

## AN INSTRUCTION BASED ON SOCIAL COGNITIVE LEARNING THEORY AND METACOGNITION APPROACH TO IMPROVE SELF-AWARENESS AND SOCIAL SKILLS FOR UNDERGRADUATE STUDENTS

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### Abstract

The purpose of this study was: 1) To compare self-awareness of Bachelor degree students between before and after learned based on social cognitive learning theory and metacognition approach. 2) To compare social skills of Bachelor degree students between before and after learned based on social cognitive learning theory and metacognition approach. The research samples were 30 bachelor students of China college in the academic year 2023. The research instruments consisted of 1) Instructional plans 2) The assessment form for self-awareness, 3) The assessment form for social skills of students. 4) Descriptive statistics and t-test for Dependent samples.

The research results revealed as follows: 1) The students learned based on social cognitive learning theory and metacognition approach had higher of self-awareness at after learning than before learning, at the .05 level of significance. 2) The students learned based on social cognitive learning theory and metacognition approach had higher of social skills at after learning than before learning at the .05 level of significance.

**Keywords:** Instruction, Social Cognitive Learning Theory and Metacognition Approach, Self-Awareness, Social Skills

### Introduction

In the results of many examinations, it is found that junior college students have good scores in theoretical knowledge in the course of "Social Etiquette", but their practical and expressive abilities are relatively weak. This reflects a common issue in educational settings, where the acquisition of theoretical knowledge does not necessarily translate into effective behavioral or social performance in real-life situations. As students prepare to enter society and the workforce, the ability to express themselves appropriately and confidently in various social settings becomes just as essential as mastering academic content. A common form of teaching students important socially appropriate behaviors is by teaching social skills.

Gresham, Van, and Cook (2006) assert that social skills are a set of competencies that “1) facilitate initiating and maintaining positive social relationships, 2) contribute to peer acceptance and friendship development, 3) result in satisfactory school adjustment, and 4) allow students to cope with and adapt to the demands of the school environment.” These competencies play a critical role in helping students function effectively in both academic and social contexts.

Social skills are best taught with explicit, systematic, and consistent instruction. Researchers have reported positive effects of social skills training on the behavior of students ranging from kindergarten to high school. Social skills training has been successfully applied in general education, special education, and school wide settings. Although specific programs vary, social skill instruction is typically based on a social modeling paradigm where the targeted skill is demonstrated, students are guided to emulate the modeled behavior and get multiple opportunities to practice the behavior, and receive feedback and reinforcement for their performance. In addition to these key factors, the basic template for teaching culturally responsive social skills includes (a) teaching skills most important to the target population, (b) using culturally relevant materials to provide a rationale for the skill, along with teaching it, (c) including culturally specific competent peer models, (d) incorporating the students’ personal experiences into the instruction, and (e) applying the skill within culturally specific parameters. Social skill instruction is a method to teach and model for students’ important social skills that are needed to be successful in school and other socially based environments. It also has positive effects on student academic performance. Social skill instruction is important for all students, but it is particularly important for students who do not easily acquire social skills through their natural environment (Sugai and Horner, 2009). Social skills are often taught within a framework which includes the following components: (a) all students can learn social skills; (b) social skills instruction is most effective when individualized to the student's needs; and (c) social skills must be generalized once they are learned (Schoenfeld, Rutherford, Gable and Rock, 2008). This approach ensures that students not only learn how to behave in one specific context but are able to apply social skills across multiple settings, including the classroom, extracurricular activities, and future workplaces. Despite students having adequate theoretical knowledge, there exists a significant gap in practical application. This issue is particularly relevant for the target group of this study-undergraduate students of Sichuan Film and Television University-who are preparing for careers in media, performance, communication, and related fields, where social expression and interpersonal communication are essential. Therefore, an emphasis solely on theoretical knowledge without corresponding practical competence poses a serious problem in their educational preparation.

To address this issue, instruction must distinguish between performance and knowledge deficits. That is, whether the student has the skill in his/her behavioral repertoire and simply fails to display it or if the student does not know how to perform the skill. Motivating contingencies would be emphasized in the former case while direct instruction as well as incentives would be needed for the latter (Schoenfeld et al., 2008).

