

The Role of Task Complexity and Task Motivation in Language Production

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ABSTRACT

This study investigates the relationship between the cognitive demands of task complexity and learners' motivation towards several tasks using task-based instruction during asynchronous computer-mediated communication (CMC) writing tasks. According to Robinson's Cognition Hypotheses (2001a, 2005, 2007), the production of language would be different when certain manipulation of task complexity was made. The tasks were manipulated following two variables from the Cognition Hypotheses, along resource-directing (+/- causal reasoning demand) and resource-dispersing (+/- task structure) dimensions. Eighty-eight undergraduate students from one of the technical universities in Malaysia were divided into four groups and assigned with a writing task. After the participants have completed the writing tasks, they were interviewed and asked to complete a questionnaire to gauge their motivation towards the tasks. Participants' written language production was coded and analyzed using syntactic and lexical complexity measures. Further analysis of the data was conducted using Multivariate Analysis of Variance (MANOVA) and correlational analysis. Analyses of the results showed that there is a correlation between task complexity and task motivation among learners. However, the correlation is only evident in lexical complexity production and no correlation was found for any of the syntactic complexity measures. This study is significant as it explores the roles of task complexity and task motivation in mediating the production of language. It also highlights how the manipulation of task complexity would encourage the production of the language in terms of its complexity.

Keywords: task complexity; task motivation; language production; resource-directing; resource-dispersing

INTRODUCTION

Individual difference variables are among the most influential factors in language classrooms as they have been seen to provide the reason, the extent and the condition of the language acquisition (Dörnyei, 2009). Nevertheless, the individual differences (IDs) of learners vary, depending on the environment of the learning process. Due to this, it is necessary to conduct research in order to understand how certain IDs affect language learning in different contexts (Dörnyei, 2005; Robinson, 2007).

Motivation is one of the variables in IDs (Dörnyei & Ushioda, 2009). Motivation has become the concern of second language researchers as it involves a dynamic process

(Dörnyei, 2014; Ushioda & Dörnyei, 2012). Thus, research on motivation on language learning should also progress overtime (Dörnyei, 2005; Dörnyei, MacIntyre & Henry, 2015; Guilloteaux & Dörnyei, 2008; Koga, 2010; Winke, 2007). Previous studies have explored various individual difference factors in second language acquisition. However, to date, very few studies have addressed the role of motivation in the context of written tasks (Kormos & Dörnyei, 2004). As the effects of motivation on second language written production has received little attention thus far, a classroom-based study that investigates learners' motivation is deemed important.

The use of tasks in language learning has received a great attention from researchers. Tasks have been extensively discussed in existing literature and the roles of tasks are crucial and beneficial in the field of language learning and teaching (e.g., Bygate, 2001; Ellis 2003; Samuda & Bygate, 2008). One of the criteria that need to be considered when designing a task-based syllabus is task complexity, for it is the inherent characteristics of a task that may affect learner's cognitive ability in performing the task. As a result, the quality and quantity of the language production may increase or decrease. In addition, task complexity includes a series of features for designing tasks that can be manipulated. Since these features are unfixed, the complexity of the tasks can be increased or decreased when designing tasks (Robinson, 2011). Hence, task complexity can be manipulated by making the cognitive demands of the tasks to become simpler or more complex. A task-based research that explores the interaction between task complexity and learners' motivation towards the tasks is important in order to provide further insights into the role of task complexity and task motivation in language production. The purpose of the study is to examine the relationship between task motivation and task complexity in mediating learners' written language production.

TASK COMPLEXITY

The notion of task complexity as proposed by Robinson (2001a, 2005, 2007) is the result of the “attentional, memory, reasoning, and other information processing demands imposed by the structure of the task to the language learner” (Robinson, 2001, p.28). The Cognition Hypotheses claims that tasks with more cognitive demands along certain dimensions will push learners to produce greater complexity of language production. This conviction was outlined as one of the factors in the Triadic Componential Framework for task design, as presented in Table 1.

