1. **Citation (Use APA style):**

Cho, M. H. (2004). The Effects of Design Strategies for Promoting Students’ Self-regulated Learning Skills on Students’ Self-Regulation and Achievements in Online Learning Environments. *Association for Educational Communications and Technology*, *27*(1999), 19–23.

1. **Research questions: (P177)**
   * + Students studying in learning environments, which are designed to forcefully encourage the practice of SRL skills, will show a higher self-regulation than others studying in normal learning environments, which don’t support SRL activities.
     + Students studying in learning environments, which are designed to forcefully encourage the practice of SRL skills, will show a higher achievement than others studying in normal learning environments, which don’t support SRL activities.
2. **Participants and sampling method: (P176)**

Convenience Sample:

* + - Thirty freshmen in a Korean university who volunteered for this research for a month
    - The students are randomly assigned into the experimental group or the control group using random numbers.

No power analysis reported

1. **Independent Variable(s): (P176)**

Design Strategies for Promoting Students’ Self-Regulated Learning Skills

1. **Dependent Variable: (P176)**

Students’ self-regulation and achievements with the use of the book, “To Be A Master In TWE” (Min, 2002)

1. **Measurement of Variables:(P176)**

IV determined by Seven self-regulated learning strategies

(Categorical with cognitive, meta-cognitive, resource management, and affective activities)

DV measured by the Self-Regulated Learning Strategies Questionnaire developed by Yang (2000) and the criteria used in ETS to rate students’ essays.

Reliability

* + - Test-retest (No evidence)
    - Interrater reliability (30 students submitted the scores of the Self-Regulated Learning Strategies Questionnaire)

* + - Internal consistency (The mean scores of each group, M = 1.067)

Validity

* + - Construct (The Self-Regulated Learning Strategies Questionnaire was assessed by measuring SRL strategies)
    - Criterion (Semi-structured interviews were conducted to measure the reasons why the treatment was not effective)
    - Content (No evidence, lacks content validity for measuring the overall students’ level of SRL strategies)

1. **Procedure:(P176)**

This is a pre- and post-test. Two online learning sites for the control group and the experimental group were respectively developed to verify the effectiveness of design strategies for promoting self-regulation with the use of the book, “To Be A Master In TWE” (Min, 2002) in one month.

The online TWE (Test of Written English) program used in the control group was developed according to the Gagné’s nine events. Another website for the experimental group was developed according to the devised SRL strategies. Both groups’ students commonly should submit their assignments three times per week.

In addition to turning in the assignments, the students in the experimental group should obligatorily practice Self-regulated Learning activities and post the results on the online bulletin boards for each class. Students’ self-regulated learning skills and essay levels were measured before and after the treatment. The scores from the scale were collected and compared.

1. **Design:**

Experimental

1. **Statistical Analysis: (P177)**

*t*-tests

Samples were taken from the control group and those taken from the experimental group have a slightly different mean and standard deviation, but not significant.

1. **Results:**
   * + Pre-test results showed that there is no significant difference in SRL between two groups. Also, there was no significant difference in TWE level between two groups.
     + SRL Post-test indicated that there was no significant difference between groups. Also, there was no significant different in SRL strategies between groups.
     + The interview data revealed that students didn’t know how to effectively practice the intended SRL skills and they didn’t know the necessity of practicing SRL skills.
2. **Conclusion:** 
   * + The treatment having students practice SRL skill was not effective.
3. **Limitations/Threats (Internal and External Validity):**
   * + The research did not consider how students’ self-regulated learning skills are different before the treatments were given.
     + Lacks continuous interactions with peers or with instructors about their progress.
     + Students weren’t motivated to use self-regulated learning activities.

1. **Contribution to the Literature:** 
   * + The research results imply three things to consider when designing SRL practice and training SRL skills in online learning environments.
     + First, college level students’ self-regulated learning skills are not something to be improved in short time periods just by forcefully having them practice activities.
     + Second, exposing students to practice self-regulated learning skills is not enough to promote their self-regulated learning.
     + Third, autonomy and responsibility should be given to students to self-regulate their own learning while they practice designed practices.