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EFL Learners' Motivation and Speech Fluency: The Potential Moderating Effects of Motivation

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***Abstract*— Understanding the connection between EFL learners' speech fluency and its connection with motivation could provide alternatives for teachers to improve teaching approaches and develop learners' self-determination. xxx The study investigated the possible connection between motivation and speech fluency among EFL learners. The theoretical framework of self-determination theory and fluency theory was the beacon. While Self-determination theory may shed light regarding the different types of motivation that learners have, fluency theory can provide a base to understand how learners' speech fluency factors may interact with their motivation. A quantitative approach using correlation analysis was employed to collect and analyse data from 54 EFL learners aged 18-25 studying at a vocational university. xxx The administration of a questionnaire to assess learners' motivation and speech tasks to measure their speech fluency was employed to gather the data. The results show that for EFL learners in the context of the study, their motivation seemed to influence their speech fluency development. These findings contribute to our understanding of the factors that influence speech fluency in EFL learners and have implications for EFL teachers in designing effective pedagogical interventions to enhance students' motivation and speech fluency.**

***Keywords*— correlational analysis; motivation; self-determination theory; speech fluency**

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I. INTRODUCTION

Fluency is one of the critical features of oral performance (Ellis, 2009; Skehan, 2009). These three elements are often researched together with complexity and accuracy to understand learners' performance. Fluency itself is regarded as a reliable predictor of L2 proficiency (de Jong, Steinel, Florijn, Schoonen, & Hulstijn, 2012) concerning its ability to help understand the speech production process and even language acquisition (de Jong et al., 2012; Kormos, 2006). As a component of oral performance, fluency has three aspects (Segalowitz, 2010) which determine how it is seen and understood. The first aspect is cognitive fluency, an underlying mechanic of a speaker's speech production. The second one is perceived fluency, which refers to how a listener sees and understands a speaker's cognitive fluency of a speaker. The last aspect is utterance fluency, also known as the measurable aspect of speech fluency as ,the reflection of a speaker's cognitive fluency. Utterance fluency has been used widely as resa earch measurement investigating fluency in oral or written performance.

Skehan (2003) and Tavakoli and Skehan (2005) suggested that utterance fluency should be measured in three sub-constructs: speed, breakdown, and repair. Speed fluency is the speed of delivery represented by the number of syllables uttered per second/minutes/total time (speech rate) (Ellis & Barkhuizen, 2005), r number or pruned syllables per total time excluding silences and pauses (articulation rate) (De Jong & Perfetti, 2011). Breakdown fluency reflects anything that disrupts the flow of speech. Pauses or silences (Skehan & Foster, 1999). Meanwhile, repair measures deal with monitoring process and repair strategies applied during the speech performance usually reflected by repetitions, replacements, and reformulations (De Jong & Perfetti, 2011; Skehan & Foster, 1999).

A. Motivation

Motivation is a crucial factor that influences language learning. It is considered one of the most significant predictors of success in language acquisition. Leaners' motivation is often connected to their self-efficacy, which plays important role in motivating learning (Bandura, 1991). Self-efficacy is defined as the belief in one's ability to achieve a task successfully. Hence, learners who have high self-efficacy are more likely to be motivated to learn a language. In addition, Deci and Ryan (2000) suggests that learners who have a sense of autonomy, competence, and relatedness are more likely to have intrinsic motivation to learn a language.

Motivation in language learning is influenced by many things. The learner's attitude toward the language and the culture surrounding it is one of the most important elements.

Language learners are more likely to be motivated to acquire the language if they have a positive attitude toward the language and the culture (Benson, 1991). Learners' perceived usefulness of language has an impact on motivation as well. Learners are more likely to be motivated to acquire a language if they believe it will help them achieve their personal or professional goals (Kong & Wang, 2021). Motivation can also be impacted by the learning environment, the instructional approach, and the feedback given to the students.

In addition, motivation is an also known as an important predictor of language acquisition success. Higher levels of language proficiency are more likely to be attained by learners who are extremely motivated (Norris-Holt, 2001). On the other hand, unmotivated language learners might find it difficult to advance in their studies. Numerous studies have demonstrated a favorable correlation between motivational variables like intrinsic motivation, self-efficacy, and autonomy, and the results of language learning. For instance, Dörnyei and Ushioda (2013) discovered that language learners were more likely to reach greater levels of proficiency when they had higher levels of self-determined motivation.

