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CURRICULUM & TEACHING STUDIES | RESEARCH ARTICLE

Effects of corrective feedback on EFL speaking task complexity in China's university classroom

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Abstract: Corrective feedback (CF) and task complexity are two important pedagogical topics in second language acquisition research in recent years, but there is few research investigating effects of CF on speaking task complexity in China's university classroom settings. This research, through conducting different versions of speaking task experiments among 24 university students in China, explores the effect of teachers' CF on English as a Foreign Language (EFL) speaking task complexity. According to the analysis of first-hand data, this research finds CF has different effects on EFL oral production with different task complexity. In simple speaking task, the effects of five kinds of CF (from largest to smallest) are listed as follows: clarification quest, metalinguistic feedback, recast, repetition and confirmation check. Regarding complex speaking task, the effects of five categorized CF are ranked from largest to smallest as follows: metalinguistic feedback, confirmation check, recast, clarification request and repetition. Improving to provide CF in pedagogical practice is an important contribution to promote EFL speaking task, so, on the basis of above research results, appropriate ways and forms of providing CF

ABOUT THE AUTHORS

Keyu Zhai's research area mainly includes EFL teaching and learning, international and comparative education and social mobility. Keyu finished MA in Education in University College London in 2016, and Keyu's MA focused on SLA and education assessment. After finishing MA programme, Keyu started to do his PhD in Education in University of Glasgow. As a part of Keyu's PhD research, this article deciphers the effects of CF on speaking task complexity.

Xing Gao's main research interest includes social science research methods. Now Xing is doing his PhD in planning in Bartlett School of Planning, University College London. In this article, Xing provided many suggestions of methodology design.

This article can be related to Chinese students' EFL teaching and provide practical reflections on EFL teachers' feedback. This article also attracts the attention of the Institute of Higher Education of China University of Mining and Technology, so this university has initial cooperation potential to work with Keyu Zhai on this topic. This topic can be extended to study teacher and student interactions.

PUBLIC INTEREST STATEMENT

China has the largest number of English as a Foreign Language (EFL) students over the world, and primary students in China start to learn English at very early ages. However, plenty of Chinese students cannot speak English fluently and accurately after graduating from universities. This article, in order to add empirical contributions to EFL teaching in China's university, explores the corrective feedback's role in different oral task complexity based on the data gathered via an experiment that simulated China's university EFL classroom. It was found the corrective feedback has different effects on different oral tasks. Understanding these different effects on the speaking task complexity can improve future corrective feedback's application to EFL teaching. More specifically, EFL teachers, in China's university classroom, can use feedback in a more efficient and appropriate way. That can bring new knowledge in China's foreign language teaching.

are expected to promote efficiency of CF in EFL classroom under the context of Chinese university classroom.

Subjects: Classroom Practice; Language & Linguistics; Language & Education; Language Teaching & Learning

Keywords: corrective feedback; speaking task complexity; Chinese university EFL classroom

A new language acquisition does not follow a straightforward path. Many factors can play roles and have effects in the process (Ortega, 2009), which depends on learner and study situations. In terms of English as a Foreign Language (EFL) acquisition, China has the largest number of EFL learners over the world, and oral English teaching and learning in China have attracted much attention over the last decade. In China's College English Curriculum Requirements (Ministry of Education, 2007), college English teaching aims to develop college students' ability to use English in a well-rounded way, especially in speaking, so that they can use English to make effective communications in their future careers, but most of them have learnt "mute English" when expressing orally in English, resulted from foreign language speaking anxiety (He, 2013; Liu & Jackson, 2008), more specifically from anxiety in task and teachers' negative feedback (He, 2018). China's Ministry of Education has launched a series of reforms on Chinese English education; as a result, great contributions have been made. However, Chinese university students obtain weak ability of practical speaking (Huang, 2014). Therefore, in current EFL classroom in China, speaking task is still the most difficult and challenging section for China's university students (Du, 2016).

