A Measure for Sight Translation Anxiety: Questionnaire Development and Validation

Karen Chung-chien Chang
National Taipei University

Recently, interpretation studies have tapped into the issue of anxiety, trying to identify the stress factors for students learning this discipline. Although many studies have been conducted on the instruction and learning of consecutive and simultaneous interpretation, the research related to sight translation (ST) is scarce. ST is the practice of interpreters reading the source text but delivering the rendition orally, making this practice more similar to interpreting in nature. ST is suggested to be taught as a preparatory course (Ilg and Lambert 2004) for those learning interpreting, and learners of interpretation face shared challenges and concerns. For these reasons, this study aimed at putting together a questionnaire for measuring anxiety-triggering factors for ST learners, so instructors could design their course activities to increase both learner interest and learning effectiveness. The questionnaire previously proposed by Lu and Liao (2012) was modified and refined through factor analyses. The original 34 items were narrowed down to 21 items, covering five subscales: learners' concerns about evaluation (both from their peers and instructor), cognitive challenges in ST, worries about English competence, anxiety in ST performance, and attitudes of learning ST.

Keywords : anxiety-causing factors, anxiety measure, anxiety triggers, sight translation, sight translation anxiety

1. Introduction

In recent years, translation and interpretation (T&I) courses have gradually become more common at many universities and colleges in Taiwan. One notion contributing to this development may be related to the viewpoint of regarding translation as the "fifth skill" (Newmark 1991; Wilss 1996), which complements the four skills of reading, writing, speaking and listening. However, different from the acquisition of these four skills, learning how to translate or interpret is often described as a task demanding much

from the learners. As pointed out by Kurz (2001: 114), some stress factors, such as "constant information overload, the tremendous amount of concentration required, fatigue, the confined environment of the booth" are found present in the working conditions of conference interpreters.

In early studies, researchers believed that the anxiety experienced by interpreting learners was very similar to that experienced by foreign language learners. The related findings helped gain a better understanding about the factors that triggered anxiety in interpreting learners (Chiang 2006). Specifically, the performance of T&I learners is often plagued by factors including source-text comprehension, jargon used in different fields, the conversion between languages, and the rendition delivery in the target language (TL) (Lu & Liao 2012). These stress factors often cause anxiety among learners of translation and interpretation, especially the latter.

In T&I training, sight translation (ST) is the oral rendition of a text written from one language to another language. In a typical T&I curriculum, an ST course is usually offered to students after they have acquired translation skills but before they are introduced to oral interpretation. The rationale for this sequence is to reduce students' tendency to write information on paper gradually and increase their cognitive ability to process the information read. More specifically, for students learning ST, they are encouraged to read and process the given information, convert the message into the TL in their heads, and deliver the converted message orally in the TL. In such a process, students are advised to use their pens only to take necessary notes.

Although more and more T&I courses are offered in universities and colleges in Taiwan, ST courses are still less commonly found. As a result, information related to ST instruction and training material is less available compared to that of translation and interpretation. The scarcity of ST-related research is not unique to Taiwan, for such a phenomenon is echoed by J. Lee (2012: 694) when she pointed out "there has been a dearth of studies on sight translation." Therefore, as an attempt to add more insight to the current research findings on ST, this study focused on the issue of anxiety for ST learners. The reason for choosing this focus is that while some previous studies (Cooper et al. 1982; AIIC 2002; Shih 2005; Chiang 2006; Lu & Liao 2012) have examined the anxiety triggers for professional and student interpreters, not much information is made available for understanding the difficulties and challenges experienced by ST learners. As suggested by Ilg and Lambert (1996), ST training can be viewed as a preparatory course for students learning interpreting. With more and more T&I courses offered in Taiwan, attention should be given to the potential anxiety-triggering factors for ST learners.

Previously, Chiang (2006) and Lu and Liao (2012) have investigated the anxiety-causing factors for interpreting learners. This study aims to build on the previous research results

and put together a measure of anxiety-triggering factors for ST learners. In many studies, an interview is commonly employed as a data collection tool to elicit learners' responses but seems to generate only qualitative findings. It is hoped that this measure will complement the interview by quantifying students' anxiety in learning and performing ST, which further helps researchers gain more insight from students' ST learning experiences. Furthermore, different concerns held by ST learners can be taken into consideration for ST instructors in their design of course activities and adoption of teaching approaches.

