

# The Enhancement of Undergraduates' Self-Regulated English Writing Ability from the Perspective of Metacognition

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**Abstract.** Metacognition and self-regulated learning ability are important research areas in the field of education. This paper summarizes the current research status of metacognition and self-regulated learning ability, mainly focuses on the influence of metacognition on undergraduates' self-regulated learning ability in English writing and explores the intrinsic connection between the two and their important role in individual learning. This paper shows that metacognitive awareness generally occurs in conjunction with metacognitive regulation as learners complete English writing tasks. Metacognitive regulation has also been shown to have a very important role in English writing. Learners who use metacognitive strategies can have some awareness and control over their cognitive process. Learners' greater involvement in the control of writing behavior may be a source of metacognitive regulation effectiveness. It is recommended that college students use more metacognitive strategies in performing English writing tasks, which will have a positive impact on self-regulation of English writing skills.

**Keywords:** Metacognition; Self-regulated Learning; English Writing Ability.

## 1. Introduction

In recent years, metacognitive strategies have normally been adopted in English classes. However, there is a great dissonance in the effectiveness of meta-cognitive strategies separately on English reading and English writing. According to Pintrich, metacognition, and the other six elements are composed of self-regulation. Importantly, planning, monitoring, and evaluating may help students manage, supervise, and reflect on their English writing ability [1]. However, the present study did not incorporate self-regulated learning as a variable of investigation. Thus, previous work failed to address whether metacognitive strategies are likely to have a positive impact on EFL learners' self-regulated English writing proficiency. The review paper will start with conceptual frameworks concerning definitions of metacognition, self-regulated learning, and their relationships with English writing proficiency. Afterward, the review paper will validate two questions. Firstly, the influence of meta-cognitive strategies on the enhancement of EFL learners' self-regulated English Writing performances. Secondly, independent roles of meta-cognitive awareness and mate-cognitive regulation play in self-regulated English writing proficiency.

## 2. Metacognition and Self-Regulated Learning

### 2.1. Theory of Metacognition and Self-Regulated Learning

Stern and Rubin were the first scholars to put forward the concept of 'successful language learners'. This concept gives a deeper insight into the nature of language learning and helps people learn languages [2]. Specifically, metacognitive strategies involve knowledge gained through the cognitive process to operate linguistic behaviors by defining learning goals and plans, observing performances, and reflecting on outcomes [3]. In other words, metacognitive strategy refers to the process of learners' self-awareness, self-monitoring, and self-regulation of cognitive activities, that is, cognition

of cognition. Metacognitive strategies emphasize learners' cognition and evaluation of learning methods, including how learners choose their learning. It helps learners plan, monitor, evaluate, and adjust their learning methods and strategies.

Furthermore, self-regulation is regarded as the capability to manage personal ideas, conduct, and surroundings to fulfill the target [4]. Generally speaking, self-regulation is composed of three ingredients: cognition, motivation, and metacognition. In detail, it is concerned with goal-setting, decision-making in strategies supervision of behaviors, and assessment of conducts and outcomes [4]. The core principles of self-regulated learning include the learner's autonomy, initiative, and goal orientation. Learners have certain learning skills and strategies in self-regulated learning, such as self-assessment, goal setting, time management, problem-solving, and so on. Moreover, self-regulated learning involves the learners' cognition of their learning interests and needs, as well as the active use and adaptation of learning resources and learning environment. In the process of college English knowledge learning, self-regulated learning is closely related to metacognition. The application of metacognitive strategies in college English teaching can not only help students arrange their learning plans scientifically but also improve their self-learning ability.

