Determining Attrition of Writing
Skills among Chinese EFL Learners

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Abstract

So far, little research about writing has been said to have occurred in an EFL environment compared to an ESL environment. This study anchors on an EFL environment found in China. In connection with the EFL environment is the question of writing attrition. The main thrust of the study is to investigate if writing attrition occurred after a long period of nonuse by tertiary students. In addition, attempts are made to link writing attrition to levels of motivation and social activities experienced by the learners. To obtain data, we resorted to standardized writing tests used by the tertiary institution and also developed a questionnaire to investigate the levels of motivation and social activities. To give credibility to the writing instrument used to gauge attrition, test validation is also carried out to lay the fundamentals for the discussion of attrition in writing. We find that overall writing skills attrite coupled with attrition in coherence, clarity and pertinence, but not in grammar. Motivation and social activities may correlate to changes in writing skills.

Introduction

These days, it is not uncommon to hear this said among the students in China: "I enjoyed working so much, during which I also visited many scenic spots with my family, and meanwhile most of the English writing skills I gained in the college was gone with my dear lecturer. Now what I can remember is nothing but ABC." These same students have also been heard to regret that they had not persisted in writing in English after they have learnt the language formally, leading one to infer that they have suffered a heavy loss of painfully gained writing skills while at the university. When they have to write in English, they find that many words they have come across earlier are no longer familiar, and they feel that it is difficult to develop their own ideas in English. This anecdote is pervasive in China where English is very much a foreign language.

The problem is further compounded by the fact that Mandarin is nearly completely different from English. The abundance of Mandarin characters in which people

are actively immersed after leaving school is enough to plunge them into a word-subtractive bilingual context. Such negative observations towards writing in English are not isolated incidents. The fact remains, however, that at the moment, all learners in China are encouraged strongly to cultivate English writing skills, but most of them have not managed to achieve a high level of writing competence in English. Policy makers in China are eager to push China as a global economic player, and needless to say, English skills including writing are useful for the country's development and international positioning (Lam, 2007). The context for language 'loss', (in this study confined to writing) needs empirical explication and attrition in EFL English writing skills therefore deserves attention.

Language attrition may be defined as the process in which the acquired language knowledge degrades when a bilingual or multilingual suspends or decreases his language learning. It can also refer to the process where first language skills decrease due to various reasons. Schmid (2006:74) argues that language attrition can be understood on the basis of the meaning of *attrition* as a result of "a linguistic system in disuse … vying for memory space with the other linguistic system(s) occupying the same brain, that not being kept 'fresh' and 'strong' through constant use will somehow weaken it, and that it will therefore suffer in some way." Attrition can be determined by a multi-factorial web of internal and external influences that affect language. The definition of the attrition process can be deceptively simple. Köpke and Schmid (2004:5) note that attrition deals with "the non-pathological decrease in a language that had previously been acquired by an individual". It could be concluded that the attrition process can be regarded as physiological or pathological. In other words, the process could be referred to as a natural or an unnatural decline (Ni, 2007: 27).

Four areas of language attrition are often discussed in the context of L1 and L2. They can be categorized as shown in Table 1 based on what language (L1 or L2) is attrited and where (L1 or L2 context) the language is attrited. The description of language attrition based on these criteria is commonly referred to as the van Els' taxonomy (van Els, 1986:6).

Table 1 Taxonomy of Language Attrition

	Van Els' terminology: Possible Attrition	
	Language environment (L1)	Language environment (L2)
L1 Loss	L1 (e.g. aphasia)	L1 (e.g. minority communities or immigrants)
L2 loss	L2 (e.g. language students)	L2 (e.g. older immigrants who revert to their L1)

van Els elaborated that L1 loss in an L1 environment can be observed as a pathological phenomenon, for example, people with dementia or those with aphasia. L1 loss in an L2 setting can be observed amongst immigrants who lose their first language in a new environment. L2 loss in an L1 setting is usually observed in individuals who have lost the ability to use an L2 that was perhaps studied at school in their L1 setting.

Finally, L2 loss in an L2 environment is most commonly observed amongst immigrant communities who do not have formal training in their L2 and they lose their L2 as they age and revert to the use of their L1.