2. Literature Review

This literature review covers two parts: important skills in ST training and anxiety studies/measurements. The former provides background information for what ST learners should focus on, whereas the latter introduces previous efforts invested in understanding anxiety-triggering factors experienced by T&I learners.

2.1. Skills Identified as Important for ST Training

ST is often known as the act of orally translating a written text, and it may be used in different settings. Generally, the working conditions for ST can first be divided into conference interpreting or non-conference interpreting settings. In a conference setting, while an interpreter listens to a live speech, he/she may be asked to sight-translate the heard message at the same time, a practice sometimes termed "simultaneous interpreting with text" (Pöchhacker 2004: 19). In this case, the interpreter is often required to keep up with the speech rate of the speaker. In a non-conference setting, audio input is usually absent, and the interpreter's task is to process the written text only. Furthermore, this latter ST working condition can be divided into rehearsed ST and unrehearsed ST (Lambert 2004). Whereas rehearsed ST gives the interpreter some text-processing time between reading the text and delivering the rendition, unrehearsed ST requires the interpreter to sight-translate the written text immediately after it is received. Since this paper focuses on developing a measure for students learning ST for the purpose of making a transition to interpreting, the training format leans towards rehearsed ST in a non-conference setting.

In performing an ST task, certain skills are required. Since the acquisition of these skills may pose certain difficulties for learners, anxiety may be present in the acquisition

process. To begin with, according to Weber (1990), when doing an ST assignment, an interpreter needs to perform a text analysis quickly, convert information between languages while avoiding word-for-word translation, and deliver the translated content with effective public-speaking techniques. Moreover, Brady (1989) has pointed out although an interpreter can control the pace in reading the written text, he/she may not have total control over the delivery speed. That is, an ST rendition is expected to resemble the reading of a document in the TL without hesitations and pauses (Angelelli 1999). The above process highlights the importance of three skills: fast reading and good comprehension, quick conversion of the source information into the TL, and smooth oral rendition of the translated message.

In a successful performance of an ST task, the factor of "time" is strongly associated with the accompanying difficulty. In ST, reading a text in the SL and producing a rendition in the TL often takes place with a very short lag of time. In other words, the interpreter often needs to read the source text and mentally compose the translated text at the same time. In a training session of rehearsed ST, a source text is distributed at the beginning of the session, and the trainees are given only a short time to read the original text, convert the information from the SL to the TL, and organize the message for the target audience. Consequently, in this process, a trainee may feel pressured by two factors. For one, he/she may worry whether his/her reading of the SL is correct. For another, he/she may be concerned about the ST production. These two aspects are strongly linked to learner anxiety in ST training.

In addition to understanding what factors may potentially worry ST learners, some researchers have made efforts to identify the difficulty areas leading to errors in ST. For instance, T-F. Lee (1996) has pointed out the lack of vocabulary items as the most frequently encountered difficulty for students. Her (1997: 134-135) has found the lack of common knowledge, compound words, phrases, jargon, complicated sentence structures, and the lack of cultural awareness as the factors leading to students' errors in ST renditions. Yang (2000) has indicated that various levels of information processing involved in ST are the main causes for problems in ST rendition. In addition, Lu et al. (2003: 257-259) have concluded that their Chinese-Spanish ST students perceived the lack of vocabulary items and related knowledge, complicated sentence structures, jargon, and the difficulty in making association between ideas and handling numbers as the biggest difficulties. In addition, Ivars' (2008) study has shown that student interpreters considered the difficulties in comprehending source texts and finding TL equivalents as the major problems in performing ST. These studies have informed the field the factors that may bother or discourage learners in their performance of an ST task.

Clearly, previous studies have informed the T&I field that ST learners should focus

on developing fast reading skills, strengthening their reading comprehension, learning to connect ideas presented in a given message, using contextual clues, and parsing sentences.

2.2. Anxiety Studies and Measurement

As little research has been conducted to unveil the anxiety-causing factors in learning ST, some shared concerns from the learning of consecutive interpreting (CI) are reviewed in this section. It is hoped that the previous research conducted on CI will shed light on the potential anxiety-causing factors for students learning ST.