Among various factors affecting Chinese student EFL oral production, two such important pedagogical factors include task complexity and corrective feedback (CF). Task complexity has been recognized as an important task characteristic in terms of influencing human performance and behaviors (Liu & Li, 2012). With respect to speaking task complexity, it is an important source of anxiety in the process of EFL speaking in China's university classroom (He, 2018). In second language (L2) oral production, speaking task complexity plays an important role in speaking adequacy, accuracy and reasoning (Revesz, Ekiert, & Rorgersen, 2016). The role of feedback has put considerable emphasis on second language acquisition (SLA) studies for the past three decades, which has explored its incidence and/or effectiveness in developing L2 capacities (Gurzynski & Revesz, 2012). There is a growing consensus among scholars operating in cognitive-interactionist frameworks that CF is facilitative and, at times, necessary for SLA (Doughty & Long, 2003). Many EFL learners in China are afraid of teachers' negative feedback (Mak, 2011), and in addition, different CF has differentiating effects on EFL production (Bitchener, Young, & Cameron, 2005). In practical EFL speaking class, various tasks are required, and according to Bitchener's research results, how to use CF in different speaking tasks is crucial. Therefore, it is important to study the relationship between CF and speaking task complexity. Studying the differentiating effects of several types of CF on Chinese university learners' English-speaking task complexity can contribute to empirical understandings on EFL speaking practice and promote the effects of CF use on English speaking in China's university classroom. However, according to extant research, there is relatively few research on teachers' CF and speaking task design in Chinese university EFL classroom. In order to explore the effects of CF on speaking task complexity, this research conducts a comparative experiment to examine the effects of CF on the different versions of speaking tasks in China's university classroom setting.

1. Literature review

1.1. Corrective feedback

Numerous research on feedback has stemmed from the Interaction Hypothesis (Long, 1996). This Interaction Hypothesis explains that feedback obtained from interaction should be beneficial and even essential for L2 learning. Moreover, several meta-analyses discuss that feedback can profoundly facilitate L2 learning (Norris & Ortega, 2006). A critical review of one particular domain—

CF, which has been subject to 18 unique feedback meta-analyses—was studied. In detail, the unique approach each study has taken in defining their domain of interest was examined. A series of domains of CF are defined and classified, which shows all-round understandings of current CF in L2 research (Plonsky & Brown, 2016). CF, which constitutes a form-focusing device, refers to responses to learners' errors. It is made up of an indication of an error, provision of correct form of target language form, or metalinguistic instructions about the nature of error, or combinations of these (Ellis, Loewen, & Erlam, 2006), so one of the positive effects of feedback is that it can create an opportunity for L2 learners to concentrate on gaps between problematic interlanguage constructions and the target language (Gass, 1997; Schmidt & Frota, 1986).

After building a basic understanding of a relationship between feedback and L2 learning, what should be concerned is how feedback conduces to L2 learning (Mackey, 2007). Lyster and Ranta (1997) classified CF into six types: recasts, clarification request, elicitation, repetition, explicit correction and metalinguistic feedback. Afterwards, sequential research of CF is conducted under the framework of Lyster and Ranta's. On the basis of that, hypothesized functions of CF have been proven by a large number of empirical research. Empirical studies demonstrated that the effects of CF were influenced by learner-external and learner-internal factors. For example, as for low-level L2 learners, prompt feedback is more effective than recasts, but prompt feedback and recasts are equally effective for high-level L2 learners (Ammar & Spada, 2006; Li, 2009); recasts are less effective on non-salient, hard linguistic structures (Lyster, 2004) while recasts have obvious effects on salient, transparent structures (Ammar & Spada, 2006). Lyster and Saito (2010) found that young learners could get more benefits from CF compared with old learners, indicating that age has significant effects on CF. Based on meta-analytic reviews of research on the effects of CF, Li (2010) explained CF is effective, and the effects of CF are affected by interactions, student situation and target form. Thus, the effects of CF are determined by the above external and internal factors. Besides, a CF investigation in L2 classroom setting demonstrates that recasts account for 57% among all CF whilst prompts only have 30% (Brown, 2014). Therefore, it is evident to us that in L2 learning recast is the main form of CF, though research has found that explicit feedback strategies are more effective than implicit feedback strategies in engendering L2 development (Carroll, 2001). These studies show that CF should be studied as a dynamic construct involving contexts and learners' internal factors, so the practices of CF in EFL speaking tasks are determined by the specific situation and task types. Therefore, in detail, different types of CF should be used in different tasks according to specific situation.

