American Journal of Multidisciplinary Research and Innovation (AJMRI)

ISSN: 2158-8155 (Online), 2832-4854 (Print)

VOLUME 3 ISSUE 1 (2024)

PUBLISHED BY: E-PALLI PUBLISHER, DELAWARE, USA

American Journal of Multidisciplinary Research and Innovation (AJMRI)

Volume 3 Issue 1, Year 2024
ISSN: 2158-8155 (Online), 2832-4854 (Print)
DOI: https://doi.org/10.54536/ajmri.v3i1.2361
https://journals.e-palli.com/home/index.php/ajmri

Congolese Student Comprehension of CMMW: A Stumbling Stone to the Development of L2 Learners' Acquisition

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Article Information

Received: November 23, 2023

Accepted: December 28, 2023

Published: January 02, 2024

Keywords

Comprehension,Teaching Strategy, Learning and Application of CMMW, Lingala Native Speakers

ABSTRACT

It is necessary to use Chinese Mandarin measure words (CMMW) when counting objects and actions with numbers, demonstratives, nouns and verbs. Compared to Mandarin, Lingala generally has no measure words. According to Lado's (1957) contrastive analysis hypothesis (CAH), linguistic elements different from the learners' native language create difficulties for them. This study uses an empirical research method to investigate L2 learners' use of CMMW and the problems they encounter. In the empirical study, questionnaires and proficiency tests were used to collect information from the participants. A CMMW test was also designed to collect data on the application and use of different CMMW by Lingala native speakers. The results of the empirical study showed that CMMW are a difficult task for Lingala native speakers. The results of this study also showed that although Lingala native speakers have difficulties in using most of the CMMW categories, some measure words are easier to use than others. The Congolese students have stronger skills in weights and measures, collective nominal measure words and temporary nominal measure words. The main reason for the difficulties lies not only in the cross-linguistic differences between Chinese Mandarin and Lingala, but also in the complexity of some CMMW. After finding out the difficulties faced by the Congolese students learning CMMW, some preliminary suggestions for teaching CMMW in second language learning and application were proposed.

INTRODUCTION

Measure words are a major feature of Chinese Mandarin (CM). However, this feature of CM is a major challenge for Congolese students who are learning the CMMW. Many African Bantu languages, such as Lingala, do not use measure words (MW), while others, although using MW, are not very common. However, CMMW are not only abundant in quantity, but also have a huge complexity usage, which leads the Congolese students often make errors in acquiring and using CMMW. However, the Lingala native-speakers do not understand MW when learning Chinese Mandarin, and they make a lot of errors in learning and using them, and most of the time, they replace the rest of the MW with the general quantifier "个"(ge)。For example, "一个书"(yí gè shū)、"一个椅子"(yí gè yǐzǐ)、"一个刀"(yí gè dāo), etc. CMMW is a type of word that learners of the Lingala language, often make significant errors when learning CM. Lingala language belongs to the African Bantu language family, and although uses measuring unit (MU), but this MU is not considered as MW category in CM. It is particularly complicated to translate CMMW into Lingala. This research on CMMW is very rich , but the research is not extensive. The author takes students from Congo as the research object to study the use of MW.

According to the definition of CMMW, there is a close relationship between CMMW and Mandarin nouns (MN) and verbs (MV), which indicates the learning and grasping of CMMW are closely related to nouns and verbs. Therefore, the acquisition of CMMW is integrated with the development of vocabulary, which is the essence of language learning. This also indicates that the learning of CMMW involves the entire learning process of Chinese Mandarin as a L2. So, it is crucial to comprehensively study the application of different MMW in learning Mandarin as a L2. In addition, the usage contexts of MMW in CM reading (MR) and speaking (MS) are diverse, that is to say, it is necessary to understand all the uses of MMW in order to communicate more effectively in Mandarin, which is also the ultimate goal of grasping and learning a L2. However, most of the existing studies on CMMW have examined nominal measure words (NMW) from both linguistic and applied linguistic perspectives. Although NMW are the main component of MMW, they are not the only category of measure words (for the categorization of MMW). Therefore, this study conducts research on both NMW and verbal measure words (VMW) to fill the research gap in this area. In addition, most of the existing studies on NMW mainly focus on individual nominal measure words (INMW), so this study also investigates other subcategories of measure words, including weights and measure words, collective nominal measure words, temporary nominal measure words, container nominal measure words and quasi-measures.