To increase the effectiveness of social skills instruction, a sound social skills program should do the following: 1) Teach students to identify alternative pro-social behaviors and strategies. 2) Provide students with models that demonstrate pro-social behaviors and strategies. 3) Provide multiple opportunities for students to practice the behavior and 4) Directly reinforce socially appropriate behaviors and strategies. Students should be given feedback that is specific, immediate, frequent, and positive. The feedback should also be specific to the needs of individual student. To help maintain appropriate social skills, and should learn through strategies of self-monitoring, self-evaluation, and self-feedback conditions (Schoenfeld et al., 2008).

Learning based on social learning theory proposes that many behaviours develop as a result of our observing what other people do. An investigation by Bandura et al. (1963) of behaviour learned from observation showed that children were more likely to be aggressive when they had observed another person behaving aggressively. They were also more likely to be aggressive when they had observed the person being praised for what he or she had done. This indicates that they had learned the social expectations and the likely outcomes for this type of behaviour.

The same principle can be applied in a positive instructional environment. When students observe peers engaging in effective social behaviors and receiving positive feedback or rewards, they are likely to emulate those behaviors. This approach is especially suitable for students who need support in developing social skills, as they learn not just by being told what to do but by seeing it in action and being guided to practice it themselves. In parallel, learning based on metacognition approach is particularly important when asking students to engage in complex tasks. Mental modeling involves three important steps: 1) Showing students the reasoning involved. 2) Making students conscious of the reasoning involved. 3) Focusing students on applying the reasoning. These steps are usually carried out through verbal statements that walk learners through the process of attaining a correct solution. This process enables students to take more responsibility for their learning, make thoughtful decisions, and adapt more readily to changing social demands.

Therefore, research study to improve self-awareness and social skills of students through social learning theory and metacognition approach is highly necessary. The social skills lessons involved modeling, roleplaying, and discussion of using social skills in real life situations. Whereas, participation and individual outcomes related to three primary domains:

disruptive behaviors, classroom habits, and social emotional behavior. The contribution to knowledge is expected to get new knowledge to support educational work and create new ideas for improving effective instructional procedure successfully and enhance a student learning with achievement motivation, and also improve of higher self-awareness and social skills of students. It also aligns with the broader goal of equipping students with not only academic but also social and emotional competencies necessary for success in real-world environments.

In terms of research scope, the study focuses on undergraduate students of Sichuan Film and Television University, and applies instructional content assigned to subjects under the researcher's responsibility. The research variables include an independent variable-learning management based on social cognitive learning theory and metacognition approach-and dependent variables: self-awareness and social skills. Definitions used in the research are consistent with the existing literature. Self-awareness represented the inception of the social psychology of self-awareness. Self-awareness theory takes into account the consequences of focusing attention on the self. The most common results of self-focused attention are, 1) conscious awareness can be established by directly focusing attention on oneself, and 2) when individuals experience this sense of conscious awareness, they begin to experience a sense of self-consciousness. Social skills identified three general definitions of social skills which include: (a) peer acceptance definition, (b) behavioral definition, and (c) social validity definition. These definitions provide a comprehensive framework for evaluating student behavior, peer interactions, and social outcomes.

In conclusion, this study is highly relevant in the current educational context where the development of social-emotional competencies is as critical as academic achievement. The integration of social cognitive learning theory and metacognitive approaches in instruction offers a promising pathway to help students translate theoretical knowledge into practical, socially appropriate behaviors. The research findings are expected to contribute to a more holistic understanding of student development and support the design of future instructional models aimed at enhancing both self-awareness and social skills.

### **Objectives of this Research**

1. To compare self-awareness of undergraduate students between before and after learned based on social cognitive learning theory and metacognition approach.
2. To compare social skills of undergraduate students between before and after learned based on social cognitive learning theory and metacognition approach

## Research Methodology

### 1. Research design

This research study employed a one-group pretest-posttest design. The research samples were 30 undergraduate students of Sichuan Film and Television University in the academic year 2023, assigned by using cluster random sampling method. The research instruments consisted of 15 instructional plans designed to support learning activities based on social learning theory and metacognition approach, a self-awareness assessment form with 10 rating scale items (total score of 50), and a social skills assessment form with 12 rating scale items (total score of 60). The data collection procedure included administering the assessment forms at three stages: before learning, mid-learning, and after learning management. The instruments were reviewed and validated by three experts, with all items showing an Index of Objective Congruence (IOC) of 1.00. Data were analyzed using descriptive statistics and a t-test for dependent samples.

