leadership in this context is a complicated phenomenon which could not be predicted by measures of personality and proficiency.

Leaders' Influence

Participation

From observation and video it was clear that leadership and levels of participation are correlated. Students perceived to be leaders by the others had a far greater participation rate in general group discussions. As this is correlation, it is not possible to make causal claims, but those high in leadership spoke more than other students. This has implications when deciding on the composition of groups, as a person deemed to show no

leadership is unlikely to participate if placed into a group where the majority of members show lots of leadership. Again more research is needed to understand the interaction between leadership and participation.

Autonomy

Although not of initial interest in the current study, it became clear that leadership has strong implications for autonomy in the language classroom. Autonomy is an area that is attracting the interest of language teachers and researchers, who understand the potential benefits of creating independent learners who can continue to learn outside the boundaries of the language classroom (Benson, 2011). Teachers aim to empower students by giving them control over their own language learning, increasing motivation and ultimately leading to greater language proficiency.

In the current study, student autonomy was encouraged, and while scaffolding and support were available, students were left to make key decisions regarding the way they would work towards the final goal of a group poster presentation. The teachers left the room at key moments in order to avoid influencing students, and yet analysis of video data showed that in group A only four members were involved in the decision making processes, while the other seven members remained passive, not taking part in the discussion, which was conducted in English and Japanese. Leadership, rather than English ability or personality, dictated who was most active in the decision-making processes, and made the final decisions. Even when students were informally working towards the poster presentation individually, in pairs, or small groups formed by the students, to prepare the presentation, they consulted the leader for guidance and approval. Similar patterns of behavior were observed in group B, with the leader influencing decisions, even at the small group level, deciding the fine details of the presentations and posters,

and limited participation in decision making from the majority of members.

These findings answer the call for more research into classroom based studies considering how autonomy is fostered in the classroom (Benson, 2011, p. 240), and support the claims by Little (1990) that autonomy does not mean the teacher simply abdicating responsibility for decisions to students. Teachers need to be aware that merely handing over decision-making to students does not mean that we are empowering every member of the group. Power may not be transferred to the students, but rather to an individual who emerges from the group and takes control. The emergent leader effectively replaces the teacher as the focal point for decision-making, and the absence of the teacher does not give rise to students becoming autonomous learners. Rather, it creates a power vacuum which, in time, is filled by the emergent leader.

This study was conducted in a specific context with a small number of students, and it cannot be assumed that the findings generalize to other language learning situations. We encourage researchers to investigate how group dynamics may be affecting students in their classrooms.

Conclusion

Language learning in formal educational contexts is generally centered around students interacting in groups. Despite the widespread use of groups in SLA, there has been relatively little research conducted into how group dynamics may influence the learning experience of individual students. This study addressed this by investigating factors which have been found to predict emergent leaders within a group, and the impact that leadership has on individuals learning experiences within the group.

The findings suggest that leader emergence is a complicated phenomenon in this context, requiring further research. Emer-

gent leadership does seem to impact on the levels of participation by students, and to complicate the practice of increasing autonomy by encouraging students to take an active part in decision-making. Teachers cannot increase autonomy by simply transferring decision making to the students.

Bio Data

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Appendix A. Schedule for the Intensive English Course

Monday, August 8		Tuesday, August 9	
9:00-10:00	Welcome / Group Breakdown	10:00-11:50	Group Work
10:00-11:50	Homework schedules / group work (ice-breakers, etc.)	12:00-12:50	Lunch
12:00-12:50	Lunch	1:00-2:00	T-shirt designs
1:00-2:35	Group Work		
2:45-3:00	General Meeting		

September 10		September 11	
1:30	BUS LEAVES FROM XXXX	7:30-8:20	Breakfast
2:00-3:20	Welcome / Orientation	8:30-11:50	Group Work
3:30-5:20	Group work	12:00-12:50	Lunch
5:30-8:00	BBQ	12:50-1:50	Recreation Time
		2:00-3:50	Group Work
5:30-6:20		4:00-5:20	Scavenger Hunt
6:30-8:30		Dinner	
		Nature Walk / Movie Night	

September 12		September 13	
7:30-8:20	Breakfast	7:30 -8:20	Breakfast
8:30-11:50	Group Work	8:30-11:00	Group Work
		11:00-12:00	Recreation
12:00-12:50	Lunch	12:00-1:00	Lunch
12:50-1:50	Recreation Time	1:00-3:00	Relay Races
2:00-5:20	Group Work	3:00-5:00	Poster Presentations
		5:00-5:30	Relax
5:30-6:20	Dinner	5:30-6:20	Dinner
6:30-9:00	Karaoke Night / Game Night	6:30-8:00	Bonfire

September 14	
7:30 -8:20	Breakfast
8:20 -8:50	Cleanup / Packing Time
9:00-12:00	Poster Presentations
12:00-1:00	Lunch
1:00-2:00	Debriefing
2:00-3:00	Cleaning / Packing Time
3:30	Bus departs for XXX

Appendix B. Open-Ended Leadership Questionnaire (Original in Japanese Only).

1. このグループにはリーダーがいますか？

(Is there a leader in this group?)

はい (Yes)

いいえ (No)

2. リーダーがいる場合、その人の名前を書いてください。(リーダーは複数可。その場合、リーダー全員の名前を書いてください。)

(Please write their name. There can be more than one leader. In that case, please write all of the leaders names.)

3. なぜその人がリーダーだと思いましたか？

(Why did you think that person was the leader?)

Appendix C. Group Leadership Index (GLI) (Japanese)

あなたのグループ内のメンバー全員 (一人ずつ) に対する評価を、次の質問に答える形で行ってください。

1. 全くそう思わない
2. 少しそう思う
3. そう思う
4. 非常にそう思う

A)

1. あなたのグループ内のメンバー 1 人の名前を書いてください。

2. その人はリーダー格だった。
3. その人は、グループ全体が協力するための調整を行っていた。
4. その人は、メンバーに作業を割り当てることを行っていた。
5. その人は、グループが効率的に活動できるようにするために努力していた。
6. その人は、グループが積極的に活動できる雰囲気作りを行っていた。
7. その人は、グループのメンバー全員の意見を聞いていた。

Appendix D. Group Leadership Index (GLI) (English)

Consider each member of your group individually. To what extent do you agree with the following statements?

1 (not at all), 2 (a little), 3 (quite a lot), to 4 (a lot):

1. Write the name of one member of your group
2. This person was a typical leader.
3. This person coordinated group behavior.
4. This person assigned tasks to members.
5. This person made sure that the group was working effectively.
6. This person created a positive working atmosphere.
7. This person listened to all members of the group.