CM is a unique lexical classification in the Sino-Tibetan language family, which has its own unique rules of usage, comparing to other countries languages. As a special class of words, MW are also one of the most important features of Mandarin grammar (MG), which always value the linguistic community. The reason for this is MW are very flexible in practical use and can be changed according to different linguistic environments,

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which poses a significant learning obstacle for CM language learners. Therefore, it is important to categorize MW from the perspective of CM as a foreign language learners. In traditional language studies, MW are usually categorized into two main categories: NMW and VMW, but the traditional categorization does not have a greater role in acquisition and differentiation for the CM language learners. In this paper, it will use semantic analysis to reclassify MMW from the perspective of the CM language learners, so that learners can recognize, analyze and apply the same category of MW together. In addition, this paper will also analyze the bias of the corpus of MMW for the Congolese learners in order to find out the different obstacles of Congolese students' acquisition of MW, especially the causes of errors in similar MW, so as to provide ideas for teaching of MMW as a L2.

This article investigates CMMW among the Congolese students and reclassifies them from the perspective of teaching strategies on students MW acquisition, that will provide new ideas for classroom teaching. The classification of MW allows teachers to review, summarize and analyze the same types of low-level MW when explaining high-level MW, it helps students to learn and better understand, also providing solutions for students self-studying. In this paper, it finds out the different errors made by Congolese students in the process of acquiring CMMW, also analyzing the causes of the errors by developing corresponding teaching strategies through interviews with front-line teachers. In addition, the teaching strategies will be implemented in the classroom with a teaching suggestions and reflections, developed through a comparative experiments and tests. It reveals the difficulties and problems faced by Congolese students in application of CMMW and it will put forward to propose some pedagogical suggestions, and hope it will inspire teaching CMMW as a L2 area.

LITERATURE REVIEW

As discussed earlier, MW are obligatory in CM but not in Lingala. This difference between CM and Lingala may lead obstacle to Congolese students in acquisition and learning CMMW, which is the main reason for this study. The present chapter places the study in the field of second language acquisition (SLA). It will discuss relevant theories of SLA to frame the discussion on how L2 learners apply CMMW. It will also review previous study on CMMW in order to place the current study within the context of CMMW research. This chapter begins in section 2.1 which reviews of SLA theories, including contrastive analysis (CA), contrastive analysis hypothesis (CAH) and error analysis (EA), and it will also present a theoretical framework for language learning. Section 2.2 tackles on an overview of previous research on CMMW and places the present study in the context of CMMW research.

MMW: Sla Hypotheses and Theories

There is a cross-linguistic difference which exists between CM as L2 and the Lingala native-speakers, and this difference affects them while learning and acquisition CM language, particularly in terms of CMMW, as many scholars have suggested (Fries & Lado, 1945). Therefore, this study reviews the relevant assumptions and theories in the field of second language acquisition process of CMMW by the L2 learners.

Contrastive Analysis and Error Analysis

CA is one of the most important methods used in this study, which compares the learners' native-language (Lingala) with the CM as their L2 they are learning. The present comparison is designed to find out difficulties and identify solutions to improve the learning and acquisition of CMMW by the L2 language learners. According to the comparison of the CA, those elements that are similar to the learners'native-language will be easy, while those that are different will be difficult. (Lado, 1957) further proposed the CAH based on CA, which was the dominant theory of the behaviourism school in the field of SLA. The CAH predicts possible difficulties in L2 learning and acquisition by comparing the learners'L1 with the L2. According to the CAH, linguistic elements for which equivalents exist in learners' first language are easy for them, while linguistic elements for which equivalents do not exist are difficult. This theory further suggests that when L1 habits are helpful for language learners'in acquiring L2 habits, this is called a positive transfer, but when it L1 habits prevents learners'from learning the new one habits, it is called a negative transfer.