1.2. Task, task complexity and speaking task complexity

Tasks, defined as activities requiring “learners to use language, with focus on meaning, in order to finish some presumed goals” (Bygate, Skehan, & Swain, 2001), have been becoming ideal pedagogical tools to carry out instructional approaches (Revesz, 2011). And in EFL, tasks are usually good tools, especially in EFL speaking learning, because task can push learners to concentrate on EFL oral production and oral meaning (Vasylets, Gilabert, & Manchon, 2017). Task complexity refers to attentional memory, reasoning and other information regarding demands imposed by the structure of the task on the language learners (Robinson, 2001). According to “Trade-Off Hypothesis”, L2 learners have limited attentional capacity, so there is an inevitable competition between content and language among L2 learners (Revesz, 2011). In other words, task complexity should be paid attention to different changeable elements. And correspondently, changes, such as CF and learning strategies, should be made. According to different numbers of elements and reasoning, tasks are generally categorized into simple task and complex task. Speaking production, as part of L2 production, also adapts to the rule. Speaking task complexity has divergent characteristics, such as different number of logical connectors and subordinate clauses. Thus, the effects of task complexity on L2 oral output or, to be precise, the accuracy and/or complexity of speaking tasks will be studied in the research.

Stimulated by a substantial number of theoretical frameworks, plenty of empirical studies on task complexity have been conducted. Gan (2012) conducted a research of oral performance in two different tasks (i.e., monologic vs. interactive) from 30 EFL Cantonese-mother-tongue,

secondary school students. In the process of measurement, a range of measures of grammatical complexity is employed. Results showed that the individual presentation tends to promote the usage of a greater number of T-units, clauses, verb phrases and words. Revesz (2011) studied the relationships between task complexity, and accuracy and complexity of L2 speech production. Based on a classroom-based empirical study, Revesz's (2011) research indicated that task complexity does affect accuracy and complexity of L2 speech production. If the task is more complex, accuracy will be lower. Different from Gan's measures, Revesz (2011) argued that speaking task complexity refers to different kinds of complexity and accuracy of speaking tasks. From a new perspective of resource, Robinson (2001, 2005) categorized task variables into two kinds: resource-dispersing and resource-directing dimensions. Along different dimensions—reasoning and different elements in a task—the different conditions and performance play a really important role. Afterwards, Robinson (2001, 2005) successfully made a comprehensive conclusion about the synthesis variables of task complexity. Meanwhile, Robinson (2005) also made some predictions that different task complexity would result in different task performance. In addition, there are numerous empirical studies on link between task design variables and the accuracy and linguistic complexity of L2 output (Ellis, 2003). In previous work, they investigated the task dimensions +/- many elements and +/- reasoning demands (Revesz, 2011), and Robinson (2001) confirmed oral production in relation to task manipulations along +/- many elements and +/- reasoning demands. Robinson (2001) concluded that more elements in an oral task would contribute to greater type-token ratio than fewer elements. However, task complexity has no effects on the rate of error-free c-units. By contrast, Robinson (2007) found an effect on syntactic complexity for the task feature +/- reasoning demands. Facing the divergent findings, Robinson (2007) explained that specific measures would be more successful than global measures.

In summary, although there are agreements on the relationship between task complexity and oral production quality, there are many different perspectives to measure task complexity. Therefore, based on the aforementioned literature, this study determines to use measurement of conjoined clauses as indicating syntactic complexity. Although recent research prefers multi-dimensionality of the construct of syntactic complexity (Yang, Lu, & Weigle, 2015), there is no agreed specific measurement in speaking task, so this study uses measurement of conjoined clauses that have been widely used in task complexity research in order to ensure the validity and reliability of measurement at the largest degree.

1.3. Effects of CF on speaking task complexity

Although task and interactional feedback have received much attention in SLA research in recent years (Gurzynski-Weiss & Revesz, 2012), there is little research investigating the relationship between CF and task complexity in China's classroom settings.