TABLE 1. The Triadic Componential Framework for Task Classification by Robinson and Gilabert (2007, p.164)

Task complexity (cognitive factors)
Resource-directing variables
+/- here and now
+/- few elements
+/- spatial reasoning
+/- causal reasoning
+/- intentional reasoning
+/- perspective-taking
Resource-dispersing variables
+/- planning time
+/- single task
+/- task structure
+/- few steps
+/- independency of steps
+/- prior knowledge

Based on the Triadic Componential Framework (TCF), task complexity refers to the intrinsic cognitive demands of the task, which can be manipulated during task design along the dimensions; resource-directing and resource-dispersing (Robinson, 2003). The task implementation features are divided along the resource-directing dimension and resource-dispersing dimension. Resource-directing dimension affects allocation of cognitive resources to specific aspects of second language (L2) code. Robinson (2011, p.15) claims that “by increasing complexity along these dimensions, initially implicit knowledge of the L1 concept-structuring function of language becomes gradually explicit and available for change during L2 production.” By increasing task complexity along this dimension, learners may be directed to construct concepts and functions required by a task using specific linguistic forms. This will eventually lead to greater accuracy and grammatical complexity of the production. On the other hand, in resource-dispersing dimension, an increase in complexity reduces attentional and memory resources with negative consequences for production, since it creates problems for learners attempting to access their current repertoire of L2 knowledge (Robinson, 2003, p.59). Increasing complexity along resource-dispersing variables is important if one intends to estimate the complexity conditions under which real-world tasks are performed. Task design along these variables will promote a learner’s ability to perform the task as well as reproducing the process that learners may experience in the real world. However, this will only positively influence the fluency, but not the accuracy and complexity of language production. Following Robinson (2003), task complexity in the current study is operationalized by distinguishing the requirement of the cognitive demand of the task, whether it is more demanding or less demanding.

STUDIES ON TASK MOTIVATION

Task motivation concerns learner motivation to do a particular task (Brown, 1987). Teachers play important roles in influencing and assisting learners to stimulate and enhance their motivation. This can be achieved by emphasizing the benefits of learning the language and also designing interesting tasks and activities to captivate learners’ attention. In second language (L2) research, task motivation is commonly used when task characteristics are the attention in motivation (Agnesia, 2010). In addition, tasks are also seen as one of the building blocks that are used to identify what and how learners perform during the teaching and learning condition whereas motivation is related to the task performance (Dörnyei, 2002). Learners’ motivation changes due to the different tasks and situation in which the learning process takes place. Studies have shown that learning environment and task characteristics may also influence motivation of learners to a certain extent. For example, Dörnyei and Tseng’s (2009) study showed that learners’ motivational task processing might be influenced by different stages during task engagement process. In a recent study, Poupore (2013) examined learners’ motivation in interactive tasks. The results demonstrated that cognitive complexity of the task is one of the factors that determine learners’ motivational level. Moreover, Poupore (2015) investigated the effects of content-related conditions on language learners’ task motivation during interactive tasks. The study highlighted that themes related to personal life (i.e. life challenges and personal growth) provide strong motivational foundation during task engagement and promote the development of the targeted language.

Several studies have provided empirical evidence on the use of communicative tasks to examine learners’ motivation towards the tasks. For example, Dörnyei and Kormos (2000) conducted a study to investigate the effect of social and affective variables on foreign language performance in oral argumentative tasks. The study found that affective variables such as self- confidence and willingness to communicate have significant impact during the task engagement. Dörnyei (2002) examined the effects of partner’s motivation on the amount of speech produced in dyads using argumentative tasks. He discovered that task motivation

is co-constructed by task participant during task completion. Another study by Kormos and Dörnyei (2004) investigated the effects of motivational factors on the quality and quantity of language performance in dyadic communicative tasks. The results indicated that there is a relationship between motivation and quantity of speech production.

Furthermore, Yanguas (2007) identified the relationship between task attitudes and linguistic variables by using a semi-guided writing activity in Spanish classroom. The results provided relevant support to the findings by Dörnyei (2002), Dörnyei and Kormos (2000) and Kormos and Dörnyei (2004), in which a significant correlation between task attitudes and quantity of production was evident. In general, these studies proved that motivation has a positive influence on the language production in dyadic tasks. Hence, further analysis of task motivation from a classroom perspective may provide solutions on how motivation can be generated when a learner is performing a task and what are the cognitive demands of the tasks that may stimulate learners' motivation.

