

The Influence of Cognitive/Affective Factors On L1/L2 Literacy Transfers

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Abstract

This study was intended to examine the affective (writing apprehension) and cognitive (writer's block) aspects of EFL writing and how the two aspects in students' first language—Chinese influenced their performance in the second language—English. 98 college students with various majors formed the data pool. A model analyzed by a path analysis using multiple regression was presented to illustrate the hypothesized "causal relationship" of EFL writing with the factors of interest. One very intriguing finding was that writing apprehension and writer's block did not significantly associate with writing performance as hypothesized. However, students' past experience in both their first and second languages was found to significantly predict the subjects' writing apprehension and difficulty with blocking in English composition. Further, free reading done by the subjects was the only significant predictor of their writing performance. The importance of reading on writing performance and its "therapeutic" effect on writing apprehension and writer's block gives a convergent validity to Krashen's "Reading Hypothesis."

I. Introduction

The transfer of one's literacy ability has been confirmed in a number of studies. Those who are high in literacy proficiency and skills will benefit when acquiring a second language (Moragne e Silva, 1986). Similarly, those who are deficient in their first language are also lacking in strategies and skills to aid their second language learning. Das (cited by Mohan & Lo, 1985) found that students had similar inadequate rhetorical strategies in their first language and in English. This deficiency, suggested by Mohan and Lo, might be developmental—"students who have not developed good strategies for writing in their first language will not have appropriate strategies to transfer to their second language" (p. 109, in Friedlander, 1990). Also, Hones and Tetroe (1987) found that ESL students transfer both good and weak writing skills from their first language to English. What is of interest in this research is to examine, in addition to the

aspect of strategy, whether students' psychological factors transfer along to their second/foreign language writing. The psychological factors include the development of writing anxiety (Daly, 1985) and the impediments it may cause on writers' writing behavior—writers' block (Rose, 1984). One of the main purposes of this investigation is to find the primary cause of these difficulties with writing apprehension and blocking.

In the many monolingual research studies in English, researchers have tried to find out the causes that arouse writing anxiety. In addition to the lack of knowledge of the value of preparation and the lack of methods to deal with one's writing demands (Aldrich, 1979 & 1982), excessive criticism and repeated, arbitrary revision of the writer's work by editors, supervisors, or, for students, teachers were believed to be one of the most relevant causes (Weil & lane, 1956). Daly (1979) also derived several explanations for WA. Among them were teachers' reactions to mechanical problems,

seeing teachers as a source of punishment, public comparison or ridicule and poor self-perception on the part of the writers. In this study, these were viewed as students' past experience that led to writing apprehension and writer's block, and the past experience was traced back to the subjects' first language to see how it influenced their first language writing and whether its impact transferred to their foreign language writing.

The following paragraphs seek to clearly define these two constructs: writer's block as proposed by Rose (1984) and writing apprehension as proposed by Daly and Miller (1975a).

1. Writer's Block (WB)

According to Rose (1984), writer's block is

"an inability to begin or continue writing for reasons other than a lack of basic skill or commitment....[It] is not simply measured by the passage of time (for writers often spend productive time toying with ideas without putting pen to paper), but by the passage of time with limited productive involvement in the writing task" (p.3).

It is rather a cognitive dimension manifested in ways/behavior such as missing deadlines, false starts, repetitions, blind alleys, or disconnected fragments of discourse, and is also a dimension that is characterized by some feelings of anxiety, frustration, anger, or confusion. Rose believed that writers get stymied for reasons of (1) rigid or inappropriate rules; (2) misleading assumptions; (4) premature editing; (5) conflicting rules and strategies; and (6) inappropriate criteria of self-evaluations.

Based on his pilot interviews, Rose designed a questionnaire to diagnose students' cognitive and cognitive/attitudinal difficulties. After 4 administrations and several rounds of refining and deletion of inappropriate items, the current 24-item Writer's Block Questionnaire was born.

The Writer's Block Questionnaire. It is a Likert-type scale including five subscales on attitudes and behavior related to blocking. (1) Blocking (i.e., the main indicators of WB): items include "There are times when I find it hard to write what I mean"; "While writing a paper, I'll hit places that keep me stuck for an hour or more." (2) Lateness (i.e., missing

deadline): The two items are "I have to hand in assignments late because I can't get the words on paper"; and "I run over deadlines because I get stuck while trying to write my paper." (3) Premature Editing (i.e., editing too early in the composing process): "I'll wait until I've found just the right phrase." "Each sentence I write has to be just right before I'll go on ..." (4) Strategies for Complexity (i.e., lack of strategies to interpret and write complex materials): "There are times when I'm not sure how to organize all the information I've gathered for a paper." (5) Attitudes (i.e., feelings and beliefs about writing and evaluation, believed to be a cognitive/attitudinal scale): "My teachers are familiar with so much good writing that my writing must look bad by comparison." This subscale might be considered to be similar to the writing apprehension construct by initial browse.

Does writer's block differ from writing apprehension? Rose argues that not all high blockers are apprehensive about or avoid writing, although they might get temporally anxious when the deadline is impending; and not all low blockers find writing enjoyable and practice writing as an interest. However, writing apprehension is subsumed as a possible cause of or reaction to blocking.