B. Motivation and Speech Fluency

Motivation can impact speech fluency in several ways. For example, motivated learners may be more likely to practice and engage in communicative activities that require them to use the language in a meaningful way. This practice can help to improve speech fluency over time. Additionally, motivated learners may be more likely to seek out feedback and opportunities for improvement, which can help to improve their speech fluency.

The connection between motivation and speech fluency has been studied using a variety of theoretical perspectives. The Cognitive-Attentional Theory of Task Performance (CTP) (Wine, 1980), for example, contends that motivation for the task at hand and anxiety can both impact speech fluency. According to the CTP, learners are more likely to speak fluently when they are extremely motivated and self-assured. On the other hand, students' speaking fluency is likely to suffer when they are anxious or unmotivated. Also, the Dynamic Model of Motivation (Maslow, 1958) is another academic perspective that argues that motivation is a dynamic and fluid process that evolves over time. This paradigm contends that motivational states of learners have an impact on their speech fluency and that motivational interventions can enhance speech fluency.

Research in the area of motivation and speech fluency have consistently shown that motivation is positively corelated with the speech fluency of second (L2) or foreign language learners (EFL) (Fälth & Eva, 2017; Gardner, Smythe, & Brunet, 1977; Kim & Kim, 2017; Kormos & Préfontaine, 2017; Wood, 2016). For example, a study by Kim and Kim (2017) found that motivation was a significant predictor of speech fluency in a group of Korean learners of English. Similarly, a study by Al-Shehri (2019) found that highly motivated learners had significantly higher levels of speech fluency than less motivated learners.

Despite some promising findings found by the previous studies, more attempts to investigate the 'true´ connection between motivation and speech fluency are still needed to strengthen the premise. To authors' knowledge, no previous studies have been dedicated to investigate potential relationship between motivation and speech fluency in Indonesian EFL context. This study sought to fill the gap.

II. METHOD

The research questions sought in this study were:

1) What is the correlation between EFL learners' general English proficiency and their speech fluency?
2) What is the correlation between EFL learners' motivation and their speech fluency?
3) What is the correlation between EFL learners' self-regulation and their speech fluency?

This quantitative study applied a correlational analysis to investigate a potential relationship between motivation and speech fluency. Results of students' speech tasks in the form of pretest and posttest, taken from their Public Speaking class, were correlated to their answers to the distributed questionnaires. The speech tasks were coded for speech fluency measures: speech rate, articulation rate, and mean duration of pauses. Analysis results were then presented in tables to describe the correlation level.

A. Participants

The participants in this study were intact classes of English students at a vocational university in Indonesia. Fifty-four students (19-20 years old) from two intact classes were invited to join the study. Most of them were female students (73%), while the rest were male. Participants' English proficiency level ranged from Pre-Intermediate or basic user (A2) to intermediate or independent user (B1), following the CEFRL. In general, participants' ability to communicate in English in classrooms was limited. Some of them can communicate on a familiar topic with some difficulty. Others can understand the main purpose of a conversation and form simple phrases, but they require more vocabulary. At the same time, a few can communicate relatively well with basic tenses but struggle with sophisticated grammar.

B. Material

First, two oral tasks were prepared and performed by all participants. The task required the participants to convey and record a two-minute news report based on a YouTube video they watched in the classroom. The recording was then transcribed, and coding for analysis purposes. Participants' proficiency was taken from the result of a practice Test of English as International Communication (TOEIC) (Lougheed, 2017). Participants took the test at the beginning of the study before the treatment begun. This test was a paper-based TOEIC test with two sections only: Listening and Reading. The motivation questionnaire was adopted from (Kormos, Kiddle, & Csizér, 2011), which investigated 13 sub-constructs of language learning motivation using 66 statements which students evaluated on a five-point Likert scale. The Cronbach alpha reliability of the scales in the questionnaire ranged from 0.71 to 0.88. This questionnaire also contained questions regarding students' backgrounds and previous learning experiences. Finally, the self-regulation questionnaire was

adopted from Seker (2016). The questionnaire contained three sub-constructs of students' self-regulation: orientation, performance, and evaluation with Cronbach Alpha of 0.75.