## **2.2. Relationships between Metacognition, Self-Regulated Learning and English Writing Ability**

A multitude of scholars outline the tie between metacognition and self-regulation. To begin with, Zimmerman and Schunk asserted that self-regulated learners can acquire metacognitive skills, motivation, and learning strategies well [5]. Likewise, Fox and Riconscente explored three influential scholars' divergent opinions on conceptions of self-regulation and meta-cognition. According to Fox and Riconscente, unlike James and Piaget, Vygotsky paid attention to the impacts of meta-cognition and self-regulation on linguistic and cultural symbols. He claimed that people are consciously accustomed to conversing with themselves via linguistic signs, and then exerting their purposive or self-regulated conduct. This alteration shifts from internalization to externalization [6]. Thus, Vygotsky's opinion can be interpreted as that metacognition may trigger people's self-regulation in language learning and application. Referring to English writing, several scholars widely agree on the positive impacts of metacognitive skills on self-regulated English writing adequacy at divergent aspects [6].

For instance, in English writing lexical retrieval ability takes a substantial part. Morshedian and Meshkat claim that EFL students who acquire metacognitive skills well are more capable of grasping written vocabulary's full meanings, and also proficient in organizing and practicing their learning with meta-cognitive regulation [1]. Moreover, Garofalo and Lester claimed that meta-cognitive strategies are constituted of objectives, composition, implementation, and examination, which can encourage students to plan, cautiously exercise, observe, and revise their choices in the writing process, and finally assess performances. Likewise, in a couple of studies, self-regulated learning is verified to be likely to indicate students' English writing ability. Considering these studies, only if the English writing process engages students in metacognitive regulation and extra elements of self-regulation, such as aspiration, the effectiveness would be dramatic [7,8]. Furthermore, monitoring is considered to entail controlling students to construct their languages in writing and assessing the results from a marker's view. Last but not least, evaluation entails self-reflection on writing outcomes [9]. On account of these theories and findings, the tie between metacognitive strategies, self-regulated learning, and English writing adequacy is theoretically held on, whereas limited studies can validate the straightforward relation between them.

## **2.3. The Influence of Metacognition on Self-Regulated English Writing**

Continuous metacognitive strategy training can improve students' autonomous learning ability, and students will learn to establish clearer learning goals have personalized learning styles, and carry out more profound self-reflection, to obtain more efficient learning results.

According to Tian, the study involved 120 non-English major first-year students from three parallel classes at Xinjiang Normal University, specializing in preschool education and Mathematics and applied mathematics [10]. It is worth mentioning that two control groups were selected in this study to ensure the reliability and validity of the experiment. The only difference is the teaching method. The experimental class adopts a metacognitive strategy to train English writing teaching, and the control class adopts a result teaching method. Through the 14-week experiment, the data show that students' autonomous learning ability in college English writing classes is generally weak, and they are not optimistic about understanding teaching objectives and requirements, effective use of planning strategies, learning strategies, monitoring strategies, and evaluation strategies, especially in the aspects of students' inability to effectively use learning strategies. The results indicate that college English writing teaching based on metacognitive strategy training can not only improve students' English writing performance but also maintain a certain lasting effect. In addition, metacognitive strategy training can effectively improve students' autonomous learning ability in college English writing classes, which is reflected in the five aspects of understanding teaching objectives and requirements, effective use of planning strategies, learning strategies, monitoring strategies, and evaluation strategies, especially in students' effective use of learning strategies and evaluation strategies.

Various studies have shown that the use of metacognitive strategies does have a positive impact on the ability to learn English writing autonomously. Nowadays, due to the long period of exam-oriented education, students who have just entered the university are not quite able to adjust their learning mentality in time, resulting in a lack of independent learning ability [11]. Developing metacognition is especially important in this context. When students are in control of their learning process and have an awareness of their learning ability, they can learn more effectively on their own. When students can find, split, solve problems, and then reflect on themselves, the process can be a huge boost to their learning skills. Instead of relying on the teacher, they learn independently. Students can set short-term or long-term goals and develop a learning plan to better self-monitor their learning under the control of metacognitive awareness.

### 3. Pathway Analysis

Overall, there are two remarkable findings drawn from explored studies. First of all, it is revealed that six elements of meta-cognitive strategies correspond to self-regulated English writing. Moreover, although metacognitive regulation was found to perform more significantly in English writing, metacognitive awareness is shown to have more influence on teaching EFL learners writing, integrated with cooperative learning mode.

