Relations among Motivation, Reading Amount, Awareness of Strategy Use and Achievement in Foreign Language Reading

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Abstract

This paper reports a study of motivation in reading English as a FL among 188 Chinese university EFL learners. It explores the nature of motivation in FL reading, and relates such motivation to metacognitive awareness of strategy use, reading amount, and reading achievement. The participants responded to the three questionnaires, tapping motivation in FL reading, metacognitive awareness of reading strategy use, and reading amount respectively. Their English reading achievement was tested through a mock CET Band 4 format reading test. Three subscales of motivation in FL reading emerged from Exploratory Factor Analysis, including one Intrinsic Motivation scale, one Utility Value and one Academic Value in FL reading. Correlation analyses revealed that although the three scales of motivation all positively and moderately associated with reading amount, only Intrinsic Motivation appeared to be related to reading achievement, and such relation was positive. In terms of relations between motivation and awareness of reading strategy use, both metacognitive and cognitive strategy use positively correlated with the three motivation scales. The correlations between strategy use and Intrinsic Motivation appeared to be slightly higher than the ones between strategy use and the two Extrinsic Motivations. Implications for future research are also articulated.

Key Words

Motivation in FL reading, reading amount, strategy use, Chinese EFL learners

1 Introduction

Much of the research on foreign language (FL) reading has been purely to cognitive processes, such as word decoding and transfer from first language (L1) reading to FL reading; leaving motivational aspects largely unexplored (Grabe, 2009; Huang, 2006). However, reading is also an effortful activity (Wigfield, 1997), which often requires motivation, and this is especially true for FL readers, since they often experience more difficulties compared with L1 readers. Therefore, when the models of FL reading do not deal with issues of motivation, a complete picture of FL reading can hardly be presented.

In the context of learning English as a foreign language (EFL) contexts, no studies have been conducted on motivation in reading English as a FL with Chinese EFL learners. The present study will explore Chinese EFL learners' motivation in English reading to see the nature of FL reading motivation. Moreover, the present study will examine Chinese EFL learners' English reading amount outside English classes. Additionally, previous FL research has demonstrated that language learners' motivation influences their use of metacognitive and cognitive strategies (i.e. Schmidt & Watanabe, 2001; Vandergrift, 2003). As motivation should be better understood in specific domains (Dörnyei, 2001), hence, the present study will examine the possible relationship between motivation and metacognitive awareness of strategy use in FL reading with a sample of Chinese EFL learners.

The present study addresses the following research questions:

(1) What is the nature of motivation in FL reading for Chinese university EFL learners?

(2) What is the interrelationship among motivation in FL reading, metacognitive awareness of strategy use, reading amount and achievement in FL reading?

2 Research Methods

2.1 Participants

A total of 203 non-English major university students voluntarily participated in the study. Their ages ranged from 18 to 23, with a mean age of 20 years old. The average period of English instruction received was 7.5 years.

2.2 Data Collection Procedure

The reading test was administered followed by the Reading Motivation in English Questionnaire (RMEQ), the Metacognitive Awareness of Reading Strategies Questionnaire (MARSQ), and Reading Amount in English Questionnaire (RAEQ). Altogether data collection took approximately 80 minutes. Due to incomplete data, responses of 186 participants were retained for analysis.

2.3 Instruments

The instruments used include a mock CET-Band 4 reading test, and three questionnaires.

2.3.1 The Reading Test

The reading test is a customer designed test suitable for the proficiency of the current participants. The format of the reading test was multiple choice and was a mock of CET Band 4.

2.3.2 The Reading Motivation in English Questionnaire (RMEQ)

The Reading Motivation in English Questionnaire (RMEQ) was used to measure Chinese university EFL learners' various motivational variables. The questionnaire contains 44 items, which were drawn from two sources: (1) MRQ and MRQ-R measuring native children's motivation in their native language reading (Wang & Guthrie, 2004; Wigfield, 1997); (2) RMEQ measuring adult or adolescent EFL learners' reading motivation in FL (i.e. Kim, 2010; Mori, 2002, 2004; Takase, 2007). The questionnaire used a 5-point Likert scale: 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree.

2.3.3 The Metacognitive Awareness of Reading Strategies Questionnaire (MARSQ)

The Metacognitve Awareness of Reading Strategies Questionnaire (MARSQ) was was adapted from the two questionnaires: (1) Metacognitive Awareness of Reading Strategies Inventory (MARSI) developed and validated by Mokhtari and Reichard (2002) and (2) Trait Reading Strategy Questionnaire (TRSQ) by Phakiti (2008). The 30-item MARSQ is comprised of two sub-scales examining EFL readers' use of metacognitive and cognitive strategies in FL reading. The reliability of the metacognitive and cognitive strategies scales are Cronbach's α=.73 and α=.71 respectively.

2.3.4 Reading Amount in English Questionnaire (RAEQ)

The Reading Amount in English Questionnaire (RAEQ), which was based on RAI (Guthrie, McGough, & Wigfield, 1994), was used to measure reading amount of English reading outside English classes. RAEQ asks 11 areas of reading amount outside English classes.

3 Data Analysis and Results

Data were entered into PASW 17 to perform a series of statistical analyses.

3.1 Results for Research Question 1

In order to answer the first research question, which examines the nature of motivation in FL reading for Chinese university EFL learners,

an Exploratory Factor Analysis was employed. Within EFA, Principal Axis Factoring (PAF) was chosen with an oblique rotation-Direct Oblimin method was selected (Field, 2009).