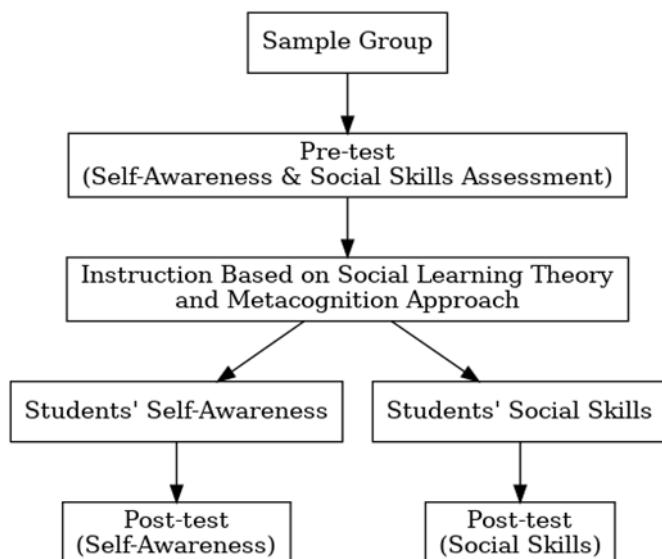


Figure 1 Flow of Research Design

### 2. Population and Research Samples

Research Population are undergraduate students of Sichuan Film and Television University in the academic year 2023, that assigned with the total of 60 students.

Research Samples are 30 undergraduate students of Sichuan Film and Television University in the academic year 2023, that assigned in experimental group of participants by using cluster random sampling method.

### 3. Research Instruments

This research employed three types of instruments to gather data on the dependent variables of self-awareness and social skills of students. These instruments

include instructional plans constructed based on social learning theory and metacognition approach, a self-awareness assessment form, and a social skills assessment form. Each tool was developed through a systematic process involving theory study, instrument construction, expert validation, revision, and try-out to ensure effectiveness and appropriateness for the research objectives.

3.1 Instructional plans that designed and construct to support learning activities and instructional activities are composed of 15 lesson plans for participants learning in the context of social learning theory and metacognition approach. The process of construction instruments was as the followings: Construction of the Instructional Plans, researcher assign concern knowledge and proceed with these steps:

1. Study about related knowledge, principles, and theories about subject content, and research studies to support design of instructional plans based on social learning theory and metacognition approach.

2. Construct of 15 instructional plans, that each plan present with the critical details of learning objectives, content conception, instructional activities or instructional process, learning medias and resources, learning assessment, and appendix of instructional plan.

3. Present instructional plans with concern experts to approve for correctness and appropriate of content details and revise for effective planning successfully. That supported with evaluating the quality of instructional plans based on 5 level of rating scales.

4. Improve of instructional plans based on new approach for experimentation and preparing to support for try-out with concern student group. In addition, find out the inappropriate details to improve instructional plans with more effectively.

5. Researcher plan and design for instructional plans to experiment with research participants completely and proceed to gather data of dependent variables based on research purposes.

3.2 The assessment form support gathering data for dependent variable, which this self-awareness assessment form was designed for 10 items of rating scale with total scores of 50 scores. Construction of assessment form for self-awareness characteristics of students be operated with this process;

1. Study about related knowledge, principles, concept, theories and conceptual frame work of self-awareness variable, and concern this research study concept to support design the assessment form, that based on affective assessment context.

2. Construct of self-awareness assessment form for rating scale condition, through rubric-scoring approach. That each item of rating scale is designed connect with each affection and performance indicators which this assessment form maybe assigned with the

evidence expressed unconcern performance abilities, including appropriate conditions or criterions for judging of correct score level.

3. Present the assessment form for self-awareness characteristic of students to concern experts for judgement in correct and validity of each assessment item through check for validity of each item, with assessing for the Index of Objective Congruence (IOC) based on three experts that revealed 1.00 for all of 10 items with full scores of 50 points. In addition, revise of inappropriate assessing context with more correct and higher quality instrument for research study.

4. Plan and prepare this assessment form for trying-out with concern student group. In addition, revised some details of instrument to confirm the quality of the research results.

5. Researcher plan and design for organizing assessment form to support gathering research data of self-awareness with the students in experimental group based on the context of before learning, between half learning, and after learning management in research study.

3.3 The assessment form support gathering data for dependent variable, which this social skills assessment form was designed for 12 items of rating scale with total scores of 60 scores. Construction of assessment form for social skills characteristics of students be operated with this process;

1. Study about related knowledge, principles, concept, theories and conceptual framework of social skills variable, and concern this research study concept to support design the assessment form, that based on affective assessment context.