Several anxiety-causing factors are inherent in an interpreting task because any of these factors can determine its success or failure. The following factors supported by previous research are shared by those performing ST and CI, professional interpreters and student interpreters alike. First, Klonowicz (1994) has pointed out the interpreting duration and the related workload as a demanding factor. The longer an interpreting task is, the greater the possibility of anxiety. In a study carried out by Riccardi, Marinuzzi, and Zecchin (1998), their findings have shown that, in the cases of remote interpreting, interpreters might face even greater anxiety because they would not be able to see the speakers and other relevant information first-hand. This result is further supported in Moser-Mercer's (2003) study, indicating that the same interpreter tended to be less tired and work more effectively in a live conference condition compared to a remote condition. In addition, Jiménez and Pinazo (2001) have found that the fear of public speaking and anxiety had a significant, positive correlation. Of their student interpreters, both factors of fear of public speaking and anxiety were positively related to their mid-term exam performances.

Besides, the anxiety caused by learning and performing interpretation extends to the physiological and cognitive aspects. In the previous studies conducted by Cooper et al. (1982), AIIC (2002), and Chiang (2006), the researchers have found that the three major stress factors bothering professional and student interpreters in their performance of an interpreting task included fast speakers, difficult accents, and unfamiliar topics. In terms of the physiological responses to the potential stress factors, the interviewed college students in Chiang's (2006) study experienced faster heart beats and sweating during class practices. Moreover, the students at times became reluctant in attending classes and did not want to be called on by their instructors. Then Lu and Liao (2012: 97) modified Chiang's questionnaire to further examine the anxiety levels of some professional and student interpreters. Their research findings have indicated that their respondents

experienced a moderate level of anxiety when practicing or performing interpreting tasks, mainly due to the unfamiliar topics involved and special terminology used. Covering three dimensions, Lu & Liao (2012) modified the questionnaire to focus on examining students' concerns/worries about the evaluation from others (including both instructors and peers), the difficulties related to cognitive processing of information, and their self-confidence and willingness in performing interpretation tasks.

Thanks to these past studies, those working and teaching in the T&I field were able to have a more complete understanding of the challenges, difficulties, concerns, and worries of both practitioners and student interpreters. Nevertheless, as more T&I courses are offered and ST training is provided either as an independent course or part of a T&I course, factors contributing to learners' successes or concerns should be explored. As an attempt to fill the gap in ST-related research, this study aims to put together a measure to better understand the factors affecting ST learners.

3. The Study

This study is inspired by the lack of research in ST. Through the above identified skills for performing an ST task and the previously-conducted studies related to anxiety, this study aims at devising a measure for understanding learner anxiety of ST. This section covers the participants and research procedures.

3.1. Participants

This study involved two groups of participants. Both groups were students majoring in English, and they took ST in their junior years. Before taking ST, the students were trained in translation for an entire year, covering both directions from Chinese to English and from English to Chinese. The first group consisted of 55 students (16 male students and 39 female students) and their responses to the first modified 34-item questionnaire were used to generate the data pool for identifying the potential subscales. Then when the refined version with the identified subscales was finalized, the questionnaire was administered to the second group of 81 students (21 male students and 60 female students). All of the students were Mandarin Chinese speakers, making Chinese their A language and English their B language.

At the university where this study took place, all freshman students were required to

take the TOEIC exam for two purposes. The first reason is for the university to keep track of students' English proficiency levels, for many departments in this university have set different criteria of English proficiency as their graduation requirements. The second reason is to provide the test scores as references for instructors to choose, design, or modify their teaching materials accordingly. For the first group of 55 students and the second group of 81 students, their English proficiency levels are compiled into Table 1 and Table 2. The scores are listed in an increment of 50 points for better sorting of the students' TOEIC scores.