Although some scholars like (Hughes, *et al*., 1972) have argued that the CAH does not predicate all difficulties in language acquisition, for this study, a combination of CA and EA were used to discuss and explore the difficulties faced by L2 learners'in the application of CMMW. More specifically, a comparisons between L1 and L2 learners'were used as the primary technique to analyze difficulties in the application of CMMW by examining errors in the empirical study. The combination of CA and error analysis (EA) is also supported by (Hammerley, 1982), who claimed that CA complements EA in explaining errors, while EA affirmatively recognizes or rejects predications based on CA. Using EA, L2 learners' misrepresentations are compared with native speakers' discourse and three steps are proposed in EA: locating the error; identifying the cause of the error, and explaining the error (Corder, 1981). For this study, EA is used to identify errors in the language learners'application of CMMW, in order to describe and explain these errors, with the help of CA with a view to suggesting some teaching strategies for language teachers. Although this study examines L2 learners' errors, the focus of the research is on the learner's language, a term introduced by (Selinker, 1972) to describe the language system that lies between the learner's native tongue and the target language.

Process Model of CMMW Acquisition

Section 3.1.1 explores the theoretical approach that this

study adopts to examine and evaluate the problems that CMMW pose for Lingala native-speakers. The section puts forward an internal process model of CMMW acquisition for L2 learners, with the aim of identifying, discussing, and analyzing the challenges of applying CMMW from the perspective of language learners. The model provides valuable insights into the acquisition of CMMW, and offers opportunities for improving the accuracy and fluency of language learners. Before introducing the process model of CMMW acquisition, it also discusses (Gass's, 1988) study on how learners convert ambient speech (input) into output. This framework serves as the primary guidance and inspiration for the CMMW acquisition process model.

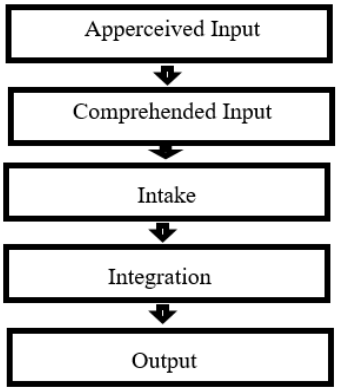

Figure 1: Ambient speech

In the given framework, "ambient speech" refers to adequate L2 data that language learners encounter. Such data is predominantly presented by the L2 native-speakers in the context of L2 immersion, and by language educators in the language-learning environment. Although language learners are exposed to ambient speech, not all of the language data they encounter is processed to the next level. The present study contends that L2 learners can access to sufficient CMMW data in "Ambient speech" conditions, and are exposed to sufficient CMMW data from the initial phase of CM language learning. This is because CMMW have close relationships with nouns and verbs, which are the fundamental elements in the language learning process. To provide additional evidence for the previous proposal, this research analysed the textbooks used by students of different level at Marien NGOUABI and Denis SASSOU NGUESSO University. The analysis revealed thirty-eight MW, which includes nouns and verbs. The findings suggest the prevalence of MW within first, second and third-year textbooks.

Review on the Use of CMMW in Learning and Teaching Cm as a L2

Section 3.1 discusses the theoretical framework for studying the application of CMMW in the acquisition and teaching of CM as a L2. This section will provide an overview of the application of CMMW in the acquisition of CM as a L2 and in the teaching and learning of CM as a L2, thus determining the position of this study in the related field. The following section will review the studies of (Wang, *et al.*, 2004) .

(Wang, 2004) conducted a study on the categorisation of CMMW and teaching CM as a L2. He believes that the categorisation of CMMW is very important for the acquisition of CMMW. His comparative study of CMMW and Foreign language units of measure is important for this study. It is a progressive argument for the study on the categorisation of CMMW. According to Wang, the difficulty in teaching CMMW does not lie in the fact that there are similar measure words in the L2, but in the fact that there are no equivalents in the L2, such as individual MW. He also puts forward some suggestions for the application of CMMW in the teaching of Chinese as a foreign language at the elementary level, for example, instead of taking individual MW as the main task in the teaching and acquisition of CMMW at the elementary level, but should make good use of the general quantifier 个(gè), and emphasise the non-specific MW when designing teaching materials.

