Learners' Self-Regulation Behavior and Their Cultural Competence

Wilbert S. Gupit

Master of Arts in Teaching, Major in Social Studies, Graduate School Valencia Colleges (Bukidnon), Inc. Purok 17-A, Hagkol, Valencia City, Bukidnon Philippines

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ABSTRACT

This study examined the levels of self-regulation behavior and cultural competence among Grade 6 learners in San Fernando II District, Bukidnon, and explored the relationship between these variables. Employing a descriptive-correlational design, the research involved 199 Grade 6 learners selected through simple random sampling. Data collection used a two-part instrument adapted from Toering et al. (2012) and Fenech, Baguant, and Abdelwahed (2020), measuring self-regulation dimensions (self-planning, self-monitoring, self-instruction, self-evaluation, and self-reaction) and cultural competence on a 5-point Likert scale. Mean scores and standard deviations assessed variable levels, while Pearson correlation tested relationships.

The study concluded that Grade 6 learners possess well-developed self-regulatory skills and cultural awareness, highlighting self-regulation as a key factor in enhancing cultural competence. The significant links indicate that processes such as self-evaluation and self-reflection are essential for promoting learners' ability to interact effectively in diverse cultural contexts.

Recommendations urge learners to actively engage in self-regulation practices supported by parents through reflective and culturally diverse experiences. Educators should embed self-regulation exercises in curricula and administrators should provide professional development to foster these competencies. Future research should investigate the mechanisms by which specific self-regulation processes influence cultural competence and explore tailored interventions across varied cultural and grade-level settings to deepen learners' intercultural skills.

Keywords: self-regulation behavior, cultural competence

INTRODUCTION

Learners' cultural competence remains a critical concern in contemporary education, particularly in contexts where exposure to diverse cultural perspectives is limited. Many learners struggle to understand cultural differences, which can lead to misconceptions, reduced empathy, and difficulties in cross-cultural interactions. These issues are often compounded by limited access to culturally responsive materials and instructional practices (Kim & Slapac, 2020).

Self-regulation has been identified as a key mechanism that supports not only academic success but also learners' ability to engage meaningfully with diverse perspectives. Through processes such as planning, monitoring, and reflection, self-regulated learners actively construct knowledge and evaluate their understanding. These processes are essential in developing cultural competence, as they enable learners to question assumptions, reflect on biases, and adapt their behavior in culturally diverse contexts. Theoretical perspectives further support this relationship. Piaget's Theory of Cognitive Development (1950) emphasizes that learners actively construct knowledge through interaction and reflection, progressing toward more autonomous and abstract thinking. Similarly, Bandura's Social Cognitive Theory (1986) highlights the role of self-regulation through reciprocal interactions among personal, behavioral, and environmental factors. Together, these frameworks suggest that learners who actively regulate their cognition and behavior are better positioned to develop cultural awareness and adaptability.

Despite the recognized importance of both constructs, limited research has examined the relationship between self-regulation and cultural competence among elementary learners in rural Philippine contexts. This gap underscores the need to explore how self-regulatory processes contribute to learners' intercultural understanding.

This study, therefore, investigates the relationship between self-regulation behavior and cultural competence among Grade 6 learners in San Fernando District II, Bukidnon. By examining this relationship, the study aims to provide insights into how self-regulated learning processes support the development of culturally competent learners.

This study is based on two theoretical approaches: the Theory of Piaget. Both the regulation (1950) and the Bandura Social Cognitive Model of Self-Regulation (1986) emphasize the significance of self-regulation in attaining cultural competence. The theory developed by Piaget underlines the significance of regulatory functions in the learning process, and the process of self-regulation should be divided into autonomous, active, and conscious levels. In the same vein, Bandura's Social Cognitive Model of Self-Regulation (1986) defines the interplay among personal, behavioral, and environmental factors in influencing self-regulation (Zimmerman, 1989). According to this model, three fundamental aspects of self-regulated learning (SRL) exist: self-observation, self-judgment, and self-reaction (Schunk, 1994).