In dealing with attrition, a number of ideas pervade about the internal and external related influences that affect language. Among them, which may be contradictory at times, are the following: attrition is the reversal of acquisition, attrition is most severe where the two language systems have similarities, when attrition is most severe, the more different the two language systems are, and attrition is most severe in cases where there is little or no contact with other speakers of the language (Ni, 2007). If these ideas are investigated, a number of theoretical questions can arise: Is loss of proficiency caused by lack of exposure, does the language knowledge system underlying language use need constant input and maintenance to remain intact, and does competition from another system cause language attrition problems? Answers to these questions would have far reaching implications for our understanding of linguistic knowledge, language learning, and in turn attrition.

Motivation, whether intrinsic or extrinsic, appears to be a driving force that causes us to achieve learning goals which include language learning goals. Intrinsic motivation which refers to motivation that is driven by an interest or enjoyment in the task itself, and exists within the individual rather than relying on any external pressure. has been studied extensively by social and educational psychologists since the early 1970s. Research has found that it is usually associated with high educational achievement and enjoyment by students (Carol, n.d.). Other extra linguistic factors of motivation have been seen to be important contributors to language attrition. Among these factors are the traditional sociolinguistic background variables that concern gender, education and age. Another important factor could the length of time which elapsed between the learning and contact with and use of the L2.

Generally, Gardner and Lambert (1972) have become a focal source of reference in research on the relationship between attitude, motivation, and language learning. Many other researchers have extended on their work including Wong Fillmore Ammon, McLaughlin and Ammon (1985). In her work, Wong Fillmore concluded that learners of a foreign language are more successful if they understand the need to learn the language and if they are motivated to do so. Motivation, undoubtedly, is an attribute that is associated with progress of learning (and attrition). The attitude the learner has toward the language, the speakers, and the culture associated with the language being learned, affect language learning.

In the present study, reference is made to motivation covering the use of language in terms of the skills, and in the participation of social activities where English is used. These activities refer to the activities considered appropriate in social occasions. Some examples are watching TV, seeing movies, making friends, shopping, chatting online or face-to-face, travelling, involvement in social gatherings and other related activities. The study has chosen to use a multi-factorial approach adapted from the questionnaires developed by Fader (2008), Toth (2004) and Fujita (2002). The broad dimensions of motivation and participation in social activities will help to explain the degree of English language use in the students' lives which in turn could lead to some conclusions about whether the language has attrited as a result of such language behaviour.

In close association with language learning, research in language attrition could establish baselines for attainment against which to measure attrition (and learning) and that learners must be compared to themselves in longitudinal designs that involve periodic assessment of both linguistic and extralinguistic factors, such as, motivation and social activities (Bardovi-Harlig & Stringer, 2010). Research also investigated linguistic phenomena which emphasises L2 interferences, social contact phenomena and motivation evident in the L1 (Schmid & Köpke, 2007). In short, we may be able to claim that language attriters could behave differently as a result of conditions that have interrupted formal language learning.

In the context of ESL writing, the last two decades have been witnessing a tremendous increase in research activities, to the extent that this strand of research has been acknowledged as a distinct field of inquiry (Matsuda & De Pew, 2002; Silva & Brice, 2004). However, far too often, little distinction is made between second language (SL) and foreign language (FL) writing, leading to an imbalance of research in the two fields. As a result, SL writing research has gained in terms of theoretical discussion, empirical research and pedagogical recommendations, while FL writing research has not caught enough theoretical and pedagogical attention. The following consequence leads Ortega (2004: 3) to argue that, "L2 writing as a field is heavily ESL-oriented". This orientation constricts the capacity of L2 writing as a field to produce theoretically robust knowledge that can be useful in improving FL writing education. In particular, research into FL writing has paid little attention to attrition. Thus this study aims to explore FL attrition in writing, which is a relatively new area of research particularly pertaining to English learnt as a FL in China.

Writing, as one of the productive language skills, has been reported to experience attrition. Kamijo, Ishiguro and Ito (1992) stated that approximately 70 percent of the Japanese student returnees from their studies abroad considered writing to be the first linguistic element they lost. In addition, productive skills, such as speaking and writing, have been found to be more vulnerable to attrition than the receptive skills (Cohen, 1989; Tomiyama, 1999; Yoshida & Arai, 1990). However, Wiggle (2002) posits that "the ability to write effectively is becoming increasingly important in our global community, ... (and) widely recognized as an important skill for educational, business, and personal reasons." (p.1). Given its importance, then all the more writing skills that are learnt should be retained as much as possible and not lost as a result of lack of use. It is also widely acknowledged that writing is mainly aimed at communicating, thus the communicative competence will be discussed to link writing to more specific sub-constructs that form its composition.