Table 1. English Proficiency Levels for the First Group of Students

TOEIC Scores	Number of Students
735-785	12
786-835	25
836-885	12
886-935	6

Table 2. English Proficiency Levels for the Second Group of Students

TOEIC Scores	Number of Students
735-785	20
786-835	23
836-885	31
886-935	7

3.2. Research Procedures

With the goal of putting together a measure for ST anxiety, this study adopted the following process that can be divided into three major steps. First, Lu & Liao's (2012) questionnaire was used as the basis of sorting out the new measure of ST anxiety, for the subscales (or "dimensions" as used in their study) they identified reflected the key concerns in the instruction and learning of ST skills. However, some modifications were necessary since Lu and Liao's (2012) 34-item questionnaire targeted those learning interpreting only. With the emphasis of this study being ST, the first modification was to change the phrase "interpretation" used in the original questionnaire to "sight translation." Then, among the remaining statements, only Item 22 and Item 30 required more modification, for the original statements involved elements specific only to an interpretation task. For example, Item 22 in Lu and Liao's (2012) version states that an

interpretation task requires a student interpreter to focus on four aspects, including listening to the original message, understanding the message, memorizing the details, and taking notes at the same time. Since ST defined in the current study does not involve any listening component, Item 22 was modified as "I feel pressured about having to read, comprehend and translate the SL texts during sight translation." Similarly, Item 30 in Lu and Liao's (2012) questionnaire specifically focuses on the difficulty brought by a speaker's accent. This item was modified as "When the source text content in an ST task is too difficult, I become worried." After these modifications were made, the entire questionnaire was translated into English to suit this study.

In the second step, after the modified version was compiled and translated, this 34-item questionnaire (see Appendix 1) was administered to 55 students in order to generate the data pool required for factor analyses. The responses collected from the 55 students were analyzed through factor analyses for the identification of the key subscales regarding factors triggering learner anxiety in ST. Based on the results of the factor analyses, five major subscales were identified, and the questionnaire was adjusted and narrowed down to 21 items (see Appendix 2). In this phase, 13 items were eliminated for the reasons that they failed either to scale (generate a loading) or form a subscale (see a more detailed discussion in the section of Results).

In the third step, the refined 21-item questionnaire was administered to 81 students, and the second round of factor analyses was conducted. The purpose of this step was to make sure that the results (the identified subscales) from the administration of both questionnaires (the 34-item version and the 21-item version) were consistent. Before the finalization of this 21-item measure, the last step was to verify the reliability and validity of this questionnaire. For reliability, the Cronbach's alpha coefficient for the finalized 21-item questionnaire was calculated, followed by the Cronbach's alpha coefficients for the five identified subscales. Then the procedures for verifying convergent and discriminant validities were carried out. For the former, correlations were calculated between every two sets of subscales. For the latter, pattern matrixes generated from different sets of every two subscales were used to calculate the average variance extractions (AVEs) for establishing discriminant validity. Through all these steps, the 21-item questionnaire was finalized and the reliabilities (for the entire questionnaire and each subscale) as well as validities were confirmed.

4. Results

4.1. Factor Analysis

This study aimed at devising a measure for ST anxiety. For the purpose of selecting items to form the subscales, exploratory factor analysis was employed. More specifically, the Principal Axis Factoring method of extraction was administered to examine the factor structure of the preliminary 34-item ST anxiety questionnaire.[1)] Then an analysis was performed to examine the responses gathered from the group of 55 students. From the analysis, five subscales were extracted. Once these five subscales were extracted, 13 items had to be eliminated for different reasons. The first reason for eliminating some items (including items 6, 15, 16, 17, 23, 30, 33, and 34) was that these items did not generate significant loadings. Only those items with a loading greater than .5 were taken for further consideration of being included in a subscale. A possible explanation for the low loadings of these items might be related to how some statements were phrased and how relevant others were to ST anxiety. For instance, items 6 and 17 were general references of one's ability or English proficiency to perform ST instead of one's concern about performing ST tasks from Chinese to English. Moreover, Item 15 was about the instructor's comments on a learner's accuracy in ST rather than the idea of the instructor's in-class evaluation. Though Item 30 was related to the ST handling process, the statement was not as specific as those associated with jargon, sentence complexity or language comprehension.