AIM

The current study was therefore an attempt to explore the relationship between the complexity of the language production and task motivation when task complexity is manipulated using task-based instruction in asynchronous CMC environment. Dörnyei and Ushioda (2013), and Dörnyei (2005) asserted that the study of language learning motivation is undoubtedly one of the most developed areas in second language research; however, it has been studied in isolation and has no link with other second language research domain. As such, this study attempts to bridge this gap by examining the interaction between task complexity and task motivation. The current study aimed to answer whether there is any significant relationship between the complexity of the language production and task motivation when the task complexity is manipulated. It is hoped that this study would supply an additional dimension for language teachers and researchers to make inferences of the role of motivation in facilitating task-based instruction.

METHODOLOGY

PARTICIPANTS

This study took place at one of the technical universities in Malaysia. The participants were eighty-eight engineering and technical students (39 male and 49 female) from various faculties, enrolled in one of the language and communication courses. This course is a compulsory course for all students at the university. Participants' ages range from 20 to 23 years old. They are at the intermediate level of language proficiency.

RESEARCH PROCEDURES AND INSTRUMENTS

PROCEDURES

Eighty-eight participants from intact classes were randomly divided into one of the four groups. They were instructed to write an essay based on the instruction. The task was on miscommunication issues at workplace. The tasks were distinguished in terms of the reasoning demand (i.e. with reasoning demand (+CRD) and without reasoning demand (-CRD)) and task structure (i.e. with task structure (+TS) and without task structure (-TS)).

Participants in Group 1 and Group 3 wrote on the possible causes of miscommunication at workplace (+CRD) while participants in Group 2 and 4 wrote on miscommunication issues at workplace (-CRD). In the task structure condition (+TS), Group

1 and 2 were given an essay guideline with some suggested main points of the topic to assist them. The instruction of the task can be found in Appendix A.

The allocation of time to write the essay is 60 minutes and participants were instructed to write using wiki. Wikispaces has a history function which allows for time monitoring. In other words, the time spent by each learner for the writing can be detected through wikispaces by comparing the time when the composition begins and ends. In wikis, learners may also edit their writing directly on the written work as compared to blogs and forum (Zailin, Nik & Ainol, 2012). Furthermore, this tool has a potential not only in language classroom but also beyond the classroom (Wan, Prain and Collet, 2014; Zeinstejer, 2008), and can be used in various valid educations setting (Singh, Harun and Fareed, 2013). After completing the writing tasks, all participants were asked to complete a questionnaire. After completing the questionnaire, ten participants were randomly selected from each group to participate in the interview. The participants were interviewed in focus groups. Focus group interviews were chosen because it is relevant when investigating motivation (Krueger, 2009) and the participants are from selected samples (Morgan, 2013). There were four interview sessions conducted consecutively and each session took 30 minutes. The sessions were audio-recorded. The interview questions can be found in Appendix C. Figure 1 illustrates the graphical representation of the task and data collection procedures.