Aim of the Study

This present study focuses mainly on the attrition of L2 (English) learners in an L1 (Chinese Mandarin) language environment with regard to EFL writing. In this study, two research questions were raised: (1) Do English writing skills attrite after two years of nonuse of English and (2) How are levels of motivation and social activities related to the attrition of writing skills over a two-year period of nonuse of English?

Methodology

To answer the first question, the learners have to be assessed. For this purpose the rationale for developing a rating scale is justified with reference to the communicative framework. Connor and Mbaye (2002) attempted to apply Canale and Swain's (1980) communicative competence model for the explication of writing. In Canale and Swain's (1980) and Canale's (1983) frameworks, they proposed four communicative competences, i.e. grammatical, discourse, sociolinguistic and strategic competence. Competence in a language inevitably is linked to evaluation and similarly the same issue is relevant for writing.

Criteria for the assessment of writing will have to be established and these criteria may be obtained from the general principles expounded by the communicative competence framework. What needs to be proposed is an evaluative approach that would incorporate both linguistic and discursive features of written texts. To measure discourse competence, there is a need to refer to text structure, particularly that concerning coherence and cohesion. These terms can be used loosely or more specifically in other ways for the purpose of identifying the features of writing. Similarly, an evaluative framework has to be established in this study to help judge the quality of EFL writing and where attrition may occur after a period of non-use.

The design of this study involves the use of a pair of writing tests and a questionnaire, which were administered before and after two years of 'non-learning' of English. The assumption of this study is that a period of 'non-learning' of English in a formal context will result in attrition. Thus any extra informal contact with the FL would not fall under the domain of formal learning. If attrition does not happen, then, the questionnaire would help to tease out some of the extra linguistic factors that could contribute to the phenomenon and similarly vice versa. Not all contributing factors can be covered in this study. The limitations are seen in the number of variables identified. Working within these constraints and assumptions, data were obtained to answer the questions raised. Data obtained were then analyzed by means of parametric tests using SPSS 13.0. The reliabilities of the data were measured through Cronbach alpha coefficient and the Multi Facets Rasch Model (MFRM).

The Writing Test and Questionnaire

The writing test was adapted from China's National College English Test Band 4 and 6 (CET 4 and CET 6). The full mark is 16 points. CET 6 and CET 4 have been evidenced that, internally and externally, to be highly reliable and valid to test participants' writing abilities (Yang and Weir, 1998). In the writing task used for the study, participants were given 30 minutes to write a campaign speech in support of an election for the post of chairman of the student union. They were asked to write a speech that is at least 120 words long, following these guidelines:

1. What qualities do you think you have that may make you competent for the chair of the student union?
2. If you are elected as the chair, what do you plan to do for students?

In order to identify attrition of writing skills, the writing test was conducted twice over a two-year period. The student writing experienced blind reviews by three independent scorers. Both the pre and post writing tests are identical so that we can ensure that both tests are at the same the level.

The measurement of writing abilities in the study is derived based on the TOEFL scale for writing. Because TOEFL scoring criteria have a highly reliable generalizability (Brennan, 1983:87), this study adopts and adapts that measure for this study measuring both the participants' specific and holistic writing skills, i.e. (1) *pertinence*, meaning *the degree in which the writing effectively addresses the topic and task*; (2) *clarity*, indicating *if the writing is well organized and well developed, uses clearly appropriate explanations, exemplifications, and/or details*; (3) *coherence,* which measures *if the writing displays unity, progression, and coherence*; and (4) *grammar*, identifying *if the writing displays consistent facility in the use of the language, syntactic variety, appropriate word choice, and idiomaticity.*

To score for the individual traits of *pertinence, coherence, clarity* and *grammar* in writing, a simple trait system is developed. Each specific criterion accounts for four points. The details are found in the scoring sheet designed for the study to facilitate ease of scoring of students' performance (see Table 2).

