

## ANALYSING FLUENCY IN WRITING AMONG THE MALAY BILINGUAL LEARNERS IN UK AND MALAYSIA

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**ABSTRACT:** *This study investigated how much variation in narrative writing fluency can be explained by the predictor variables namely age, residence and fluency in argumentative writing. The participants were 92 Malay bilingual learners aged 8 to 13 years old and living in United Kingdom (UK) or Malaysia. Both groups wrote two different writing tasks differing in genre for the purpose of the study. A multiple regression was run to predict the fluency in narrative writing from age, fluency in argumentative essay and location of residency. The multiple regression model statistically significantly predicted fluency in narrative writing  $F(3,88)=61.898, p<.0005, adj. R^2=.668$ . All four variables added statistically significantly to the prediction,  $p>.05$ . The findings are discussed in light of the factors contributing to the fluency in writing among bilingual learners.*

**KEYWORDS:** Fluency in Writing, Bilingual Learners, Narrative Writing, Argumentative Writing

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### INTRODUCTION

For decades, there have been many studies been carried to examine the effect of bilingualism on school achievement especially on literacy and mathematical abilities. Apart from that, there have been many arguments that the number of languages that children learn, whether through natural exposure or educational intervention, has consequences for their development in literacy and language. This is because, according to Barac and Bialystok (2011:37), “learning two languages in childhood changed the way in which children could think about language”. Barac and Bialystok (2011) for instance found that bilingualism turns out to be an experience that benefits many aspects of each language such as vocabulary. In previous years, Cummins’ study (1991) found that bilingual learners who gained knowledge in one language use it when learning in another language. Callan (2008) further emphasized that bilingual learners are not at a disadvantage for their language development and compared to monolingual peers. Callan found that sequential bilinguals may need additional time to have similar skills to their monolingual counterparts. In addition, Bialystok, Craik and Luk (2012) reported that bilingual at all ages demonstrate better executive control (cognitive functions like inhibition, switching attention and working memory) than monolinguals matched in age and other background factors.

Nevertheless, Costa, Colome, Gomez & Galles (2003) argued that being bilingual can be disadvantages to learners as “the individual’s multiple language systems within the brain are always active, creating competition between the appropriate target words in the two languages.” Sandoval, Gollan, Ferreira & Salmon (2010) for instance found that bilinguals learners performed worse on measures of verbal fluency, or the ability of an individual to produce a high number of appropriate words within a given time. Anderson, Vanderhoff and Donovick (2013) also found that bilinguals in their study were at disadvantage when asked to

produce English writing sample in a restricted amount of time and, they concluded that “this may indicate a manifestation of the verbal fluency and lexical access disadvantages for bilinguals in writing.” (Anderson, et al., 2013: 149).

Based on the previous studies, it can be seen that bilingual learners have many advantages and disadvantages as well in language learning. In language learning, bilingual learners were said to be at fluency disadvantages either in writing or verbal skills in previous studies. Technically, writing is perceived as a highly complex and demanding skills to be acquired. It is not an easy task as it requires a number of skills to be performed. According to Lavelle, Smith and O’Ryan (2010), it is a complex cognitive activity involving attention at multiple levels: thematic, paragraph, sentence, grammatical and lexical. Kellog R.T (1999) previously also indicated that writing and other meaning making activities actually illustrate the cycle of cognition in which writers are presented with task environment and the writers need to think how the information can be presented clearly to the audiences.

Given all these challenges, assessing writing skills among the bilingual writers perhaps would perhaps shed a light on the bilingual writers’ linguistic knowledge and writing skills development. Martinez (2015:47) had also pointed out that “writing has been a useful tool to assess learners’ language competence in a foreign language classroom.” In this study, written competence is characterised by three dimensions of language proficiency: fluency, accuracy and complexity. Research has shown that these three dimensions are robust indicators of a learner’s written competence (Babba and Nitta, 2014). Nevertheless, for the purpose of this paper, the discussion will only focus on fluency aspects among the bilingual learners in Malaysia and UK. It is hoped that the present study will be able to contribute to this line of research in a different context and aims to analyse and compare the written competence of two groups of Malay bilingual learners: one enrolled on a context where English is an L2 (i.e Malaysia) and another group enrolled on an education programme where English is the first language or mother tongue of the context (i.e. UK).