The second reason for eliminating other items (including items 7, 9, 12, 28, and 32) was that these items failed to scale or form a subscale. When examined more closely, these eliminated items were found to be either vague in description or lacking keywords. Take Item 7 for example. None of the statements included in the original 34-item questionnaire was related to "ST exams." A similar situation was also found on Item 9, the only statement pertinent to performing ST from English to Chinese. In addition, Item 7 was the only statement related to the notion of "preparation." Among these five items,

1) Both exploratory factor analysis (EFA) and principal components analysis (PCA) can "help investigators represent a large number of relationships among normally distributed or scale variables in a simpler (more parsimonious) way" (Leech, Barrett, and Morgan 2015: 68). However, one major difference between these methods is that, in EFA, "one postulates that there is a smaller set of unobserved (latent) variables or constructs underlying the variables actually observed or measured" (68). For this reason, EFA was chosen for this study. Among different ways of computing factors for factor analysis, principal axis factoring is one of the most commonly used methods for factor extraction (Cheng 2004) and is "highly similar mathematically to PCA" (Leech et al. 2015: 68).

although items 28 and 32 were related to unfamiliar topics and the language handling process in ST, they failed to belong to any of the five identified subscales.

With the elimination of 13 statements, the finalized ST anxiety questionnaire contains 21 items (see Appendix 2) and covers five subscales. The first subscale covers five items related to learners' concerns about evaluation from either their peers or instructor. As shown in Table 1, these statements are items 7, 13, 15, 16 and 17. The second subscale includes five items, covering statements 4, 8, 11, 12, and 21, pertinent to learners' cognitive challenges in performing an ST task. The third subscale consists of five items (statements 1, 6, 10, 18, and 19) pertinent to learners' worries about their English competence. In addition, the fourth subscale is made up of three statements (items 2, 3, and 20) regarding learners' anxiety from ST performance. Finally, the last subscale, covering items 5, 9, and 14, is about learners' attitudes of learning ST. For more details about the factoring results, please refer to Table 1.

Table 3. Rotated Factor Pattern for ST Anxiety

No	Items	Components				
		1a	2b	3c	4d	5e
17	During class practice of ST, I worry about being laughed at by my peers.	.782				
16	I feel anxious and it is nerve-wracking when doing ST in front of my classmates.	.764				
13	I feel awkward about doing ST in front of my classmates.	.746				
7	I become a bit anxious if I have to volunteer my answer to the instructor during ST classes.	.662				
15	I feel pressured when doing ST practices.	.650				
12	During ST practices, I become anxious while facing long and complicated English sentences.		.767			
8	When doing ST, if I come across unfamiliar vocabulary or phrases, I feel anxious.		.747			
21	During ST, if encountering jargon used in different fields, I feel disturbed.		.687			
11	When doing ST, if I encounter problems in language comprehension, I feel anxious.		.638			
4	I become anxious when I don't understand the "English as SL" texts.		.593			
18	Compared to E-C ST, I feel more anxious about C-E ST.			.775		
10	Doing C-E ST during class, I feel confident.			.752		
6	In class, if I am called on to perform C-E ST, I become panicked.			.645		

1	I am confident in my English competence when practicing ST in class.			.624		
19	Although the time span for translating from one language to another is shorter in ST, I feel at ease.			.529		
3	When it is almost my turn to do ST, I become nervous.				.838	
2	I worry about making mistakes in ST.				.798	
20	I will be anxious when knowing someone is going to evaluate my ability in performing ST.				.568	
9	I don't want to attend ST classes.					.829
14	Attending ST classes is a terrifying experience.					.783
5	I am willing to lengthen the course time or practice time of ST.					.750

Extraction method: Principal Axis Factoring.

Rotation method: Varimax with Kaiser Normalization.

[a] Learners' Concerns about Evaluation.

[b] Learners' Cognitive challenges in ST.

[c] Learners' Worries about English Competence.

[d] Learners' Anxiety in ST Performance.

[e] Learners' Attitudes of Learning ST.

4.2. Reliability and Validity Analyses

The responses gathered from the administration of the 21-item questionnaire were used for checking reliabilities and validities. In term of reliability, Cronbach's coefficient alpha values were calculated for the reliability of the entire questionnaire and that of each subscale. The Cronbach's coefficient alpha for the new 21-item ST measure reached an estimate of .775. In addition, Cronbach's coefficient alpha values for all five subscales were generated for the purpose of verifying the consistency within each subscale. The respective calculated results for the five subscales were .787 for learners' concerns about evaluation, .827 for learners' cognitive challenges in performing ST, .834 for learners' worries about their English competence, .776 for learners' concerns about evaluation from peers and instructor, .776 for learners' anxiety from ST performance, and .723 for learners' attitudes of learning ST.