Table 2 Scoring Sheet for Scoring Students' Writing Performance

Student No.: _____
Pre/post (delete whichever is not applicable) Test Writing Scores ____
Total marks:_____

Pertinence	*Clarity*	*Coherence*	*Grammar*
4. The essay effectively addresses the topic and task;	4. The essay is well organized and well developed, and uses clearly appropriate explanation, exemplification, and/or details;	4. The essay displays unity, progression, and coherence;	4. The essay displays consistent facility in the use of language, demonstrating syntactic variety, appropriate word choice, and idiomaticity, though it may have minor lexical or grammatical errors;
3. The essay addresses the topic and task well enough, some points may not be fully elaborated;	3. The essay is generally well organized and well developed, and uses appropriate and sufficient explanation, exemplification, and/or details;	3. The essay displays unity, progression, and coherence, though it may contain occasional redundancy, digression, or unclear connection;	3. The essay displays facility in the use of language, demonstrating syntactic variety and range of vocabulary, though it may have occasional noticeable minor errors in structure or word form or idiomatic language use that do not interfere with meaning;

Table 2 *(cont.)*

2. The essay addresses the topic and task using somewhat developed explanation, exemplification, and/or details;	2. The essay may demonstrate inconsistent facility in sentence formation and word choice that may result in lack of clarity and occasionally obscure meaning;	2. The essay displays unity, progression, and coherence, though connection of ideas may be occasionally obscured;	2. The essay may display accurate but limited range of syntactic structures and vocabulary;
1. The essay has limited development in response to the topic and task;	1. The essay has inappropriate or insufficient exemplification, explanation, or details to support or illustrate generalizations in response to the task;	1. The essay has inadequate organization or connection of ideas;	1. The essay has noticeably inappropriate choice of word or word forms and an accumulation of errors in sentence structure and/or usage;
0: The essay has little or no details, or irrelevant specifics, or questionable responsiveness to the task.	0: The essay has serious problems in organization or development.	0: The essay is seriously insufficient in unity, progression, and coherence.	0: The essay has serious and frequent errors in sentence structure or usage.

Note: The numbers refer to points awarded for each descriptor assigned for the evaluation of writing.

Questionnaire

Literature on definitions of language attrition and development, and past questionnaires (Fader, 2008; Toth, 2004; Fujita, 2002) was relied on for the design of the questionnaire used in the study. The final questionnaire includes three sections: (1) Personal information where participants' demographic details were gathered. (2) Motivation which consists of questions that attempt to measure the different factors that affect motivation before and during two years of nonuse. (3) Social activities which spell out social interactive events that include shopping, travelling, online chatting, attending gatherings, and watching movies. All the questions will help to determine the influence of social factors on language attrition. Where necessary, translations in Mandarin were provided to aid comprehension.

Four response options were used for the questionnaire: *strongly agree, agree, disagree,* and *strongly disagree.*

Sample

For the writing test, 25 males and 25 females from NUPT (Nanjing University of Posts & Telecommunications) were randomly selected for both the pre and post writing tests. The students were registered in English language proficiency courses. The random selection is performed by the *random number generators* found in the SPSS. All of the 50 participants had received four semesters of college English education at NUPT and subsequently worked out of campus for two years before taking the post test. They were tested twice and the scores were analyzed in order to explain the phenomenon

of language attrition. The number of the participants in the writing tests is considered adequate, which is supported by the validity measurement of writing scores. Other studies, such as Chandler's (2003), have used a smaller number of participants than that in this study. Chandler used two groups to measure participants' accuracy and fluency in L2 writing, with one group having 16 participants and the other 15, giving a total of 31.

Computer-aided Analysis
The numeric data that are normally distributed can be measured via paired-samples T tests (Muijs, 2004). Since the variable is expressed in linear terms, the Rasch model will be applied to the data to determine reliability (Linacre, 1989). After all the data and programs are matched, data will be entered into the corresponding programs and processed where related output were realized.

Findings
This part presents the findings and discussion of the results of the writing tests and questionnaire. Research questions are first presented before the findings and discussion. Before the data to answer the research questions are discussed, validation results are firstly presented.

Validation of results
The validity of the writing measurement includes scores that relate to inter-rater reliability, test items and examinees reliability via MFRM. Table 3 summarizes the statistical output from MFRM.

Table 3 Report of the Validity of Writing Judgments

	Severity of raters		Separation index		Reliability		Infit Mnsq	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Rater 1	Most	Moderate	1.05	.91	.49	.51	.94	.88
Rater 2	Moderate	Most					.90	.94
Rater 3	Least	Least					1.17	1.21
Pertinence			3.12	2.36	.91	.84	1.10	.91
Coherence							1.04	.88
Clarity							.82	.94
Grammar							1.05	1.33
Examinee			.90	1.10	.48	.56	.23-.48	.23-.59

Note: Infit MnSq- Infit Mean-Square

As shown in Table 3, the statistical output from MFRM can be further summarized from three perspectives: (1) rater report (2) test item report; and (3) examinee report.

