Fostering Learner Autonomy in Collaborative Language Learning Settings

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Abstract

This study investigates some research aspects of collaborative language learning and teaching. It was conducted both quantitatively and qualitatively from the following two aspects: (a) students' perceptions of collaborative language activities and (b) the relationship between their perceptions toward collaborative language learning and their motivation for their English language learning. Over past decades, many researchers have paid a great deal of attention to collaborative language learning/ teaching. Various benefits are described in other literature (e.g., Beckett & Miller, 2006). Recently, there has been a greater expectation of student collaboration in language classrooms, but few researchers have discovered learners' perception toward collaborative language activities in their classroom settings. Thus, not much research has paid attention to students' motivation for language learning and their perception toward collaborative language learning.

1-1. Introduction

The present study concerns exploratory research with the aim of investigating how Japanese learners of English (JLE) perceive collaborative language learning. The researcher asked 100 Japanese university students to answer questions about their perception of collaborative language learning activities and the data were statistically analyzed and their comments were qualitatively observed to obtain insights regarding their collaborative language learning. Then pedagogical implications are discussed for better understanding of collaborative language learning.

1-2. Previous studies

Collaborative language learning

Collaborative learning, which is based on Vygotsky's Sociocultural Theory, has been widely recognized, and is now one of the buzzwords of this century. Vygotsky (1978) emphasizes that social interaction plays a fundamental role in the process of cognitive development. He emphasizes that effective learning happens through social activities. In accordance with a shift from teacher-centered to learner-centered language learning, students' collaborative learning should be considered more carefully in foreign language education (MEXT, 2011). Recently, there has been great interest in collaborative language learning in Japan and The Ministry of Education, MEXT proposed the importance of self-directed and deep learning (2016). In this statement, learners are expected to involve in their learning actively and "Collaboration" is one of the essential keys in language learning, not only in foreign language educational settings, but also in worldwide situations as stated in the "21st Century Skills Map" reported by 21 and ACTFL.

Motivation

For many years, learner factors such as motivation, age, gender, personality, learning

style, language learning strategies (LLSs) and others have been considered important factors that influence success in learners' language learning. It is often said that one of the most important factors that affect learner's language learning is motivation. The word, motivation is social psychological concept to do with the desire to do and achieve one's goal. The research on this area was often seen from the late 1970s and Gardner (1985) described the components of motivation as follow: a goal, want, attitudes toward learning activity. Gardner and Lambert (1972) put strong emphasis on two types of motivation, integrative motivation and instrumental motivation. Many studies suggest that successful language learners often have integrative motivation. Then, Deci & Ryan (1985, 2002) and Noels, Pelletier, Clement and Vallerand (2000) proposed intrinsic motivation and extrinsic motivation in their study. Intrinsic motivation comes from within and on the other hand, extrinsic motivation comes from outside of a learner. In other words, students expect rewards from outside. In 2008, Deci & Ryan proposed self-determination theory which explains motivation and it differentiate autonomous motivation and controlled motivation (Ryan & Deci, 2008). Autonomous motivation is comprised of two regulation, intrinsic regulation and identified regulation. Thus, controlled motivation is introjected regulation and external regulation. The SDT model identified three basic needs, (1) competence (2) autonomy (3) relatedness.

It has been proposed that collaborative language learning provides various benefits in their language learning, but not many researches focus on learning contexts and learner' factor, motivation.

2. Purpose

There are some studies researching on the relationships between learning motivation and their performances, use of language learning strategies, and others, however not many

researchers have found the relationship between their learning motivation and their perception toward collaborative language learning. This is a need for a study which explains how different learners perceive their collaborative language learning settings in order to foster autonomous language learners.

Therefore, in this study, the researcher discusses the following research questions:

1. How do the participants perceive collaborative learning?
2. Is there a relationship between their perception toward collaborative language learning and their motivation for language learning?

3. Methods

3-1. Participants

Participants of this study are Japanese university students aged 18 to 22. In this study, 24 were male students and the 76 were female students. All of the participants were native Japanese speakers in their 1st to 4th years, majoring in English as a Foreign language. The participants learn their foreign language English at university setting in Japan. Lots of participants are highly motivated in their language learning, and some of them prefer learning the language in collaborative settings. The university offers the self-access language center (SALC) and their English classes involve lots of interactive activities in English.

