

ANALYSIS OF TRANSLATION ANXIETY AND RELIEF METHODS OF TRANSLATORS

Yanming Ren

The Faculty of Foreign Languages, Zhoukou Normal University, Zhoukou 466001, China

SUMMARY

Background: In recent years, more and more international enterprises flood into China. The relevant English materials, websites, and software need translation and result in a huge market. Translators often encounter certain obstacles in the process of translation and feel psychological anxiety. It is very detrimental to the translations the translators' physical and mental health. This study investigates and analyzes the status quo and causes of translation anxiety of professional translators for appropriate solutions.

Subjects and methods: 55 professional translators from Henan Province participated in the experiment. The subjects were divided into five groups, with 11 people in each group. The four experimental groups adopted different methods to relieve translation anxiety respectively including physical therapy, music therapy, relaxation therapy, and positive behavior. The control group did not receive any treatment. SAS standard scores of each group were tested before and after the experiment, and SPSS 24.0 was used for data analysis.

Results: Physical therapy, music therapy, and relaxation therapy can significantly improve translation anxiety. Positive behavior also has a good effect on the improvement of translators' anxiety, but the significance level is lower than the above three methods ($t_4 = 4.923$, $P_4 < 0.01$).

Conclusions: In terms of relieving translation anxiety, physical therapy has the best effect. While regarding the stability of the effect, music therapy is the best. It is recommended to choose physical exercise or music therapy to relieve translation anxiety.

Key words: translators - anxiety - Chinese - English translation - relief methods

* * * * *

INTRODUCTION

In recent years, with the continuous development of economic globalization, the demand for information exchange has continued to increase. There are more and more demands of international companies for relevant translations of English materials, websites, and software. International trades, technical exchanges, and cultural exchanges have become more frequent. Such factors have formed a huge translation market (Muies et al. 2011). In 2012, the total global output value of translation was about 33.5 billion US dollars, of which Europe and North America accounted for the largest proportion of 49.38% and 34.85% respectively (Krajcso 2018). At the end of 2015, the translation market value was estimated at US \$ 47.3 billion, an increase of about 40% compared to 2012 (Chan & Liu 2013). In China, translation services also have the characteristics of high output value and high growth rate. According to *China Language Service Industry Development Report 2012* published by the China Translators Association and the China Translation Industry Development Strategy Research Institute, by the end of 2011, the total production value of translation services created in China is about 157.6 billion yuan. Based on the data provided by the China Translators Association, there are currently about 1.19 million translation professionals in China, and 29372 companies provide translation services.

Anxiety is characterized by excessive and persistent pressure and worries about daily trifles. It is spiritually

manifested as excessive worry and fear of uncertain events, including worries about family illnesses, mistakes at work, minor financial problems, relationships, etc. This is often called anticipatory anxiety with various contents. Anxiety can be accompanied by insomnia, dreaminess, difficulty in concentration, reduced work efficiency, irritability, restlessness, and other symptoms (Rudaizky & MacLeod 2014). Translation anxiety refers to the fear and behavior of translators during the conversion of two languages. It is one of the important factors affecting the emotional change of translators (Weiner et al. 2015). In the process of Chinese-English translation, translators may feel psychological anxiety due to some translation obstacles. This latent unhealthy state is extremely detrimental to translation activities and has serious adverse effects on translators' physical and mental health (Vieira 2020). This study investigates and analyzes the status quo and causes of translation anxiety of professional translators for appropriate solutions.

SUBJECTS AND METHODS

Survey method

In this study, the main factors causing anxiety in translators were collected through online questionnaires. A total of 3,000 questionnaires were distributed and 1,992 were recovered with a recovery rate of 66.4%. After the invalid questionnaires were excluded, there were 1,820 valid ones with an effective rate of 91.4%.

Invalid questionnaire: the answer time does not exceed 20 seconds, and the repeated choices exceed 80%.

Questionnaires

(1) How much anxiety does your current English language basic knowledge (vocabulary and grammar) cause in the translation process?

(2) How anxious does the background knowledge of the subject cause in translation?

(3) How much anxiety does your current language comprehension and expression ability cause in translation?

(4) How much anxiety do your basic translation skills cause in translation?

(5) Whether your technical mastery of translation tools have an impact on translation anxiety?

(6) How much anxiety does the social, cultural, and historical knowledge cause in translation?

(7) To what extent do translation strategic factors (planning, evaluation, and formulation steps) affect your psychological anxiety in translation?

(8) How do interest, attention, and curiosity affect translation anxiety?

(9) What is the impact of workload on translation anxiety?

(10) What is the impact of teamwork ability on translation anxiety?