1. Rater Report
   From Table 3, we can find some differences in the ratings of the pre and and post writing tests. In the pre writing test, rater 1 is the most severe judge, but rater 2 acts as the most severe one in the post writing test. By contrast, rater 3 remains the least severe judge in both pre and post writing tests.

2. The separation indices and reliabilities are 1.05 and 0.49 for the pre test and .91 and .51 for the post test respectively. Generally, a separation ratio less than 2 and a reliability index smaller than 0.9 would fail to indicate statistically significant difference among all the elements (Linacre, 1991:43). In the rater facet, this means that there is no significant and consistent difference in rater severity. These statistics indicate that the raters could rate consistently and independently.

3. 2.Test Item Report
   As shown in Table 3, the Infit Mean-Square (Infit Mnsq) varies within the normal range, indicating that raters have consistently scored each of the writing items. The separations are 3.12 (pre test) and 2.36 (post test) which indicates that raters have distinctly scored different items instead of making universally similar judgments. The reliabilities were .91 (pre test) and .84 (post test) indicating that test items are highly reproducibly different.

4. Examinee Report
   From Table 3, it can be seen that separation indices are .90 for the pre test and 1.10 for the post test, less than 2.0, which indicates no problems or inaccuracies exist in the ratings awarded for the examinees. The reliability indices are .48 for the pre test and .56 for the post test, indicating that examinees are not highly reproducibly different.

5. Generally, it can be said that the three raters did show different degrees of severity but were internally consistent in their ratings of both tests. As for the specific writing items that were scored, the ratings demonstrated the significant differences which indicate that participants had obtained distinct scores in different items. The three raters were therefore guided by more or less similar scoring criteria and as a result the participants' scores were stable.

6. The Cronbach's alpha coefficient for the questionnaire was 0.91. This was considered to be reasonably high and therefore reliable in its use.

Research question 1: Do specific and total writing skills attrite after two years of nonuse of English?

Data on writing performances are synthesized and the results are presented in Table 4. Table 4 was produced from paired-samples T tests using SPSS 13.0. As presented in Table 4, total writing skills, with reference to *pertinence, coherence,* and *clarity* have undergone significant attrition at the significance level of 0.05. From the table above, it can be seen that only grammar has not undergone significant attrition. Thus, we partially accept the hypothesis that writing skills in English attrite after two years of nonuse of English.

Table 4 Attrition in Writing Skills

	Mean	N	Std Deviation	T	Sig.(2-tailed)
Pre-total	9.41	150	1.48	8.37	.00
Post-total	8.51	150	1.55		
Pre-pertinence	2.42	150	.81	5.17	.00
Post-pertinence	2.15	150	.71		
Pre-coherence	2.48	150	.76	5.47	.00
Post-coherence	2.21	150	.74		
Pre-clarity	2.54	150	.78	6.45	.00
Post-clarity	2.26	150	.79		
Pre-grammar	2.12	150	.83	4.21	.11
Post-grammar	2.09	150	.79		

Considering the writing skills as a whole, participants came across as having experienced a significant attrition during the two years of non-formal learning of English. In terms of the specific skills which were coded as *pertinence*, *coherence*, and *clarity*, participants also experienced significant attrition over two years. The mean difference in *grammar* was the smallest compared with *pertinence, clarity* and *coherence.* Therefore, *grammar* seemed the most stable element with regard to attrition in writing. At the same time, it also had the lowest scores in both the pre and post tests, which indicated that participants might have the least competence in terms of *grammar*.

It appears that Chinese learners of English have a strong imprint of grammatical knowledge acquired. While the scores may not be high, there was no significant record of attrition unlike the other writing skills. This phenomenon could have happened as a result of the tendency of Chinese students to learn grammar through rote memorization resulting in imprinted knowledge that may not be as susceptible to attrition.

Research question 2: How are levels of motivation and social activities related to the attrition of writing skills over a two-year period of non-use of English?

The second question aims to connect motivation and social activities to English language attrition. The findings are as follows:

Section 1 of the questionnaire revealed the simple demographic information of the participants as shown in Table 5.