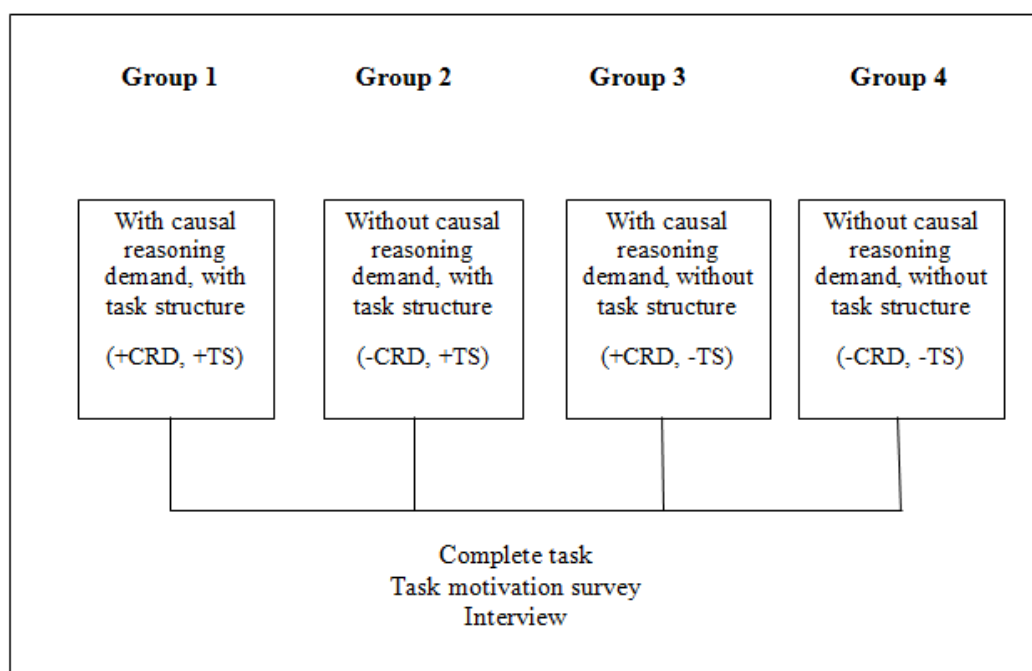


FIGURE 1. Graphical representation of the task and data collection procedures

TASK MATERIALS

In the present study, learners' motivation was measured against task complexity which was manipulated along causal reasoning demand and task structure. Causal reasoning demand (CRD) is the extent to which learners are required to give reasons and justifications and explain causalities (Nunan, 1989; Skehan, 1996). A task with relatively higher reasoning demand requires learners to involve in reasoning process to complete the task. In the current study, causal reasoning demand is operationalized as providing reasons or justification for the causes of the miscommunication issue. '+CRD' represents relatively greater causal reasoning demand and '-CRD' represents relatively lower causal reasoning demand.

Tavakoli and Skehan (2005) defined task structure as the features of the task, for example, time line, a script, a story with a beginning, middle and end and the existence of a problem solution structure. The current study operationalized task structure as essay guideline which is in the form of essay format and suggested main points. Structured task (+TS) is the task which provides the task structure while the unstructured task (-TS) is the one which does not have any guideline.

TASK MOTIVATION QUESTIONNAIRE

The present study utilized questionnaires employed in three previous studies to examine the role of task motivation (Appendix B). The questions for task motivation consist of 11-items, which were adapted from Kormos and Dörnyei (2004), Robinson (2001b) and Julkunen (1989). Overall, the questionnaire consists of two sections. The first sought to elicit information on the demographic information of the students while the second section was to gather information on task motivation. The questionnaire applies a six-point Likert Scale, ranging from 'strongly disagree' to 'strongly agree'. An internal consistency measure of reliability, Cronbach Alpha, was conducted to determine the reliability of the instrument. The accepted value should access .70 (Dörnyei & Csizér, 2012). The questionnaire for the current study was piloted to 23 participants and the Cronbach Alpha coefficient is .873. Thus, this questionnaire is a reliable instrument to be applied in this study. In addition, the validity is gathered by having some competent colleagues who are familiar with the intended purpose to examine the items whether or not they are appropriate for measuring what they are supposed to measure.

LANGUAGE PRODUCTION MEASURES

The written production of each participant serves as the data for the current study and therefore was measured for syntactic and lexical complexity. The measures for syntactic complexity are T-unit complexity ratio (clauses per T-unit), dependent clause ratio (dependent clauses per clause), dependent clause per T-unit and sentence complexity ratio (clauses per sentence).

Three measures used for lexical complexity were the percentage of sophisticated words, Guiraud Index and word type ratio. In analyzing the percentage of sophisticated words, Lexical Frequency Profile which used British National Corpus (BNC) wordlists was used (Laufer & Nation, 1995; Nation, 2004). The Range program that runs LFP analyses the words in the participants' essay (Nation & Heatley, 2002). Then, the percentage of sophisticated words was calculated as (number of sophisticated words per number of word types). Meanwhile, Guiraud Index was calculated as (the ratio of types to the square roots of the token). Finally, word type ratio was determined by the number of word types per T-unit.