Lee and Lyster (2016) studied the role of feedback in improving speaking proficiency and addressed this question by reporting the results of a classroom-based experimental study conducted with 32 young adult Korean learners of English. In an experimental design, the effects of grading and personal differences were examined. The research results showed that traits and message cues function independently in predicting changes in behavior. Lee and Lyster (2016) were motivated by the research question—to what extent do L2 learners benefit from CF on L2 speech perception—and then addressed this question by demonstrating the results of a classroom setting experimental study in which 32 Korean learners of L2 English participated. After analyzing the data, Lee and Lyster (2016) found that group involving instruction and CF outperform the instruction-only group on the immediate and delayed post-tests as well as on unfamiliar words. As a result, CF plays an evidently important role in promoting speaking task. Certainly, the findings will be discussed as regard to the pivotal role played by CF in developing accuracy in L2 speech perception. Dłaska and Krekeler (2013) studied short-term effects of individual CF on L2 pronunciation, which investigated the effect of explicit individual CF on L2 pronunciation. An experiment, which investigated the immediate effect of feedback on comprehensibility of controlled speech production by L2 learners, was carried out. In total, 169 adult learners of German participated in

the experiment. The results explained that individual CF is more effective than listening-only interventions in improving L2 comprehensibility and thus individual CF is more powerful than listening-only activities. In conclusion, CF does have power in promoting speaking tasks, but according to the extant research, there are few studying how CF affects speaking task complexity and the effects of CF on speaking task complexity.

1.4. Summary

In L2 learning, CF is essential in promoting learners' performance. In terms of the research of task complexity, L2 writing production is often focused on. In the Chinese task-setting learning, the study of CF on speaking task complexity and accuracy is a significant research field but it is also easily neglected. Chinese EFL learners, in general, are afraid of speaking English because of anxiety in speaking foreign language and task complexity. In the process of promoting Chinese university students' oral production, CF can play significant and efficient roles. However, facing the research problem, there is few research exploring the effects of CF on speaking task complexity in China's university classroom setting. In order to fill the research gap, it is timely that attention should be paid to effects of CF on speaking task complexity. Both CF and speaking task complexity are highlighted in L2 field, so this research explores them based in Chinese university classroom in order to provide specific strategies on speaking learning interaction, especially on L2 speaking output for China's university students and EFL instructors.

2. Research questions and hypotheses

On the basis of previous studies and the motivation for the current study, the research questions and hypotheses are as follows:

- (1) Does CF have same effects on speaking task complexity? According to the Trade-Off and the Cognitive Hypotheses, the task complexity influences on the accuracy and linguistic complexity of L2 learners' output. Correspondently, it can be predicted that CF will have different effects on different kinds of speaking tasks because CF's effects are evidently manifest (Rahimi & Zhang, 2015).
- (2) To what extent does CF affect on quality of speaking task complexity? Motivated by numerous theories of CF, explicit CF is more effective than recasts in L2 development. It is predicted that explicit CF is effective in both easy and complex speaking tasks whilst recasts are more effective than explicit CF in L2 complex speech task.

3. Method

3.1. Participants

The participants in this research were 24 EFL students studying undergraduate courses in China. Their bachelor subject is English, and they are studying in a key China's university. According to the scores of their professional course, the 24 participants with similar scores were selected. The 24 participants were made up of 12 male students and 12 female students. All of them did not have overseas study experiences. The 24 participants were divided into six groups. The data collection lasted about 1.5 h, including 15 min for rest and 15 min for questionnaires. In terms of the participants' background information, all participants ranged in age from 20 to 24. All participants were third year students. The instructor in the stimulated class was a professional lecturer who has been an English teacher for over 5 years. CF providers in the research were six teachers (including the instructor) whose research interests are EFL learning and language teaching.

3.2. Design

In this experiment, the 24 participants were divided into six groups of four. In order to ensure everyone had enough time to produce L2 output, every group consisted of four people. The experiment was carried out in normal class form so that the research could simulate the pedagogical interactional environment. The six groups were assigned with two versions of speaking

Table 1. Design and procedures

	Simple task (25 min)	Complex task (35 min)		
Group 1–6	1 small group discussion	1 small group discussion	Break (15 min)	CF perception questionnaire (15 min)
	2 offering CF	2 offering CF		
	3 group presentation	3 group presentation		

tasks: a simple version and a complex version (shown in Table 1). Afterwards, CF of the two versions of tasks would be given to every participant respectively. Lastly, 12 participants would do the presentation to show their progress in the speaking task based on the CF provided by tutor in every group. In order to collect data of their perception of effects of CF, they were required to finish questionnaires about their perception of effects of CF on speaking task complexity.

