

# Classroom Management Practices and Learning Behavior in Elementary Classrooms as Reported by Teachers

Chona L. Hiyangan

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

DOI: <https://doi.org/10.47772/IJRISS.2026.100300568>

Received: 02 April 2026; Accepted: 08 April 2026; Published: 18 April 2026

## ABSTRACT

This study examined classroom management practices and their relationship with learning behavior in elementary classrooms in Quezon District 1, Bukidnon, during School Year 2025–2026. A descriptive–correlational design was used. Data were collected through a researcher-made questionnaire administered to all elementary teachers using total enumeration.

Results showed that classroom management practices were very highly practiced across domains, including structured routines, consistent rule enforcement, guided collaboration, and behavioral interventions. Learning behavior was observed to a large extent, with cooperation and attention showing stronger manifestations than persistence and initiative.

A significant positive relationship was found between classroom management practices and learning behavior. Among the variables, learners' collaboration showed the strongest correlation, although all relationships were weak to moderate.

The findings suggest that structured and collaborative classroom environments support positive learning behaviors. Schools are encouraged to strengthen professional development programs focused on effective management and collaborative instructional strategies.

**Keywords:** classroom management, learning behavior, collaboration, task persistence, motivation, elementary learning

## INTRODUCTION

Classroom management is essential in elementary education, where learners are still developing self-regulation, social skills, and discipline. It includes routines, behavioral expectations, instructional organization, and relational practices that help create a structured and productive learning environment. At this level, effective management not only maintains order but also promotes attention, persistence, cooperation, and motivation. A well-managed classroom minimizes distractions, maximizes instructional time, and provides a psychologically safe space for learning. Thus, classroom management serves both as a behavioral framework and an instructional support system that contributes to learners' academic and socio-emotional development.

Despite its importance, many elementary teachers continue to encounter challenges such as off-task behavior, low motivation, limited participation, and discipline issues. These challenges become more complex in diverse classrooms where learners differ in needs, abilities, and socio-emotional backgrounds. In rural public schools, limited resources and large class sizes further intensify these difficulties. As a result, persistent behavioral problems can reduce the effectiveness of teaching strategies and hinder the development of positive learning behaviors.

This study is important because it identifies classroom management practices that influence key learning behaviors, including attention, persistence, cooperation, and motivation. The findings may help teachers design more responsive and effective instructional strategies. School administrators and policymakers can also use the

results to strengthen teacher training, behavior interventions, and support systems. Moreover, the study contributes to existing literature on classroom management and child development within the Philippine public school context and may help parents better understand factors that influence their children's behavior in school.

Recent studies highlight the strong link between classroom management and learner behavior. Gadermann et al. (2021) found that consistent classroom routines improve learners' emotional regulation and attention, particularly in low-resource settings. Similarly, Kirkland and O'Connor (2020) reported that proactive classroom management increases engagement and reduces disruptive behavior. In the Philippine context, Cortez and Bagayna (2022) found that participatory rule-setting and reward systems enhance cooperation and academic participation.

Other studies further support this relationship. Amponsah and Tawia (2023) reported that teacher behavior management is significantly associated with learner motivation in basic education settings. Yap and Soriano (2019) also found that behavioral interventions, such as class contracts and restorative practices, improve persistence and initiative among Filipino learners. These findings suggest that classroom management not only maintains order but also shapes learners' academic behavior and socio-emotional growth.

This study examined classroom management practices and their relationship with learning behavior in elementary classrooms in Quezon District 1, Bukidnon. Specifically, it assessed classroom management in terms of learner collaboration, behavioral interventions, and classroom discipline. It also measured learning behavior in terms of attention, persistence, cooperation, and motivation, and determined whether a significant relationship exists between these variables.

This study is anchored on Behaviorist Learning Theory (Skinner, 1953) and Social Cognitive Theory (Bandura, 1986, 2001). These theories explain how structured classroom environments and social interactions influence observable learner behavior. Classroom management practices serve as the independent variable, examined through classroom management style, learner collaboration, and behavioral interventions. Learning behavior is the dependent variable, measured through attention, task persistence, cooperation, and motivation.