DATA ANALYSIS

The data from the complexity of the language production (syntactically and lexically) and task motivation questionnaire were used to run the correlational analysis to analyze the correlation between task complexity and task motivation.

RESULTS

The summary for the statistical data of the correlation between the complexity of the language and task motivation for all groups is presented in Table 2.

TABLE 2. The correlation between task complexity and task motivation

Measures	Pearson Product-Moment correlation (r *)			
	(+CRD, +TS)	(-CRD, +TS)	(+CRD, -TS)	(-CRD, -TS)
Syntactic complexity				
Clauses per T-unit	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>
Sentence complexity ratio	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>
Dependent clause ratio	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>
Dependent clause per T-unit	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>
Lexical complexity				
Word type ratio	-0.513	<i>n.s</i>	<i>n.s</i>	0.592
Guiraud Index	<i>n.s</i>	<i>n.s</i>	0.450	0.509
Sophisticated words	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>	<i>n.s</i>

Note: * $p \leq 0.05$

n.s non-significant

Based on Table 2, it was found that no correlation exist between syntactic complexity and task motivation for any of the groups. However, for lexical complexity measures, the correlation between task complexity and task motivation were found on two measures: word type ratio and Guiraud Index. Negative correlation between task motivation and task complexity for word type ratio in (+CRD, +TS) condition was found ($r=-0.513$). In (+CRD, -TS) condition, a positive correlation ($r=0.450$) was evident for Guiraud Index measure. Positive relation was observed for word type ratio ($r=0.592$) and Guiraud Index ($r=0.509$) measures in (-CRD, -TS) condition.

DISCUSSION

The discussions of the results are divided into two sections, i.e. syntactic complexity and lexical complexity.

SYNTACTIC COMPLEXITY AND TASK MOTIVATION

According to Dörnyei and Ushioda (2013), learners' performance on task can be promoted if learners have good attitude towards the task. In the context of this study, attitudes refer to learners' motivation towards the task, as in whether the task motivates them or not, while performance refers to the complexity of the language production elicited by the learners. Overall, no correlation was found between task motivation and syntactic complexity of the language. In other words, in producing syntactically complex language production, there was no cost or loss of motivation despite how simple or complex the task was. One of the explanations of this finding is that learners probably have focused more on producing essay with variety of vocabulary and grammatical accuracy compared to producing more complex grammatical structures of sentences. This is perhaps, due to learners' perception that a good language learner produces wider choice of words and less errors in his or her language. This is evident in the interview data when the participants were asked on what they aim to accomplish at the end of the writing task. Ally, one of the participants in the (+CRD, -TS) condition said that:

I was happy that I have completed the task, regardless of whether it was correct or wrong. But I hoped that it was good enough since I have tried so hard to insert some 'bombastic' words because I want to impress the evaluator. I wrote simple sentences to avoid making grammatical errors and hopefully at the end it was fruitful.

Despite the data revealed in the interview session, another explanation had also been proposed in an earlier study. Storch and Wigglesworth (2007) claimed that intermediate learners focus more on producing accurate and fluent language. Hence, in the current study where the participants are of the intermediate level of language proficiency, the relationship between the complexity of the task and learners' motivation towards the task was evident only on lexical measures because learners (at this level) emphasis more on generating more variety of vocabulary as a sign of better language learners. Consequently, the aspect of complex syntax may have been disregarded by learners upon achieving this aim.

Moreover, the participants in this study were instructed to write the essay in an hour. Due to this time limit, it is rather challenging for them to concentrate on everything that they should focus on (such as grammatical accuracy, grammatical complexity, vocabulary and content) during the writing task. Thus, there may be certain aspects that they may have abandoned (in this context, the grammatical complexity) due to the time constraint. This argument is supported by the interview data. The next excerpt is from one of the participants in (-CRD, +TS) condition, Laleh. She commented that she was unsatisfied because she did not have sufficient time to complete the task and that constraint may have caused her to produce poor essay writing.