#### 3.1. The Interdependence of Meta-Cognitive Awareness and Meta-cognitive Regulation

In general, it is contended that when an English starter works on a writing task, meta-cognitive awareness seems to be always integrated with meta-cognitive regulation. Simply said, English students scarcely only employed metacognitive awareness or metacognitive regulation in their writing process. To be more precise, Qin, Zhang and confirmed this association in their study [9]. Fundamentally, researchers found that English students' metacognitive awareness tends to be signaled by their acquisitions over six constituents of metacognitive strategies. In other words, metacognitive regulation reflects how students build up their skills of controlling their writing, while students' self-perceptions of English learner identity and task were presented in their metacognitive awareness [9]. Similarly, Teng articulated that the correlation between metacognitive awareness and metacognitive regulation may be largely due to their divergent functions in self-regulated English writing [7].

Notably, unlike the former study, Teng implicitly stresses the different contributions of metacognitive awareness and metacognitive regulation in self-regulated English writing [7]. Strikingly, metacognitive regulation was proved to take a more substantial component in English writing. This can be seen in the direct relation between English writing attainments and three factors

of metacognitive regulation (planning, monitoring, and evaluating). In opposition, knowledge of task and strategy in metacognitive knowledge appeared to have slight impacts on English writing outcomes [7]. Thus, the effectiveness of metacognitive regulation may be attributed to more involvement with the control on actions on writing instead of self-awareness of writing. Apart from that, in Morshedian and Meshkat's study, considering metacognitive strategies, monitoring and evaluation were justified to dramatically stimulate self-regulation of lexical retrieval and the retention of vocabulary in English writing [1]. Thus, these two studies further validated the positive role of metacognitive regulation.

### **3.2. Metacognitive Awareness and Cooperative Learning Mode**

Despite of metacognitive regulation's pivot role, metacognitive strategies combined with cooperative learning was found to foster self-regulated English writing. The success was due to two elements: group feedback and metacognitive awareness. Teng's studies respectively explained the impacts of these two elements [12]. Explicitly, self-reflection seemed to be collectively conducted in a more effective way compared with individually conducted. As the communication among peers help to clarify personal confusions [8,12]. Additionally, self-regulation and critical-thinking is encouraged in group work as a result of metacognitive awareness [12]. On the account of these studies, metacognitive strategies would work better in self-regulated English writing in teamwork.

Above all, when students are able to find, split, solve problems, and then reflect on themselves, the process can be a huge boost to their learn their ng skills. Instead of relying on the teacher, they learn independently. Students can set short-term or long-term goals and develop a learning plan to better self-monitor their learning under the control of metacognitive awareness. Therefore, it is recommended that students use more metacognitive strategies in performing English writing tasks, which will have a positive impact on self-regulation of English writing skills.

## **4. Conclusions**

Learners who use metacognitive strategies can have some awareness and control over their cognitive processes. Self-regulation is also a skill of self-monitoring and self-control in the learning process. This paper focuses on the effect of metacognition on undergraduates' self-regulated learning ability in English writing and explores the relationship between the two.

It shows that metacognitive awareness generally occurs in conjunction with metacognitive regulation as learners complete English writing tasks. Metacognitive regulation has also been shown to have a very important role in English writing. Its effectiveness may be attributed to greater involvement in the control of writing actions.

To summarize, the review paper explores the influence of metacognitive strategies on self-regulated English writing, as well as how meta-cognitive awareness and regulation played roles in it. Basically, according to the studies mentioned above, these findings all confirmed the positive effects of meta-cognitive strategies on self-regulated English writing. Secondly, metacognitive strategies and cognitive strategies compose self-regulation, which largely articulates the correlation mentioned above. Thirdly, metacognitive regulation is largely determinant for English writing than metacognitive awareness. Most strikingly, six factors of metacognitive strategies were found to have both comprehensive and independent impacts on self-regulated English writing skills.

## **Author Contribution**

All the authors contributed equally and their names were listed in alphabetical order.

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