3-1-1. Ethical Consideration

The participants were explained that participation for this study does not affect anything in terms of their academic works and data collected in this study held in strict confidence.

3-2. Questionnaire

For this research, all participants were given a questionnaire in their first language, Japanese (Part 1 19 questions, Part II 20 questions and Part III 2 questions). The 5 point Likert scale was chosen in this study. In this scale, 1 describes strongly disagree with the statement and 5 shows strongly agree to the statement. The Part 1 asks the participants about their learning motivation for English language learning. These questions were derived from Fujita & Tomita (2012) questionnaire on the basis of self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000).

The Part II asks about the participants' perception toward collaborative language learning. The questions were chosen in order to find out how and in what ways the participants understand collaborative language situations. After Part I and II, there are two open-ended questions to get their responses toward the language learning. In this study, their responses were qualitatively analyzed with qualitative research software called KH Coder.

These two questions ask benefits from collaborative language learning and their difficulties on their collaborative language learning settings. The all the questions are shown in Appendix 1.

3-3. Analysis

For this study, their responses on Part I and Part II were analyzed statistically using IBM SPSS statistics. In order to find out pattern in Part II which is about their perception toward collaborative language learning, the factor analysis was chosen. Then to find out the relationship between the two, Part I (their motivation for language learning) and Part II (their perception toward collaborative language learning), the correlation analysis was chosen to determine whether there is a relationship between each factor to understand the relation between their learning motivation and their perception toward collaborative

language learning. Then, the last two questions were analyzed qualitatively to find more details in their responses. For this analysis, the frequency of terms written in their responses were analyzed and the researcher found the connection between terms in the co-occurrence network analysis.

4. Results & Discussion

4-1. Statistical Analysis

4-1-1. Questionnaire

Cronbach's alphas for the 19 items for their learning motivation and 21 perceptions on collaborative language learning items were. 86, respectively. The questionnaire applied in this study was found to be highly reliable (40 items; $\alpha = .86$).

4-1-2. Descriptive Statistics for Part I and Part II

Table 2 shows the descriptive statistics of II, which is students' perception toward collaborative language learning.

Table 2 Descriptive Statistics of the Participants' Perception [Q1-Q19]

	N	M	SD	Skew.	Kurt.
Q1	100	3.01	1.141	.063	-.763
Q2	100	2.93	1.112	.140	-.706
Q3	100	2.93	1.148	.098	-.578
Q4	99	2.92	1.122	-.015	-.804
Q5	100	4.27	2.141	6.744	60.009
Q6	100	4.13	1.012	-1.282	1.371
Q7	100	4.03	1.123	-1.064	.209
Q8	100	3.96	1.109	-1.097	.489
Q9	100	4.48	.822	-2.103	5.494
Q10	100	3.48	1.114	-.463	-.547
Q11	100	2.38	1.237	.510	-.794
Q12	100	2.32	1.222	.582	-.634
Q13	100	2.42	1.208	.367	-.868
Q14	100	2.22	1.142	.510	-.701
Q15	100	2.30	1.227	.643	-.599
Q16	100	1.97	1.077	.951	.223
Q17	100	1.70	.980	1.559	2.298
Q18	100	2.17	1.111	.649	-.405
Q19	100	2.29	1.183	.423	-.938

Table 3 Descriptive Statistics of the Participants' Perception [Q20-Q39]

	N	M	SD	Skew.	Kurt.
Q20	100	4.02	.816	-.378	-.592
Q21	100	4.20	.804	-.738	-.057
Q22	100	4.20	.841	-.707	-.395
Q23	100	3.54	.968	-.456	.297
Q24	100	3.58	.987	-.549	-.024
Q25	100	4.10	.785	-.435	-.535
Q26	99	4.42	.730	-1.018	.230
Q27	100	3.85	.914	-.424	-.222
Q28	100	3.58	.976	.070	-1.019
Q29	100	4.22	.733	-.528	-.411
Q30	100	4.43	.807	-1.532	2.024
Q31	100	3.98	.932	-.724	.113
Q32	100	3.94	.886	-.861	.718
Q33	100	3.98	1.073	-.911	.187
Q34	100	4.11	.952	-.940	.340
Q35	100	3.88	1.008	-.842	.455
Q36	100	1.88	.924	1.261	1.747
Q37	100	2.91	1.083	-.013	-.547
Q38	100	4.10	.882	-.739	.261
Q39	100	3.84	.992	-.431	-.846