### **Theoretical Underpinning**

Bereiter and Scardamalia (1987) framework is used as the foundation of this study. Here, Bereiter and Scardamalia (1987) framework gives the picture of writing skill development in which two models of composing were developed; *the knowledge telling model*, which is used to describe the naturally acquired ability in writing and *the knowledge transforming model*, which is used to describe the studied ability and skills that not everyone acquired (Bereiter and Scardamalia, 1987). According to this model, novice writers employ a knowledge-telling strategy which involves the processes of retrieving content from memory in relation to topical and genre cues given in writing task (Kellog, 2008). In other words, novice writers retrieve information and produce text by thinking about the topic, reflecting on what they know, considering the genre of the task and finally search for the appropriate forms of writing. As Bereiter and Scardamalia (1987) argued, the *knowledge telling model* resembles a straightforward structure of basic speech production which does not involve a great deal of preparation. In other words, the learners at this stage are simply presenting the ideas on paper. Bereiter and Scardamalia (1987) also added that the writers in this model are incapable of employing more complex writing strategies which involve extensive planning, efficient retrieval of information and major revisions.

The second model that is the knowledge-transforming model describes the writing behaviour of skilled writers which involves the employment of a knowledge-transforming strategy

during writing (Kellogg, 2008). It is believed that at this stage, skilled writers employ this knowledge-transforming strategy by creating a mental representation of task which later leads to the development of a series of problem solving analysis and goal setting (Alice Wong Su Choo, 2012). Galbraith (2009) reviewed that the goals derived from the problem analysis guide the generation and evaluation of content during writing. Therefore, as this model suggests, expert writers are more able to reflect on their writing and employ more sophisticated strategies in writing. Galbraith (2009) also argues that at this stage, writers develop more detailed plans, modify and elaborate plans more thoroughly and revise their initial drafts more comprehensively. In addition, the writers at these two stages are in the phase of building a more critical writing product. Overall, Bereiter and Scardamalia's distinction between the writing processes and development of skilled and unskilled writers suggest that less-skilled writers actually go through less polished version of skilled writers' process. According to Myles (2002), the latter model is crucial in writing because it opens the idea of multiple processing, which is revealed through writing tasks that differ in processing complexity. In this study, this model will be used to describe Malay bilingual learners' development in writing. In this paper, the learners' development in writing will be described in terms of fluency in narrative writing and argumentative writing.

## **METHOD AND PROCEDURES**

This study aimed to predict value of fluency in narrative writing among Malay bilingual learners based on age, location of residency either UK or Malaysia, and fluency in argumentative writing. By predicting how much of the variation in fluency of narrative writing, the study also aimed to know relative contribution of each predictor to the explanation of variance. Basically, there were two stages involved in this study namely the Introduction and Task distribution stage. In Introduction stage, the researcher distributed two set of questionnaires (Language Background Questionnaire) to the learners. This stage was mainly to get the language background of the learners and their family. The questionnaires were adopted from Mairead MCKendry and Victoria Murphy (2012) from University of Oxford. After completing the questionnaires, the learners were then given two writing tasks. Fluency in writing were measured from these writing tasks by dividing the total number of words produced (including those that were crossed out by the learners themselves) by the time spent in writing. Thus, fluency in writing here was measured the number of words produced per minute.

### **Writing Tasks**

There were two writing tasks namely narrative text and argumentative text. The procedures were adopted from Olive, Fawart, Beauvais & Beauvais (2009) in analysing 10 to 14 years old learners' cognitive effort and fluency in writing. The learners were required to write both texts. For the narrative text, the learners had to tell what they did during recent school holidays. For the argumentative text, they needed to explain why learners prefer to eat school lunches, while others prefer to have lunch at home. They had to explain where they themselves preferred to eat lunch and why. Each writing task lasted no more than 20 minutes.

### **Subject Selection**

92 Malay bilingual learners aged 8 to 13 years old participated in this study. Out of 92, 32 learners resided in UK area namely London, Nottingham, Reading, Manchester and

Newcastle for a minimum of 1 year and maximum of 4 years. The other 60 learners lived in Malaysia comprising the area of Selangor, Kuala Lumpur, Pahang and Johor Bahru. The uneven distribution in the sample was due to the limited number of Malay bilingual learners volunteered in the study. Apart from that, those whose parents speak 'Always/mostly English' were removed from the study to ensure that the learners are exposed to L1 (Malay) on regular basis. While the irregular sampling should be noted, it did not seem to have affected the results.

