The Role of Metacognitive Strategies in Enhancing Students' Translation Skills

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Abstract

The research examined the role metacognitive strategies in enhancing students' translation skills of Iraqi EFL students. The participants of the research were100 of Iraqi EFL students from university of Mosul \ department of translation. Two instruments were used for data collection, namely, questionnaire which was adopted and translation test designed by the researcher. It tried to answer the following questions

1. Are there any statistically significant differences between the mean scores of the experimental and control groups due to the method of teaching (metacognitive strategies vs. regular instruction) on the third stage students' performance in translation?
2. Which meta cognitive strategies do the experimental group and the control group develop more?
3. What is students' attitude toward using metacognitive strategies in translation?
4. Is there any correlation between students' attitude and their performance in translation?

The results showed there were statistically significant differences between the mean scores of the experimental and control groups; it indicated that metacognitive strategies were more effective than using the regular method. The findings also revealed that meta cognitive strategies might enhance students' translation skills effectively. Finally, the research ended up with some conclusions, recommendations, and suggestions for further research.

Keywords: metacognitive, enhancing, translation students, skills

Introduction

The role of translation in the global scope cannot be overstated. As a pivotal skill in linguistics and language studies, translation serves as a bridge between cultures and languages, enabling to exchange the ideas, literature, and information across different linguistic field. Translation extends beyond mere word-for-word substitution to involve deep cognitive processing and understanding of context, culture, idiomatic expressions and stylistic nuances (Kautz, 2020). Consequently, students of translation are required not only to have a robust command of language but also to develop cognitive strategies to manage and optimize their translation process.

Recent educational researches have highlighted the significance of metacognitive strategies in learning processes increasingly. Metacognition, defined as "thinking about one's own thinking" refers to the awareness and control over one's cognitive processes during the act of learning (Flavell, 1979). In the context of translation studies, metacognitive strategies involve the ability of students to plan, monitor,

and evaluate their translation tasks that can potentially lead to enhanced translation skills. These strategies are crucial because they strengthen the students to be more self-regulated learners, capable of adapting their method to translation based on the demands of the text and the context (Anderson, 2002).

Statement of the Problem

Despite the acknowledged importance of metacognitive strategies in educational sectors, there is a need for a research specifically focusing on these strategies within the domain of translation studies. Previous studies have focused on the benefits of metacognitive strategies in language learning and reading comprehension extensively (Vandergrift & Goh, 2012; Baker, 2010). The use of metacognitive strategies in translation has not been adopted much in researches in the Arab World. The researcher noticed that many EFL students face difficulties in translating efficiently and effectively. However, translation tasks uniquely combine language understanding with cultural sensitivity and contextual awareness may pose different challenges and opportunities for the application of metacognitive strategies in translation.

Aims of the Research

The research aimed to investigate the role of metacognitive strategies in enhancing translation skills among students. The research also focused on identifying commonly used metacognitive strategies, assessing the effectiveness of these strategies in improving translation accuracy and efficiency. Moreover, it aimed at exploring the relationship between metacognitive strategy training and translation performance improvements.

Questions of the Research

- Are there any statistically significant differences between the mean scores of the experimental and control groups due to the method of teaching (metacognitive strategies vs. regular instruction) on the third stage students' performance in translation?
- Which meta cognitive strategies do the experimental group and the control group develop more?
- What is students' attitude toward using metacognitive strategies in translation?
- Is there any correlation between students' attitude and their performance in translation?

Significance of the Research

The research aimed to fill this gap by investigating how these strategies can be applied to improve translation skills specifically. Metacognitive strategies are involving self-awareness and self-regulation of cognitive processes have been identified as potentially beneficial for enhancing translation proficiency. It is hoped that the results obtained in the current study will enrich EFL literature with new information concerning the metacognitive strategies as an instructional approach.