Table 2 and 3 demonstrate all the mean comparisons between each questions in Part I and II. For Most of the scores are very high in Part I and Part II but some questions in Part I, Q 16 *(M*=1.97), Q17(*M*=1.70) are below 2 shown in Table 3. Question 16 and question 17 are the category under External regulation. Q 16 is "I need to study because other people tell me to do so". Q17 is "I need to study because I don't want to get yelled at for receiving bad grades". Then, the Questions 36 on Part II is also below score, 2, *M*=1.88. In the statement on Q36 is " I think in collaborative language learning, I feel like I am wasting time."

4-1-3. Perception toward collaborative language learning

In order to find out the patterns in their perception toward collaborative Language learning, the researcher conducted factor analysis for Part II on their questionnaire responses. These questions ask how they think about collaborative language learning. The exploratory factor analysis using a least squares method was conducted to determine factor structure. The result recommended a four factor solution, the Parallel Analysis recommended a four-factor solution for the perception on collaborative language learning. The results are shown in Table 4.

The Chronbach's *α* :Factor 1: .745; Factor 2:.869; Factor 3: .707; Factor 4: .711.

Factor 1 are the items are Q34, 35, 33, 32, 24, 31 and key words for each question are "friends", "teamwork", "fun", "improve performance" "relaxing", so the researcher named this factor 1 as "relatedness". Factor 2 are Q 20, 21, 22, 23, 26, and the key words from the each question are "understanding more", "knowledge", "experience", "different perspective", "critical thinking". So these can be described as "various knowledge and perspectives". The key words of Factor 3 are "helping other", "collaborative effort", "feedback from other peers", "responsibility", so this factor explains "students' attitude'. Lastly, in Factor 4, there are two items Q37 and Q36. These show their "difficulty" and

they feel it is a "waste of time". So Factor 4 is something "negative feeling" toward collaborative language learning.

Table 4 Factor Analysis

	Factor 1	Factor 2	Factor 3	Factor 4
Q34	0.765	0.082	-0.023	0.109
Q35	0.732	0.126	-0.202	0.144
Q33	0.667	0.19	-0.047	-0.08
Q32	0.572	-0.118	0.179	-0.161
Q24	0.562	-0.064	0.268	-0.111
Q31	0.441	-0.108	0.369	-0.083
Q20	0.129	0.895	-0.165	-0.028
Q21	-0.182	0.86	0.12	-0.093
Q22	0.21	0.842	-0.196	-0.018
Q26	-0.105	0.482	0.454	0.054
Q23	0.21	0.378	-0.024	-0.013
Q38	0.349	0.351	0.155	0.065
Q29	0.181	0.107	0.538	-0.013
Q27	0.402	0.016	0.486	0.098
Q25	0.291	0.096	0.476	0.05
Q30	0.139	0.169	0.418	0.009
Q28	0.234	-0.05	0.328	-0.03
Q39	-0.064	-0.107	0.322	0.023
Q37	-0.321	0.055	0.264	0.832
Q36	0.38	-0.235	-0.25	0.566

4-1-4. Relationship between learners' language learning motivation and perception toward collaborative language learning

For interpretation of the six factors, Promax rotation was used (Table 6 . Table 6 shows inter-factor correlations. Regulation 1and F13 (r=.259, p<.01), Regulation 1 and F3 (r=.299, p<.01) are moderately related. Then, Regulation 2 and Regulation 3 (r=.346, p<.01), Regulation 2 and F1 (r=.274, p<.01), Regulation 3 and 2 (r=.346, p<.01), Regulation 3 and 4 (r=.417, p<.01), and Regulation 4 and F4 (r=.339, p<.01) are also moderately related.