C. Procedures

The TOEIC proficiency test for the participants was held at the beginning of the semester. Meanwhile, the posttest and the questionnaires were administered at the end of the semester. The speech tasks which served as the analysed data were conducted twice. The first was at the beginning of the semester (pre-test), and the other was at the semester end (post-test).

D. Analysis

The study collected participants' audio recordings, background, motivation, and self-regulation questionnaires, and TOEIC test scores from 54 participants in the entire study. The audio recordings database were then prepared for the analysis purposes. The preparation included data transcription and coding for the speech fluency measures. The transcriptions, which were written down in Microsoft Words 2016, were checked and coded to get the mean duration of pauses measure by using PRAAT 6.1.09 (Boersma & Weenink, 2019). Two other measures, speech rate and articulation rate, were also coded in the spreadsheet in separated columns. The speech rate was calculated by dividing the number of syllables by the total time. Meanwhile, the articulation rate was derived from dividing the number of syllables by the speaking time or phonation time.

This study applied the non-parametric inferential statistics due to the data, which was not normally distributed. Some features in the non-parametric test were used for specific analysis purposes. Spearman's test of correlation was used to evaluate the potential relationship between two variables. IBM SPSS Statistics version 26 was used for this analysis.

III. RESULT AND DISCUSSION

A. Learners' Proficiency and Speech Fluency

To answer Research Question 1, regarding the correlation between participants' proficiency and their speech fluency, the TOEIC test scores of participants taken at the beginning of the study were used as the construct of proficiency. Bivariate Spearman's correlation analysis was performed on the speech fluency measures (speech rate, articulation rate, and mean duration of pauses) on the pretests and posttests, as detailed in Table I and Table II.

TABLE I
THE RESULTS OF SPEARMAN'S CORRELATION ANALYSIS OF THE TOEIC SCORES AND THE PRETEST

Spearman's rho		Speech Rate	Articulation Rate	Mean Duration of Pauses
TOEIC	Correlation Coefficient	0.36**	0.32*	-0.09
	Sig. (2-tailed)	0.01	0.02	0.5
	N	54	54	54
**. Correlation is significant at the 0.01 level (2-tailed).				
*. Correlation is significant at the 0.05 level (2-tailed).				

TABLE II
THE RESULTS OF SPEARMAN'S CORRELATION ANALYSIS OF THE TOEIC SCORES AND THE POST-TEST

Spearman's rho		Speech Rate	Articulation Rate	Mean Duration of Pauses
TOEIC	Correlation Coefficient	0.55**	0.52*	-0.23
	Sig. (2-tailed)	0.00	0.00	0.10
	N	54	54	54
**. Correlation is significant at the 0.01 level (2-tailed).				
*. Correlation is significant at the 0.05 level (2-tailed).				

As can be seen from Table I and Table II, speech rate and articulation rate in the pretest and posttest conditions resulted in a significant correlation with the TOEIC score. In the pretest, the speech rate values were $r = 0.36$, $p = 0.01$, and the articulation rate were $r = 0.32$, $p = 0.02$. Meanwhile, in the posttests, the significant level of speech rate was < 0.01, with a correlation value of 0.55. For articulation rate, the values were $r = 0.52$, $p < 0.01$. These results indicated improvements in the level of significance and correlation coefficient of the analysis. These results infer that participants' proficiency level, as measured by their TOEIC scores, influenced the speed of their speech positively. In other words, the higher the proficiency, the faster they speak.

B. Learners' Motivation and Speech Fluency

The motivation questionnaire results were used to answer research Question 2 concerning the correlation between participant's motivation and their speech fluency. Following the original questionnaire from Kormos et al. (2011), this study also clustered the items into 13 groups (latent variables) and tested for reliability by determining their Cronbach's alpha value (Cronbach, 1951).

The first latent variable was named ideal L2 self, which contained five items questioning participants' view of themselves as successful L2 speakers (for example, I can imagine myself reading books and articles in English). The reliability analysis of this group resulted in Cronbach's alpha (α) = 0.68, which was below the acceptable value of 0.70 (Field, 2017). The analysis also suggested that the alpha value could be increased if one item, question no 37 (When I imagine my future job, I see myself using English), was omitted from the cluster. Therefore, item no 37 was deleted, and the new Cronbach alpha value of the latent variable was 0.80.