## FINDINGS AND DISCUSSION

### Assumption Tests

A multi linear regression was run to predict fluency in narrative writing among the bilingual learners in UK and Malaysia based on their age, location of residence and fluency in argumentative writing. There was independence of residuals as assessed by a Durbin-Watson as shown in Table 1 below;

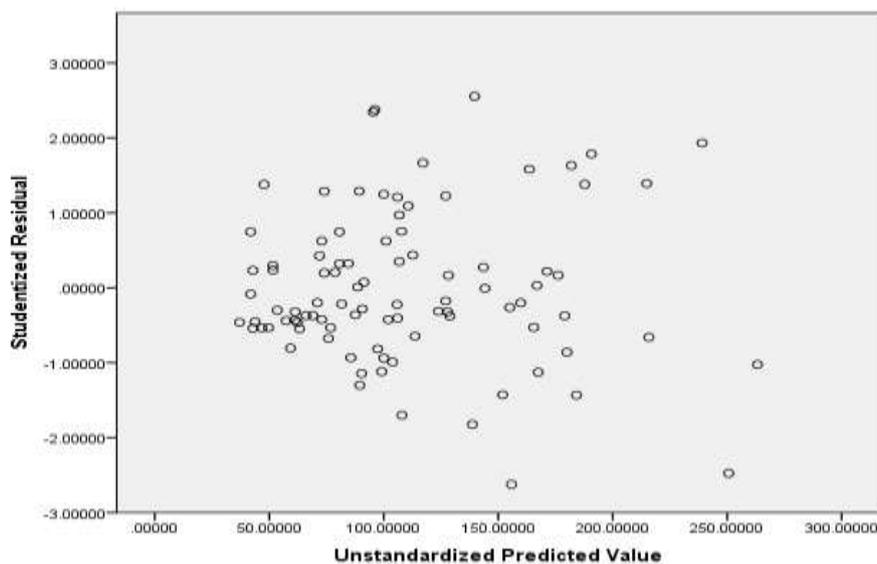
**Table 1: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.824 <sup>a</sup>	.678	.668	35.722	1.909

a. Predictors: (Constant), Residence, Age, Argumentative

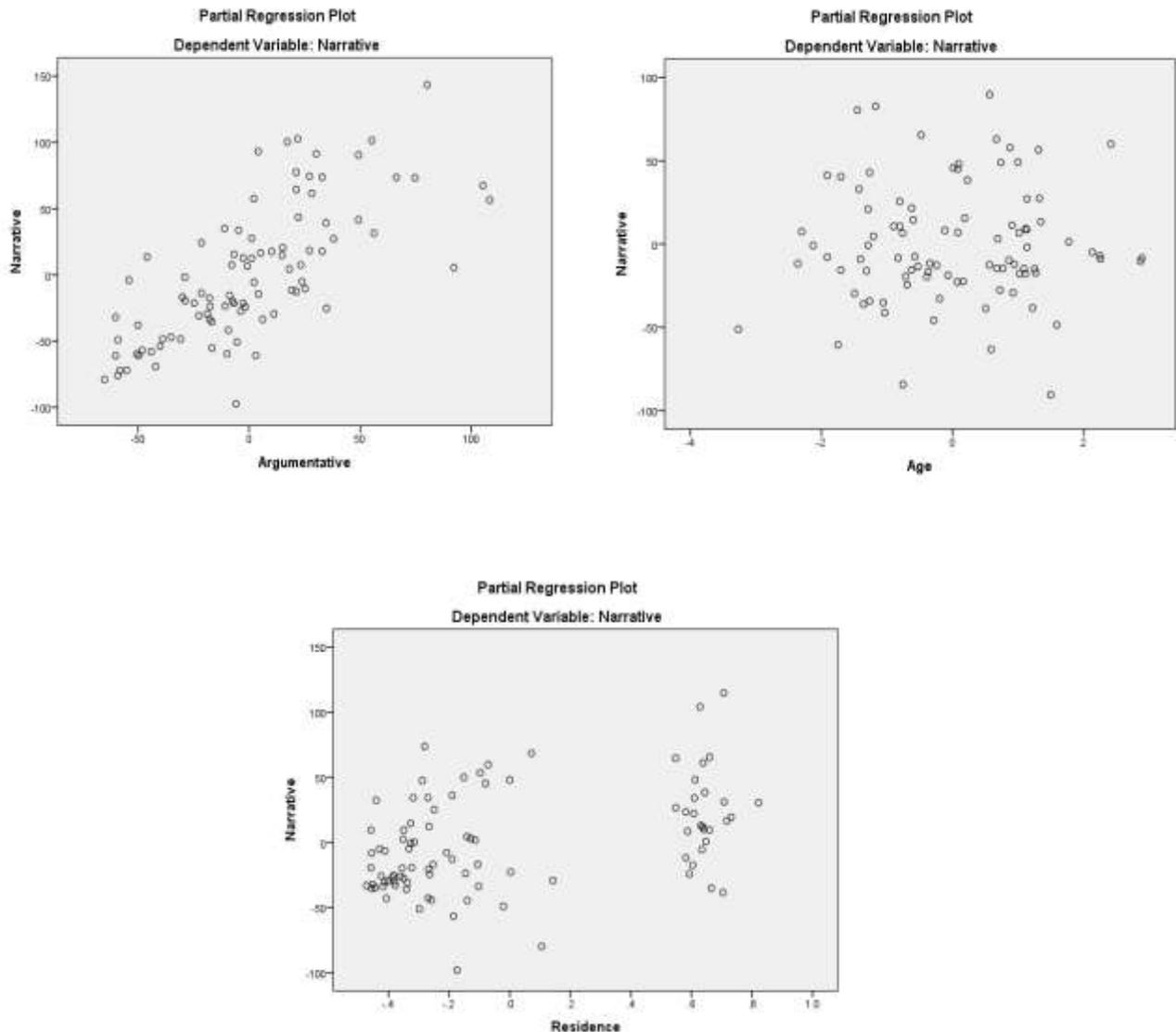
b. Dependent Variable: Narrative\_per\_min