2. Writing Apprehension (WA)

Writing apprehension was conceptualized by Daly (1985) as "dispositional [affective] feelings" about composing, such as to like or dislike, enjoy or fear, approach or avoid writing. A plentiful amount of research studies have been directed both qualitatively and quantitatively to observe, survey, and measure this phenomenon in student writers who cannot write with ease. Among the results of the naturalistic inquiries, researchers have found different behavioral patterns between low and high apprehensives, (Selfe, 1981; Bloom, 1980; Hayes, 1981). It was found that highly apprehensive students feared the assignment and provided less information, engaged in less planning and did less "prefiguring" than did lower apprehensives. During the writing period, high apprehensives spent less time composing individual sentences and were less concerned with overall structure. Finally, high apprehensives spent less time editing and revising. Further, non-anxious writers were more purposeful than anxious writers; they could control how they behaved. Because of this control and a highly efficient use of time that permits considerable thinking and

organizing, non-anxious writers often write better than anxious writers do. Other differences were found between the apprehensive and non-apprehensive writers: the apprehensive disliked writing, needed a longer time to finish the task, paused more often, and stuck to one draft; while the non-apprehensive enjoyed writing much more, finished the first draft rapidly, paused a few times and made some minor changes, then started the following draft immediately.

These negative impacts of writing apprehension have also been confirmed by empirical studies using a large scale of subjects and statistical analyses. The Writing Apprehension Scale developed by Daly and Miller (1975a & b; also see Lee, 1998, for a review) has been widely applied to test this concept.

Correlates with Subject-Specific Attitudes. WA is a construct specific to writing and is distinct from other types of attitudes such as test-trait anxiety, self-esteem, and personality (Daly & Miller, 1975; Daly & Wilson, 1983). However, it is of great interest to note its relationship with some other academic subject-specific attitudes. Daly and Miller (1983) correlated the WAS with measures of attitudes toward reading, science, math, and speech communication anxiety, and some other measures of writing anxiety. These correlations provide crucial information about the relationship of students' writing apprehension to attitudes toward other subjects: People who enjoy writing may, in some instances, find math uninviting and reading and speech attractive. These correlations were of low or moderate magnitude, meaning that WAS is fairly independent of other constructs and measures.

Correlates with Other Performance Measures. There were also attempts to relate WA to some widely used standardized tests: the Scholastic Aptitude Test (SAT), the American College Test (ACT), the Test of Standard Written English (TSWE), the English Composition Test (ECT), the McGraw-Hill Reading Test and Writing Test, and the Missouri College English Test (Daly & Miller 1975b; Fowler & Kroll, 1980; Dickson, 1978; Faigley, Daly, & Witte, 1981). All these studies observed small to moderate relationships between WA and standardized tests, which were expected, as discussed previously.

One study using Chinese as a first language to examine the association between writing proficiency and WA was conducted by Lee and Krashen (1997). In addition to finding a significant association between the writing

scores for the Joint College Entrance Examination (JCEE) and WA, this study also found a significant relationship between reported free voluntary reading and WA. The researchers suggested that one cause of WA is lack of knowledge of the written language. "Because reading is the way we acquire the written language, those who read more will have less WA because they have a better knowledge of the special language used in writing" (p. 33). Thus, this paper is also interested in getting to know if the Reading Hypothesis proposed by Krashen (1993) can prove its cross-language validity in this research. To state it in another way, can reading be the "cure" to the psychological and behavioral problems that EFL students endure.

Based on this review of the literature, the questions of interest in this project are as follows:

Research Question 1: Are there differences between students' past experience, writing apprehension and writer's block in their first and foreign language writing?

Research Question 2: Does students' past experience in learning writing in the first language (C-PAST) transfer along to their foreign language acquisition (PAST), which in turn affects their willingness to do English writing and reading (E-READ)? Also, does students' past experience (PAST) influence their attitude (WA) toward and composing behavior (WB) in the foreign language writing?

Research Question 3: Does their fear (CWA) or difficulty with procrastination (CWB) in writing in the first language cause the same obstacles for their writing in the foreign language (WA and WB)?

Research Question 4: Is there a relationship among writing apprehension (WA), writer's block (WB), and students' writing performance (WP) in English? (Can this study add more evidence to the cognitive/affective constructs?)

Research Question 5: What might be the "cure" for writing apprehension and writer's block? E-READ or E-WRITE?

The ultimate goal of posing and finding answers to these questions is trying to search for a model that can best explain a phenomenon of EFL writing at the college level so that we could all have a better and clearer picture of what had happened within our students' minds when writing with constant frustration, and a better and more considerate idea of how to deal with problems that we have unintentionally ignored for too long in teaching EFL writing.

II. Method

1. Subjects and Procedure

Ninety-eight (98) undergraduate students enrolled in the National Taipei University participated in this project. 32.7% (32) were male and 67.3% (66) were female, of varied majors of study and including all four years. All students were, by the time of this project, taking the English writing course. It was believed that with some knowledge of the composing process, as well as skills and experience in English writing, they were able to understand the concepts brought out in the questionnaire items and thus able to give answers on the right track. For instance, blocking or procrastination is a behavioral outcome that a student, who might have had some negative experience in English, undergoes during a writing task; and the feeling of being evaluated or judged can only be depicted by one who has had that experience.

The completion of the questionnaires took approximately 30 to 40 minutes. 40 minutes then was given to write the composition. Before the students undertook these tasks, the author explained each questionnaire and reminded the subjects of the weighting of each item from "strongly disagree" to "strongly agree," and from "almost always" to "almost never." Even though there was a written description for the essay they were asked to write, the author orally explained this writing task again so that they could write this essay with the most understanding of what to do and with the least amount of pressure to do it. The whole series of tasks was done in class, taking about 160 minutes.

In order to examine the occurrence of literacy transfer and cognitive/affective factor transfer, the subjects were required to finish the questionnaires twice, one for the information about their reading and writing experience in Chinese, the other pertaining to that about their behavior in and attitudes toward the English experience. The interval between the two responses was one month and the purpose was not to confuse their feelings toward their experiences in the two different languages.

2. Tests and Analyses of the Instruments Employed

The instruments included three sets of questionnaires and an essay requiring the subjects to demonstrate their ability in writing as a college student. All questionnaire items were

translated into Chinese to ensure that the tools were measuring the same construct as they did in English. Two bilinguals who are currently teaching English at institutions of college level completed the back-translation task. Moreover, factor and reliability analyses were conducted for each set of questionnaires; deletion of certain items was also done after these analyses.