The second latent variable suggested by Kormos et al. (2011) was called intrinsic motivation and consisted of seven

items (for example, I really enjoy learning English). The Cronbach alpha value of this variable was 0.85, and therefore it was reliable. The third latent variable consisted of six items relating to participants' belief and confidence about themselves and their English learning (for example, I am certain that I will be able to use English successfully in my future job). This variable was called self-efficacy and the Cronbach's alpha = 0.80. The fourth variable was peer pressure, which contained four items (for example, My friends are not bothered to study English). However, the Cronbach's alpha value was only 0.64, and no suggestions of item deletion that could improve the value. Therefore, this latent variable was not included in the further correlation analysis.

The fifth latent variable was named parental encouragement, which contained five items (for example, My parents really encourage me to study English) with Cronbach's alpha = 0.91. The sixth variable, instrumental motivation, consisted of five items that did not result in a suitable Cronbach's alpha value ($\alpha = 0.35$) and, therefore, was also excluded in the correlation analysis. The seventh latent variable was anxiety. This variable contained eight items (for example, I get nervous when I'm speaking in my English class), with resulted in Cronbach's alpha of 0.82. The eighth latent variable dealt with participants' technology usage and contained three items (for example, I often use the internet to practice English). This variable resulted in a very low Cronbach's alpha value ($\alpha = 0.29$), which could not be improved. This variable was also removed from the correlation analysis.

Latent variable number nine was called resourcefulness, containing statements regarding participants' use of resources to learn English (for example, If there is something that I do not understand in the English class, I make efforts to find out more about it). The Cronbach alpha value was also low ($\alpha = 0.37$) and was also omitted from the correlation analysis. The lowest Cronbach's alpha value (-0.02) was found on the tenth latent variable called satiation control, which was also not included in the correlation analysis. This variable only consisted of two items and dealt with participants' ability to overcome a problem in their English learning (for example, I have my special techniques to make learning English interesting).

Self-regulation was the eleventh latent variable. This variable contained five items regarding participants' self-regulation ability (for example, I try to find opportunities to practice English), and Cronbach's alpha value ($\alpha = 0.69$) was also below 0.70. It was not analysed further for correlation analysis. The self-regulation matters were already included in a specific self-regulation questionnaire discussed later in this chapter. Latent variable number 12 was motivational intensity, which consisted of five items regarding participants' efforts and persistence in learning English (for example, I'm ready to work hard to learn English). The Cronbach's alpha value of this variable was low ($\alpha = 0.32$) and, therefore, was not included in the correlation analysis. The last latent variable was international orientation, which dealt with participants' attitudes to English as an international language (for example, I would really like to communicate with foreigners in the future). The Cronbach's alpha of this variable was 0.72 and, therefore, was acceptable in terms of reliability and validity.

In summary, out of 13 latent variables suggested by Kormos, Kiddle, only six latent variables resulted in suitable Cronbach's alpha values ($\alpha = 0.70$ or above). These variables were ideal L2 self, intrinsic motivation, self-efficacy, parental encouragement, anxiety, and international orientation. The descriptive statistics and reliability analysis results of these latent variables are described in Table III.

TABLE III
DESCRIPTIVE STATISTICS AND RELIABILITY ANALYSIS OF THE MOTIVATION QUESTIONNAIRE

Latent Variables	Number of items	Mean	Std. Deviation	Cronbach's alpha
Ideal_L2_self	4	1.9213	0.68478	0.8
Intrinsic Motivation	7	1.5635	0.53769	0.85
Self-Efficacy	6	2.1296	0.61401	0.8
Parental Encouragement	5	2.237	0.93249	0.91
Anxiety	8	2.4514	0.67048	0.82
International Orientation	7	1.3836	0.40389	0.72

Next, these variables were analysed to find out their correlation with the speech fluency measures in the pretests and posttests, as detailed in Tables IV and V.