The Durban-Watson statistic for this analysis was 1.909 and this was close to 2. Therefore, it can be concluded that there was independence of residuals, as assessed by a Durbin Watson statistic of 1.909. Moreover, there was linearity as assessed by a plot of studentized residuals against predicted values as shown in Figure 1 below;



**Figure 1: Collective linear relationship**

From the scatterplot, it can be seen that the residuals form a horizontal band and thus the relationship between the dependent variable and independent variables was likely to be linear. Here, the spread of residuals were approximately constantly spread as well. Thus, there was homoscedasticity as assessed by visual inspection of a plot studentized residuals versus unstandardized predicted values. To complement, Partial regression plots were also established to identify whether any linear relationship existed between the dependent variable and each of independent variables. These can be portrayed from the figures below;



**Figure 2: Partial regression plots**

Based on the three partial regression plots produced, all of the plots showed a linear relationship between fluency in narrative writing with age, location of residence and fluency in argumentative writing. In terms of multicollinearity, correlation values were tabled out as in Table 2 below;

**Table 2: Correlations**

		Argumentative			
		Narrative	e	Age	Residence
Pearson Correlation	Narrative	1.000	.783	.564	.009
	Argumentative	.783	1.000	.694	-.298
	Age	.564	.694	1.000	-.177
	Residence	.009	-.298	-.177	1.000
Sig. (1-tailed)	Narrative	.	.000	.000	.465
	Argumentative	.000	.	.000	.002
	Age	.000	.000	.	.045
	Residence	.465	.002	.045	.
N	Narrative	92	92	92	92
	Argumentative	92	92	92	92
	Age	92	92	92	92
	Residence	92	92	92	92

Table 2 roughly indicated that none of independent variables had correlations greater than 0.7 except the correlation between argumentative and narrative (0.783) which showed a slight greater than 0.7. Thus, “Tolerance” and “VIF” values of the Coefficients table was consulted in table 3 below;

**Table 3: Coefficients**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Argumentative	.487	2.053
Age	.769	1.302
Residence	.909	1.100