The Writing Apprehension Scale. As mentioned in the previous section, Daly and Miller (1975a & b) first created a sixty-three item questionnaire dealing with anxiety about writing in general, teacher evaluation, peer evaluation, and professional evaluation (e.g., publishers or magazine editors). One hundred and sixty-four students at the University of West Virginia were initially involved and completed the questionnaire by indicating their responses on a five point Likert-type scale from **Strongly Agree** to **Strongly Disagree**. A factor analysis suggested the existence of a single factor including twenty-six items with the highest loadings (all above .60), which then composed the current WAS (See Appendix 1).

For this new group of subjects, a practical component analysis with varimax rotation showed adequate loadings of these items from .49 to .80, and thus all remained within one factor. In other words, they were all considered valid to represent a single factor—writing apprehension. The internal reliability for the scale was .90 (Cronbach's alpha).

As for the Chinese version of the scale, a Cronbach's alpha of .84 indicated that this scale was satisfactory in reliability; and the factor loadings from .46 to .76 were also acceptable.

The Writer's Block Questionnaire. The 24-item questionnaire (See Appendix 2), developed by Rose (1984), aimed at measuring the degree of writer's block with 5 subscales: "Attitude," "Complexity," "Latency," "Premature editing," and "Blocking," as described in an earlier section of this paper. To ensure this questionnaire's capability in measuring the Chinese subjects' problem of blocking, correlational analysis was employed as a factor analysis for the two versions of the questionnaire. The purpose was to determine if the subscales were conceptually related to the main indicator of blocking and would not overlap too much to distinguish among them (Rose, 1984). Compared to Rose's results, which had correlations from .37 to .59, this sample pool yielded similar correlations from .35 to .66 (Table 1) for the English version, and also moderate correlations from .39 to .53 for the Chinese version (Table 2). In other words, the two versions of the questionnaire

could validly measure the 5 inter-related and distinct characteristics of writer's block among

Taiwanese college students.

Table 1. Correlations among the 5 subscales of the original version of the WB questionnaire

	ATTITUDE	COMPLEXITY	LATENESS	PRE-EDIT
BLOCK	.349**	.604**	.660**	.486**

** All correlations are significant at the 0.01 level (2-tailed).

Table 2. Correlations of Blocking to other subscales for the Chinese version of the WB questionnaire

	ATTITUDE	COMPLEXITY	LATENESS	PRE-EDIT
BLOCK	.474**	.494**	.531**	.392**

** All correlations are significant at the 0.01 level (2-tailed).

The Questionnaire Pertaining to Literacy Activities, Views of Value of Each Activity, and Past Experience. This was a questionnaire designed by the author whose purpose was to survey for information on the subjects' literacy involvement with reading and writing in English (items 1 to 10), their views on activities that may or may not be helpful for their English writing (items 11 to 22), and their past experience in taking a writing class (in both languages, items 23 to 26). (See Appendix 3)

Three reliability tests were done for the three areas of questionnaire items, as were factor analyses. An alpha of .67 was obtained for items 1 to 10, questions probing students' reading and writing activities at leisure; factor loadings ranged from .38 to .75. For items 11 to 22, items for activities that students believe to be helpful for their writing, the Cronbach's alpha was .58 and the factor loadings ranged from .20 to .72. These analyses suggested that item 11 and item 15 had the lowest loadings on this factor, indicating their inconsistency with other responses to the questionnaire; they, therefore, were deleted. Item 22, "teachers' comments and error correction," was the one that was drastically lower in reliability (= .78 if this item is to be deleted). However, this item won a considerable amount of affirmation from students (mean = 4.32 out of the range of 5); thus, it was kept for further analyses. An alpha of .73 was attained for past experience (items 23 to 26), with the factor loadings ranging from .38 to .75. All items were considered adequate except for item 11 and item 15.

There was a Chinese version for item 23 to item 26 for the information on students' past experience in learning writing in Chinese. The reliability alpha was .71, and the factor loadings ranged from .56 to .83. The amount of reading and writing in Chinese they did at leisure was obtained from their written response to an open-ended questionnaire, which was then coded into numerical data for statistical analyses.

However, these open-ended items made it impossible to make a comparison of the amount of reading and writing between the two languages.

The Essay and Its Grading System.

There was a controlled essay writing task conducted in the classroom with a time limit of 40 minutes. Students were required to write a composition on the positive and negative influences of TV programs on our society. The purposes of this task were (1) to induce a certain amount of apprehension so that the ability to write under some strain could be ascertained; (2) to avoid the inconsistency of the grading from the individual instructors if one final grade was used.

Two raters were involved in the grading task. In order to objectively and effectively distinguish each student's writing performance, each rater first divided the 98 essays into 6 piles, corresponding to 6 levels of writing proficiency, where level 1 represented the lowest proficiency level and level 6 the highest proficiency level. For each pile, each rater once again read the compositions and assigned scores from 0 to 9. Therefore, the final grade was assigned with a two-digit number with the first number standing for the level and the second number for the score after a more thorough comparison. For example, if a students obtained a grade as "47," it meant this students was placed in level 4 with a score 7 at that level.

Both raters are experienced writing teachers at college. After an elaborate discussion, we considered this grading system fully able to achieve fairness, for each composition had to be read at least 4 times in order not to be misplaced and thus impact the outcome of the study. The inter-rater reliability was obtained by the correlation between the two sets of grades, which was .67, *p* < .000. This association was deemed sufficient to justify averaging the two raters' evaluations.