TABLE IV
THE RESULTS OF SPEARMAN'S CORRELATION ANALYSIS OF THE MOTIVATION SCORES AND THE PRETESTS

Spearman's rho		**Speech Rate**	**Articulation Rate**	**Mean Duration of Pauses**
Ideal L2 Self	Correlation Coefficient	-0.34*	-0.34*	0.1
	Sig. (2-tailed)	0.01	0.01	0.47
Intrinsic motivation	Correlation Coefficient	-0.2	-0.13	0.18
	Sig. (2-tailed)	0.17	0.35	0.19
Self-efficacy	Correlation Coefficient	-0.15	-0.03	0.15
	Sig. (2-tailed)	0.27	0.86	0.29
Parental encouragement	Correlation Coefficient	0.21	0.14	-0.26
	Sig. (2-tailed)	0.12	0.32	0.06
Anxiety	Correlation Coefficient	0.2	0.24	-0.21
	Sig. (2-tailed)	0.15	0.09	0.14
International orientation	Correlation Coefficient	-0.15	-0.28*	0.15

	Sig. (2-tailed)	0.27	0.05	0.29
	N	54	54	54
*. Correlation is significant at the 0.05 level (2-tailed).				
**. Correlation is significant at the 0.01 level (2-tailed).				

TABLE V
THE RESULTS OF SPEARMAN'S CORRELATION ANALYSIS OF THE MOTIVATION SCORES AND THE POST-TESTS

Spearman's rho		Speech Rate	Articulation Rate	Mean Duration of Pauses
Ideal L2 Self	Correlation Coefficient	-0.43*	-0.31*	0.30*
	Sig. (2-tailed)	0	0.02	0.03
Intrinsic motivation	Correlation Coefficient	-0.54**	-0.47**	0.33*
	Sig. (2-tailed)	0	0	0.02
Self-efficacy	Correlation Coefficient	-0.36**	-0.32*	0.33*
	Sig. (2-tailed)	0.01	0.02	0.01
Parental encouragement	Correlation Coefficient	0.26	0.15	-0.03
	Sig. (2-tailed)	0.06	0.28	0.83
Anxiety	Correlation Coefficient	0.14	0.21	0.1
	Sig. (2-tailed)	0.31	0.13	0.5
International orientation	Correlation Coefficient	-0.26	-0.18	0.19
	Sig. (2-tailed)	0.06	0.21	0.17
	N	54	54	54
*. Correlation is significant at the 0.05 level (2-tailed).				
**. Correlation is significant at the 0.01 level (2-tailed).				

The reliability analysis results of the motivation questionnaire's latent variables were different between the pretest and posttest measures. As can be seen from Table 4, two latent variables, ideal L2 self and international orientation, resulted in statistically significant correlations. The ideal-self had negative correlations with speech rate and articulation rate ($r = -0.34$, $p = 0.01$, and $r = -0.34$, $p = 0.01$ respectively). Meanwhile, international orientation had a negative correlation with articulation rate ($r = -0.28$, $p = 0.05$). These results indicate that before the instruction, the way participants saw themselves as successful learners and their attitude toward English as an international language influenced the speed of their speech negatively. In other words, the higher their motivation in terms of self-confidence and perception of international English, the slower they speak.

Table V shows that three latent variables resulted in a significant correlation with three measures in the posttests. The ideal L2 self, intrinsic motivation, and self-efficacy had a negative correlation with speech rate ($r = -0.43$, $p < 0.01$) and articulation rate ($r = -0.31$, $p = 0.02$) and a positive correlation with mean duration of pauses ($r = 0.30$, $p = 0.03$). For intrinsic motivation, the correlation result with speech rate and articulation rate were also negative ($r = -0.53$, $p < 0.01$, and $r = -0.47$, $p < 0.01$, respectively), while the correlation with mean duration of pauses was positive ($r = 0.33$, $p = 0.02$). Similarly, the self-efficacy also showed a negative correlation with speech rate ($r = -0.36$, $p = 0.01$) and articulation rate ($r = -0.32$, $p = 0.02$), and a positive correlation with mean duration of pauses ($r = 0.33$, $p = 0.01$). It can be inferred from these results that after the treatment, not only their views about ideal L2 self but also their intrinsic motivation and self-efficacy caused the participants to speak slower. The higher the participant's motivation in terms of these three latent variables, the slower they speak. These three latent variables also positively influenced the mean duration of pauses. Since the mean duration of pauses was resulted by dividing the total length (duration) of pauses by number of pauses, this result indicates that higher results in the three latent variables correlated to a higher frequency of pauses or longer pause duration, or both.