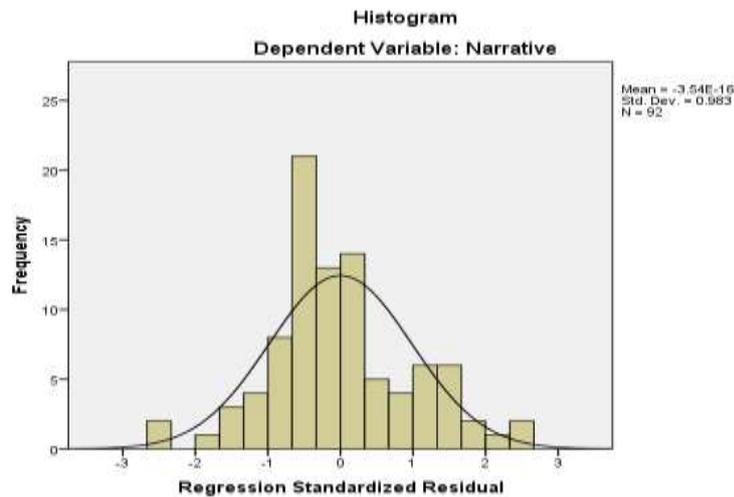
a. Dependent Variable: Narrative

Based on the table 3 above, it can be seen that all the Tolerance values were greater than 0.1 with the lowest of 0.487. Therefore, it can be concluded that there was no evidence of multicollinearity as assessed by tolerance values greater than 0.1.

When checking for outliers, studentized deleted residual, leverage values and value for cook were utilized. Firstly, by examining whether these residuals were greater than  $\pm 3$  standard deviation, these data can be classified as potential outliers. Based on the processed data, the highest value was 2.64 while the lowest value was -2.72. It can be seen that there was no values that was greater than  $\pm 3$  standard deviation and thus no potential outliers. Secondly, to determine whether any cases exhibit high leverage, a general rule of thumb is to consider leverage values less than 0.2 as safe, 0.2 to less than 0.5 as risky, and values of 0.5 and above as dangerous. Based on the processed data, the highest value was 0.113 and the lowest was 0.0121. Therefore, there were no leverage values above the ‘safe’ value of 0.2. Finally, in

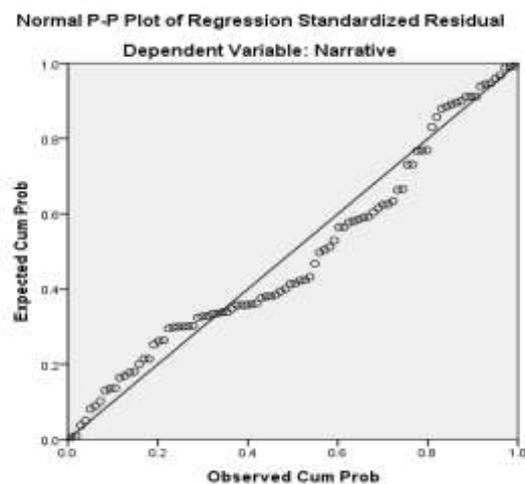
checking for influential points, if there are Cook's Distance values above 1, they should be investigated and recorded. Based on the processed data, the highest value was 0.178 while the lowest was 0.00000. Thus, it can be seen that there were no Cook's Distance values above 1 (Cook and Weisberg, 1982) and there was no any highly influential points.

In the final assumption testing for regression, checking for normality was conducted using the histogram (see Figure 3) and P-P plot (see Figure 4).



**Figure 3: Histogram for normality**

It can be seen from the histogram in figure 3 above that the standardized residuals appeared to be approximately normally distributed. Nevertheless, a look into P-P Plot was carried out to further confirm the findings.



**Figure 4: P-P Plot**

From the P-P Plot of figure 4 above, it can be seen that although the points were not aligned perfectly along the diagonal line (the distribution was somewhat peaked), they were close enough to indicate that the residuals were close enough to normal for the analysis to proceed. As multiple regression analysis is fairly robust against deviations from normality, it can be accepted that this result as a meaning that no transformation needed to take place and the assumption of normality was met.

## RESULTS

In this study three independent variables were entered as indicated in the table 4 below.

**Table 4: Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Residence, Age, Argumentativ e <sup>b</sup>		. Enter

a. Dependent Variable: Narrative

b. All requested variables entered.

Nevertheless, tests needed to be carried out to determine whether multiple regression model was a good fit for the data. A number of measures had been taken namely; (a) the multiple correlation coefficient, (b) the percentage (or proportion) of variance explained; (c) the statistical significance of the overall model; and (d) the precision of the predictions from the regression model.

As a rule of thumb, a multiple correlation coefficient of 0 (zero) indicates no linear association between the dependent variable and the independent variables and, a value of 1 is a perfect linear association.