The independent variable is CF, including five sub-variables: recast, repetition, confirmation check, clarification request and metalinguistic feedback. Although in CF recasts are mostly used to correct L2 learner’s output (Rahimi & Zhang, 2015), the research considers all forms of CF so as to study all-round situations. Thus, the five independent variables are included in this research. Correspondently, facing different versions of speaking tasks, the effects of recast, repetition, confirmation check, clarification request and metalinguistic feedback would be measured respectively.

3.3. Materials

3.3.1. Task

The experimental task was adapted from Revesz (2011). In Revesz’s experiment, the 43 EFL learners were told that the aim of research was to study the task complexity and individual differences. Forty-three participants were divided into 12 groups and assigned with two versions of tasks. Their tasks were to accomplish the two versions and then to finish the questionnaires. In the tasks designed by Revesz (2011), the two versions of the task differed along the +/- reasoning and the +/- elements dimensions. In the SLA research, tasks that induce more reasoning and involve more number of elements are more cognitively complex than tasks with fewer reasoning and elements (Ellis, 2003; Robinson, 2001). Based on Revesz’s task design (2011), this research will reference it to study the task complexity. In this research, simple task refers to fewer reasoning demands, elements, planning and prior knowledge (Robinson, 2001). Specifically, in this study, a task including less than three elements, a few reasoning and less resource-demanding, which is familiar to L2 learners, is defined as a simple task. The complex tasks differentiate from simple tasks in the extent of attentional focus, working memory, reasoning and other cognitive demands. And thus, in this study, complex task refers to a task with more than three elements, more reasoning and resource-demanding, which is not generally familiar to L2 speakers. Besides, the research will study five kinds of CF: recast, repetition, confirmation check, clarification request and metalinguistic feedback. The five kinds of CF are very commonly used in SLA classroom. Additionally, the five kinds of CF are often used in SLA speaking tasks. Through referencing Revesz’s task design (2011), the research would focus on the effects of speaking task complexity on CF.

3.3.2. Questionnaires

The self-assessed questionnaires were employed into this research so as to assess the effects of CF on different versions of the speaking task. The questionnaires were adapted from Drewelow and Theobald (2007). The questions were all tailored to assess the effects of CF. In this questionnaire, in order to calculate more accurate effects of CF, all answers were calculated on 7-point scale. The perceptions of effects of CF would be the main questions. Additionally, the questionnaire would

also cover the perception of English speaking because distinct individual difference of speaking perception would have effects on final research result. In this complementary part, all questions were assessed on 5-point scale.

3.4. Data collection procedure

All data collection was completed in a simulated English class. In the class, data collection lasted for 1.5 h. Before the class began, the materials were shared with the instructor. Besides, the researcher explained the two versions of the speaking tasks which had been designed and tailored by the researcher for the purposes of this study. In order to make the tasks feasible and suitable for participants in this research, the tasks were reviewed by two experienced EFL teachers working in a Chinese university. After being reviewed by the two teachers, the tasks were piloted by two students and a tutor. Based on comments of the teachers and students, the tasks were improved once again. Thus, the speaking tasks can be, at the most extent, feasible and valid in this research.

As demonstrated in Table 1, the class was conducted as follows: in the first part, the 24 students were given the simple version task and complex task, respectively. Each task consisted of three phrases. First, four students in a group would discuss the tasks (12 min for simple version, 15 min for complex task). Every group would present their discussion results in front of all other students. In this stage, their performance would be paid attention to and then six EFL teachers would offer CF to every group (5 min for simple version, 8 min for complex version). Lastly, after getting CF on their speaking tasks, every group would do a simple presentation (8 min for simple version, 12 min for complex version). During the period of doing the task, the six CF providers would participate in the tasks, listening to and offering feedback on the tasks. All the feedback would be presented through written form so that the data collection and analysis would be more convenient. Once the oral tasks were completed, the students would have 15-min rest and then they were required to file out the questionnaire. The whole process was recorded by a recording device and transcribed into written form. Throughout the whole process of collecting data, the researcher was in the classroom, which could make sure that the researcher could be able to observe the research procedures and make notes.