A three-factor solution emerged from the 25 items. The Eigen-values of the three factors were 6.61, 2.50 and 1.78 respectively, and they accounted for approximately 47.57% of the total variance. The three factors include one Intrinsic Motivation in FL Reading (11 items) and two Extrinsic Motivation in FL Reading. The two Extrinsic Motivation in FL Reading factors are Utility Value in FL Reading (7 items) and Academic Value in FL Reading (7 items). Table 1 presented factor loadings of the 25 items, and the reliability of the three scales. The three subscales showed good internal consistency. The reliability of the Intrinsic Motivation is Cronbach's α=.85, α=.85 for the Utility Value and α=.73 for Academic Value. The correlations analysis showed that Intrinsic Motivation positively and moderately correlated with two Extrinsic Motivation scales, (*r*=.40 for Utility Value, and *r*=.35 for Academic Value), and a positive and large correlation was obtained between the two Extrinsic Motivation scales (*r*=.54).

Table 1: Factor loadings and reliability for the three scales of the RMEQ (25 items)

Scales	Item	Rotated Factor Loadings		
Intrinsic Motivation (11 items)	5.	-.830		
	34.	-.731		
	14.	.657		
	38.	-.628		
	30.	.591		
	10.	-.589		
	29.	-.527		
	6.	-.493		
	42.	-.378		
	12.	-.362		
	21.	-.301		
Utility Value (7 items)	19.		.866	
	28.		.866	
	24.		.767	
	16.		.663	
	13.		.548	
	1.		.495	
	33.		.308	
Academic Value (7 items)	17.			.750
	7.			.693
	41.			.416
	4.			.385
	11.			.339
	26.			.336
	25.			.330
α		.85	.85	.73

3.2 Results for Research Question 2

To examine the interrelationship among the participants' motivation, metacognitive awareness of strategy use, reading amount, as well as reading achievement in FL, a series of Pearson Product Moment correlation analyses were performed. Table 2 presents the results of correlation analyses.

Table 2: Correlations between motivation, metacognitive awareness of strategy use, reading amount and reading achievement

Scales	2	3	4	5	6	7
Intrinsic 1	**.40**	**.35**	**.51**	**.46**	**.28**	**.31**
Utility 2	---	**.54**	**.31**	**.41**	**.36**	-.03
Academic 3		---	**.32**	**.28**	**.32**	.09
Meta cognitive 4			---	**.66**	---	**.23**
Cognitive 5				---	---	.14
Amount 6					---	.06
Reading 7						---

Note: Bold indicates *p*<.01 (2-tailed)

Table 2 shows that the three motivational subscales all positively associate with metacognitive strategy use and cognitive strategy use in FL reading. The correlation between Intrinsic Motivation and metacognitive strategy use (r=.46, p<.01) is slightly higher than the one between Intrinsic Motivation and cognitive strategy use (r=.46, p<.01). Similarly, the association between Academic Value and metacognitive strategy use (r=.32, p<.01) is slightly higher than the one between Academic Value and cognitive strategy use (r=.28, p<.01). For the correlation between Utility Value and metacognitive strategy use (r=.31, p<.01) and cognitive strategy use (r=.41, p<.01), the latter is higher than the former. Metacognitive strategy use is moderately and positively correlated with reading achievement (r=.23, p<.01), but cognitive strategy use does not correlate with reading achievement (r=.14, p=.06). A large and significant correlation is also seen between metacognitive and cognitive strategy use (r=.66, p<.01).

In terms of relations between motivation and reading amount, the three motivational subscales all positively and moderately correlate with reading amount, and the correlation coefficients are r=.28, p<.01, for Intrinsic Motivation; r=.36, p<.01, for Utility Value; and r=.32, p<.01, for Academic Value. For the association between motivational subscales and FL reading achievement, only Intrinsic Motivation is found to be positively correlated with reading achievement, and the value of correlation coefficient suggests a moderate relation, r=.31, p<.01. The relations between the two Extrinsic Motivation scales and FL reading comprehension were found not to be statistically significant, with r=-.02, p=.76; r=.09, p=.24 for Utility Value and Academic Value respectively. Additionally, reading amount was not to be associated with FL reading achievement, r=.10, p=.18.

4 Discussion and Conclusion

Three motivational subcomponents were identified. Intrinsic Motivation reflects Chinese EFL learners' willingness to read in English due to their personal interest in the topic, enjoy challenges, and more self-confident. Utility Value drives students to read to broaden views, to obtain information, and to hunt for a decent job. Academic Value motivates students to read English to excel in English classes and tests, and as a means to learn English learners.

The correlations between metacognitive and cognitive strategy use and Intrinsic Motivation appear to be higher than the ones with the two Extrinsic Motivations. This finding is supportive for findings between motivation and learning strategy studies in FL learning (i.e. Schimitt & Watanabe).

A medium and positive association was found between metacognitive strategy and FL reading comprehension, and no relation was found between cognitive strategy and FL reading comprehension. This finding aligns with some of previous studies in metacognition, L2 reading and L2 testing (i.e. Purpura, 1997; Trainin & Swanson, 2005). The results that Intrinsic Motivation is positively associated with reading amount, and reading achievement seems to support Self-Determination Theory in that intrinsically more motivated learners have more internalized locus of control, hence are more likely to be more effective and efficient learners (Dickinson, 1995; Dörnyei, 1998).

The results of the present study revealed that different motivational factors influence students' reading performance in FL. How to increase FL readers' motivation remained to be explored. With the boosted reading motivation in a FL, students are more likely to strategically orchestrate useful and appropriate

metacognitive and cognitive strategies in FL reading, and as a result, students will read more fluently with a better comprehension.

5 References

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