**Table 5: Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.824 <sup>a</sup>	.678	.668	35.722

a. Predictors: (Constant), Residence, Age, Argumentative

b. Dependent Variable: Narrative

From the table 5 above, the R value was 0.824 which indicated a large level of association. Nevertheless, this might not be a common measure used to assess goodness of fit and thus Total variation explained ( $R^2$  and adjusted  $R^2$ ) was used. It can be seen that  $R^2$  was equal to 0.678 and adjusted  $R^2$  was 0.668. It can be concluded that  $R^2$  for the overall model was 66.8% with an adjusted  $R^2$  of 67.8%, which means a large size effect according to Cohen's (1988) as indicated in the table 6 below;

**Table 6: Thresholds for interpreting effect size**

Test	Relevant effect size	Effect size threshold			
		Small	Medium	Large	Very large
Standardized mean difference	$d, \Delta,$ Hedges' $g$	.20	.50	.80	1.30
Correlation	$r$	.10	.30	.50	.70

Notes: The rationale for these benchmarks can be found in Cohen (1988) at the following pages:  $d$  (p.40) and  $r$  (pp.79-80). Supplementing Cohen's (1988) original small, medium and large effect sizes, Rosenthal (1996) added a classification of very large, defined as being equivalent to, or greater than  $d=1.30$  or  $r = .70$ .

### Statistical significance of the model

**Table 7: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	236957.913	3	78985.971	61.898	.000 <sup>b</sup>
	Residual	112293.956	88	1276.068		
	Total	349251.870	91			

a. Dependent Variable: Narrative

b. Predictors: (Constant), Residence, Age, Argumentative

Based on the table 7 above, it can be seen that the "Sig" value was .000 which actually means that  $p < .0005$ . This means that age, fluency in argumentative writing and location of residency statistically significantly predicted fluency in narrative writing,  $F(3,88)=61.898$ ,  $p < .0005$ . However, it was unclear which independent variables that were significant predictors for fluency in narrative writing. Therefore, interpretation from the beta (i.e. standardized regression coefficient) and its level of significance were necessary as depicted below;

**Table 8: Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
	B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1 (Constant)	16.508	26.136		.632	.529	-35.433	68.449
Argumentative	.968	.099	.845	9.753	.000	.770	1.165
Age	13.210	1.345	.750	9.826	.002	10.539	15.878
Residence	35.941	8.576	.266	4.191	.000	18.898	52.984

a. Dependent Variable: Narrative

From the equation in table 8 above, all three independent variables namely fluency in argumentative writing ( $b=.845$ ,  $p<.000$ ), age ( $b=.893$ ,  $p<.002$ ) and location of residence ( $b=.266$ ,  $p<.000$ ) were found to have significant impact on fluency in narrative writing when all of the variables were entered into the regression equation. All in all, for this model, Fluency in argumentative writing,  $t(88)=9.753$ ,  $p<.01$ , age,  $t(88)=9.826$ ,  $p<.01$ , and location of residency,  $t(88)=4.191$ ,  $p<.01$  were significant predictors of fluency in narrative writing. From the magnitude of the t-statistics it can be seen that the fluency in argumentative had more impact than age and location of residency. The standardized beta value for fluency in argumentative writing was 0.845, age was 0.750 and for location of residency was 0.266. This indicated that fluency in argumentative writing had more impact in the model and this was followed by age variable. Based on the table 8, it can be concluded that there was an increase in fluency of argumentative writing of 10 words associated with the increase in fluency in narrative writing of 9.68 words. Furthermore, the increase in age of one year was associated with an increase in fluency of narrative writing of 13.210 words. Meanwhile, the value of slope coefficient for location of residency was 35.941 which means that predicted fluency in narrative writing for bilingual learners in UK was 35.941 words greater than that predicted for bilingual learners in Malaysia.

### Predicting the dependent variable

This study aimed to predict fluency in narrative writing among the Malay bilingual learners. Briefly, there were two groups of Malay bilingual learners in which one was from United Kingdom (UK) and the other group of participants was from Malaysia. Within these two groups, three age groups namely aged 9, 10 and 13 were selected for the purpose of predicting the dependent variables. These three age groups were selected because they were the biggest groups among the five age groups (i.e. aged 8, 9, 10, 11, 13). Overall, prediction of fluency in narrative writing would be based on three variables; age, country of residence and also fluency scores in argumentative writing. Two fluency scores of the highest and the lowest in argumentative writing would be selected for each age group in this discussion.