Theoretical Framework and Literature Review

The concept of meta cognition was first introduced by Flavell (1976), who defined it as "knowledge and cognition about cognitive phenomena," or more simply, thinking about thinking. Meta cognition encompasses both metacognitive knowledge awareness of one's own learning processes and strategies and metacognitive regulation the ability to oversee, plan, and adjust one's approach to learning (Flavell, 1979). Flavell's model proposes that metacognitive knowledge includes three essential components:

person variables, task variables and strategy variables. The research was grounded in Flavell's (1979) model of meta cognition, who distinguishes between metacognitive knowledge (knowledge about one's cognitive processes and strategies) and metacognitive regulation (the monitoring and control of these processes). Applying this model to translation studies, the research explored how students' awareness of their cognitive strategies (metacognitive knowledge) and their ability to control and adapt these strategies (metacognitive regulation) contribute to their translation proficiency. The incorporation of metacognitive strategies in educational practices in language learning and translation particularly, representing a significant area of interest within cognitive and educational psychology. This review examined key theoretical frameworks and empirical studies that have explored the interference of meta cognition with language learning and translation, setting the stage for understanding how these strategies can be applied to enhance translation skills effectively.

In the context of language learning, Vandergrift & Goh (2012) expand on Flavell's ideas by detailing how metacognitive knowledge and regulation play crucial roles in successful language acquisition and comprehension. They argued that successful language learners are not only aware of the linguistic and cognitive demands of a task but also regulate their learning strategies actively to meet these challenges.

Meta cognition in Language Learning

Research in language learning has consistently demonstrated the benefits of metacognitive strategies in enhancing linguistic proficiency. Veenman, Van Hout-Wolters, and Afflerbach (2006) conducted a comprehensive review of empirical studies and concluded that metacognitive awareness significantly correlates with success in language learning. This is particularly evident in tasks that require deep comprehension and manipulation of language, such as reading and listening comprehension.

Anderson (2002) investigated the role of metacognitive strategies in second language acquisition, the results revealed that strategies such as planning, monitoring, and evaluating one's understanding and performance can dramatically improve learning outcomes. These strategies also enable learners to become more self-directed and effective in their study practices.

Metacognitive Strategies in Translation

Despite the robust research on meta cognition in language learning, studies targeting translation as a cognitive and educational activity are limited relatively. However, the work that does exist provides valuable insights. Kiraly (2000) explained that translation is inherently a metacognitive activity, requiring translators to continually assess and regulate their understanding and manipulation of both source and target texts. He argued for a more explicit focus on metacognitive training in translation education to develop students' ability to reflect on and refine their translation strategies.

Shreve (2006) in his study on translation and cognition, emphasized the need for translators to employ metacognitive control during the translation process. This included evaluating the effectiveness of chosen translation strategies and revising them as necessary, a practice that can be improved through targeted metacognitive skills training.

Previous Studies Related to the role of Metacognitive Strategies

1. **Kiraly, D. (2000). A social constructivist approach to translator education: Empowerment from theory to practice.**

Kiraly discussed the role of metacognition in the training of translators within a social constructivist framework. The study emphasized the importance of reflective practice and self-monitoring in developing effective translation strategies. Kiraly argued that fostering metacognitive awareness in translator education not only enhances linguistic competencies but also empowers students to become independent, reflective practitioners.

2. Shreve, G. M. (2006).Cognition and the evolution of translation competence. In J. W. Schwieter (Ed.), Cognitive and linguistic aspects of translation.

Shreve explored cognitive processes translation and stresses the importance of metacognitive underlying. The study examined how experienced translators use metacognitive strategies to manage and optimize their translation processes. The findings indicated that metacognitive control is crucial for effective translation, particularly in dealing with complex texts and maintaining consistency across translations.

3. Vandergrift, L., & Goh, C. C. M. (2012). Teaching and learning second language listening: Metacognition in action.

While primarily focused on second language listening, Vandergrift and Goh's work provided insights applicable to translation studies. They detailed specific metacognitive strategies, such as planning, monitoring, and evaluation. Their framework can be adapted to teach translation students how to apply these strategies to improve their translation skills.

4. Angelone, E. (2010). Translation and metacognition. Meta, 55(2), 320-335

This article presented a detailed analysis of the metacognitive aspects of the translation process. Angelone's research explored how translators' awareness of their cognitive processes affects their translation accuracy and efficiency. The study also discussed the methods for training translators to develop their metacognitive skills, arguing that such training leads to improved problem-solving abilities during translation.