The answers for each question are rated at five levels: "Very high", "High", "Average", "Low", and "Almost no impact".

Psychological scale

Self-rating Anxiety Scale (SAS), compiled by W.K. Zung, is a measure for anxiety assessment. It is a psychological scale used to measure the severity of anxiety and its changes in the course of treatment. At present, the scale has become one of the most commonly used psychological measurements by counselors, psychologists, and psychiatrists (Dunstan & Scott 2020).

SAS uses a 4-level scale, which mainly evaluates the frequency of symptom occurrence defined by the following criteria: "1" for seldom; "2" usually; "3" sometimes; "4" always ("1", "2", "3" and "4" refer to the score). The main statistical indicator of SAS is the total score. After self-evaluation of the subjects, the scores of the 20 items are added together and then multiply by 1.25 to get an integer. This integer would be the standard score. The same conversion can be referred to in the "rough score standard score conversion table". The higher the standard score, the more severe the symptoms (Olatunji et al. 2006). In general, an anxiety score below 50 is normal; 50 to 60 is mild, 61 to 70 is moderate, and over 70 is severe. The number of negative items indicates how many items the subjects do not respond to, and the number of positive items indicates how many items the subjects do respond

to (Ramirez & Lukenbill 2008).

Experiment design

Fifty-five professional translators from Henan Province participated in the experiment, including 26 males and 29 females. All subjects were informed and consented to the research background and research protocol. Fifty-five subjects were divided into five groups, with 11 in each group. The four experimental groups adopted different methods to relieve translation anxiety respectively including physical therapy, music therapy, relaxation therapy, and positive behavior. The control group did not receive any treatment. SAS standard scores of each group were tested before and after the experiment, and SPSS24.0 was used for data analysis.

Relief methods

Physical therapy studies have found that exercise can promote endocrine changes in human bodies. The brain produces substances called endorphins after exercise, and human mood is related to the number of endorphins secreted by the brain. (Bourbeau et al. 2020). Exercise can stimulate the secretion of endorphins. With certain exercise, the secretion of endorphins increases. Under the stimulation of endorphins, the human body and mind would be in a relaxed and happy state. Endorphins are therefore also known as "pleasure hormones". They can make humans happy and satisfied, and help to relieve stress and unhappiness. In this experiment, subjects take exercises 3-4 times a week for 40 minutes each time (Mircea 2013).

Music therapy is an emerging approach. Based on the theory and method of psychotherapy, music therapy is to enable the subjects to experience a variety of specially designed music appreciations with the joint participation of music therapists. Its purpose is to eliminate psychological barriers, restore or enhance physical and mental health (Matokhniuk et al. 2021). In this experiment, the method of pure listening therapy was adopted.

Relaxation training has a good anti-stress effect. In a relaxed state, sympathetic nerve activity is reduced, manifested as a decrease in systemic skeletal muscle tone. This refers to muscle relaxation, a slowdown in breathing rate and heart rate, a decrease in blood pressure, a feeling of warmth in the limbs, a clear mind, a relaxed and happy mood, and a comfortable feeling in the whole body. At the same time, it strengthens the active function of the parasympathetic nervous system and promotes the secretion of anabolism and related hormones. Through the regulation of nerve, endocrine, and autonomic nervous systems, relaxation therapy can affect all aspects of the body functions, so as to achieve the purpose of improving physical and mental health and preventing and curing diseases.

Active behavior. This method is not specific to psychological therapy but refers to the positive

behaviors that the translator completes the translation task through positive actions such as seeking help and strengthening communication with others.

RESULTS

The statistical results of translation anxiety factors of 1820 valid questionnaires are shown in Figure 1. It can be seen that three factors have the most serious impact on the anxiety of translators including the master of background knowledge related to the topic; knowledge of society, culture, and history; and the workload. Academic articles are often more difficult to translate, especially the professional terms and vocabulary (Kaspere & Motiejuniene 2021). In addition, translators without related backgrounds may find it difficult to understand the specialized knowledge and experimental methods involved. In such translations, translators may spend more time looking up related materials. Even so, it is difficult to ensure the professionalism of the translation. This situation can cause great psychological anxiety (LeBlanc 2017). Lack of knowledge about society, culture, and history is another problem in translation. It is difficult for translators to master the cultural and historical backgrounds in different countries, which leads to great psychological pressure when they meet relevant tasks. Finally, an excessive workload can cause great psychological stress for translators all the time. (Lopez et al. 2021).