Table 4. Cronbach's Coefficient alpha Values for the Five Subscales

Subscale	Number of statements (Items)	Cronbach's alpha value
Learners' Concerns about Evaluation	5	.787
Learners' Cognitive challenges in ST	5	.827
Learners' Worries about English Competence	5	.834
Learners' Anxiety in ST Performance	3	.776
Learners' Attitudes of Learning ST	3	.723

Then, for validity, different procedures were employed: correlations for convergent validity and AVE analysis for discriminant validity. Table 5 to Table 9 showed the correlation results within each subscale. The correlations in all five tables established the convergent validity within each subscale.

Table 5. Intra-subscale Correlations within Subscale 1

	Item 13	Item 15	Item 16	Item 17	Item 7
Item 13	1	.482**	.595**	.524**	.460**
Item 15	.482**	1	.579**	.501**	.374**
Item 16	.595**	.579**	1	.616**	.469**
Item 17	.524**	.501**	.616**	1	.423**
Item 7	.460**	.374**	.469**	.423**	1

** $p < 0.01$.

Table 6. Intra-subscale Correlations within Subscale 2

	Item 4	Item 8	Item 11	Item 12	Item 21
Item 4	1	.558**	.613**	.499**	.281*
Item 8	.558**	1	.506**	.546**	.498**
Item 11	.613**	.506**	1	.547**	.406**
Item 12	.499**	.546**	.547**	1	.454**
Item 21	.281*	.498**	.406**	.454**	1

** $p < 0.01$.

* $p < 0.05$.

Table 7. Intra-subscale Correlations within Subscale 3

	Item 1	Item 6	Item 10	Item 18	Item 19
Item 1	1	.369**	.492**	.374**	.331**
Item 6	.369**	1	.541**	.554**	.360**
Item 10	.492**	.541**	1	.581**	.306**
Item 18	.374**	.554**	.581**	1	.347**
Item 19	.331**	.360**	.306**	.347**	1

** $p < 0.01$.

Table 8. Intra-subscale Correlations within Subscale 4

	Item 2	Item 3	Item 20
Item 2	1	.606**	.535**
Item 3	.606**	1	.502**
Item 20	.535**	.502**	1

** $p < 0.01$.

Table 9. Intra-subscale Correlations within Subscale 5

	Item 5	Item 9	Item 14
Item 5	1	.606**	.535**
Item 9	.606**	1	.502**
Item 14	.535**	.502**	1

** $p < 0.01$.

In addition, the average variance extracted (AVE) analysis was employed for establishing the discriminant validities among the five subscales. In this step, the pattern matrix for each two sets of subscales was calculated for their AVE value. Table 10 is a compilation of all AVE values obtained. As the AVE values were all greater than the correlation squares calculated, the discriminant validities between different scales were established.

Table 10. AVE Analysis Results between Subscales

Between Subscales	AVE	Correlation Square	Discriminant Validity
1 and 2	0.58452	0.17472	Established
1 and 3	0.55143	0.20612	Established
1 and 4	0.64142	0.17057	Established
1 and 5	0.67364	0.06605	Established
2 and 3	0.54908	0.19625	Established
2 and 4	0.53	0.27248	Established
2 and 5	0.62087	0.0023	Established
3 and 4	0.59211	0.2153	Established
3 and 5	0.58606	0.0346	Established
4 and 5	0.67509	0.00123	Established

5. Conclusions

The purpose of this study was to generate a measure for helping T&I instructors to understand the challenges and attitudes that students face in their journey of learning to perform an ST task. Modified from Lu and Liao's (2012) questionnaire, this 21-item

questionnaire covers five subscales, including learners' worries about evaluation, their cognitive challenges in performing ST, their concerns about English competence, their anxiety in performing ST, and their attitudes in learning ST. Among the five aspects, the first three subscales include five items respectively, while the last two subscales consist of three items separately. Understanding how students respond to different statements in these five subscales can help teachers identify and strengthen their instructions. For example, as many students seem to hold the concern of being laughed at by their classmates in performing an ST task, pair work or group work may be incorporated into practice activities in class. This arrangement not only can encourage students to brainstorm the rendition into the TL but also may bear the potential of lessening their worry in rendition delivery in front of the entire class. Another example is related to the cognitive challenges that learners face when they learn to perform ST. As unfamiliar expressions or jargon from different fields appear to be the issues hindering students' performance of ST tasks, providing students with vocabulary lists before class may help them acquire new vocabulary items and cultivate a habit of task preparation. As to long and complicated sentences, more class time may be allotted to the explanation of strategies that can assist students' understanding.