(Dong & Zheng, 2007) , studied the use of CMMW by international students whose mother tongue is not CM in the CM Interlanguage Corpus, in which they adopted the EA method to analyse 63 CMMW with 1,636 usages in each sentence of the corpus. According to their research, international students can correctly use the "weights and measures" and "container measure words", as well as master individual MW with less usages. They also discovered two types of errors that learners make. The first one is the mismatch between CMMW and nouns, including the overgeneralisation of "个"(gè), "位"(wèi), "种"(zhǒng), and "件"(jiàn), the general inappropriate between CMMW and nouns, as well as the errors caused by nouns. Another type of errors is syntax errors in the application of CMMW, including redundant of CMMW in sentences, inappropriate between CMMW and parts of speech other than nouns and verbs, the use of CMMW as nouns, and errors in word order.

(Guo & Han, 2007) investigated and analysed foreign students' use of CMMW based on the CM Proficiency Test outline. They interviewed and surveyed 116 learners of CM as a L2 at Tianjin Normal University, including beginner of CM learners (learning CM for more than half a year), intermediate CM learners (learning CM for more than one year) and advanced CM learners (learning CM for more than two years). After collecting data, they used EA to analyse these students' application of CMMW. According to their research, the higher the students' Mandarin proficiency, the better their application of CMMW. Guo and Han also used the interlanguage theory (Selinker, 1969) ,to conclude that the CMMW interlanguage system develops with the development of CM proficiency. According to Guo and Han, errors in the use of CMMW are mainly due to the overgeneralisation of 个"gè", the distinction between synonyms, measure words that have the same pronunciation and similar characters i.e. 副"fù" and 幅"fú", MW with similar features i.e.根"gēn" and条"tiáo", nouns which can

be collocated with different MW (i.e. 买了一行树 "mǎi le yì xíng shù" [bought a row of trees] and a general misunderstanding of CMMW.

(Guo, 2008) analysed the reasons for foreign students' made errors in learning CMMW from both teaching and learning perspectives. According to her research, errors in learning and acquiring CMMW are mainly caused by negative transfer, over-generalisation in the L1, and learners' communication strategies. She believes that the difference between the L1 and L2 is the main reason for international students' difficulties in learning and acquisition of CMMW. Over-generalisation of the target language is most common among novice learners, for example, using the general measure word "个" (gè) with countable nouns for which they do not know the measure. In terms of communication strategies, L2 learners tend to avoid using CMMW when they lack confidence in using it. Although Guo analyses some errors in the learning and teaching of CMMW from two aspects: SLA and teaching CM as a foreign language (TCFL), she provided insufficient examples, made simple assumptions, lacked evidence, and did not fully explain the research methods and findings. Guo mentioned L1 transfer in his research, but did not further introduce it, and did not either discuss the evidence of related research. She also mentioned the impact of communication strategies, but did not provide a detailed explanation of its relationship with learning CMMW.

(Liang, 2009) conducted a study on the acquisition of CM Nominal measure words (NMW) by L2 adult learners. In his study, 29 Korean native-learners, 29 English native-learners, and 10 Taiwanese native learners participated in three tests, including a comprehension test, a production test, and a prototype test, to explore the acquisition of different NMW by L2 learners. The results of these three tests showed that the level of CM proficiency was related to the learners' use of CMMW.

MATERIALS AND METHODS

Context and Participants

This current study was mainly conducted at Marien NGOUABI University and Denis SASSOU NGUESSO University, both university located in the southern part of the Republic of the Congo at the end of the first semester of the academic year in 2022-2023. At both university, the Confucius Institute (CI) is in charge of teaching CM to all university students. The CI has recruited CM volunteers'teachers from China and Congolese volunteers'teachers from the Republic of the Congo, in order to be teaching CM to the Congolese institution of education, where student and people who show great interest learning CM. The CI aims to provide better teaching, facilitate a CM learning environment, and enhance learners'communication and critical thinking skills using creative and lively teaching activities. Every student at both institution who were taking CM course would have the chance to obtain a scholarship from the CI to pursue their higher academic education in the People Republic of China, while taking a CM language proficiency level test. Then, after being selected they can file an application to a Chinese University, based on their CM proficiency level test. Thus, students with a higher language proficiency level test (Like: HSK4; HSK5 and HSK6) can directly apply for the major and those with the low language proficiency level test (Like: HSK1; HSK2 and HSK3) would be advised to retake a one-year CM language course. Currently, this study was an introductory statistic of CM course in the application of CMMW by the Congolese students language learners, as they often encounter MW while learning CM. However, CMMW are difficult to learn, and its lead to many types of biases in their use. So, the present study is considered as a great help to the language learners, in so far as, it can not only help the learners to reduce the biases in the acquisition and application of CMMW, but also help them more effectively to grasp CMMW, in the same way it also helps the Congolese teachers to improve their ways of teaching CMMW.