III. Results and Discussion

Table 3. Paired *t* tests for the means of affective factors on both languages

	Mean	Mean Difference	S.D.	<i>t</i> value	d.f.
C-PAST – PAST	9.82 – 11.06	-1.23	2.75	4.35	93
CWB – WB	70.34 - 72.63	-2.29	13.63	1.66	97
CWA - CWA	76.75 - 77.26	-.51	13.60	.37	97

** *p* < .001

Table 3 shows the paired *t* tests for the means of the three affective factors on both the native language and the foreign language. Only past experience in learning writing has significant mean difference between Chinese and English. It is predictable that second language learners may have experiences different from

their experience in the first language, and their negative experience in the foreign language was understandably higher than their negative experience in the first language: a similar situation was found with blocking and apprehension.

Table 4. Correlations among all variables

	CWB	WB	CWA	WA	C-PAST	PAST	C-READ	E-READ	C-WRITE	E-WRITE
WB	** .497									
CWA	** .389	* .212								
WA	** .407	** .634	* .203							
C-PAST	** .535	** .333	** .468	** .428						
PAST	* .232	** .464	** .325	** .551	** .555					
C-READ	* -.220	-.176	-.189	-.113	** -.335	* -.214				
E-READ	* -.256	** -.318	-.057	** -.332	** -.341	** -.366	** .333			
C-WRITE	* -.231	** -.260	-.133	* -.218	* -.204	-.133	* .214	.148		
E-WRITE	-.075	* -.213	.095	** -.390	-.153	** -.375	.188	** .436	.184	
WP	-.072	-.188	-.192	-.112	-.177	-.162	-.068	* .222	* .249	.080

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).
N=94-98 for different variables; CWB = Writer’s block in Chinese; WB = Writer’s Block in English; CWA = Writing apprehension in Chinese; WA = Writing Apprehension in English; C-PAST = Past experience in Chinese; PAST = Past experience in English; E-READ = English reading; E-WRITE = English writing; C-READ = Chinese Reading; C-WRITE = Chinese writing; WP = Writing performance

Table 4 gives an overall picture of the relationships among all variables concerned. First of all, what was predictable were the significant correlations of C-PAST with CWA (*r* = .47) and CWB (*r* = .54), meaning the connection of past experience to writing apprehension and writer’s block in first language writing. C-PAST also significantly correlated with C-READ (*r* = -.34) and C-WRITE (*r* = -.20). While the significant correlation of .56 strongly suggested that the past experience in first language writing (C-PAST) transferred to the foreign language writing experience (PAST), it could be interpreted as the more negative experience one has in first language writing, the more likely s/he will endure negative experience in the course of learning writing in a foreign language. And, PAST, in the second language writing history, directly caused WA (*r* = .55) and

WB (*r* = .46) and strongly influenced students’ willingness to do free reading and writing in the foreign language—English (E-READ, *r* = -.37 and E-WRITE, *r* = -.38). Here, teachers’ evaluation and comments, repetitive correction, sense of frustration, and comparison with peers defined the negative experience.
To be more specific, the negative past experience in one’s first language writing not only impacts how and what one might experience in foreign language learning, its influence may be both affective and cognitive. Under the affective category was the significant correlation of C-PAST with WA (*r* = .43); while the cognitive category thus included a significant association with WB (*r* = .33) and one with E-READ (free reading in English; *r* = -.34). C-PAST however did not significantly correlate with E-WRITE (free writing in English, *r* =

-15).

From the results above, it is observable that students’ past experience in first language writing did influence their foreign language writing in both affective and behavioral ways. One who has negative experience in first language writing might have a higher level of writing apprehension in any language. Further, the fear and anxiety may cause more severe damage in the composing process, namely blocking, premature editing, being unable to finish the writing task within deadline, or having difficulty dealing with complicated materials or processes. We can also observe that students with more apprehension in English writing may not be interested in doing more reading in English. Consistent with the study by Lee & Krashen (1997) in which 200 freshman students in college were tested, pleasure reading was a significant and negative predictor of writing apprehension (in Chinese as the target language). The researchers suggested that it is very possible that those who read less have acquired less of the written code, and thus are more anxious about writing. Other researchers also found that people who enjoy writing might also find reading attractive (Daly & Miller, 1983). Although students’ past experience in Chinese writing did not significantly associate with free writing in English, their mediators, writing apprehension and writer’s block, do have negative impact on it ($r = -.39$ and $-.21$, respectively). That is, the higher the writing apprehension and writer’ block, the less one will like to try writing as a leisure activity, in both the native and the second languages.

The significant correlations between CWA and WA ($r = .20$), and between CWB and WB ($r =$

$.39$) seemed to be able to give an ample answer to Research Question 3. Students’ fear toward writing in their first language did transfer to their attitude toward their second language writing, very similar to the variable of past experience in both languages. Moreover, their problem of blocking or procrastination also transferred to their foreign language writing, which means, one who has behavioral difficulties in first language writing will also suffer the same deterrents in their foreign language writing. This can also be observed from the insignificant mean differences in the paired t tests shown in Table 3. Because WA strongly correlated with WB ($r = .63$), (probably due to some overlap of the items in the two questionnaires inquiring about the same concept of writing attitude), CWA and CWB had cross association with WB and WA ($r = .21$ and $.41$, respectively). This could mean that the two measures are either indeed inter-related or heavily overlapping. This leads to a measurement problem that needs to be clarified before answering my Research Question 4.

Is there any possibility of multicollinearity occurring between these two measures? According to Daly and Miller (1975a), the Writing Apprehension Scale (WAS) was developed based on one affective factor, detecting students’ fear and anxiety toward writing. Yet Rose (1984) based his study on five types of writing behavior “that would apply to both bilingual and monolingual writers” (p.463). One way to clarify the possible confusion was to correlate WA with the five subscales and see if there were correlations too strong to distinguish between the 5 variables and the WAS.