Table 5 Demographic Information of the Participants

Gender	Number	Received education
Male	25	
		College English
Female	25	

As shown in Table 5, there were 25 male and 25 female participants taking both questionnaires and writing tests. All of the participants have received four semesters' college English education.

Social Activities

The following table (Table 6) shows the results on the survey of social activities in relation to English language use.

Table 6 Questions on Motivation and Social Activities

Section Two: Motivation	**Mean**	**S.D**	**Cronbach's Alpha**
TWO YEARS AGO			
I liked to learn English.	3.00	0.68	
I liked to learn English culture.	2.90	0.73	
I often watched English movies/TV's	2.79	0.85	0.79
I often listened to English radio's/records/tapes.	2.50	0.76	
I often read English books.	2.52	0.71	
I often wrote letters/stories/diary in English.	2.31	0.75	
I often spoke English with others.	2.30	0.73	
DURING THE TWO YEARS			
I like to learn English.	2.82	0.77	
I like to learn English culture.	2.73	0.93	
I often watched English movies /TV's.	2.65	0.86	0.85
I often listened to English radio's/records/tapes.	2.38	0.76	
I often read English books.	2.39	0.72	
I often wrote letters/stories/diary in English.	2.22	0.74	
I often spoke English with others.	2.22	0.72	
Section Three: Social Activities			
Before TWO YEARS, how often did you do the following things?			
Watching incompletely Chinese (有英文字幕) movies/TV's/ dramas	2.52	0.70	
Watching English movies/TV's/dramas with/without Chinese subtitles (字幕).	3.02	0.70	
Shopping with my English speaking family/friends.	2.89	0.73	
Travelling with my family/friends in foreign countries.	2.89	0.80	
Chatting with my friends/family members in English through the Internet.	2.73	0.81	0.83
Chatting with my friends/family members in both English and Chinese.	2.73	0.80	
Gathering with my English speaking friends/family members.	2.60	0.80	
Doing other things about English learning.	2.66	0.84	

Table 6 *(cont.)*

DURING TWO YEARS, how often did you do the following things?			
Watching incompletely Chinese (有英文字幕) movies/TV's/dramas.	2.42	0.94	
Watching English movies/TV's/dramas with/without Chinese subtitles (字幕)	2.47	0.91	
Shopping with my English speaking family/friends.	2.61	0.96	
Travelling with my family/friends in foreign countries	2.74	0.92	0.92
Chatting with my friends/family Members in English through the Internet	2.61	0.96	
Chatting with my friends/family members in both English and Chinese	2.37	0.89	
Gathering with my English speaking friends/family members	2.28	0.78	
Doing other things about English learning	2.62	0.93	

Table 6 shows the questions as regards to capturing information on motivation and social activities in the questionnaire, coupled with the means, standard deviation and Cronbach's Alpha coefficients.

Motivation
Table 7 displays the significant difference in the levels of motivation before and during the two years, via nonparametric 2-related samples tests. The figures were produced out of 14 items in the second section of the questionnaire (targeting at motivation).

Table 7 Comparison of Motivation Levels Before and During two years of nonuse of English

	N	Mean	Std. Deviation	Z	Asymp.Sig.(2-tailed)
BFRMTV	50	19.01	3.03		
DURMTV	50	16.31	2.66	-12.941	.00

Note:
BFRMTV- motivation before two years of nonuse of English

DURMTV- motivation during two years of nonuse of English

As shown in Table 6, the means of motivation levels before and after two years of non-use of English are 19.01 and 16.31 respectively with a significance level set at 0.05. The figures indicated in the table showed a significantly lower level of motivation after two years of non-use of English (p=0.05). It indicates that participants had a stronger level of motivation prior to the two years of non-use of English. The Cronbach's alpha coefficients for the data in this section before and after two years of non-use are 0.78 and 0.81 respectively, and the item-total Cronbach's alpha coefficient is 0.83, which gives a satisfactorily index for reliability.

The results seem to indicate some parallel movement between levels of motivation and attrition in writing skills. Before the two years of non-use when motivation was

higher, the level of writing ability was also higher. However, when there was a decrease in motivation during the two years of non-use, there was a similar decline in writing ability.