C. Learners' Self-regulation and Speech Fluency

To answer Research Question 3, which asked about the correlation between learners' self-regulation and their speech fluency, a similar analysis regime as performed on the motivation was conducted. The original questionnaire suggested that there were five latent variables consisting of items with similar themes. Those variables were named external motivation (4 items), internal motivation (5 items), cognitive strategies (7 items), metacognitive strategies (10 items), and evaluation (4 items). Following the suggestion, the current study performed a reliability analysis of all five clusters to determine the Cronbach alpha value. The results of the analysis, together with the descriptive statistics, are presented in Table VI.

TABLE VI
DESCRIPTIVE STATISTICS AND RELIABILITY ANALYSIS OF THE SELF-REGULATION QUESTIONNAIRE

Latent Variables	Number of items	Mean	Std. Deviation	Cronbach's alpha
External Motivation	4	10.4815	3.68444	0.76
Internal Motivation	5	7.3333	2.31484	0.65
Cognitive Strategies	7	15.9259	2.94511	0.55
Metacognitive Strategies	10	19.3889	4.24449	0.53
Evaluation	4	8.9259	2.21361	0.52
Self-regulation	5	10.5	2.75236	0.692

As can be seen in Table VI, only intrinsic motivation resulted in an acceptable Cronbach's alpha value (α = 0.72). The rest of the latent variables were not suitable for correlational analysis. Since no variable could be used to measure participants' self-regulation in this questionnaire, the latent variable measuring self-regulation from the above motivation questionnaire was used. The Cronbach's alpha value of the variable (α = 0.692) was very close to 0.70 as a suitable value. Therefore, the correlational analysis of self-regulation included only two latent variables: external motivation and self-regulation. The results of the correlation analysis are presented in Table VII and Table VIII.

TABLE VII
THE RESULTS OF SPEARMAN'S CORRELATION ANALYSIS OF THE SELF-REGULATION SCORES AND THE PRE-TESTS

Spearman's rho		Speech Rate	Articulation Rate	Mean Duration of Pauses
External Motivation	Correlation Coefficient	-0.04	-0.03	0.19
	Sig. (2-tailed)	0.77	0.82	0.17
Self-regulation	Correlation Coefficient	-0.08	-0.14	-0.16
	Sig. (2-tailed)	0.57	0.32	0.25

TABLE VIII
THE RESULTS OF SPEARMAN'S CORRELATION ANALYSIS OF THE SELF-REGULATION SCORES AND THE POST-TEST

Spearman's rho		Speech Rate	Articulation Rate	Mean Duration of Pauses
External Motivation	Correlation Coefficient	-0.13	-0.16	0.25
	Sig. (2-tailed)	0.35	0.27	0.77
Self-regulation	Correlation Coefficient	0.01	0.07	0.24
	Sig. (2-tailed)	0.97	0.62	0.08

The correlation analysis between the self-regulation scores represented by external motivation and self-regulation variables resulted in a non-significant relationship between those variables and the three speech fluency measures. These results indicate that participants' self-regulation did not influence their speech fluency ability.

D. Discussion

This study investigated the correlation between three EFL learners' background constructs: proficiency, motivation, and self-regulation with their speech fluency. In general, the results indicated that learners' proficiency, represented by the TOEIC scores, positively influenced the speech rate and articulation rate with moderate correlation coefficients. Therefore, for EFL learners in the context of the present study, their proficiency level had a positive influence on their fluency, in which learners with higher proficiency tend to have better speech fluency.

These findings corroborate previous studies such as Kim, Nam, and Lee (2016). In their study, Kim, Nam, and Lee found a strong correlation between EFL learners' proficiency and their oral fluency. The study used number of syllables per minute, which is similar to speed rate, as fluency measure. However, this finding is different from the study of Duran-Karaoz and Tavakoli (2020). Duran-Karaoz and Tavakoli found that their participants' English proficiency did not correlate to speech rate and articulation rate. Perhaps, different background of participants between this previous study and the current study triggered the difference. Duran-Karaoz and Tavakoli's study employed participants with mostly lower level of proficiency while the present study's participants were at medium proficiency level.