Time flies very fast.. not enough for me to go through the essay again. I think my essay was bad especially in terms of the structures.

As purported by Krashen (1982) that in a condition when there is a time constraint, learners focused more on the form in relation to their monitor use. Learners tend to direct their attention to producing language with the correct form particularly when they have time limitation as according to the monitor hypothesis. As a result, the production of language which is grammatically complex may have been neglected due to the time restriction.

These findings are also argued in comparison to previous studies that have explored task engagement of learners in written discourse and role of motivation, using Academic Motivation Scale (AMS) (Giesbers, Rienties, Tempelaar & Gijsselaers, 2013; Rienties, Tempelaar, Van den Bossche, Gijsselaers & Segers, 2009; Rienties, Beausaert, Grohnert, Niemantsverdriet & Kommers, 2012) and abstract writing tasks (Sabet, Tahriri & Haghi, 2014). In a study of examining the relationship between learners' motivation and CMC (by combing both asynchronous and synchronous CMC), Giesbers et al. (2013) revealed that the quality (i.e. the number of task-related posts) and quantity (i.e. the number of forum posts) of the performance were unrelated to learners' level of motivation. In contrast, studies proved that learners with higher degree of intrinsic motivation learn more effectively and produce better learning outcomes in online settings (Rienties et al., 2009; Rienties et al. (2012). In the same vein, Sabet et al. (2014) who modified a motivation questionnaire from Lam and Law (2007), affirmed that high-motivated learners of intermediate level university students wrote better abstracts compared to other counterparts. Although these studies have looked into the role of motivation (using AMS and a modified version of motivation questionnaire), but the disparity lies on the medium of the online settings (i.e. CMC and Computer-Supported Collaborative Learning), the type of tasks employed (i.e. problem-solving tasks and presentation-practice- production approach) and measures used in those studies.

Studies have concluded the existence of interaction between motivation and language production (Al-Khalil, 2011; Dörnyei, 2002; Dörnyei Kormos; 2000). Dörnyei (2002) and Dörnyei and Kormos (2000) have analyzed the production of language in oral argumentative tasks for dyads. The language production was measured in terms of the quantity of the production (i.e. number of turns and quantity of speech). Thus, although the studies concluded that a correlation exists between motivation and language production, the measures used were definitely different from the measures employed in this study. In

addition, in the argumentative tasks learners were allowed to present their views until a conclusion is made and this permitted an extensive volume of speech production. In comparison to the current study, only an hour was allotted for participants to complete the writing tasks. As such, the amount of language elicited by participants in Dörnyei (2002) and Dörnyei and Kormos (2000) were higher than the one produced by participants in this study.

One of the conclusions made in a recent study (Al-Khalil, 2011) was not fully supported in this current study due to the reasons most likely related to the research methodology. Although Al-Khalil's study analyzed the language produced by forty-four intermediate learners, a clear significant relationship was found between syntactic complexity and motivation (i.e. intended learning effort, desire to learn the L2 and attitudes towards learning the L2). Another comparison is that Al-Khalil's study explored the role of task-based interaction (i.e. expressing opinions and narrative tasks) that took place in native-speaker dyads while this study assessed the written language production using causal essay topic. The result of the study needs to be interpreted carefully due to small number of sample size.

LEXICAL COMPLEXITY AND TASK MOTIVATION

The results of the lexical complexity highlight three important points. First, a negative significant correlation exists between task motivation and lexical production in (+CRD, +TS) condition. When the task is cognitively complex along resource-directing (+CRD) and simpler along resource-dispersing (+TS) dimensions, learners who have positive motivation towards the tasks produced less varied lexical items while learners who were less motivated towards the tasks produced more varied vocabulary. Increasing the demand along resource-directing will increase the functional requirement of a task, whereas reducing the demand along resource-dispersing will direct learners to focus on particular aspects of language code (Robinson, 2001a, 2003, 2005, 2007, 2010). In this study, the complex reasoning demand task (+CRD) requires complex reasoning for causes of miscommunication at workplace, may draw learners attention to (i) describe what are the reasons for miscommunication to occur at workplace, (ii) explain the claims they made and (iii) use appropriate subordinators (because, as a consequences, etc.). At the same time, structured tasks (+TS) may lead learners to focus attention on the essay guidelines and direct them to notice the language code that can be used in the task. In return, learners who produced more variety and sophisticated vocabulary have lessened their motivation when performing the task. The negative interaction between the task motivation and the lexical complexity of the language produced by learners exists; however, it was not very strong.