Nevertheless, motivation could not be the only general factor that could be linked to attrition in writing skills. More pertinent perhaps was the fear expressed by the learners about attrition. This fear could lead to learners being not confident about their ability to write and retain what was learnt. The lack of confidence in turn could lead to learners not wanting to improve further and this indirectly could affect motivation. Thus their writing ability stagnated or suffered a subtractive language reversal captured as attrition.

Social Activities
In order to identify the level of social activities before and during the two years of non-use of English, data from the third section of the questionnaire was analysed. After entering all the data of this section into the SPSS and using nonparametric 2-related samples tests, Table 8 was generated to display the following information:

Table 8 Mean Scores of Social Activities Before and During Two Years of Non-use of English

	N	Mean	Std. Deviation	Z	Asymp.Sig. (2-tailed)
BFRSACT	50	18.21	19.23	-8.01	.00
DURSACT	50	16.18	18.51		

Note:
BFRSACT- social activities before two years of nonuse of English

DURSACT- social activities during two years of nonuse of English

The means of the social activities before and during the two years of non-use of English are 19.23 and 16.18 respectively and the significance level is .00. This indicates that the results are statistically significant at the level 0.05. It could be inferred that the participants took part in significantly fewer social activities related to English language use during the two years of non-use of English compared to the period of time before the two years of nonuse. The data could be said to provide support for inferring language attrition occurrence in writing skills. The Cronbach's alpha coefficients in the data of this section are 0.79 and 0.76 before and during two years of non-use of English respectively, and the item-total Cronbach's alpha coefficient is 0.81, which proves the internal reliability of the questions. Accordingly, we cannot dismiss social activities as not having an influence on English language attrition with reference to writing skills. It could then be said that a decrease in motivation as well as fewer opportunities for social language contact could be linked to the attrition of productive skills of the language with writing as a component.

Relationship between writing attrition, motivation and social activities
Finally, we calculated both the changes in levels of motivation and frequencies of social activities and performance in writing skills. The continuous data were then entered into

SPSS 13.0 and analyzed through Spearman's correlation coefficient. Thus, Table 9 was produced through the summarization of the output from SPSS 13.0.

Table 9 Correlation of changes in writing skills, social activities and motivation

	Correlation coefficient	Sig. (2-tailed)	N	Correlation coefficient	Sig. (2-tailed)	N
		Chsc			Chmt	
Chpt	-.21	.02	50	.02	.02	50
Chch	-.23	.03	50	.21	.01	50
Chct	-.08	.04	50	.08	.04	50
Chgr	-.12	.02	50	-.16	.03	50
Chtt	-43	.01	50	-.07	.01	50

Notes: Chpt-change of writing skills in pertinence; Chch- change of writing skills in coherence; Chct- change of writing skills in clarity; Chgr- change of writing skills in grammar; Chtt- change of writing skills in total; Chsc-change of frequencies of social activities; Chmt- change of levels of motivation

In Table 9, the correlation coefficient, significance level, number of participants and changes in English skills are cross tabulated in order to identify the correlation between the selected variables. As shown in Table 9, there was a significant relationship between changes in writing skills and motivation levels and frequencies of social activities, *p* (two-tailed) < 0.05.

It could then, therefore, be said that motivation and social activities play significant roles in writing attrition. Language operations are closely knitted. Linguistic and extralinguistic features are part of a web of language learning and retention. Attrition in writing is not solely attributed to the learners not writing, but also to lack of use in other matters, as manifested in motivation and social activities.

Conclusion

Overall, participants show a significant decrease in writing abilities except in grammar which had the lowest scores. While it does point to the tendency of the Chinese learners in using memorization as a learning strategy for grammar leading to more ingrained learning, they may not still have learnt it well. In the context of attrition, it would be prudent that a high level of competence should first be maintained. Thus, when non-learning takes place, there is the likelihood that a high level of ability is maintained. In the present situation, grammar was least attrited but it was also a skill that was least mastered. Extending from this notion, there can be an institutional awareness of the attrition phenomenon and it then could be more effectively addressed. In addition, practical use of language cannot be merely confined to institutional learning. The test of competence is performance which is especially significant when one enters the workforce. The recognition of attrition establishes the need to institute language programmes that are more extensive and not confined only to particular sessions in a university curriculum. Non-use is a serious matter if attrition in writing is given due recognition. The findings revealed that writing attrition is worrying; especially so when writing

ability is often used as a benchmark to gauge language competence of job applicants. As such, undergraduates could ill-afford to attrite in writing. Language instructors should alert learners about this phenomenon and that they should make every effort to retain the level of writing competence and not lose it through attrition. For language planners who need to formalize programs and training needs, it would be imperative to set long term goals that address language retention.