Table 5. Correlations among WA and the subscales of the WBQ

	ATTITUDE	COMPLEXITY	LATENESS	PRE-EDIT	BLOCK
WA	** .718	** .543	** .415	.083	** .450

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Table 5 shows that three of the five subscales moderately correlated with the WAS. The Attitude subscale was somewhat highly correlated with the WAS because the nature of the questions asked seemed very close. However, the seven items in the Attitude subscale, according to Rose (1984) were designed to tap students’ attitudes “that are most likely formed by one’s history of evaluation by others.” It was assumed to be an “evaluative orientation toward the act or result of composing.” Therefore, it was more of a cognitive/attitudinal aspect rather than an

affective one, such as the writing apprehension defined by Daly and Miller (1975a). Rose would rather see WA as a reaction to or a possible cause of blocking, as mentioned earlier. Daly (1979) adopted the model of WA as a cause of blocking. For instance, how students feel about writing influences how they perceive (their attitude toward) others’ criteria in evaluating their writing (i.e., this paper is no good). And, those who are high in WA may find it difficult to deal with complex materials for writing, and thus are more likely to have the problem of blocking and to have to turn in

assignments late. The insignificant correlation between WA and Premature Editing was also interpretable. WA and WB should be different in nature; one is directed to people’s fear and anxiety, the other is directed to one’s composing behavior. In other words, those high in WA may not necessarily be lacking in the strategies for editing. Certainly, it may also be very possible that the two constructs have a strong, direct and reciprocal relationship.

To answer Research Question 4, very intriguingly, WA and WB were not significantly correlated with writing performance, although the correlation between WB and WP very closely approached the significance level ($r = -.19$). Since the whole group of subjects were not able to show the pattern hypothesized, the next step was to examine the two extreme groups¹: one with writing rated under 20, the low performance group ($n = 10$); the other with scores above 59, the high performance group ($n = 12$). The mean difference was significant between the two groups. As shown in Table 6, the mean differences on WA and WB were still not significant; however, we observed that the low performance group was higher on all cognitive and affective factors.

There might be several reasons for the

insignificant mean differences between the high and low performance groups. First, by inspecting the means of the two groups, we could observe that the variation of both the cognitive and affective factors for the two extreme groups were insufficient to obtain significant results. Second, this group of subjects was taking the writing course willingly; thus the subjects might be highly motivated in learning English writing. In other words, these subjects might represent a somewhat elite group (48 of the 98 subjects were English majors and 50 of them were sophomores to seniors who took the English composition course as an elective), meaning a possible ceiling effect within this group (Lee, 1996). According to Daly and Miller (1975b), students with high writing apprehension were less likely to enroll or continue to take more advanced writing courses; therefore, this group of subjects was probably already low in apprehension if placed in a larger sample pool. Finally, writing apprehension was meant to be an affective factor that might hinder writing performance, but not necessarily for every case or in every setting, just like what was found in this study as well as in other studies on oral performance and second language anxiety.

Table 6. Mean differences of the cognitive and affective variables between the high and low performance groups

c		C-PAST	PAST	CWA	WA	CWB	WB
Low (n=10)	Mean	9.00	11.40	77.00	76.70	66.30	80.10
	S.D.	2.14	1.90	8.94	9.17	11.37	12.77
High (n=12)	Mean	7.92	9.42	73.67	71.00	65.92	69.33
	S.D.	2.19	3.55	16.97	16.71	21.30	14.13

Researchers found that some students may have better skills to control their anxiety and be less affected by it (Cheng, 1998). Thus, apprehension may not necessarily transmit to performance if controlled well. Related studies on oral anxiety (Young, 1991; Madsen, et al., 1991) indicated that the effect of anxiety on oral performance might be moderated by the student’s actual ability in the language. The amount of anxiety varied according to the student’s ability and very often times did not seem to be directly related to the “perceived difficulty of the target task”—the “perceived anxiety.” In Cheng’s study, the “perceived anxiety” was defined as the examinee’s self-perception of anxiety level toward the oral test, which was distinct from the examiner’s perception of the examinee’s anxiety level—“observed anxiety.” Results showed that it was the observed anxiety that directly affected the students’ oral performance.

In this present study, writing apprehension was obtained from students’ self-perception of writing anxiety, instead of being observed; therefore, the results were consistent with what Cheng found, i.e., WA was not significantly and directly associated with writing performance. Also, what one could be sure of was that the writing task required in the study represented the students’ writing performance, rather than their actual ability. A single task performed in the classroom under a 40-minute limit cannot tell too much about a student’s ability, but rather shows how much of his ability could be brought to the task. This group of subjects usually had as much as a week to finish one writing assignment; however, this improvised task announced in the classroom, though fair in a sense, may have induced unexpected stress that could either drag down their normal behavior pattern (Greenberg & Tannebaum, 1962) or have been mediated by their “adequate capacity” in

the target task (Young, 1986). Furthermore, many other factors that contribute to writing quality, such as reading, may have confounded the effect of WA. Similarly, these subjects felt that they were suffering WB but probably in actuality had the capacity to overcome and reduce the damage to the minimal level. Then the next issue of immediate interest (Research Question 5) should be what could be done to help diminish these internalized psychological disturbances.

Results indicated that WA had significant and negative correlations with E-READ (-.33), E-WRITE (-.39), and C-WRITE (-.22), consistent with many studies that had tried to correlate WA with other subject-specific attitudinal and behavioral measures. Daly and Witte (1982) found that teachers' own writing behavior (how often they wrote for personal purposes) significantly correlated with their WA. Boice (1982) contended that "blocked" academicians tended to avoid actual writing by engaging in other activities. Daly and Wilson (1983) thus found a significant and inverse correlation between WA and reading attitude. Accordingly, Lee (1996 & 2001) found that free reading consistently played a role as a moderator between WP and WA, where WP and WA had no direct relationship, as discussed above. To interpret these results synthetically, those who read more write better due to their richer literacy and language input from print that enables them to write better. With a higher level of language and literacy skills, they are more confident to do writing with less fear and anxiety. And it seemed to be the same case with the present study.