The participants of the current study were all conducted by university students taking the CM language courses. Most of these students were majoring in different area of study. A few had majored in languages and had chosen CM as their L2 learning. As far as the questionnaire is concerned, the respondents consisted of 114 students from three different CM classes which are divided as follows: Elementary level or freshman students (45 students, 39.4%), Intermediate level or Second year Students (33 students, 29%), and Advanced level or third year students (36 students, 31.6%). Of the 114 students, there were 69 males which represent 60.5% and 45 were females which represent 39.5% (in the survey, there were four of the test taker did not mention their gender). The survey was conducted by non-Chinese mandarin native-speakers and they were majoring from different fields and schools that is listed as follows: Humanity and Liberal Arts, Law, Business, Science, Engineering, Journalism, and Foreign languages. In all the three classes of both institution, the teachers were Chinese and Congolese. After taking part to the survey and providing specific details and contact information about the survey, ten students showed their interests for the interview in participating in further research. Between the ten, six were chosen from the students who had fully answered the questionnaire and four were students of School of Foreign languages, majoring in English and CM language with study abroad experience. They were contacted directly by the researchers. The ten students conducted to participating for the interview, five were male and six were female.

When reviewing the Congolese student progress and learning in the application of CMMW, a variety of qualitative and quantitative data collection techniques are used throughout the programme. Among the techniques used on the collection data includes the distribution of open-ended questionnaires to students on the CMMW, in order to find out their problems in learning and

acquisition on the CMMW. In addition to collecting data on the whole questionnaires, in-depth follow-up interviews were conducted with the learners of different CM proficiency levels.

Instruments

Questionnaire

The purpose of the questionnaire on the CMMW, is to collect personal information of participants before the test. However, the current study does not focus on individual differences among participants, so personal information is mainly for reference.

Question 1

Collects information about the gender of the participants.

Question 2

Investigates the native-speakers language of the participants, the targeted participants of this study are the Lingala native-speakers.

Question 3

Concerns the participants experience in learning other languages.

Question 4

The participants are required to rate their CM language proficiency themselves.

Question 5

Investigate the hours participants spend on practicing CM outside the classroom.

Question 6

Investigate whether the participants completing the questionnaire has any CM native-speaking partners or friends, as it would be helpful for them to develop their CM language skills.

Question 7

Finds out how often the participants practice their reading, listening, writing and speaking.

Many Congolese students face certain obstacles in the application and learning of CMMW. This article investigates a survey questionnaire mastery of CMMW among students of the Confucius Institute at Marien NGOUABI and Denis SASSOU NGUESSO University, thus the investigation is aimed to identify the obstacles that exist in teaching CMMW of the Congolese students learners', based on a comprehensive analysis, which provide a practical suggestion for the teaching of CMMW for the language learners'. The current study will be a great helpful for the Congolese students to an extent that, it will not only help Congolese students to solve the problem of learning CMMW, but also will help them to correctly understand, learn and master the importance of CMMW, so as to better mobilise their motivation in learning CM, and to improve efficiently their learning and enjoyment of the CM language.

Interviews

Semi-structured interviews were the main method used in this study because it allows researchers to gather similar data from different interviewees, while providing the flexibility to ask follow-up questions and discover unexpected fields. The interviews were conducted after following the distribution of the questionnaire. The first round of interviews involved six students who fully completed the questionnaire and it focused on the same topics related to their CMMW ability. In addition to these questions, follow-up questions were asked based on the interviewees' answers and personal experiences. The second round of interviews was conducted with four senior CM students who had experience of studying CM in China. In addition to the questions listed above, this interview was also based on their previous experiences abroad during their staying in the People's Republic of China. In conducting the interviews, the research tried to identify the problems faced by language learners in using CMMW. All interviews were audio-recorded and then transcribed by the researchers with the permission of the participants.