3.5. Data analysis procedures

3.5.1. CF and speech production measures

As independent variables, the different kinds of CF were analyzed as follows: first, the CF on feedback paper was collected and then coded according to the previous established categories: recast, repetition, confirmation check, clarification request and metalinguistic feedback. Afterwards, the five forms of CF were calculated and measured by regression model. In terms of the measurement of speech production, the number of conjoined clauses was calculated. Conjoined clauses are considered relevant to the +/- reasoning dimension. Compared with tasks that do not need reasoning, tasks with reasoning need speakers to justify their views and explanations with presenting discussion on contrastive, causal and conditional relationships (Revesz, 2011). Although there is rich research supporting to employ multidimensional measurement, there is no agreement with which dimension should be considered. In order to ensure the validity and reliability at the largest extent, this research chose the basic and widely used measurement—the number of conjoined clauses. Although using only one dimension to measure the oral production has many flaws, it can effectively measure reasoning, so it can be an adequate method to measure oral production in this research.

3.5.2. Statistical analysis

In order to examine the effect of CF on speaking task complexity, regression model is employed in the research. After data were collected, they were analyzed with regression model supported by SPSS software 12.0 (SPSS Inc., Chicago, USA). In the regression model, speaking task complexity is dependent variables (simple version is Y_1 , complex task is Y_2). Y is measured through calculating the numbers of conjoined clauses which contain +/- reasoning and then can reflect the task complexity. Regarding independent variables, recast (X_1), repetition (X_2), confirmation check (X_3), clarification request (X_4) and

metalinguistic feedback (X_5) are five independent variables. All variable data come from participants' oral production and tutor's CF. Through regression model, the relationship between CF and speaking task complexity is established. All the parameters in the front of X represent the degrees of effects. Therefore, the regression model can be able to provide a clear result about the effects of CF on speaking task complexity.

4. Results and discussion

4.1. Analysis of effects of CF on simple task

The regression results, provided by the regression model of SPSS software, are shown in Tables 2-4. From the regression model analysis, we can obtain the unstandardized coefficients of five independent variables: -1.107 (recast), -0.149 (repetition), -1.998 (confirmation check), 2.779 (clarification request) and 1.045 (metalinguistic feedback). Thus, it can be concluded that the effects of independent variables on dependent variable (from largest to smallest) are listed as follows: clarification quest, metalinguistic feedback, recast, repetition and confirmation check. According to the aforementioned unstandardized coefficients, we can develop the following equation:

$$Y = 19.996 + 1.045X_1 + 2.779X_2 - 1.998X_3 - 0.149X_4 - 1.107X_5$$

According to Tables 2 and 3, it can depict the goodness of fit of the model because the value of sig is 0.013. In other words, the model results can effectively decipher the relationships between independent variables and dependent variable. Apart from sig value, the value of R^2 is 0.715, which means in the degree of 71.5%, independent variables can result in dependent variable. We can explain that the model is significant in exploring the relationship between CF and simple speaking task.

Among the five independent variables, clarification request has the largest positive effects on promoting speaking task of simple version. In the dimension of CF, clarification request locates in explicit feedback. Through being given clarification request in simple version of speaking task, EFL students can catch the short and easy form of CF compared with other kinds of CF. When students see the clarification request: "sorry?" which is more like interactional communication, their attention can be drawn quickly. In addition, because the task is simple version, students have enough attention and time to ponder over their incorrect speech production. Thus, clarification request has the best effects on students' oral productions improved after receiving CF. Metalinguistic feedback, ranking in the second place among the five kinds of CF, also has relatively large positive effects. As explicit feedback, metalinguistic feedback provides metalinguistic corrections which is a much clearer form than any other CF. However, in speaking interaction, clarification request is more effective than metalinguistic feedback in this research. Although metalinguistic feedback can provide the clearest feedback, clarification request can be more impressive, especially in the speaking task of simple version. The implicit feedback—recast, repetition and confirmation check—has

Table 2. Model summary of simple task

R	R^2	Adjusted R^2	Std. error of the estimate
0.846	0.715	0.704	1.05

Table 3. ANOVA of simple task

Model	Sum of square	df	Mean square	F	Sig.
Regression	33.636	5	6.727	0.225	0.013
Residual	179.28	6	29.88		
Total	212.917	11			