The correlations show that WP only significantly correlated with E-READ, free reading in English, ($r = .22$) and C-WRITE ($r = .25$), free writing in Chinese; while its correlations with WB, CWA, and C-PAST were approaching the significance level, ($r = -.19$, $-.19$, and $-.18$, respectively). As mentioned in the previous paragraph, writing quality may be an accumulated accomplishment affected by many other observed or latent variables. The power of these potential predictors may have been diluted by one another when analyzed, while reading was once again proved to be the powerful variable that directly associated with writing performance (partly ability). Consistent with Krashen's notion in that extensive free voluntary reading contributes to one's language and literacy competence as well as writing ability, this present study provided a convergent validity to the Reading Hypothesis.

As for the significant correlation with

C-WRITE, instead of E-WRITE, a plausible interpretation was that subjects had many more chances and requirements to write in Chinese for both personal purposes and school assignments. Yet, the amount of free writing in English was just too little to have a significant effect on WP. The means of the four items probing for free writing in English ranged from 1.3 to 1.8, meaning "almost never" to "occasionally." The same situation occurred in many previous studies, indicating that people simply do not write very much (Allen et al., 1992; Smith, 1983; Krashen, 1993). However, what was the impact free writing in Chinese had on WP? Krashen (1993) argues that writing does not result in better writing style (which should be a result of more reading), but writing involving "enterprise," the intention to solve a problem of interest, makes you smarter. And it is the intellectual growth that makes you write better. Furthermore, the correlations show that those who did more free reading in English still had more involvement in English free writing ($r = .44$), meaning E-WRITE might also have an indirect relationship with WP.

Knowing that a correlation matrix gives information on associations in all possibilities rather than showing the potential causal relationship among variables, a path analysis using multiple regression was employed to fulfill this inquiry. Hypotheses were formed based on the correlations among the variables concerned and the interpretations to the five research questions. First, it was hypothesized that both the cognitive (attitudinal and behavioral) and affective factors would transfer from the first language experience to the foreign language experience in writing. Second, these factors were assumed to be developed and affected by students' past experience in school across (the first and the foreign) languages. Third, the amount of free reading and writing they did in English was presumed to help alleviate writing apprehension and writer's block. However, fourth, free reading in English was still the most powerful predictor of writing performance since the English writing done was scarce. Please note that WA and WB were computed as one indicator (the cognitive/affective factor) for two reasons: (1) the correlation between WA and WB was high (.63). (2) The author intended to delineate a simple and clear model that can properly describe the whole picture of the causal relationship of the psychological barriers, and the possible cures, to the writing performance, rather than to detail each and every variable in a tedious fashion. Thus, CWA and CWB were also analyzed as one index, although the

correlation was moderate ($r = .39$). Figure 1 shows the model to be tested and the result of

each path in the model. The dotted lines refer to the insignificant betas between variables.

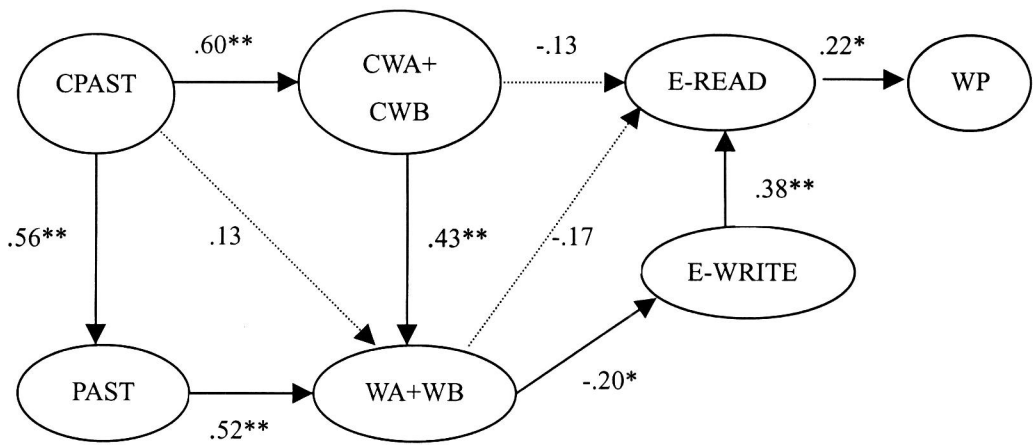


Figure 1. Path analysis using multiple regression

As hypothesized, the cognitive/affective factor ($\beta = .43, p < .001$) and the students' past experience in Chinese writing ($\beta = .56, p < .001$) significantly influenced their foreign language writing experience. Second, their past writing experience directly impacted their levels of fear and blocking ($\beta = .60, p < .001$, for Chinese; $\beta = .52, p < .001$, for English). Different from the correlational results, their past experience in learning Chinese writing did not significantly influence their apprehension, and