5. Alves, F., & Gonçalves, J. L. V. (2013). Who investigated the cognitive effort in the post-editing of machine-translated texts: A relevance-theory approach. Translation Spaces, 2(1), 155-178

Alves and Gonçalves explored the cognitive effort involved in post-editing machine-translated texts, focusing on how translators use metacognitive strategies to make decisions and correct errors. Their study provides a unique perspective on how metacognitive strategies are applied in the context of machine translation, revealing the potential for these strategies to enhance not only traditional translation skills but also modern, technology-assisted translation tasks.

Concluded remark

While these studies laid important groundwork, there remains a gap in specifically identifying which metacognitive strategies are most effective in translation tasks and how these strategies can be systematically cultivated among translation students. Most studies have focused broadly on language learning with less emphasis on the specific challenges of translation. Furthermore, there is a lack of empirical research concerning the specific metacognitive training interventions with improvements in translation skill outcomes. To fill this gap, the current study aimed to investigate the specific metacognitive strategies that can enhance translation skills and to explore how these strategies can develop EFL students in translation.

Methodology

A mixed-methods approach were employed to achieve the objectives of the research. Quantitative data gathered through pre- and post-tests of translation tasks to measure the impact of metacognitive strategy training. Additionally, A questionnaire was also used to measure the students' attitude toward the role of metacognitive strategies in enhancing translation skills.

Participants

The research sample consisted of 100 Iraqi EFL students from the third stage \Department of translation\ university of Mosul\Iraq. They are selected randomly.

Table 1: Participant

Variable	Description
Age	18-25 years
Gender	Male, Female
Year of Study	1st, 2nd, 3rd, 4th
Language Pairs	e.g., English-Arabic

Table 2: Participant according to their age

Participant

The participant of the research consisted of 100 Iraqi EFL students, with the following demographic breakdown:

Variable	Frequency
Age	
18-20	40
21-23	50
24-25	10
Gender	
Male	45
Female	55
Year of Study	
1st	10
2nd	30
3rd	40
4th	20
Language Pairs	
English-Arabic	50

Instruments

Three primary instruments were used in the research:

- **Metacognitive Awareness Inventory (MAI):** The instrument, adapted for translation, assessed the participants' awareness and use of metacognitive strategies. The MAI for translation consists of items measuring both knowledge about cognition (declarative, procedural, and conditional knowledge) and regulation of cognition (planning, monitoring, and evaluating). The tool was crucial for establishing a baseline of metacognitive strategy use and for assessing changes following the intervention.

- **Translation Tasks:** These standardized tasks were designed to objectively measure translation skills. The tasks involved translating short paragraphs from a source language to a target language with complexities in linguistic structures and cultural references to challenge the students' skills. The tasks were the same for the pre- and post-tests to ensure comparability.

- **Questionnaire on Metacognitive Strategies in Translation (QMST):** Developed specifically for this research, the QMST collected detailed data on the use of metacognitive strategies during translation tasks. The questionnaire included items related to planning, monitoring, and evaluation phases of translation, rated on a Likert scale to rank frequency and perceived effectiveness.

Procedures of the research

The research procedures were divided into several stages:

1. **Pre-test Assessment:** was administered at the beginning of the semester, participants completed the MAI and undertake the first set of translation tasks.

2. **Metacognitive Strategy Workshop:** Following the initial assessment, a workshop was conducted focusing on specific metacognitive strategies that could enhance translation skills. These workshops were interactive and included exercises that encouraged students to reflect on their thought processes and decision-making during translation.

3. **Post-test Assessment:** After the workshop, the same MAI and translation tasks were administered as a pos-test. This approach allowed for direct comparison to evaluate the impact of the metacognitive strategy training. and scores were analyzed after applying the treatment to ascertain whether the metacognitive strategies had any influence on the experimental groups and which strategies had more effect on the participants than the other.

Data Analysis

To answer the research questions. The following statistical methods were employed:

- **Paired t-tests:** These tests compare pre- and post-test scores from the MAI and translation tasks to determine if there are statistically significant differences post test, indicated to the effectiveness of the metacognitive strategies training.

- **Analysis of Variance (ANOVA):** ANOVA tests were used if there are more than two time points of data collection. The method helped in understanding the changes over time and the effect of different interventions across various groups.

- **Correlation Analysis:** The analysis explored the relationships between the level of metacognitive strategy use and translation performance. It identified specific strategies where most strongly associated with successful translation outcomes.