### Malay bilingual learners in UK

**Table 9: Contrast Results (K Matrix) for Malay bilingual learners in UK**

		Independent variables (Age/Argumentative essays scores)					
		Age 9		Age 10		Age 13	
Contrast		5.5	0.7	2.7	1.55	4.95	3.3
L1	Contrast Estimate	65.757	61.106	63.879	62.764	68.562	66.963
	Hypothesized Value	0	0	0	0	0	0
	Difference (Estimate - Hypothesized)	65.757	61.106	63.879	62.764	68.562	66.963
	Std. Error	7.665	7.857	6.888	8.708	14.804	14.928
	Sig.	.000	.000	.000	.000	.000	.000
	95% Confidence Lower Bound			46.711	45.458	39.142	37.297
	Interval for Difference Upper Bound	50.525	45.491	81.046	80.071	97.982	96.629

a. Based on the user-specified contrast coefficients (L') matrix number 1

Table 9 above described the mean fluency scores in narrative writing (per minute) for Malay bilingual learners resided in United Kingdom (UK). Based on the table 9, the mean for fluency scores in narrative writing for Malay bilingual learners aged 9 years old with the highest fluency scores in argumentative writing of 5.5 words per minute and the lowest scores 0.7 words per minute was predicted as 65.757 words (3.28 words per minute) and 61.106 words (3.06 words per minute) respectively. It can be seen 95% confident that both of the true mean for fluency in narrative writing were between the range of lower and upper bound. All in all, Malay bilingual writer aged 9 surprisingly recorded the highest fluency in argumentative writing that was 5.5 words per min in comparison to other age groups of 10 and 13 years old.

Predictions were also made to determine mean fluency scores in narrative writing for Malay bilingual learners aged 10 and 13 years old. For bilingual learners aged 10, the highest fluency scores in argumentative writing was 2.7 words per minute and the lowest was 1.55 words per minute. Again, the values predicted were between lower and upper bound based on table 9 above. It can be concluded that mean fluency in narrative writing for Malay bilingual learners aged 10 years old and resided in UK with the highest scores in argumentative writing (2.7 words per min) was predicted as 3.193 (95% CI, 46.711 to 81.046) words/min. Meanwhile, mean fluency scores in narrative writing for the lowest scores in argumentative writing of 1.55 words per minute was predicted as 3.138 (95% CI, 45.458 to 80.071) words/min.

Group consisted of Malay bilingual learners aged 13 had the second highest fluency scores in argumentative writing which was 4.95 words per min while the lowest scores was 3.3 words per min (See table 9). Predictions were made based on these criteria to determine mean fluency score in narrative writing and it was predicted as 3.428 (95% CI, 39.142 to 97.982) words/min for the scores of 4.95 words per min in argumentative writing. Meanwhile, the lowest scores (3.3 words per min) for bilingual learners aged 13 and resided in UK was predicted as 3.348 (95% CI, 37.297 to 96.629) words/min. Prediction for fluency in narrative writing seems higher in comparison to other groups aged 9 and 10, even though writer aged 9 scored higher for fluency in argumentative writing. This was perhaps because of the age and location residence factor that also played roles in predicting the result of the fluency in narrative writing.

### Malay bilingual learners in Malaysia

**Table 10: Contrast Results (K Matrix) for Malay bilingual learners in UK**

Contrast		Independent variables (Age/Argumentative essays scores)					
		Age 9		Age 10		Age 13	
		8.25	1.3	3.3	0.6	12.15	4.6
L1	Contrast Estimate	32.502	25.768	28.540	25.924	39.619	32.303
	Hypothesized Value	0	0	0	0	0	0
	Difference (Estimate - Hypothesized)	32.502	25.768	28.540	25.924	39.619	32.303
	Std. Error	7.263	7.738	8.632	8.862	14.452	15.113
	Sig.	.000	.001	.001	.000	.007	.003
	95% Confidence Lower Bound	18.068	10.390	11.385	8.312	10.899	2.270
	Interval for Difference Upper Bound	46.937	41.146	45.695	43.536	68.339	62.337

a. Based on the user-specified contrast coefficients (L') matrix number 1

Table 10 above depicted the predicted values for fluency score in narrative writing for Malay bilingual learners aged 9 to 13 years old and resided in Malaysia with the highest and lowest fluency scores in argumentative writing. Mean fluency scores in narrative writing for bilingual learners aged 9 with the highest fluency scores of argumentative writing (8.25 words per min) was predicted as 1.6251 (95% CI, 18.068 to 46.937) words/min. The lowest fluency scores in argumentative writing (1.3 words per min) depicted a low mean score prediction in narrative writing with 1.288 (95% CI, 10.390 to 41.146) words/min. This was the lowest prediction among the three groups of bilingual Malay learners in Malaysia aged 9 to 13 years old. For Malay bilingual learners aged 10 with the highest fluency scores in argumentative writing, that was 3.3 words per min, mean fluency scores in narrative writing was predicted as 1.427 (95% CI, 11.385 to 45.695) words/min. However, the lowest fluency scores of 0.6 words per min in argumentative writing was predicted as 1.296 (95% CI, 8.312 to 43.536) words/min in narrative writing.