The correlation between cultural competence and self-regulation is shown in Figure 1. It shows how self-regulatory processes: self-planning, self-monitoring, self-instruction, self-evaluation, and self-reaction facilitate the acquisition of cultural awareness, adaptability, and interaction with different perspectives. With good control over their learning, learners become more open to various cultural values, norms, and traditions, which eventually makes them culturally competent. Knowledge of this relationship offers useful insights into how self-regulated learning facilitates learners' cultural literacy, enabling them to operate successfully in highly diverse and globalized societies.

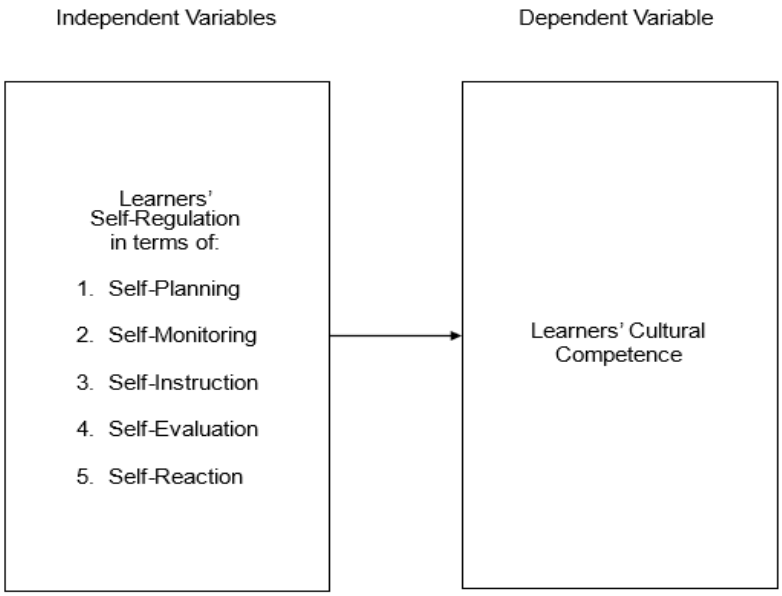

Figure 1. Schematic Diagram showing the Relationship of the Independent and Dependent Variables of the Study

This study aimed to explore the relationship between self-regulation behavior and cultural competence among Grade 6 learners in the San Fernando II District, Division of Bukidnon, for the school year 2025-2026.

In particular, the following questions were to be answered in this study:

1. What is the level of self-regulation behavior in terms of self-planning, self-monitoring, self-instruction, self-evaluation, and self-reaction among Grade 6 learners?

2. What is the level of cultural competence among Grade 6 learners?

3. Is there a significant relationship between self-regulation behavior and cultural competence among Grade 6 learners?

Hypothesis of the Study

The hypothesis was tested at a 0.05 level of significance.

Ho: There is no significant relationship between self-regulation behavior and cultural competence among Grade 6 learners.

METHODS

Research Design

This study employed a descriptive–correlational research design to examine the relationship between self-regulation behavior and cultural competence among Grade 6 learners. A descriptive–correlational design is a quantitative approach used to describe existing conditions and determine the relationship between variables without manipulating them.

In this study, the design was appropriate because it allowed the researcher to assess learners' levels of self-regulation behavior and cultural competence and determine whether a significant relationship exists between the two variables. Data were collected using survey questionnaires and analyzed using descriptive and inferential statistical methods.

Research Setting

The study was conducted in San Fernando District II, Division of Bukidnon, Philippines. San Fernando is a municipality located in the southeastern part of Bukidnon and is characterized by mountainous terrain and river valleys formed by the Tigwa and Salug Rivers. The municipality is politically divided into 24 barangays and serves diverse communities within the district. The district includes several public elementary schools where Grade 6 learners are enrolled. These schools provided the research setting for examining learners' self-regulation behavior and cultural competence within the local educational context.