Table 3: Pre- and Post-test Scores on MAI and Translation Tasks

Test Type	Pre-test Mean	Post-test Mean	t-value	p-value
MAI	2.80	3.45	5.67	<0.001
Translation	67.50	82.30	6.12	<0.001

Results

The findings of the pre- and post-tests by using the Metacognitive Awareness Inventory (MAI) and translation test in table (3) revealed the mean scores of the MAI pre test were 2.80 while the mean scores of the post test were 3.45 respectively. It is obvious that the mean scores of the post test were higher than those of the pre test in MAI . The difference in this finding might be attributed to the method of teaching. The results also showed the mean scores of translation pre test were 67.50 while the mean scores of the post test were 82.30. it is observing that there are a significant difference between the pre and post tests while the tabulated T-value is 6.12 at the 0.001 significance level. Based on these statistical values, it is evident that the calculated T-value is greater than the tabulated T-value at the assigned level of significance. As a result, this demonstrates that the post-test is significantly better than in the pre-test.

Metacognitive Awareness and Translation Task Performance

The results of the paired t-tests on the MAI scores and translation task performance were summarized below:

Table 4: Pre- and Post-test improvements of MAI and Translation tests according to the mean scores

Test Type	Pre-test Mean	Post-test Mean	t-value	p-value	Percentages of improvements
MAI	2.80	3.45	5.67	<0.001	21.9
Translation	67.50	82.30	6.12	<0.001	23%

The results showed significant improvements in both metacognitive awareness and translation task performance following the metacognitive strategy training. The MAI scores increased by approximately 21.9% while the translation task scores improved by 23%, at the level of significance ($p < 0.001$).

Analysis of Metacognitive Strategy Use

Strategy	Improvement in percentages
Goal Setting	5%
Self-Monitoring	10%
Contextual Guessing	8%
Planning	15%
evaluating	9%

the percentages ranged from 5% for goal setting to 15% for planning while the self-monitoring was 10%, the evaluating was 9% and contextual guessing was 8%. The results showed that planning was too high. There is shortage, however, in goal setting.

Correlation between Metacognitive Strategy Use and Translation Performance

Strategy Usage Level	Average Translation Score
Low	60 (±12)
Medium	75 (±9)
High	85 (±5)

The results showed that there was a high usage for metacognitive strategies in translation due to improving translation performance. The findings might be attributed to there was a correlation between the use of metacognitive strategies in translation and that improvement.

Results Summary:

The findings from the research showed significant improvements in both metacognitive awareness and translation task performance post-intervention. MAI scores increased from an average of 2.80 to 3.45, while translation task scores rose from 67.50 to 82.30, both with p-values less than 0.001, the results also indicated to statistically significant enhancements. Additionally, correlation analysis revealed a strong positive relationship between the level of metacognitive strategy usage and translation performance ($r = 0.76$, $p < 0.001$).

Discussion of Results

The results revealed that there was an increase in MAI scores post-intervention indicated that the metacognitive strategy workshops were effective in enhancing students' awareness and control over their cognitive processes during translation. This was further supported by the substantial improvement in translation task performance which highlighting the practical benefits of metacognitive training in translation tasks.

There was a strong correlation between metacognitive strategy use and translation performance underscores the importance of these strategies in achieving high-quality translations. It appeared that the more consciously students engage in planning, monitoring and evaluating their translation processes in better performance. These findings were consistent with theoretical frameworks that advocated for the use of metacognitive practices in learning environments to foster deeper engagement and higher achievement (Flavell, 1979).

Conclusion:

The results concluded that there was a higher usage of metacognitive strategies was associated with better performance in translation tasks. There was an increase in MAI scores post-workshop indicated that the training was effective in enhancing students' metacognitive awareness which in turn positively impacted their translation performance. This aligned with theoretical frameworks suggesting that metacognitive knowledge and regulation are crucial for effective learning and performance in complex cognitive tasks like translation. The findings also revealed that strategies could be emphasized in translator training programs to foster better translation skills.

Suggestions and Recommendation

These findings suggested potential pedagogical implication that could be made in translator education programs to incorporate more focused metacognitive strategy training, thereby preparing students to meet the challenges of professional translation work more effectively. Educators can encourage EFL

students to become more effective translators. Further research could explore the long-term impacts of such training and its applicability across different levels of language proficiency and translation competence.

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