As hypothesized, the cognitive/affective factor (CWA and CWB) in Chinese ($\beta = .43, p < .001$) and the students' past experience (C-PAST) in Chinese ($\beta = .56, p < .001$) significantly influenced the same factors in English. Second, their past writing experiences directly impacted their levels of fear and blocking ($\beta = .60, p < .001$, for Chinese; $\beta = .52, p < .001$, for English). Different from the correlation results, their past experience in learning Chinese writing did not significantly influence their apprehension and blocking in learning English writing after the strong and direct effects of past experience in English and the cognitive/affective factor in Chinese writing were partialled out. As for free reading, free writing in English became the only predictor ($\beta = .38, p < .001$), meaning there is a significant association between these two literacy behaviors. But, it did not necessarily mean that the subjects did as much writing as they did reading. Moreover, English free writing was the mediator between the cognitive/affective factor and English free reading ($\beta = -.20, p < .05$). These two paths

might suggest that those who are low in apprehension and blocking are more likely to do free writing in English, as discussed earlier, and thus are also more interested in reading others' writing. However, the beta from the cognitive/affective factor to English free reading ($-.17$) was approaching the significance level. Probably due to the combination of WA and WB, the effect of the individual predictor might have been lessened. The rejection of this path may be too early and incautious. Finally, the beta from free reading in English to writing performance was almost identical to the correlation between them ($\beta = .22, p < .05, F = 4.97, \text{Adjusted } R^2 = .04$), but directional in this analysis, confirming that our writing proficiency was mainly developed by reading extensively and voluntarily.

IV. Implications and Conclusion

This study confirmed the hypothesis that EFL students' past experience in their first language writing, either good or bad, transfers to their foreign language writing, as do their cognitive/affective factors, writing apprehension and writer's block. The results were consistent with studies indicating that students display similar ability and deficiency in writing strategies in their native and foreign language writing (Moragne e Silva, 1986; Mohan & Lo, 1985; Hones and Tetroe, 1987). Second, the cognitive/affective factors in writing influence these EFL students' willingness to do more free reading and writing in English. Although the

effect of these factors on free reading may have been reduced due to the strong association between reading and writing in the path analysis, the author would withhold the hypothesis that free reading might possess a "cure" effect on writing apprehension and blocking. What can be confirmed in the path analysis and the correlational analysis is the effect of English free reading on English writing, consistent with Krashen's "Reading Hypothesis" and many other studies providing hard evidence on free voluntary reading's effect on literacy and language development (1993). Even though the variance explained was small, 4%, it was still significant and won its status over other variables.

However this research did not provide results consistent with assertions in the literature that writing apprehension and blocking significantly impede students' writing performance as assessed by holistic grading. As discussed in the previous section, the self-perceived anxiety might not necessarily impact students' performance in a certain task if they have sufficient capacity to overcome these difficulties. Also, as pointed out by Rose (1984), some high blockers may eventually generate writing with good quality, but the differences that can be found by directly observing the behavior do not lead to significant differences in the actual compositions (Jones, 1985). Thus, the generalizability of the constructs of writing apprehension and writer's block in relation to performance or ability measures need to be cautiously explained. And, any outcomes and results of the utility of the two constructs need to be interpreted depending on how the sample is selected and what characteristics the sample possesses.

Nevertheless, with the use of these two constructs, this study did make contributions in raising the affective and cognitive issues for discussions in foreign/second language writing for Taiwanese college students. This study also contributed to sorting out the problems with both the cognitive and affective aspects that indeed exist among EFL writers. Therefore, the next issue of interest should be directed to what and how to help alleviate their cognitive/affective deterrents in learning writing, and develop their strategies and skills in foreign language writing. With the realization that past experience may transfer across languages, wouldn't it be very important for writing teachers at the elementary level to start teaching writing with more generous praise, more positive reinforcement, and more chances for kids to read?

Notes

¹Patton (1990) contended that examinations on extreme or unusual cases provide researchers with more information than studying the average sample in the setting. Cheng (1998) also used "a combination of extreme case sampling with stratified purposeful sampling" in deciding her sample. "...Stratified purposeful sampling has the advantage of capturing major variations of particular subgroups of interest, thereby facilitating comparison" (p. 311).

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Appendix 1: The Writing Apprehension Scale

Directions: Below are a series of statements about writing. There are no right or wrong answers to these statements. Please indicate the degree to which each statement applies to you by circling whether you (1) strongly agree, (2) agree, (3) are uncertain, (4) disagree, or (5) strongly disagree with the statement. While some of the statements may seem repetitious, take your time and try to be as honest as possible.

	SA	A	U	D	SD
1. I avoid writing.	1	2	3	4	5
2. I have no fear of my writing being evaluated.	1	2	3	4	5
3. I look forward to writing down my ideas.	1	2	3	4	5
4. I am afraid of writing essays when I know they will be evaluated.	1	2	3	4	5
5. Taking a composition course is a very frightening experience.	1	2	3	4	5
6. Handing in a composition makes me feel good.	1	2	3	4	5
7. My mind seems to go blank when I start to work on a composition.	1	2	3	4	5
8. Expressing ideas through writing seems to be a waste of time.	1	2	3	4	5
9. I would enjoy submitting my writing to magazines for evaluation and publication.	1	2	3	4	5
10. I like writing my ideas down.	1	2	3	4	5
11. I feel confident in my ability to clearly express my ideas in writing.	1	2	3	4	5
12. I like to have my friends read what I have written.	1	2	3	4	5
13. I'm nervous about writing.	1	2	3	4	5
14. People seem to enjoy what I write.	1	2	3	4	5
15. I enjoy writing.	1	2	3	4	5
16. I never seem to be able to clearly write down my ideas.	1	2	3	4	5
17. Writing is a lot of fun.	1	2	3	4	5
18. I expect to do poorly in composition classes even before I enter them.	1	2	3	4	5
19. I like seeing my thoughts on paper.	1	2	3	4	5
20. Discussing my writing with others is an enjoyable experience.	1	2	3	4	5
21. I have a terrible time organizing my ideas in a composition course.	1	2	3	4	5
22. When I hand in a composition I know I'm going to do poorly.	1	2	3	4	5
23. It's easy for me to write good compositions.	1	2	3	4	5
24. I don't think I write as well as other people.	1	2	3	4	5
25. I don't like my compositions to be evaluated.	1	2	3	4	5
26. I'm no good at writing.	1	2	3	4	5

Appendix 2: Writer's Block Questionnaire

Directions: Below are twenty-four statements about what people do or how they feel when they write. Under each is a five-point scale describing degrees of agreement or disagreement with the statements. Please circle from **Almost Always** (5) to **Almost Never** (1) to indicate your agreement or disagreement with your own writing behavior.