Second, the findings revealed that a significant positive correlation between motivation and the language production in (+CRD, -TS) and (-CRD, -TS) conditions. In an unstructured task condition, learners with higher motivation produced more variety of word types and vocabulary (as evident in word type and Guiraud Index measures), regardless of the reasoning demand required during the task fulfillment. Translated in this context, the impact of task structure is considerably bigger than the reasoning demand in making a link with task motivation. As evident, learners in (-TS) condition who produced more variety and sophistication words have a higher motivation towards the task. Making the tasks more complex along resource-dispersing dimension by not providing a task structure, distribute learners attention to other non-linguistics part of the tasks (i.e. organization and structure of the essay). Therefore, learners have less restriction in formulating the essay as they were not provided with any guidelines like other learners in the (+TS) condition. Learners with a positive motivation may produce more variety of vocabulary as they feel motivated due to the freedom to fulfill the task requirement. On the other hand, low-motivated learners may find the task more challenging because no guidelines were available for them and in the end they

produced less varied lexical items. In short, the flexibility for learners in deciding the essay structure and the control they have over the construction of the essay may result in the production of vocabulary and motivation in the same direction.

Third, it is also notable that task motivation and lexical complexity of language production was unrelated in (-CRD, +TS) condition. This condition is the simplest condition among all tasks where the task was made less demanding in both resource-directing (-CRD) and resource-dispersing (+TS) dimensions. As there is no evident yet that conclude the relationship between the degree of task complexity and motivation, these findings may come to the same assumption. Although the task was cognitively simpler and learners probably elicited more varied lexical items, but their motivation towards the task may increase or decrease depending on how they perceive the task. Perhaps some learners perceived the task as positive while some perceived it negatively.

The findings of the current study partly support Kormos and Dörnyei's (2004) study where they found a strong positive correlation between motivational variables and lexical richness (measured by using Uber formula) for high-attitude learners. This means that if the learners were highly motivated, the vocabulary production is more. This finding is similar with the findings of the current study in (+CRD, -TS) and (-CRD, -TS) conditions in which positive relations was found between motivation and lexical complexity.

CONCLUSION

The current study aims at examining the relationship between learners' motivation towards the tasks and task complexity by analyzing the complexity of language produced by learners. The findings indicated that in the condition when reasoning demand and task structure are operationalized, learners' motivation towards the task only correlates significantly with the lexical production of the language but not with the syntactic complexity. Learners who feel motivated with the task assigned to them, elicited more lexically complex language production but less complex in terms of the syntax. This indicates that performing different level of task complexity not only may affect the complexity of the language production but also learners' motivation towards the tasks. These findings might act as a supportive foundation to enhance teaching practices so that the production of complex language can be encouraged (Bygate, 2001; Samuda & Bygate, 2008). As such, teachers should be alert of the importance of task complexity in affecting language production and learners' motivation when they plan to apply task-based in their classrooms.

There are other factors that were not discussed in the current study such as learner factors. As this study only serves to examine learners' motivation towards the tasks, therefore it is recommended that future studies may include other individual difference variables such as language aptitude, motivational level, self-efficacy and anxiety. Would these individual difference factors mediate the level of language production that learners produced? Longitudinal study could be conducted in exploring how and in what way these individual difference factors facilitate the production of the language. Future research on individual difference variables should also consider adopting a dynamic perspective that examines the influences of other factors such as environmental and learners in language acquisition. More studies are also essential to thoroughly examine how the individual difference variables inhibit or exhibit language performance. The current study dealt with monologic tasks in written language production. Thus, research into the effect of other medium of communication such as listening, reading and speaking would be fruitful. This study examined the language production but not the development. Hence, learners' performance in language development equally merits further exploration. Another possible direction of related future research would be on other modes such as dyadic and interactive tasks. These

studies could provide an additional dimension on how different medium on type of tasks mediates the production and development of language. In addition, these results could be used to inform language teachers and researchers the importance of task design and encourage them to apply tasks in their classrooms and research.