In addition to aiding the design of class activities and instructional approaches, the results of students' responses to this refined 21-item questionnaire shed light on learners' concerns over language-specific issues. For instance, in the second subscale, although the statements are all related to different aspects of a source text, a more careful reading will reveal that, when learning to perform ST tasks in both directions in the language combination of Mandarin Chinese and English, learners clearly are more concerned about their English competence, in either the source text comprehension or the target text rendition. This finding is of no surprise because even though most college students in Taiwan have learned English for more than 10 years, they still worry greatly about their competence in this language. This phenomenon also echoes the difficulty in structuring an ST course when the emphasis is placed on how to sharpen students' language skills and interpreting skills.

Two limitations of this measure may be related to the language combination and the practice format involved. First, the combination of working languages emphasized in this measure covers Mandarin Chinese and English. For other language combinations, such as Korean and English, Spanish and English, or French and English, learners' concerns may vary, leading to the addition or deletion of some statements in this measure. Second, as the practice format considered in the development of this measure is rehearsed ST in a non-conference setting, the application of this measure to other ST training focuses, unrehearsed ST for example, may be limited. Also, for ST in a conference setting, the

element of memory may need to be taken into consideration for causing learner anxiety. In those conditions, further modification and verification will be required.

Many previous studies have helped the T&I field to make progress in understanding the challenges/difficulties which practitioners and learners face and the improvements that are needed. However, such information is still lacking in the aspect of sight translation. As more and more translating and interpreting courses are offered at the college level in Taiwan, it is hoped that this study can act as a spring board for more research in ST.

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Appendix 1

Questionnaire for Anxiety in Learning Sight Translation (34 items)

This questionnaire consists of 34 statements focusing on your perceptions of learning sight translation (ST). Please reflect on your learning experience in this course and mark the answers that best reflect your opinion.

5 = Strongly Agree (SA), 4 = Agree (A), 3 = Fair (F), 2 = Disagree (D), 1 = Strongly Disagree (SD)

Please mark your answers based on your learning experience. There is no right or wrong answer.

Gender: _____Year in College:_____English Proficiency Score before Taking this Course:_____

		SA	A	F	D	SD
1.	I am confident in my English competence when practicing ST in class.	5	4	3	2	1
2.	I worry about making mistakes in ST.	5	4	3	2	1
3.	When it is almost my turn to do ST, I become nervous.	5	4	3	2	1
4.	I become anxious when I don't understand the "English as the SL" texts.	5	4	3	2	1
5.	I am willing to lengthen the course time or practice time of ST.	5	4	3	2	1
6.	I think other classmates have better ability than me in doing ST.	5	4	3	2	1
7.	I feel at ease during the ST exams.	5	4	3	2	1
8.	In class, if my teacher suddenly calls on me to perform C-E ST, I become panicked.	5	4	3	2	1
9.	When we practice ST from English to Chinese, I feel confident in my ability.	5	4	3	2	1
10.	I become a bit anxious if I have to volunteer my answers to the instructor in class.	5	4	3	2	1
11.	While doing ST, if I encounter problems in language comprehension, I feel anxious.	5	4	3	2	1
12.	Even with full preparation, I still feel anxious and worried about attending ST classes.	5	4	3	2	1
13.	I don't want to attend ST class.	5	4	3	2	1
14.	When doing ST from C-E during class, I feel confident.	5	4	3	2	1
15.	When the instructor comments on the accuracy of my ST rendition, I feel anxious.	5	4	3	2	1
16.	I worry about not passing the course of ST.	5	4	3	2	1
17.	In ST class, I feel my classmates' levels of English proficiency are higher than mine.	5	4	3	2	1
18.	While doing ST, if I come across unfamiliar vocabulary or phrases, I feel anxious.	5	4	3	2	1
19.	When facing long and complicated English sentences during an ST task, I become anxious.	5	4	3	2	1
20.	I feel awkward about doing ST in front of my classmates.	5	4	3	2	1
21.	Attending ST class is a terrifying experience.	5	4	3	2	1
22.	I feel pressured about having to read, comprehend and translate the SL texts during ST.	5	4	3	2	1
23.	Compared to other English speaking/listening courses, ST makes me more anxious.	5	4	3	2	1
24.	I feel nervous and anxious when doing ST in front of my classmates.	5	4	3	2	1
25.	During class practice of ST, I worry about being laughed at by my peers.	5	4	3	2	1
26.	Compared to E-C ST, I feel more anxious about working from Chinese to English.	5	4	3	2	1
27.	Although the time span for translating from one language to another is short in ST, I feel at ease.	5	4	3	2	1
28.	When I am unfamiliar with the topic of an ST task, I feel anxious.	5	4	3	2	1
29.	I will be anxious when knowing someone is going to evaluate my ability in performing ST.	5	4	3	2	1
30.	When the source text content in an ST task is too difficult, I become worried.	5	4	3	2	1
31.	During ST, if encountering jargon used in different fields, I feel disturbed.	5	4	3	2	1
32.	The fact that ST requires much concentration and quick response brings me much pressure.	5	4	3	2	1
33.	I feel anxious when realizing that I have made mistakes.	5	4	3	2	1
34.	I am not confident in doing ST during practices.	5	4	3	2	1