2. Construct of social skills assessment form for rating scale condition, through rubric-scoring approach. That each item of rating scale is designed connect with each affection and performance indicators which this assessment form is assigned with the evidence expressed in concern performance abilities with 5 levels of effective characteristics, including appropriate 12 elements for judging of correct score level with total of 60 points.

3. Present the assessment form for social skills characteristic of students to concern experts for judgement in correct and validity of each assessment item through check for validity of each item, with assessing for the Index of Objective Congruence (IOC) based on three experts that revealed IOC value for each item of 1.00. In addition, revise of inappropriate assessing context with more correct and higher quality instrument for research study.

4. Plan and prepare this assessment form for trying-out with concern student group. In addition, revised some contents of instrument to confirm the quality of the research results.

5. Researcher plan and design for organizing assessment form to support gather in research data of social skills with the students in experimental group based on the condition of before learning and after learning management in research study.

#### 4. Data Collection

The researcher planned to use each research instrument to collect data from participants before and after learning management, following proper procedures such as obtaining consent at each stage. Data on students' self-awareness and social skills were gathered according to the research objectives before and after the study.

#### 5. Data Analysis

Research data were categorized and analyzed using appropriate statistical methods to compare pre- and post-scores of self-awareness and social skills. Both descriptive and inferential statistics were applied, including dependent sample t-tests, ensuring statistical assumptions were met.

#### 6. Statistical Methods

Statistical analysis included descriptive statistics (means and standard deviations) and inferential statistics (dependent samples t-test) to support research purposes and hypotheses regarding students' self-awareness and social skills.

### Research Results

1. To compare self-awareness of undergraduate students between before and after learned based on social cognitive learning theory and metacognition approach.

#### 1.1 Research Participants

(1) Age Range: This study involves first-year students, usually between the age of 18 and 19.

(2) Grade Level: 30 participants are first -year students from the University of Sichuan Film and Television, Chengdu, China.

#### 1.2 Self-Awareness Result

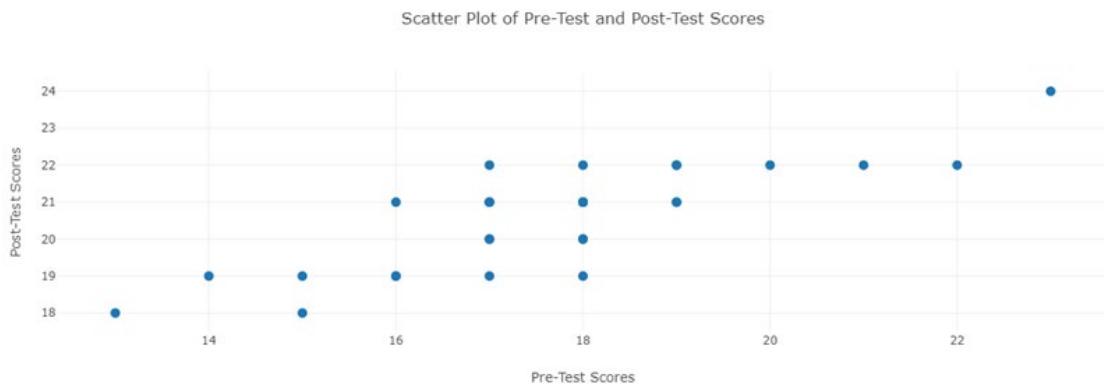
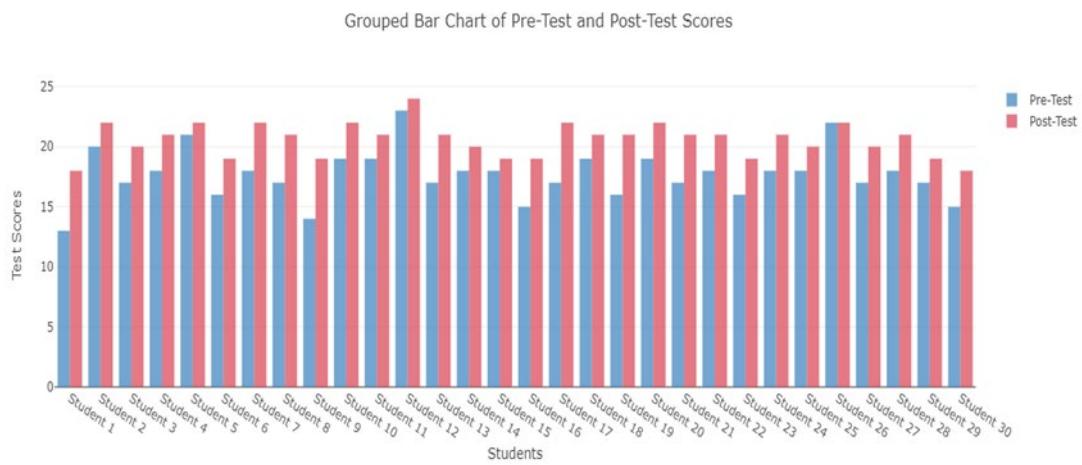
The paired sample T-test for Dependent samples showed that there was a significant difference in the value of Self-Awareness of students in research samples between before and after intervention or learning management through social cognitive theory and Metacognitive learning. This finding confirms the effectiveness of the intervention and provides valuable insights for this course. The findings and research on these aspects will be further explained in the following chapters.