Participants

The respondents of the study were Grade 6 learners enrolled in public elementary schools in San Fernando District II during the School Year 2025–2026. These learners were typically between 11 and 12 years old and were at a developmental stage where they begin to develop greater independence in their learning processes.

A total of 199 learners participated in the study. This group was considered appropriate because learners at this level begin to demonstrate self-regulated learning behaviors such as planning, monitoring, and evaluating their own learning, while also developing awareness and respect for cultural diversity.

Sampling Procedure

The study employed simple random sampling to select the respondents. According to Fraenkel, Wallen, and Hyun (2018), simple random sampling ensures that every member of the population has an equal chance of being selected.

From the total population of 401 Grade 6 learners in San Fernando District II, the required sample size of 199 respondents was determined using the Raosoft sample size calculator. Random selection was conducted across the participating elementary schools to ensure that learners with varying levels of self-regulation behavior and cultural competence were represented.

Research Instrument

The study utilized a two-part survey questionnaire adapted from established instruments.

The first part measured self-regulation behavior using the Self-Regulation of Learning Self-Report Scale (SRL-SRS) developed by Toering et al. (2012), covering five dimensions: self-planning, self-monitoring, self-instruction, self-evaluation, and self-reaction. The second part measured cultural competence using an adapted scale from Fenech, Baguant, and Abdelwahed (2020), focusing on learners' awareness, respect, and interaction with diverse cultural groups.

To ensure content validity, the instrument was evaluated by three experts in educational research and multicultural education. Revisions were made to enhance clarity, relevance, and alignment with the study objectives.

A pilot test was conducted among 30 Grade 6 learners outside the study sample. Reliability analysis using Cronbach's alpha yielded coefficients of 0.94 for the self-regulation scale and 0.90 for the cultural competence scale, indicating high internal consistency.

Construct validity was supported through item-total correlation analysis, with all items meeting acceptable thresholds. Despite these strengths, the use of self-reported data may introduce response bias; thus, future studies are encouraged to incorporate triangulated data sources such as classroom observations or interviews to enhance validity.

Data Collection Procedure

Prior to data collection, the researcher obtained approval from the Schools Division Superintendent, Public Schools District Supervisor, and the school heads of the participating schools. After approval was granted, coordination was conducted with Grade 6 teachers regarding the administration of the survey questionnaires.

On the scheduled data collection period, the questionnaires were distributed to the respondents through their advisers. The purpose of the study and instructions for answering the questionnaire were explained to the learners before administration. After completion, the questionnaires were retrieved, checked for completeness, and organized for data processing.

The collected responses were encoded and tabulated using a spreadsheet program. The data were reviewed for accuracy prior to statistical analysis.

Scoring Procedure

Responses were interpreted using a five-point Likert scale.

A. Self-Regulation Behavior

Scale	Range	Descriptive Rating	Interpretation
5	4.20–5.00	Always	Very High
4	3.40–4.19	Often	High
3	2.60–3.39	Sometimes	Moderate
2	1.80–2.59	Rarely	Low
1	1.00–1.79	Never	Very Low

B. Cultural Competence

Scale	Range	Descriptive Rating	Interpretation
5	4.20–5.00	Strongly Agree	Very High Competence
4	3.40–4.19	Agree	High Competence
3	2.60–3.39	Neutral	Moderate Competence
2	1.80–2.59	Disagree	Low Competence
1	1.00–1.79	Strongly Disagree	Very Low Competence

Data Analysis

Both descriptive and inferential statistical techniques were used to analyze the data.

The mean and standard deviation were used to determine the levels of self-regulation behavior and cultural competence among the learners.

To determine the relationship between self-regulation behavior and cultural competence, the Pearson product–moment correlation coefficient (Pearson r) was used.