Table 5 Descriptive Statistics of each factor

	n	M	SD
Regulation1	100	3.22	.92
Regulation2	100	4.02	.78
Regulation3	100	2.33	1.02
Regulation4	100	2.03	.89
F1	100	3.91	.73
F2	100	4.08	.66
F3	100	3.95	.57
F4	100	2.40	.84

Table 6 Correlation between each factor

		Regulation1	Regulation2	Regulation3	Regulation4	F1	F2	F3	F4
Regulation1	Pearson の相関係数	1	.059	.217*	.036	.259**	.242*	.299**	-.146
	有意確率 (両側)		.558	.030	.722	.009	.015	.003	.147
	度数	100	100	100	100	100	100	100	100
Regulation2	Pearson の相関係数	.059	1	.346**	.091	.274**	.100	.218*	-.226*
	有意確率 (両側)	.558		.000	.368	.006	.323	.029	.024
	度数	100	100	100	100	100	100	100	100
Regulation3	Pearson の相関係数	.217*	.346**	1	.417**	.085	-.161	-.012	.161
	有意確率 (両側)	.030	.000		.000	.401	.110	.907	.109
	度数	100	100	100	100	100	100	100	100
Regulation4	Pearson の相関係数	.036	.091	.417**	1	-.004	-.140	-.169	.339**
	有意確率 (両側)	.722	.368	.000		.969	.163	.094	.001
	度数	100	100	100	100	100	100	100	100
F1	Pearson の相関係数	.259**	.274**	.085	-.004	1	.558**	.634**	-.276**
	有意確率 (両側)	.009	.006	.401	.969		.000	.000	.006
	度数	100	100	100	100	100	100	100	100
F2	Pearson の相関係数	.242*	.100	-.161	-.140	.558**	1	.624**	-.252*
	有意確率 (両側)	.015	.323	.110	.163	.000		.000	.011
	度数	100	100	100	100	100	100	100	100
F3	Pearson の相関係数	.299**	.218*	-.012	-.169	.634**	.624**	1	-.204*
	有意確率 (両側)	.003	.029	.907	.094	.000	.000		.041
	度数	100	100	100	100	100	100	100	100
F4	Pearson の相関係数	-.146	-.226*	.161	.339**	-.276**	-.252*	-.204*	1
	有意確率 (両側)	.147	.024	.109	.001	.006	.011	.041	
	度数	100	100	100	100	100	100	100	100

*. 相関係数は 5% 水準で有意 (両側) です。

**. 相関係数は 1% 水準で有意 (両側) です。

4-2. Qualitative Analysis

For the qualitative analysis, their responses on open-ended question, (21) what are the positive points about doing collaborative language learning? were analyzed with KH coder. Table 7 shows descriptive statistics of word frequency in their responses.

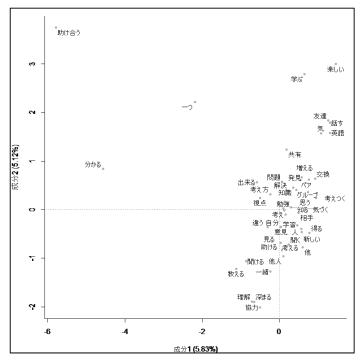| Table 7 Descriptive statistics of word frequency in the	
Term type (n)	317
Means of frequency of words	3.40
Standard Deviation of frequency of words	7.75

Figure 1 Correspondence analysis on their response in Q21. Positive points about collaborative language learning

From the results from the correspondence analysis, the researcher interpreted as follows: vertical axis shows their learning and the horizontal axis describes self and other.

(1) The participants think that collaborative learning deepen their understanding of their learning.

(2) They can help other peers and they can be helped by others.

(3) The learning is fun in collaborative language learning settings.

(4) They notice and get some new perspectives through learning in collaborative settings in language classrooms.

These results suggest that collaborative language learning tends to give opportunity for learners to deepen their understanding of their language learning, but at the meantime, these can be their motivation for their language learning.

5. Conclusion

The present study has not yet analyzed how these factors relate to each other, but these results imply that the context in which collaborative language learning takes place might have some impact on a learner's autonomous motivation. Participants think that collaborative learning deepens their understanding of what they learn.