RESULTS AND DISCUSSION

Questionnaire Results

As stated in the method, the questionnaire results present the overall results of L2 learners from CM who participated in the survey. The participants were split into three groups based on their language level, and 114 L2 learners completed the survey. The organization of this chapter is structured as follows, with Section 4.1 presenting and discussing the general results of L2 learners' application of CMMW; with Section 4.2 providing a summary of how CMMW application to different test items; with Section 4.3 summarizing the difficulties encountered in the application of CMMW; and with section 4.4 is the study discussion, based on the examination of L2 learners' ability in application of different CMMW.

Students' Overall Performance Application Of CMMW

The Statistical Package for the Social Sciences (SPSS) was used for data entry and analysis. The software is now widely used in market research, government surveys, educational research, etc. The answers to the empirical studies were recorded in the software and the percentage of correct answers was also entered into the software for analysis. The elementary level is marked as "1", the intermediate level is marked as "2" and the advanced level is marked as "3".

One-way analysis of variance (ANOVA) is a statistical testing method in the SPSS, aimed at testing for differences between groups by comparing the means values of two or more groups. The graph based test in one-way ANOVA determines significant differences between groups by

comparing all means (with a significant value of 0.05). Since the one-way ANOVA test assumes that there is no significant difference between groups, a significant value of 0.05 is usually used as the cut edge point to reject the hypothesis. If the significant probability result is above 0.05, the hypothesis is accepted,meaning there is no significant difference between different groups. More specifically, if the significant probability result is equal to or less than 0.05, the hypothesis is rejected, meaning that there is a significant difference between groups. If the significant probability result is 0.893, this means that there is a 89.3% chance that there is no significant difference between groups, so the hypothesis is accepted. If the significant probability result is 0.013, this means that there is a 1.3% chance that there is no significant difference between groups and therefore the hypothesis is automatically rejected. The main purpose of the "Tukey test" is to study the similarity of the L2 group in the application of CMMW in their mother tongue. The following section describes the process of the "Tukey test".

Table 2: L2 students' overall performance Result application of CMMW

1=Elementary 2=Intermediate 3=Advanced	1=Elementary 2=Intermediate 3=Advanced	Mean difference in the percentage of the correct answer	Significant probability
1	2	4.95000	.893
	3	5.41667	.888
2	1	-4.95000	.893
	3	.46667	1.000
3	1	-5.41667	.888
	2	-.46667	1.000

** If the mean difference is 0.05 level, it is significant*

As mentioned in the Method chapter, the present study investigated the application of CMMW with some university students in the Republic of the Congo. In Table 2, the "mean difference of the percentage of correct answers" represents the average difference in the percentage of correct answers between sample groups, while the "significant probability" refers to the statistical difference indicated by the letter p. The mean difference of the percentage of correct answers is considered significant at 0.05, meaning that, if it is less than or equal to 0.05, it is considered to be significant. The mean difference is significant at 0.05, which means that if the significant probability is less than or equal to 0.05, there is a significant difference between the groups; if it is bigger than 0.05, there is no significant difference.

The above Table 2 compares each group with the other three groups to find out whether there is any significant difference in the average correctness of the groups in the application of CMMW. Firstly, the elementary level group was compared with the intermediate level group and no significant difference was found (Sig.=0.893 i.e. p>0.05). Then the elementary level group was compared with the advanced level group and no statistically significant difference was found between them (Sig. =0.888, i.e. p>0.05). The elementary level group was compared to the advanced level group and a significant difference was found (Sig. =0.013, i.e. p<0.05).

The intermediate level group was first compared to the elementary level group and no significant difference was found (Sig. =0.893, i.e. p>0.05). The intermediate level group was then compared to the advanced level group and no statistically significant difference was found (Sig. =1.000, i.e. p>0.05).

The advanced level group was first compared to the elementary level group and no significant difference was found (Sig. =0.888, i.e. p>0.05). The advanced level group was then compared to the intermediate level group and no significant difference was found (Sig. =1.000, i.e. p>0.05).

The above results indicate that there is no significant difference between the L2 groups. However, all the three L2 groups were significantly different (significant value less than 0.05). This indicates that L2 learners have difficulties in learning and acquisition CMMW.

As mentioned above, the different questions in the empirical study aimed to discover different information about learners' application of CMMW. The next two sections will introduce and discuss the results of different topics.