From the questionnaire, participants show a lower level of motivation in learning the English language after two years of 'non-learning' the language. This low level of motivation may be considered to be a contributing factor to attrition in their writing. Similarly, this can be said of social activities which appear not to provide opportunities for the use of the English language. The exploitation of motivation and social activities are definite avenues to ward off language attrition with that of writing included. Again it should set planners thinking about maintaining or increasing the level of motivation and social activity engagement to enhance language retention. It would be a disadvantage for learners to have gone that far in language learning and be stumped by attrition at the outset of their careers, especially when the job world continues to be more and more competitive.

While the data cannot claim to be exhaustive, it can be seen as helping to advance knowledge with regard to attrition and the learning of English as a foreign language. It can be said that attrition is a powerful force in language learning especially in the FL environment. It has the potential to de-motivate the human capital that forms the backbone of a nation's development. Even the most diligent language learner could be an attrition victim causing the learner to lose language skills that have taken years to acquire. Part of the language maintenance program could involve the greater practice of personal and cognitive strategies that characterize an expert learner. In addition, positive motivation towards language learning and cultural attitudes can be fostered as maintenance strategies. Ideally, learners could travel abroad to immerse themselves in the language and culture of the FL environment. At the local level, technology-aided instruction and the development of specific cross-cultural resources could be made available to the community of FL learners. Thus, language maintenance activities should provide the scaffolding to ward-off attrition and its negative impact in the vulnerable FL environment.

Appendix

A Questionnaire for an English Language Attrition Project

Section One: Personal Information (Will remain confidential)

1. Name_____
2. Hand phone No.:_____
3. Email:_____
4. Age: 18-20_____ 21-23_____ 24-25_____ 26-28
5. Sex: Male_____ Female_____

Section Two: Motivation

TWO YEARS AGO:

1. I liked to learn English.	4 3 2 1
2. I liked to learn English culture.	4 3 2 1
3. I often watched English movies/TV's.	4 3 2 1
4. I often listened to English radio's/records/tapes.	4 3 2 1
5. I often read English books.	4 3 2 1
6. I often wrote letters/stories/diary in English.	4 3 2 1
7. I often spoke English with others.	4 3 2 1

DURING THE TWO YEARS

8. I liked to learn English.	4 3 2 1
9. I liked to learn English culture.	4 3 2 1
10. I often watched English movies/TV's.	4 3 2 1
11. I often listened to English radio's/records/tapes.	4 3 2 1
12. I often read English books.	4 3 2 1
13. I often wrote letters/stories/diary in English.	4 3 2 1
14. I often spoke English with others.	4 3 2 1

Section Three: Social Activities

TWO YEARS AGO
Two years ago, how often did you do the following things?

15. Watching incompletely Chinese (有英文字幕) movies/TV's/dramas	4 3 2 1
16. Watching English movies/TV's/dramas with/without Chinese subtitless (字幕)	4 3 2 1
17. Shopping with my English speaking family/friends	4 3 2 1
18. Travelling with my family/friends in foreign countries	4 3 2 1
19. Chatting with my friends/family members in English through the Internet	4 3 2 1
20. Chatting with my friends/family members in both English and Chinese	4 3 2 1
21. Gathering with my English speaking friends/family members	4 3 2 1
22. Doing other things about English learning	4 3 2 1

DURING THE TWO YEARS

During the two years, how often did you do the following things?

23. Watching incompletely Chinese (有英文字幕) movies/TV's/dramas	4 3 2 1
24. Watching English movies/TV's/dramas with/without Chinese subtitless (字幕)	4 3 2 1
25. Shopping with my English speaking family/friends	4 3 2 1
26. Travelling with my family/friends in foreign countries	4 3 2 1
27. Chatting with my friends/family members in English through the Internet	4 3 2 1
28. Chatting with my friends/family members in both English and Chinese	4 3 2 1
29. Gathering with my English speaking friends/family members	4 3 2 1
30. Doing other things about English learning	4 3 2 1

31. Are there any relevant remarks you would like to add? Please use the space below.

[This questionnaire was adapted from Fader's (2008), Toth's (2004) & Fujita's (2002) works]

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