**Table 1** Paired-Samples T-Test Results for Reading ability

Statistical Indicator	Before Learning	After Learning	T-value	df	P-value
Mean Score	31.30	39.20	18.85	29	0.000*
Standard Deviation	2.30	2.17	-	-	-

\* $p \leq 0.05$ 

## Self-awareness Score Visualization

**Figure 2** Scatter-plot of Pretest and Post-test Scores**Figure 3** Bar Chart of Pretest and Post-test Scores

Based on the provided scatter plot (Before vs After Test Scores) and bar chart (Average and Standard Deviation of Before and After Test Scores) for the students' self-awareness (See figures 5.1, 5.2), here are some observations:

(1) Overall Trend: The scatter plot illustrates the individual changes in pre-test and post-test scores among students. The majority of points lie above the positive diagonal line, indicating that, overall, students have made progress in self-awareness.

(2) Score Comparison: The bar chart compares the scores between the pre-test and post-test. It is evident from the bar chart that, overall, students' average scores in the

post-test are significantly higher than in the pre-test. This further supports the trend observed in the scatter plot, indicating that instructional intervention has a positive impact on students' self-awareness.

2. To compare social skills of undergraduate students between before and after learned based on social cognitive learning theory and metacognition approach.

Through statistical analysis, the paired sample T-test results show that: value of  $t$  – test (Dependent samples) according to the criteria of statistical significance, when  $p < 0.05$ , there was a significant difference in social skills variable between before and after the intervention. Specifically, the means and standard deviation of social skills before and after intervention proposed in this study, and provides a solid data foundation for further discussion of research question. It also provides an empirical basis with reference value for subsequent relevant research and practical application.

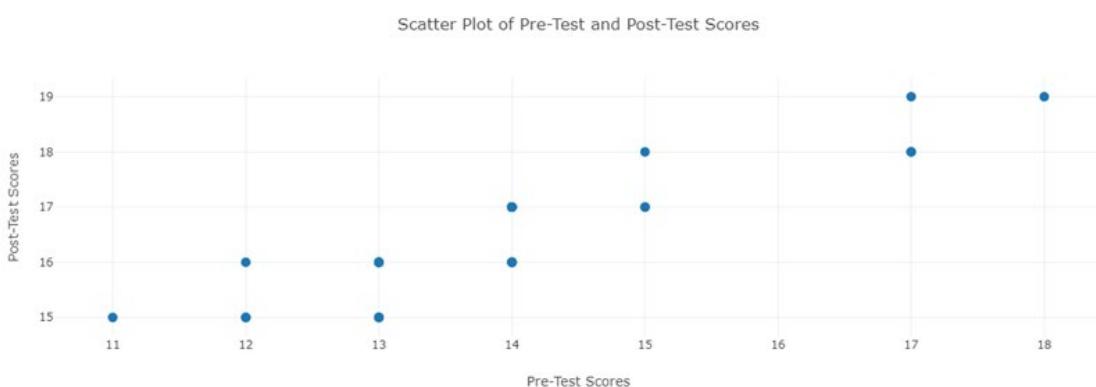
**Table 1** Paired-Samples T-Test Results for Social Skills of Students

Variable	M	D	t	df	p
Students' Scores in Different Tests			19.66	29	0.000*
Test Scores (First Test)	35.96	2.26			
Test Scores (Second Test)	44.93	2.78			

\* $p \leq 0.05$

The results obtained from the paired-samples t-test showed that there was a significant difference in the value of social skills of students in research samples between before and after intervention or learning management through social cognitive theory and Metacognitive learning. This finding confirms the effectiveness of the intervention and provides valuable insights for this course. The findings and research on these aspects will be further explained in the following chapters.