Ethical Considerations

Ethical standards were strictly observed throughout the conduct of the study. Prior to data collection, permission to conduct the research was obtained from the Schools Division Superintendent of the Division of Bukidnon, the Public Schools District Supervisor of San Fernando District II, and the school heads of the participating schools. Participation in the study was voluntary, and respondents were informed about the purpose of the research and the procedures involved before answering the questionnaire. The learners were assured that their participation was optional and that they could withdraw from the study at any time without penalty.

To ensure confidentiality and anonymity, no personal identifiers such as names were collected from the respondents. Instead, responses were coded and used solely for research purposes. All collected data were securely stored and accessed only by the researcher.

The study adhered to ethical research principles, ensuring the protection of participants' rights, privacy, and well-being throughout the research process.

RESULTS AND DISCUSSION

This section presents the analysis and interpretation of the data gathered from the respondents in relation to the research problems. The discussion focuses on the level of self-regulation behavior among Grade 6 learners, the level of cultural competence, and the relationship between self-regulation behavior and cultural competence.

Level of Self-Regulation Behavior among Grade 6 Learners

Table 1. Overall Level of Self-Regulation Behavior among Grade 6 Learners

Variable	Mean	SD	Interpretation
Self-Planning	3.88	0.442	High Level
Self-Monitoring	3.92	0.407	High Level

Self-Instruction	3.96	0.409	High Level
Self-Evaluation	3.85	0.420	High Level
Self-Reaction	4.06	0.500	High Level
Overall Mean	3.93	0.436	High Level

Table 1 presents the overall level of self-regulation behavior among Grade 6 learners. The results show an overall mean of 3.93 (SD = 0.436) interpreted as High Level, indicating that learners frequently demonstrate self-regulated behaviors in managing their learning tasks and academic responsibilities. Among the five components of self-regulation, self-reaction obtained the highest mean (M = 4.06), followed by self-instruction (M = 3.96) and self-monitoring (M = 3.92). The findings indicate that learners demonstrate a high level of self-regulation behavior (M = 3.93), suggesting that they are generally capable of managing their learning processes. However, the variation across dimensions provides important insights. While self-reaction obtained the highest mean, self-evaluation was relatively lower, indicating that learners are more inclined to adjust behavior than to critically assess their performance.

From a theoretical standpoint, this pattern reflects Bandura's (1986) Social Cognitive Theory, where self-reaction represents the behavioral adjustment phase of self-regulation. Learners appear to respond to outcomes but may not fully engage in the deeper evaluative processes required for sustained cognitive development. In relation to Piaget's (1950) framework, the results suggest that learners are transitioning toward more reflective thinking but have not fully developed advanced metacognitive regulation. The relatively low emphasis on self-evaluation suggests that learners may still be developing higher-order reflective abilities associated with formal operational thinking.

These findings highlight that while self-regulation is present, it may not yet be fully developed in its most critical dimension, evaluation, which is essential for deeper learning and cognitive restructuring.

Level of Cultural Competence among Grade 6 Learners

Table 2. Level of Cultural Competence among Grade 6 Learners

Variable	**Mean**	**SD**	**Interpretation**
Cultural Competence	4.03	0.282	High Competence

Table 2 presents the level of cultural competence among Grade 6 learners. The results show an overall mean of 4.03 (SD = 0.282) interpreted as High Competence, indicating that learners demonstrate strong awareness, respect, and openness toward cultural diversity. The findings reveal that learners frequently demonstrate culturally responsive attitudes, such as respecting cultural beliefs, learning from people with different cultural backgrounds, and avoiding stereotypes or discriminatory comments about cultural groups. Learners also show willingness to understand cultural differences and interact respectfully with individuals from diverse backgrounds.

The results reveal a high level of cultural competence among learners (M = 4.03), indicating that they demonstrate awareness, respect, and openness toward cultural diversity. However, high self-reported competence should be interpreted cautiously, as it may reflect socially desirable responses rather than fully internalized intercultural understanding.