1. My teachers are familiar with so much good writing that my writing must look bad by comparison.
2. I've seen really good writing, but my writing doesn't match up to it.
3. I think my writing is good.
4. I think of my instructors as reacting positively to my writing.
5. Writing is a very unpleasant experience for me.
6. I enjoy writing, though writing is difficult at times.
7. I like having the opportunity to express my ideas in writing.
8. I'm not sure, at times, of how to organize all the information I have collected for a paper.
9. Writing on topics that can have different focuses is difficult for me.
10. I have trouble deciding how to write on issues that have many interpretations.
11. To write essays on books and articles that are very complex is difficult for me.
12. I have trouble with assignments that ask me to compare or contrast or to analyze.
13. I run over deadlines because I get stuck while trying to write my paper.
14. I have to hand in assignments late because I can't get the words on paper.
15. Each sentence I write has to be just right before I'll go on to the next.
16. When I write, I'll wait until I've found just the right phrase.
17. I find myself writing a sentence, then erasing it trying another sentence, then scratching it out. I might do this for some time.
18. My first paragraph has to be perfect before I'll go on.
19. While writing a paper, I'll hit places that keep me stuck for an hour or more.
20. At times, I find it hard to write what I mean.
21. At times, my first paragraph takes me over two hours to write.
22. Starting a paper is very hard for me.
23. At times, I sit for hours unable to write a thing.
24. Some people experience periods when, no matter how hard they try, they can produce little, if any, writing. When these periods last for a considerable amount of time, we say the person has a writing block. Estimate how often you experience writer's block.

Appendix 3: Reading & Writing Activities

Directions: Below are 26 statements about your experience in taking the English writing class. From Item 1 to 10, please indicate the frequency with which each statement applies to you by circling (1) almost never, (2) occasionally, (3) sometimes, (4) often, or (5) Almost always. From Item 11 to 22, please circle from (1) strongly disagree to (5) strongly agree to indicate how you feel about each of the activities that you feel helpful. From Item 23 to 26, statements about your past experience in the writing class, please circle from (1) strongly disagree (SD) to (5) strongly agree (A) to indicate how you feel about each statement.

<i>Reading and writing you do at leisure:</i>	Almost Always	Often	Some-ti mes	Occasion -ally	Almost Never
1. I have regular mail exchanges in English with foreign pen pals.	5	4	3	2	1
2. I keep diary and /or journal in English.	5	4	3	2	1
3. I practice English writing as my own interest.	5	4	3	2	1
4. I have e-mail exchanges in English even with my Chinese friends.	5	4	3	2	1
5. I read in English for pleasure.	5	4	3	2	1
6. I visit the library or check out books (for outside reading)	5	4	3	2	1
7. I visit bookstores looking for books I am interested in.	5	4	3	2	1
8. I am interested in reading English on the Net.	5	4	3	2	1
9. I read English newspapers.	5	4	3	2	1
10. I read English magazines.	5	4	3	2	1
<i>Activities that help improve your writing:</i>	SA	A	U	D	SD
11. The correction software in the computer.	5	4	3	2	1
12. Conference (talk) with the instructor about my writing.	5	4	3	2	1
13. Draft writing required by the instructor.	5	4	3	2	1
14. Practice and correction in the classroom.	5	4	3	2	1
15. Peer evaluation helps improve my writing.	5	4	3	2	1
16. Interpreting the meaning of a reading text.	5	4	3	2	1
17. Analyzing the grammar and syntax of a text.	5	4	3	2	1
18. Some other speaking activities in the reading class (including expressing my opinions or ideas).	5	4	3	2	1
19. Some other listening activities related to the text.	5	4	3	2	1
20. The assignments requiring memorizing words, grammar, or texts.	5	4	3	2	1
21. Analyzing a text in order to show how a good composition is done.	5	4	3	2	1
22. Teacher's comments and error correction.	5	4	3	2	1
<i>Past experience in taking the English writing class:</i>	SA	A	U	D	SD
23. I never received good comments from my writing teachers.	5	4	3	2	1
24. I was frustrated because my teacher repeatedly corrected my grammar and spelling.	5	4	3	2	1
25. I always felt frustrated when I got my returned work with bad grades and red marks.	5	4	3	2	1
26. Compared to my classmates, my writing was much poorer.	5	4	3	2	1

認知/情感因素對於第一/第二語文學習與能力轉移之影響

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摘要

此研究旨在檢視影響外語寫作的情感(寫作焦慮)與認知(寫作障礙)因素,及探討這兩大因素是否由學生第一語言習得之經驗轉移進而影響其外語寫作之表現。共有 98 位大學生,來自不同科系與年級,參與本計畫。作者提出以線性迴歸分析法(regression analysis)作路徑分析(path analysis)來「探索」外語寫作與其他因素之間的假設性「因果模式」(causal relationship)。結果意外發現寫作焦慮與寫作障礙並未如研究假設所預期的會影響外語寫作表現。然而學生在學習語言的過去經驗卻顯著影響其外語寫作焦慮與寫作障礙。此外,受試者平時的自由閱讀是唯一能顯著預測寫作表現之變數。相關分析中亦顯示,自由閱讀對寫作之重要性及對寫作焦慮與障礙之「治療性」為 Krashen 的「閱讀假設」提供了一次效度驗證。

關鍵字: 語文學習與能力轉移、寫作焦慮、寫作障礙、過去經驗、認知/情感因素、自由閱讀。