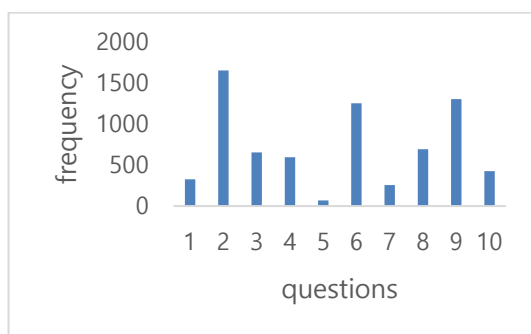


Figure 1. Results of translation anxiety factors among 1,820 professional translators

The translation tools and translation strategies at present rarely lead to translation anxiety. This shows that most translators can use network tools proficiently in their work. At the same time, most translators can complete the planning and evaluation of translation tasks.

Fifty-five subjects were divided into five groups, 11 in each group. The four methods of physical therapy, music therapy, relaxation therapy, and positive behavior were used to relieve translation anxiety. The control group did not do any treatment.

Fifty-five subjects were divided into five groups, with 11 in each group. The four experimental groups adopted different methods to relieve translation anxiety respectively including physical therapy, music therapy, relaxation therapy, and positive behavior. The control group did not receive any treatment. SAS standard scores of each group were tested before and after the one-month experiment, and SPSS24.0 was used for data analysis. The data descriptive statistics of each group before and after the experiment are shown in Table 1, and the *t*-test results of each group before and after the experiment are shown in Table 2.

According to the data in the tables, physical therapy, music therapy, and relaxation therapy can significantly improve the translator's translation anxiety ($t1 = 15.849, P1 < 0.001; t2 = 16.193, P2 < 0.001; t3 = 10.674, P3 < 0.001$). Positive behavior also has a good effect on the improvement of translator anxiety, but the significance level is lower than the above three therapies ($t4 = 4.923, P4 < 0.01$). There is no significant difference between the translators in the control group after the experiment ($t5 = 0.083, P5 > 0.05$). According to Table 2, it can be seen that $M1 > M2 > M4 > M3, S4 > S1 > S3 > S2$. This shows that physical therapy has the best effect on the relief of translation anxiety. Its SAS standard score tested after the experiment is significantly larger Lower, followed by music therapy. Positive behavior and relaxation therapy come third and fourth. In terms of the stability of efficacy, music therapy is the best, physical therapy, relaxation therapy, positive action is the second, third and fourth respectively.

Table 1. Descriptive statistics of each group before and after the experiment

		Minimum	Maximum	Mean	Std. deviation	Variance
Physical therapy	Before the experiment	56	70	62.73 ± 1.81	6.002	36.018
	After the experiment	42	62	51.36 ± 2.16	7.173	51.455
Music therapy	Before the experiment	59	72	66.27 ± 1.21	4.027	16.218
	After the experiment	49	65	59.09 ± 1.48	4.908	24.091
Relaxation therapy	Before the experiment	56	72	64.64 ± 1.70	5.626	31.655
	After the experiment	51	66	59.18 ± 1.59	5.269	27.764
Positive behavior	Before the experiment	55	75	65.36 ± 2.13	7.061	49.855
	After the experiment	45	73	59.55 ± 2.72	9.015	81.273
Control group	Before the experiment	57	75	63.73 ± 1.81	6.002	36.018
	After the experiment	58	74	63.67 ± 1.77	5.884	34.618

Table 2. *t*-test results of each group

	M	Std. deviation	Std. error mean	95% CI		<i>t</i>	Sig. (2-tailed)
				Lower	Upper		
Physical therapy	11.364	2.378	0.717	9.766	12.961	15.849	0.000
Music therapy	7.182	1.471	0.444	6.194	8.170	16.193	0.000
Relaxation therapy	5.455	1.695	0.511	4.316	6.593	10.674	0.000
Positive behavior	5.818	3.920	1.182	3.185	8.451	4.923	0.001
Control group	0.061	1.183	0.357	-0.776	0.795	0.083	0.923

CONCLUSIONS

According to the data, item 2 (the background knowledge of the subject), item 6 (the social, cultural, and historical knowledge), and item 9 (workload) have the most serious impact on the anxiety of translators. Currently, the translation tools and translation strategies seldom lead to translation anxiety (Zou 2015). Translators' basic English language knowledge, language understanding and expression ability, basic translation skills, teamwork ability, attention and curiosity, and other related abilities may cause different effects on translation anxiety (Martiny et al. 2011).