Based on table 10, bilingual Malay learners aged 13 years old with the highest fluency scores in argumentative writing of 12.15 words per min showed slight higher prediction in mean fluency scores for narrative writing and was predicted as 1.981 (95% CI, 10.899 to 68.339) words/min. The lowest fluency scores in argumentative writing achieved by Malay bilingual learners aged 13 was 4.6 words per min and mean fluency scores for narrative writing was predicted as 1.615 (95% CI, 2.270 to 62.337) words/min. Overall, it can be seen that predicted values for fluency in narrative writing among the Malay bilingual learners in Malaysia were lower in comparison to Malay bilingual learners in UK. Predicted values for fluency in narrative writing among the learners in Malaysia ranged between 1.2 to 1.9 words per minute, while predicted values for learners in UK ranged between 3.0 to 3.4 words per minute. The discrepancy was perhaps because of the variable location of residency that contributed to the model of regression as well.

### **Implication to Research and Practice**

From the data, it can be seen that all variables namely age, fluency in argumentative writing and location of residency made a significant contribution to the fluency in narrative writing. However, fluency in argumentative writing was found to have more impact in the model and followed by the variable age and location of residence. It was found that the higher the fluency scores in argumentative writing, the higher the scores in fluency narrative writing would be. Similarly, the older the learners were, the higher their fluency scores in narrative writing. These two findings bring two educational implications to the learning and teaching in writing.

First, explicit teaching of genres is important as young writers' cognitive effort varies with the type of text they are writing. As in this study, the learners' abilities to write in argumentative genre somehow bring effect to other skills in writing genre specifically narrative writing. Through argumentative writing, learners learn how to produce effective argumentation and reasoning skills presupposed for effective writing. Meanwhile in narrative writing, the learners need to tell a story that allows readers to learn a lesson or gain insight. Based on the findings, it can be concluded that bilingual learners may infer from their experiences in argumentative writing to structure their knowledge in narrative writing. This in the way portrayed Bereiter and Scardamalia (1987) knowledge transforming framework which indicates learners inferring previous task in order to solve current writing task. Thus, it is wise to treat reasoning, argumentation, critical thinking and descriptive as especially interdependent subset in developing writing skills. Secondly, as for the age variable, it is

logically recognized that fluency in writing tends to increase with age and this is parallel in the findings of this study where fluency in narrative writing is reportedly increased with the increase in age. This is further supported by Stein & Miller (1993) as cited in Deane, Odendahl, Quinlan, Fowles, Welsh, Bivens-Tatum (2008:32) that “expression of more complex writing skills tends to increase with age and is most favored when children are familiar with the topic and situation, personally involved, and easily can access or remember the data needed to frame the argument”.

Lastly, the context in which the bilingualism occurs is also important even though it is not the highest contributor in this research investigation. There is evidence that whether the learners were from UK or Malaysia affected the learner’s fluency in narrative writing outcomes. In this study, fluency in narrative writing among the Malay bilingual learners in UK was predicted higher in comparison to those living in Malaysia. Even though these two bilingual learners had the same background, they had been exposed to two different settings which somehow affected their fluency in writing. Bilingual learners in Malaysia perhaps had been exposed to Communicative Language Teaching and academic content as the substance of the communication, and on the other hand learners in UK are more frequently exposed to the English language where English is immersed in the setting and culture. This gives the perspective to what extent exposure plays the role in building the bilingual learners’ fluency in writing. Therefore, “the implications of the learner’s language experience should ideally be examined with careful attention to the social and linguistic factors that describe the learner’s social and educational environment”. (Bialystok, 2006: 2).

## **FUTURE RESEARCH AND CONCLUSION**

In conclusion, this study can be further extended to understand bilingual learners’ skills in writing. A different angle of how fluency among bilingual learners impacts on their writing ability to carry out higher level thinking processes and a look into strategies that enable them to do better would perhaps shed more light on bilingual learners’ skills in writing in the future.

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