Table 4. Coefficients of simple task

Model	Unstandardized coefficients		Standardized coefficients	t
	B	Std. error	Beta	
Constant	19.996	15.1		1.324
Metalinguistic	1.045	1.643	0.289	0.636
Clarification	2.779	5.223	0.393	0.532
Confirmation	-1.998	3.458	-0.362	-0.578
Repetition	-0.149	2.385	-0.034	-0.063
Recast	-1.107	2.026	-0.265	-0.577

negative effects, which conforms to Carroll’s findings—explicit feedback strategies are more effective than implicit feedback strategies in engendering L2 development (Carroll, 2001) and explicit feedback is more likely to interrupt the flow of conversation (Ellis, 1994). Moreover, we can see in terms of low level of speaking task complexity prompt feedback is more effective than recasts, which conforms to Ammar and Spada’s research results 2006. In simple version of speaking task, recast, repetition and confirmation check are easily overlooked by EFL learners and then the effects of these three kinds of CF are relatively weak in this research. The implicit CF lacks interactional characteristics, so in simple version task, explicit CF can be more effective in improving EFL students’ oral productions.

4.2. Analysis of effect of CF on complex task

In terms of speaking task of complex version, the analytical results of regression model demonstrate the effects of CF (Tables 5–7). According to the regression model analysis, unstandardized coefficients of five independent variables are: 3.040 (recast), -2.274 (repetition), 7.795 (confirmation check), -1.691 (clarification request) and 8.153 (metalinguistic feedback). Therefore, the effects of independent variables on dependent variable (from largest to smallest) can be listed as follows: metalinguistic feedback, confirmation check, recast, clarification request and repetition. Based on what has been discussed above, we can calculate the following equation:

$$Y = -55.707 + 3.040X_1 - 2.274X_2 + 7.795X_3 - 1.691X_4 + 8.153X_5$$

Tables 5 and 6 show the goodness of fit on the model with the value of R^2 (0.754). In other words, the regression model results can effectively in 75% degree show the relationships between independent variables and dependent variable. However, the significance value in this model is 0.296, much larger than 0.05, which may have resulted from small sample. It can be explained that the CF does have effects on speaking task of complex version, but the linear relationship is not strong, so this research considers whether multicollinearity occurs in this model. In order to ensure

Table 5. Model summary of complex task

R	R^2	Adjusted R^2	Std. error of the estimate
0.854	0.754	0.699	1.32

Table 6. ANOVA of complex task

Model	Sum of square	df	Mean square	F	Sig.
Regression	147.788	5	29.558	1.577	0.296
Residual	112.462	6	18.744		
Total	260.250	11			

Table 7. Coefficients of complex task

Model	Unstandardized coefficients		Standardized coefficients	t
	B	Std. error	Beta	
Constant	-55.707	38.551		-1.445
Metalinguistic	8.153	3.308	1.452	2.464
Clarification	-1.691	1.338	-0.428	-1.264
Confirmation	7.795	4.456	0.925	1.749
Repetition	-2.274	1.919	-0.521	-1.185
Recast	3.040	2.028	0.936	1.499

the model is statistically significant, this research does an additional multicollinearity test. The multicollinearity test is also supported by SPSS. Through the multicollinearity test, the largest Pearson’s correlation coefficient is 0.631, larger than other coefficients, indicating that the explanatory variables are relatively independent. The multicollinearity issue is not a challenge in the model estimations. Therefore, it can still see the model can be useful and significant.

In speaking task of complex version, the effects of five kinds of CF are profoundly divergent (from -2.274 to 8.153). Great differences among the five kinds of CF are determined by the speaking task of complex version whose inner is complicated.