Analytical Writing Score Visualization.



**Figure 4** Scatter-plot of Pretest and Post-test Scores

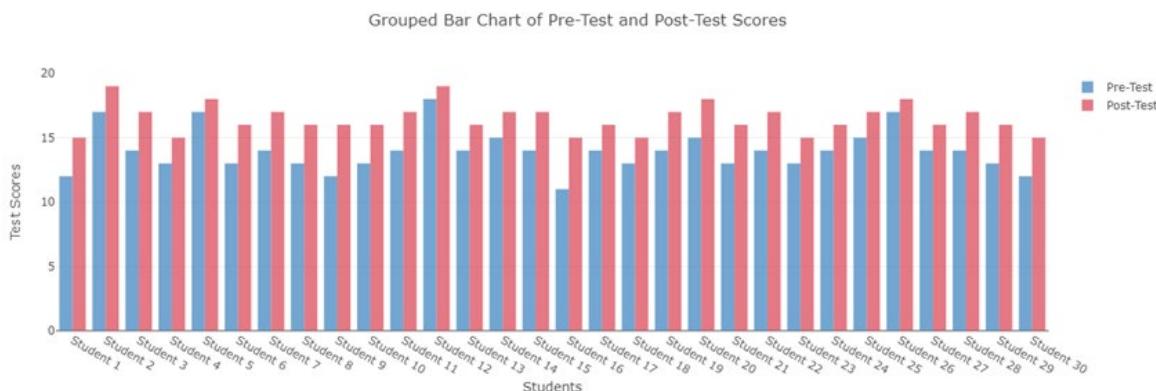


Figure 5 Bar Chart of Pretest and Post-test Scores

The scatter plot illustrates the individual changes in pre-test and post-test scores among students. The majority of points lie above the positive diagonal line, indicating that, overall, students have made progress in social skills.

The bar chart compares the scores between the pre-test and post-test. It is evident from the bar chart that, overall, students' average scores in the post-test are significantly higher than in the pre-test. This further supports the trend observed in the scatter plot, indicating that instructional intervention has a positive impact on students' social skills.

### Research Discussion

The results of self-awareness and social skills need to be explained in the context of positive facets. According to statistical analysis, there is a correlation between self-awareness and social skills. As self-awareness improves, social skills also tend to improve correspondingly. This phenomenon can be explained by several aspects. Social Cognitive Learning plays a crucial role within the constructivist framework. It posits that students, through interaction and collaboration with others and engaging in meaningful tasks, can achieve a deeper understanding of knowledge and apply it to real-world situations. In developing self-awareness and social skills, social cognitive learning creates a learning environment where students can build cognitive and emotional skills through collaborative problem-solving in mathematics and social interaction. By solving problems together, students construct knowledge actively, share perspectives, and develop better understanding. Interacting in social contexts links mathematical learning to real-world relevance, fostering social awareness and responsibility. This open environment encourages students to learn from others' thinking, broadening cognitive flexibility and societal insights.

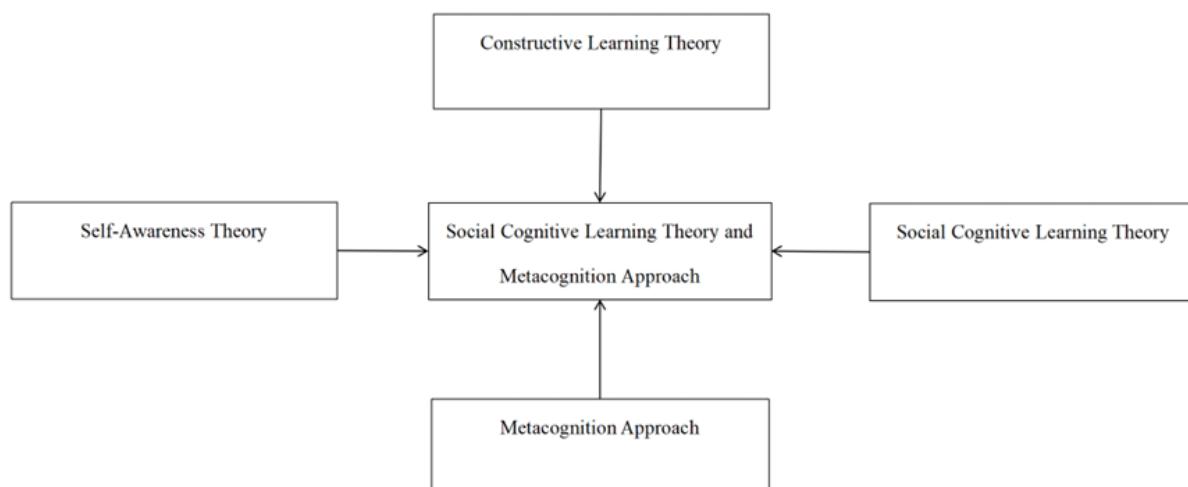
Adopting social cognitive learning and metacognitive approaches stimulates student motivation. These approaches emphasize active participation and collaboration, creating meaningful and engaging learning. Students construct knowledge through personal