From a Piagetian perspective, cultural competence involves the ability to decenter and consider multiple perspectives, a skill associated with advanced cognitive development. The findings suggest that learners are developing this ability, but further opportunities for experiential learning may be necessary to deepen authentic cultural understanding. Bandura's framework further explains that cultural competence is shaped through social interaction and observational learning. Learners who engage in culturally diverse environments are more likely

to internalize inclusive attitudes. Thus, the high level observed may reflect exposure to socially guided learning experiences rather than independently constructed intercultural competence.

Overall, the findings suggest that while learners demonstrate positive cultural attitudes, the depth of their cultural understanding may require further development through reflective and experiential learning.

Relationship Between Self-Regulation Behavior and Cultural Competence

Table 3. Correlation Analysis Between Self-Regulation Behavior and Cultural Competence

Variable	**r**	**p-value**	**Interpretation**
Self-Planning	.017	.810	Not Significant
Self-Monitoring	.065	.362	Not Significant
Self-Instruction	.134	.060	Not Significant
Self-Evaluation	.141	.046	Significant
Self-Reaction	.349	.000	Significant
Overall	.291	.000	Significant

Table 3 presents the correlation between self-regulation behavior and cultural competence among Grade 6 learners. The results show a significant positive relationship ($r = .291$, $p = .000$) between the two variables. This indicates that learners who demonstrate stronger self-regulation behaviors tend to exhibit higher levels of cultural competence. Although some components of self-regulation, such as self-planning, self-monitoring, and self-instruction, did not show significant associations with cultural competence, the variables self-evaluation ($r = .141$) and self-reaction ($r = .349$) were statistically significant.

The study revealed a significant but modest relationship between self-regulation behavior and cultural competence ($r = 0.291$), indicating that while self-regulation contributes to cultural competence, it is not the sole determinant.

Notably, only self-evaluation and self-reaction showed significant associations, suggesting that the reflective and adaptive components of self-regulation are more influential than planning or monitoring processes. This finding aligns with Bandura's (1986) theory, which emphasizes that behavioral regulation and self-reflection are critical for adapting to social contexts.

From Piaget's perspective, this result highlights the importance of reflective equilibrium, where learners continuously evaluate and adjust their understanding. Cultural competence requires not just exposure to diversity but also the ability to reflect on and reinterpret experiences, which helps explain the stronger role of self-evaluation and self-reaction.

The non-significant relationships of self-planning, self-monitoring, and self-instruction suggest that procedural aspects of self-regulation may be more relevant to academic tasks than to intercultural understanding. Cultural competence appears to depend more on reflective and affective processes rather than task-oriented regulation.

Furthermore, the relatively low correlation coefficient indicates that other factors, such as social environment, cultural exposure, and instructional practices, play a substantial role in shaping cultural competence. This underscores the need for a more holistic approach to developing intercultural skills.

While the findings support a meaningful link between self-regulation and cultural competence, causality cannot be inferred. Future research using mixed-method or experimental designs is necessary to further explore this relationship.

CONCLUSION

The findings of the study indicate that Grade 6 learners generally demonstrate a high level of self-regulation and cultural competence. However, the results suggest that not all dimensions of self-regulation equally contribute to cultural competence.

Reflective components, particularly self-evaluation and self-reaction, were found to significantly influence cultural competence, highlighting the importance of reflection and behavioral adjustment in developing intercultural understanding. In contrast, more procedural aspects such as planning and monitoring showed limited influence, suggesting that cultural competence is more closely associated with reflective and affective processes.

The study supports both Piaget's and Bandura's theoretical frameworks, emphasizing that cognitive development and social interaction play critical roles in shaping learners' ability to engage with diverse cultural perspectives.

However, the modest strength of the relationship indicates that cultural competence is influenced by multiple factors beyond self-regulation. These include environmental exposure, instructional practices, and social experiences.

Future research is recommended to incorporate qualitative methods such as interviews and classroom observations to provide deeper insights into learners' intercultural development. Expanding the study to more diverse populations and including additional variables will further strengthen the generalizability and explanatory power of the findings.

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