1. They can help their peers and they can be helped by others.

2. The learning is fun in a collaborative language learning setting.

3. They become aware of new perspectives when learning in collaborative settings in language classrooms.

These results suggest that collaborative language learning tends to provide opportunities for learners to deepen their understanding of the language they are learning as well as motivating them to continue learning the language.

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Appendix 1. Questionnaire

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ご自身について

1.　年齢　　[　　　　　]　　2.　性別　[男・女]

Part I. あなたが英語を学習する理由にどのくらい当てはまりますか

<<1. 全くそう思わない--2--3--4--5.とてもそう思う>>

(1) 問題をとくことが面白いから	[1---2---3---4---5]
(2) 難しいことに挑戦することが楽しいから	[1---2---3---4---5]
(3) 勉強すること自体が面白いから	[1---2---3---4---5]
(4) 新しい解き方ややり方を見つけることが面白いから	[1---2---3---4---5]
(5) 自分が勉強したいと思うから	[1---2---3---4---5]
(6) 将来の成功につながるから	[1---2---3---4---5]
(7) 自分の夢を実現したいから	[1---2---3---4---5]
(8) 自分の希望する就職先・進学先に進みたいから	[1---2---3---4---5]
(9) 自分の為になるから	[1---2---3---4---5]
(10)　　勉強することは大切なことだから	[1---2---3---4---5]
(11)　　勉強で友達に負けたくないから	[1---2---3---4---5]
(12)　　友達より良い成績をとりたいから	[1---2---3---4---5]
(13)　　周りの人にかしこいと思われたいから	[1---2---3---4---5]
(14)　　友達に馬鹿にされたくないから	[1---2---3---4---5]
(15)　　勉強ができないとみじめな気持ちになるから	[1---2---3---4---5]
(16)　　やらないとまわりの人がうるさいから	[1---2---3---4---5]
(17)　　成績が下がると怒られるから	[1---2---3---4---5]
(18)　　勉強するということは、規則なようなものだから	[1---2---3---4---5]
(19)　　みんなが当たり前のように勉強しているから	[1---2---3---4---5]

Part II. 協働での英語学習について

<<1. 全くそう思わない--2--3--4--5.とてもそう思う>>

ペアやグループ（協働）の活動（で）は、

(1) 理解を促す	[1---2---3---4---5]
(2) 知識や経験を共有するのを促す	[1---2---3---4---5]
(3) 問題解決しやすくする	[1---2---3---4---5]

(4)	クリティカルシンキングを活性化さあセル	[1···2···3···4···5]
(5)	よりリラックスした空間になる	[1···2···3···4···5]
(6)	助けとなるようなフィードバックを受けることができる。	[1···2···3···4···5]
(7)	新しい見識を得ることができる	[1···2···3···4···5]
(8)	個人の努力よりも、共に協力して行う努力に注目する。	[1···2···3···4···5]
(9)	自分やグループの責任が大きくなる。	[1···2···3···4···5]
(10)	グループの中で、助けが必要な学習者を他の学習者が助けることが可能である。	
		[1···2···3···4···5]
(11)	コミュニケーション能力を高める	[1···2···3···4···5]
(12)	パフォーマンスを高める	[1···2···3···4···5]
(13)	より学習に能動的に取り組む	[1···2···3···4···5]
(14)	楽しい	[1···2···3···4···5]
(15)	新しい友達をつくることができる	[1···2···3···4···5]
(16)	チーム力を高める	[1···2···3···4···5]
(17)	他者に説明するのは時間がもったいない	[1···2···3···4···5]
(18)	他の学習者を活発に参加させるのが難しい	[1···2···3···4···5]
(19)	ペアやグループでの学習は行われるべきだ	[1···2···3···4···5]
(20)	グループの人数は多くて4人がふさわしい	[1···2···3···4···5]

(21)　　　ペアやグループでの英語学習でよかったことはどのような事ですか？

_____
_____
_____
_____
_____
_____
_____

(22)　　　それらの活動中、難しいと感じたことはどのようなことですか？

_____
_____
_____
_____