The Results of CMMW Application for Various Tasks

Table 3: Multiple choice question results

1=Elementary 2=Intermediate 3=Advanced	1=Elementary 2=Intermediate 3=Advanced	Mean difference in the percentage of the correct answer	Significant probability
1	2	1.03750	1.000
	3	12.23636	.820
2	1	-1.03750	1.000
	3	11.19886	.692

3	1	-12.23636	.820
	2	-11.19886	.692

** If the mean difference is 0.05 level, it is significant*

Table 4: Blank-filling Task Results

1=Elementary 2=Intermediate 3=Advanced	1=Elementary 2=Intermediate 3=Advanced	Mean difference in the percentage of the correct answer	Significant probability
1	2	-1.16667	.999
	3	-3.00000	.991
2	1	1.16667	.999
	3	-1.83333	.994
3	1	3.00000	.991
	2	1.83333	.994

** If the mean difference is 0.05 level, it is significant*

Table 5: Matching-up Task Results

1=Elementary 2=Intermediate 3=Advanced	1=Elementary 2=Intermediate 3=Advanced	Mean difference in the percentage of the correct answer	Significant probability
1	2	6.68182	.994
	3	15.37500	.947
2	1	-6.68182	.994
	3	8.69318	.977
3	1	-15.37500	.947
	2	-8.69318	.977

** If the mean difference is 0.05 level, it is significant*

Table 6: Gap-filling Task Results

1=Elementary 2=Intermediate 3=Advanced	1=Elementary 2=Intermediate 3=Advanced	Mean difference in the percentage of the correct answer	Significant probability
1	2	-12.71429	.171
	3	-22.20000*	.025
2	1	12.71429	.171
	3	-9.48571	.469
3	1	22.20000*	.025
	2	9.48571	.469

** If the mean difference is 0.05 level, it is significant*

Table 7: Phrase Translation Task Results

1=Elementary 2=Intermediate 3=Advanced	1=Elementary 2=Intermediate 3=Advanced	Mean difference in the percentage of the correct answer	Significant probability
1	2	-113.06140	.175
	3	-118.32051	.180
2	1	113.06140	.175
	3	-5.25911	.999
3	1	118.32051	.180
	2	5.25911	.999

** If the mean difference is 0.05 level, it is significant*

Table 8: Sentence Translation Task Results

1=Elementary 2=Intermediate 3=Advanced	1=Elementary 2=Intermediate 3=Advanced	Mean difference in the percentage of the correct answer	Significant probability
1	2	-4.50000	.978
	3	-21.87500	.274
2	1	4.50000	.978
	3	-17.37500	.207
3	1	21.87500	.274
	2	17.37500	.207

** If the mean difference is 0.05 level, it is significant*

According to Tables 3 - 8, significant difference is found between the L2 groups in the multiple-choice task, blank-filling task, matching-up task and sentence translation task. Significant difference is also found in the gap-filling and phrase translation tasks, although the results of the intermediate and advanced level group are not significantly different from the other groups. These results suggest that L2 learners with higher language proficiency are better at gap-filling and phrase translation tasks.

Section 4.2 presents the results of the application of CMMW in different tasks. In general, the application of CMMW by L2 learners has not reached a similar level of application of CMMW. According to Congolese students whose mother tongue is Lingala, CMMW are a difficult part of their L2 language learning of CM. In order to facilitate the discussion of the results in the next section, the following table presents a summary of the results for different tasks.

Table 9: Summary of Different Tasks

Tasks	The application of CMMW is significantly different from the learners native language		The application of CMMW that are closely related to the learners mother tongue
Multiple-Choice	Elementary	V	
	Intermediate	V	
	Advanced	V	
Blank-filling	Elementary	V	
	Intermediate	V	
	Advanced	V	
Matching-up	Elementary	V	
	Intermediate	V	
	Advanced	V	
Gap-filling	Elementary	V	
	Intermediate		V
	Advanced		V
Phrase Translation	Elementary	V	
	Intermediate		V
	Advanced		V
Sentence Translation	Elementary	V	
	Intermediate	V	
	Advanced	V	

DISCUSSION

Carroll (1982), Alderson *et al.* (1995) agree that different tasks are needed to test the different abilities of L2 learners. Therefore, six different questions were used in the current study to examine L2 learners' ability to use different CMMW.