In the experiment, physical therapy, music therapy, relaxation therapy, and positive behavior all show a certain degree of anxiety relief effect. Among the four methods, physical therapy relieves anxiety most obviously. After the experiment, the mean value of the SAS standard score in the experimental group is reduced to 51.36 ± 2.16 . Its experimental individuals generally return to a state of no anxiety or mild anxiety. The related effect of relaxation therapy is relatively weak. After the experiment, the mean value of the SAS standard score of the experimental group was reduced to 59.18 ± 1.59 . Meanwhile, music therapy has the most stable effect, and positive behavior has the worst stability. This indicates that some translators can solve anxiety problems better by seeking help and other means, while some translators are not good at this method. The individual differences are large. Taking the experimental results into consideration, it is suggested to alleviate translation anxiety through physical exercise or music therapy (Contreras-Molina et al. 2021). The four methods to relieve translation anxiety listed in this study are all common and practicable solutions for translators to self-heal under limited conditions. Moreover, if the anxiety problem is too serious to self-regulate, it is still necessary to seek timely help from professional psychologists.

Acknowledgements: None

Conflict of interest: None to declare.

References

1. Bourbeau K, Moriarty T, Ayanniyi A & Zuhl M: *The combined effect of exercise and behavioral therapy for depression and anxiety: systematic review and meta-analysis. Behavioral Sciences* 2021; 10.
2. Chan ALJ & Liu CFM: *The translator status, the translation market and developing economies: a preliminary study of ASEAN countries. Southern African Linguistics and Applied Language Studies* 2013; 31:435-450
3. Contreras-Molina M, Rueda-Nunez A, Perez-Collado ML & Garcia-Maestro A: *Effect of music therapy on anxiety and pain in the critical poly traumatised patient. Enfermeria Intensiva* 2021; 32:79-87.
4. Dunstan DA & Scott N: *Norms for Zung's Self-rating Anxiety Scale. BMC Psychiatry* 2020; 20
5. Kaspere R & Motiejuniene J: *Impacts of global pandemic on translator's career and translator training. Current Trends in Translation Teaching and Learning E* 2021; 8:154-195
6. Krajcso Z: *Translators' competence profiles versus market demand. Babel-Revue Internationale De La Traduction-International Journal of Translation* 2018; 64:692-709
7. LeBlanc M: *Translators on translator training: a canadian case study. Current Trends in Translation Teaching and Learning E* 2017; 4:1-47
8. Lopez AMR, Ferez PC & Lopez LE: *The influence of time pressure on translation trainees' performance: Testing the relationship between self-esteem, salivary cortisol and subjective stress response. Plos One* 2021; 16
9. Martiny C, Silva A, Nardi AE & Pachana NA: *Translation and cross-cultural adaptation of the Brazilian version of the Geriatric Anxiety Inventory (GAI). Revista De Psiquiatria Clinica* 2021; 38:8-12
10. Matokhniuk L, Avramenko N, Kushnir Y, Shportun O, Shevchuk V, Shorobura I & Koval T: *Psychocorrection of adolescents' anxiety by music therapy. Brain-Broad Research in Artificial Intelligence and Neuroscience* 2021; 12:51-66
11. Mircea B: *The efficiency of physical therapy associated with psychotherapy in the treatment of generalized anxiety. Paper presented at the 2nd World Conference on Psychology and Sociology (PSYSOC), Brussels, Belgium* 2013; 11:27-29
12. Muies L, Yarosh M & Casanova M: *Making translator's intercultural training reality: measuring translator's intercultural competence. Paper presented at the 4th International Conference of Education, Research and Innovation (ICERI), Madrid, Spain* 2011; 11:14-16
13. Olatunji BO, Deacon BJ, Abramowitz JS & Tolin DF: *Dimensionality of somatic complaints: factor structure and psychometric properties of the Self-rating Anxiety Scale. Journal of Anxiety Disorders* 2006; 20:543-561
14. Ramirez SZ & Lukenbill J: *Psychometric properties of the*

- Zung Self-rating Anxiety Scale for Adults with Intellectual Disabilities (SAS-ID). *Journal of Developmental and Physical Disabilities* 2008; 20:573-580
15. Rudaizky D & MacLeod C: Anxiety reactivity and anxiety perseveration represent independent dimensions of anxiety vulnerability: an in vivo study. *Anxiety Stress and Coping* 2014; 27:361-375
16. Vieira LN: Automation anxiety and translators. *Translation Studies*, 2020; 13:1-21
17. Weiner CL, Elkins RM, Pincus D & Comer J: Anxiety sensitivity and sleep-related problems in anxious youth. *Journal of Anxiety Disorders* 2015; 32:66-72
18. Zou YQ: The constitution of translation competence and its implications on translator education. Paper presented at the International Conference on Arts, Design and Contemporary Education (ICADCE), Moscow, Russia 2015; 4:22-24

Correspondence:
Yanming Ren, PhD
The Faculty of Foreign Languages, Zhoukou Normal University
Zhoukou 466001, China
E-mail: ryanming0309@163.com