Meanwhile, learners' motivation was found to be negatively correlated with speech rate and articulation rate, the two speech fluency measures used in the study. The intrinsic motivation and self-efficacy also showed positive correlations with the mean duration of pauses. Since mean duration of pauses was derived from pauses learners made during speech, higher number of mean duration of pauses actually showed lower fluency. Therefore, it could be concluded that learners' motivation had a negative influence on their speech fluency. Learners with higher motivation would tend to have low speech fluency and vice versa. In contrast, this finding was different from the study of Kormos and Préfontaine (2017) and Putra (2017) that found a strong positive correlation between motivation and learners' speech fluency. This difference could be due to a psychological factor in which the highly motivated students could be more careful during speech because they do not want to make mistakes in their speaking. This could result in a lower fluency.

There was no correlation found between participants' self-regulation and their speech fluency in this study. The lack of correlation between participants' self-regulation and their speech fluency could be attributed to a variety of factors, such as sample size and individual differences. The size and composition of the participant sample might have needed to be more representative to capture a meaningful correlation. A small or homogenous sample might not adequately reflect the full range of self-regulation abilities and speech fluency. Meanwhile, Human behaviour is complex and can be influenced by a multitude of individual differences. Other factors that were not considered in the study, such as cognitive processing speed, anxiety, or specific neurological conditions, could have played a role in speech fluency and masked the correlation with self-regulation.

As its contribution to the EFL language teaching and learning context, the present study's findings could contribute to the following aspects: proficiency focus, motivation awareness, and individual differences consideration. The data imply that the level of proficiency of the learners affects their speech fluency positively. EFL teachers can highlight the need to develop language competency in order to improve speech fluency. Opportunities for extensive language practice, exposure to authentic texts, and focused language

development activities can all help learners increase their fluency.

The negative relationship between motivation and fluency in speaking shows that extremely motivated students may have worse fluency due to increased self-monitoring and anxiety. By fostering a supportive and low-anxiety learning environment, EFL educators can assist learners in striking a balance between motivation and fluency. It can be good to encourage students to focus on communication rather than perfection and to provide anxiety management skills.

Although the study found no link between self-regulation and speech fluency, it does not dismiss the relevance of self-regulation in language development. Self-regulation practices could be incorporated into the teaching methods of EFL educators. Helping students acquire metacognitive awareness, goal-setting skills, and mechanisms for self-monitoring and self-assessment can help them improve their overall language competency, which may have an indirect impact on fluency.

IV. CONCLUSIONS

Finally, this study investigated the relationship between the background components of EFL learners - proficiency, motivation, and self-regulation - and their speech fluency. The findings emphasised the importance of competence, suggesting that learners with higher levels of proficiency have better speech fluency, as seen by moderate correlation coefficients.

The negative correlation between motivation and speech fluency, on the other hand, shows that increased motivation may result in decreased fluency due to increased self-monitoring and anxiety. This inconsistency could be explained by a psychological phenomenon in which highly driven students exercise caution to avoid errors during speech, perhaps jeopardising fluency. In language learning, motivation must be approached in a balanced manner. Educators should foster a supportive, low-anxiety learning atmosphere in order to assist students in striking a balance between drive and fluency. Finally, while there was no direct association between self-regulation and speech fluency in the study, the potential significance of self-regulation in language development remains noteworthy.

In short, this research improves our understanding of the complex interplay between proficiency, motivation, self-regulation, and speech fluency in the context of EFL acquisition. Its findings are useful for EFL teachers who want to create an atmosphere that promotes well-rounded language development and improves learners' speech fluency. Teachers should foster a supportive, low-anxiety learning atmosphere in order to assist students in striking a balance between drive and fluency. Additionally, while there was no direct association between self-regulation and speech fluency in the study, the potential significance of self-regulation in language development remains noteworthy.

Based on this conclusion, it could be advised to future studies investigating similar topics under the same context to improve the study design in a couple of ways. First, the number of participants should be increased in order to get more robust data, which is more acceptable for statistical analysis. Second, an interview could also be added as an additional design to achieve a deep understanding of the connection between speech fluency and the three constructs investigated in this study. Finally, this study might be specific to the Indonesian context. Hence, generalising the finding to other EFL contexts may not be suggested.

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