The multiple-choice tasks in the present study examined L2 learners' application of non-specific NMW, one of the most common MW in CM. The options in the multiple-choice tasks are similar in some aspects. The first multiple-choice tasks requires L2 learners to distinguish between CMMW that are similar in characters, pronunciations, or meanings, in which participants need to pay attention to the differences between the choices and understand the

choices in order to make the correct choice. Another type of multiple-choice question tests the overlap of CMMW, requiring L2 learners to distinguish the differences between choices. The results of multiple-choice task (Table 3) indicate that L2 learners face difficulties in application of similar MW and overlapping CMMW. According to the requirements of the above Chapter, the blank-filling tasks mainly test students' understanding and application of CMMW in communication, especially NMW with different quantity relationships in context. Participants need to understand the text in order to fill in the blanks with appropriate MW. First, L2 learners need to understand the meaning of the text and then analyse where the missing gaps are. Then, they need to determine what is missing from each gap. After determining what is needed for each gap, they need to find the correct MW or phrase.

Matching-up evaluate the application of literary usages of "nominal measure words", "temporary nominal measure words", and "verbal measure words" by L2 learners. These tasks require participants to first understand the meaning of the entire sentence and then understand the meaning of the choices. In addition, since the choices contained CMMW with similar semantic and grammatical usage, participants needed to understand the choices and analyse them in order to make correct matches. The results of the matching-up tasks in the empirical study (Table 5) indicate that L2 learners encountered difficulties with the literary usage of "nominal measure words", "temporary nominal measure words", and "verbal measure words".

Gap-filling and phrase translation tasks are mainly used to examine the application of NMW. The results in Table 6 show that L2 learners at the intermediate and advanced levels have a better understanding of NMW. However, L2 learners with elementary levels of language proficiency have difficulties in matching noun with their proper CMMW in the tasks.

The sentence translation tasks in the empirical study aims at examining the application of VMW borrowed from verbs and quasi-measures. The L2 learners are free to translate sentences with or without MW. According to the results (Table 8), L2 learners have not yet reached the point where they can freely use VMW borrowed from verbs and quasi-measures.

This section briefly discusses the different tasks used in the empirical research. By analyzing different tasks, possible difficulties have been identified, as shown in the table below.

Table 10: Difficulties in the application of CMMW

CMMW with similar characters, pronunciations or meanings
CMMW repetition
Using NMW and VMW in contexts
Literary usages of NMW
Temporary NMW
VMW and Quasi-measures

CONCLUSION

The current article explores the effects of the application of various CMMW through the empirical research. In general, it is common for Lingala native speakers who are learning CM as a L2 to find CMMW difficult, and three main reasons are attributed to the difficulties in the application of CMMW: L2 learners' inability to understand CMMW, the negative transfer (interference and overgeneralization) of their current CM, and their own complexity.

According to the average percentage of correct answers in applying different CMMW, "the hierarchy of difficulties in applying various CMMW for the Congolese students from CM learners (ranging from the most difficult to the least difficult) should be proposed from the empirical research. By analysing the errors and difficulties, the current research shows that negative transfer from learners' L1 is not the only cause for the difficulties despite the fact that the results from the matching tasks agree with the Hierarchy of Difficulty Model based on the differences and similarities between learners' L1(Lingala) and L2 CM. The reason of the difficulties is based on the negative transfer from learners' existing ability of CMMW. As far as, the model of the process of CMMW acquisition is concerned, the difficulties in the application of standard verbal measure words mainly appear at the noticing stage, understanding stage and integration stage. The empirical research not only provides all the difficulties of CMMW categories for the Lingala native speakers but also shows where the difficulties lie in the model of the process of CMMW acquisition.

Acknowledgements

I would like to express my special thanks of gratitude to my supervisor Professor Chang-Hai Chi for his able guidance and support in completing the current project. I would also like to extend my gratitude to my colleagues from Zhejiang University and Marien NGOUABI University for providing me with all the facility that was required. I would also like to show my gratitude to everyone for sharing their pearls of wisdom with me during the course of this research, and I also thank the reviewers for their insights. I am also immensely grateful to all of you for the comments on an earlier version of the manuscript, although any errors are my own and should not tarnish the reputations of these esteemed persons.

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