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APPENDIX A

CAUSAL REASONING DEMAND MATERIALS

Communication skill is important at workplace. Nevertheless, miscommunications between colleagues may occur due to several reasons. What could the contributing factors be?

Write an essay about the issue in approximately 250 words. You may refer to the guidelines given.

- Definition of communication skill
- Verbal (oral and written language) and non-verbal communication (facial expressions and gestures)
- The importance of communication skill in workplace
- Unaware of non-verbal communication
 - Inappropriate non-verbal signals
- Misunderstanding of the message
 - Wrong interpretation
- Ambiguity of the meaning
 - Meaning is not clear
- An individual's cultural background
 - Asian cultures- build consensus, avoid embarrassing others by direct criticism
 - Western cultures - directness and straight talk
- Cultural values
 - East Asians - group motivated
 - North Americans - individually motivated
- Cultural norms
 - Americans - direct eye contact when conversing
 - Asians- avert their eyes, politeness and respect.
- Gender
- Working experience
- Several factors may contribute to miscommunication at workplace.

TASKS WITHOUT CAUSAL REASONING DEMAND (-CRD)

Write an essay about 'Miscommunication issues at workplace'. The essay should be written in approximately 250 words.

TASK STRUCTURE MATERIALS

TASKS WITH TASK STRUCTURE (+TS)

Guideline 1 : Format of the essay

A typical format of an essay is as follows:

	Content
Introduction	<ul style="list-style-type: none">▪ Background for the topic▪ Setting out the issues▪ Focusing the argument—the purpose of the essay▪ Thesis statement
Body paragraph/s	<ul style="list-style-type: none">▪ Begin with a topic sentence▪ What the specific conditions are▪ Specific illustrations/examples of these conditions▪ End with a concluding sentence
Conclusion	<ul style="list-style-type: none">▪ Summing up▪ Explain why the issue is important to be discussed▪ End the essay with a memorable conclusion

Guideline 2: Main points

Point 1: Poor communication skills

Point 2: Cultural differences

Point 3: Other factors

TASKS WITH TASK STRUCTURE (-TS)

No essay format and guidelines.

APPENDIX B

POST-TASK SURVEY

Section A: Demographic information

Instruction: Please tick (√) and fill in where appropriate.

1. Program of study :

2. Semester of study:

3. Gender :

Male

Female

4. Age :

5. MUET score :

Band 1

Band 2

Band 3

Band 4

Band 5

Band 6

6. State of origin :

Section B

Instruction: Read the statements below very carefully and tick (√) the most suitable response for you.

1	2	3	4	5	6
Strongly Disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly Agree

Questions	1	2	3	4	5	6
1. I have found the tasks useful from a language learning point of view.						
2. I have found the tasks hard.						
3. I liked the tasks.						
4. I could do my language proficiency justice when doing the tasks.						
5. I enjoyed doing the tasks.						
6. I want to do more tasks like this.						
7. I learned from this task.						
8. This task was difficult.						
9. I did the task to the best of my ability.						
10. I was able to concentrate while doing this task						
11. I am satisfied with my performance doing the task						

APPENDIX C

INTERVIEW QUESTIONS

Questions on the tasks

1. Do you understand your task?
2. What do you think about the task?
3. How do you feel about the topic assigned to you?
4. Does the topic relate to you or your study?

Questions on the use of wikispaces

1. How do you feel about using wikispaces for essay writing?
2. Did you face any difficulties while completing your essay through wikispaces?
3. Would you like to use wikispaces in learning English language in the future?
4. Do you know various functions that wikispaces offer?

Questions on the task structure

1. Do you understand the information given in the essay guideline?
2. What do you think of the essay guideline which was given for this task?
3. How does the essay guideline encourage or discourage you from performing in this task?

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