Appendix 2

Questionnaire for Anxiety in Learning Sight Translation (21 items)

This questionnaire consists of 21 statements focusing on your perceptions of learning sight translation (ST). Please reflect on your learning experience in this course and mark the answers that best reflect your opinion. 5 = Strongly Agree (SA), 4 = Agree (A), 3 = Fair (F), 2 = Disagree (D), 1 = Strongly Disagree (SD)

Please mark your answers based on your learning experience. There is no right or wrong answer.

Gender: _____ Year in College: _____ English Proficiency Score before Taking this Course: _____

		SA	A	F	D	SD
1.	I am confident in my English competence when practicing ST in class.	5	4	3	2	1
2.	I worry about making mistakes in ST.	5	4	3	2	1
3.	When it is almost my turn to do ST, I become nervous.	5	4	3	2	1
4.	I become anxious when I don't understand the "English as the SL" texts.	5	4	3	2	1
5.	I am willing to lengthen the course time or practice time of ST.	5	4	3	2	1
6.	In class, if I am called on to perform C-E ST, I become panicked.	5	4	3	2	1
7.	I become a bit anxious if I have to volunteer my answers to the instructor in ST classes.	5	4	3	2	1
8.	While doing ST, if I encounter problems in language comprehension, I feel anxious.	5	4	3	2	1
9.	I don't want to attend ST classes.	5	4	3	2	1
10.	Doing C-E ST during class, I feel confident.	5	4	3	2	1
11.	While doing ST, if I come across unfamiliar vocabulary or phrases, I feel anxious.	5	4	3	2	1
12.	When facing long and complicated English sentences during an ST task, I become anxious.	5	4	3	2	1
13.	I feel awkward about doing ST in front of my classmates.	5	4	3	2	1
14.	Attending ST classes is a terrifying experience.	5	4	3	2	1
15.	I feel pressured when doing ST practices.	5	4	3	2	1
16.	I feel anxious and it is nerve-wracking when doing ST in front of my classmates.	5	4	3	2	1
17.	During class practice of ST, I worry about being laughed at by my peers.	5	4	3	2	1
18.	Compared to E-C ST, I feel more anxious about C-E ST.	5	4	3	2	1
19.	Although the time span for translating from one language to another is short in ST, I feel at ease.	5	4	3	2	1
20.	I will be anxious when knowing someone is going to evaluate my ability in performing ST.	5	4	3	2	1
21.	During ST, if encountering jargon used in different fields, I feel disturbed.	5	4	3	2	1

This paper was received on 31 December 2015; received in revised form on 14 May 2016; and accepted on 20 May 2016.

Author's email address
changcc@mail.ntpu.edu.tw

About the author
Karen Chung-chien Chang is an assistant professor in the Department of Foreign Languages and Applied Linguistics at National Taipei University. Her research interests include translation/interpretation studies, ESP course design and implementation, second language writing, discourse analysis, and rhetoric.