experiences, enhancing intrinsic motivation. Social interaction allows for shared success and positive learning atmosphere, increasing interest and connection with tasks. Successful academic experiences improve confidence, encourage deeper thinking, and enhance awareness of societal issues. Practical application of math in real-world problems increases purpose and value in learning, fostering enthusiasm and awareness of subject utility.

Social cognitive learning emphasizes social interaction, crucial for developing social skills and responsibility. Students collaborate in math and social problem-solving, expressing views and listening to others, which builds communication skills. Team tasks foster interdependence and mutual support, enhancing teamwork and social responsibility. Addressing real-world issues integrates disciplinary knowledge with societal relevance, encouraging commitment to social values. Such interaction helps form a supportive community, reduces stress, increases interest, and promotes deeper concern for social issues. These experiences improve individual development and create an effective environment for cultivating social awareness.

### Research Body of Knowledge

The body of knowledge for this study was concentrated in social cognitive learning theory and metacognition approach, which integrated concerned theoretical and pedagogical frameworks.



**Figure 6** Knowledge framework

### Research Suggestion

#### 1. Suggestions in practice

Sample representative limitations: The study sample may not be fully representative of the population or context of the entire field of education administration. For example, data collection may focus on specific regions, school types, or levels of education,

which limits the generality of findings to broader educational management scenarios, such as educational institutions in different national cultural contexts.

**Deviation of data collection method:** If questionnaire survey is used, there may be problems such as unreasonable question design, subjective bias of respondents or memory errors, which may lead to inaccurate data. However, the interview method may be influenced by factors such as the guidance of the interviewee and the interviewee's reluctance to disclose the real situation, which makes the collected data deviate from the reality, thus affecting the reliability of the analysis results.

**Difficulty in variable control:** Education management involves many complex variables, and it is difficult to accurately control all interfering factors. For example, when studying the influence of a certain teaching management strategy on student achievement, it is impossible to exclude the additional effects of individual differences, family environment and social factors on student achievement, which will blur the real relationship between core variables in the study and reduce the persuasiveness of data analysis conclusions.

**Data timeliness:** The education landscape is constantly evolving, and the time lag between data collection and analysis can cause results to lag behind reality. Factors such as new educational policies, technological applications, or changes in social attitudes may not be taken into account during data analysis, resulting in conclusions based on existing data that cannot adapt to the dynamic development of educational management and greatly reduce the value of current and future practice guidance.

## 2. Suggestions for research

**Long-term Outcome Tracking:** Further research can track students' learning outcomes over a more extended period to gain a deeper understanding of the impact of vocabulary-based and collaborative learning methods on reading comprehension and writing abilities in the medium to long term.

**In-depth Investigation of Individual Differences:** Future research can delve more deeply into exploring the responses of different student groups to vocabulary-based and collaborative learning methods, considering factors such as learning styles, proficiency levels, and interests.

**Comparison of Different Teaching Activities:** Future research could conduct more nuanced comparisons, juxtaposing our approach with other teaching strategies to comprehensively understand the effectiveness of various teaching methods in enhancing reading comprehension and writing abilities.

**Integration of Educational Technology:** Consider integrating educational technology into vocabulary-based and collaborative learning methods to further enhance student engagement and disciplinary application.

By openly addressing limitations and proposing future research directions, we aim to provide a helpful framework for other researchers to continue refining and advancing the study of vocabulary-based and collaborative learning methods.

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