Among the five kinds of CF, metalinguistic feedback, confirmation and recast have positive effects on speaking task of complex version with unstandardized coefficients of 8.153, 7.795 and 3.040, respectively. Similar to speaking task of simple version, in complex task, metalinguistic feedback still accounts for the largest positive effects on speaking task complexity. The manifested effects of metalinguistic feedback are rooted in its explicit characteristics that can attract learners’ attention effectively. According to “Trade-Off Hypothesis”, L2 learners have limited attentional capacity, so there is an inevitable competition between content and language form among L2 learners (Revesz, 2011). Therefore, in this situation, metalinguistic feedback can solve this dilemma and thus it has the largest effects. Then, confirmation check is ranked as second place. Usually, confirmation checks are questions that indicate the wrong part of speech production. Through questioning their L2 utterance, L2 learners will be led to the correction forms. Different from simple task version, recasts in complex task play a more significant role in correcting speech production. Recasts are common forms of CF appearing in L2 classrooms, which provides the correct forms for L2 learners. In complex task version, L2 learners have limited attention to think about the gaps between their speech production and the correct forms. As for them, recasts can help them have a clear knowing of their mistakes in speech production and then they can directly use the correct forms. In terms of improving L2 learners’ speech production in the short term, recasts have apparent effects, especially in speaking task of complex version. Contrast to simple task version, clarification request has weak effects on speaking task of complex version. In complex task, clarification request just can indicate the existence of mistakes in speech production. L2 learners have limited attention to analyze which part goes wrong, so the confirmation check can provide more information beneficial to correcting mistakes of speech production. Regarding repetition, its effects on speaking task of complex version are so weak that L2 learners would easily overlook it, resulting in the lowest effects of repetition compared with other four kinds of CF. In complex speaking task, time and attention are so limited, so just repetition cannot make any difference. In this research, eight students sometimes neglected the repetition feedback, which is found by researcher’s observation. The eight students have no response to repetition, but they are sensitive to other more indicative feedback.

Therefore, we can come to conclude that CF does promote EFL students’ speaking task; the result also supports Long’s (1996) and Lee and Lyster’s (2016) research. Moreover, different kinds

of CF have different effects on speaking task complexity because in different situations CF plays different roles in promoting EFL students' speaking task (Brown, 2014; Carroll, 2001; Li, 2010). Facing different versions of speaking tasks, CF has divergent effects. Moreover, in terms of research question 2, in different versions of tasks, CF affects speaking task complexity in different degrees. In simple version of speaking task, it can be concluded that the effects of the five kinds of CF (from largest to smallest) are listed as follows: clarification quest, metalinguistic feedback, recast, repetition and confirmation check. By contrast, in complex version of speaking task, the effects of five kinds CF are ranked from largest to smallest: metalinguistic feedback, confirmation check, recast, clarification request and repetition. Therefore, in research question 1, the prediction is correct. However, the prediction is wrong in research question 2.

5. Conclusions

Task complexity and CF have received much attention in SLA research over the recent years, but few research investigates the effects of CF on speaking task complexity in China's university classroom setting. To bridge the gap, this study explored the effects of recast, repetition, confirmation check, clarification request and metalinguistic feedback on different speaking tasks that were designed according to complexity respectively. And this can be viewed as a brand new exploration in this field. On the one hand, much extant CF research has laid foundations for analyzing CF profoundly. For example, Plonsky and Brown (2016) defined and classified a series of domains of CF. Eighteen unique meta-analyses provide profound understandings of CF, which can be considered as the foundation of systematical study of CF. On the other hand, this research also can be a complementary part to CF and EFL speaking task complexity. The connections between the two fields can be beneficial to pedagogical practice. In current EFL classroom in China, the CF is eagerly required to be used in an efficient way in order to promote Chinese students' speaking skills. This research can add empirical understandings to the application of CF to EFL speaking teaching.

However, there are some limitations in the research as well. First, sample size is not large enough. Although the research has tried to select 24 participants whose explicit conditions are very similar, the research cannot exclude their inner different cognitive abilities. The small size of sample determines larger fluctuations of final unstandardized coefficients that can reflect the effects of every independent variable. Increasing sample size in the research can be constructive in strengthening reliability and validity. Moreover, the data collection procedures have some flaws because of limited experimental resources. Participants in the research are students who cannot often gather together, so the experiment is their only one chance to meet with each other. Limited time for discussion about tasks would have low efficiency. Strangers, to some extent, usually have interactional barriers at the beginning. Often chatting with each other will be beneficial to this research because the speaking task in this research still belongs to a form of interactional activity. In future's research, strengthening communications and acquaintances between participants in experiment can be advantageous in promoting efficiency of data collection. Finally, this research is a simulated class activity, but in reality, there is only one teacher in class. However, there are six teachers providing CF in this research, which cannot be the practice in real pedagogical activities. All these limitations can provide reflections for future research.

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