Classroom management style refers to the structured implementation of rules, routines, and instructional organization. From a behaviorist perspective, consistent routines and clear expectations function as stimuli that shape learner responses. This structure supports attention and task persistence by reducing uncertainty and distractions.

Learner collaboration highlights the teacher's role in facilitating peer interaction and cooperative learning. Based on Social Cognitive Theory, learners acquire behaviors through observation, modeling, and social interaction. Structured collaboration helps learners develop communication skills, social responsibility, and active engagement, which enhance cooperation and motivation.

These variables are interrelated and operate dynamically within the classroom. Effective management establishes a supportive environment, while collaboration strengthens social interaction, and behavioral interventions reinforce expectations. Together, these factors promote improved attention, persistence, cooperation, and motivation. The relationship is reciprocal: effective classroom management enhances learner behavior, and positive learner behavior contributes to a more stable and productive learning environment.

Figure 1 Presents the Schematic Diagram of the Study

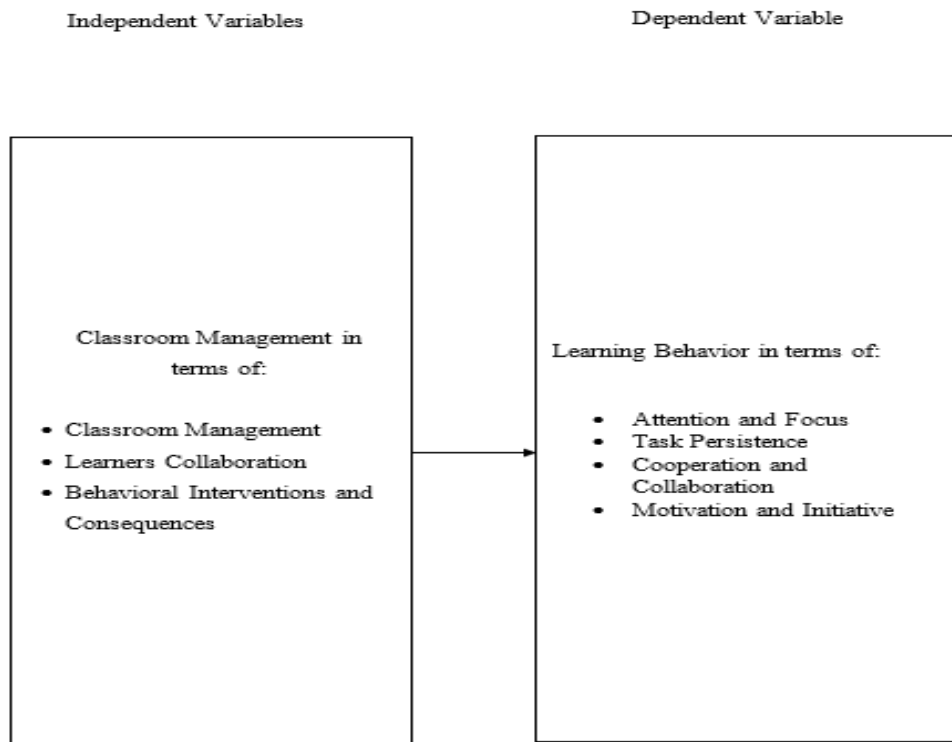


Figure 1. Schematic Diagram showing the Relationship of the Independent and Dependent Variables of the Study

This study aimed to examine teachers' classroom management practices and determine their impact on learners' learning behavior in elementary grades. Specifically, it sought to answer the following questions:

1. What is the extent of Classroom Management in the areas of Classroom Management, Learners Collaboration, and Behavioral Intervention and Consequences?
2. What is the level of Learning Behavior in terms of Attention and Focus, Task Persistence, Cooperation and Collaboration, and Motivation and Initiative?
3. Is there a significant relationship between Classroom Management and Learning Behavior?

### Hypothesis of the Study

The hypothesis was tested at a 0.05 level of significance.

H<sub>0</sub>: There is no significant relationship between Classroom Management and Learning Behavior.

### Delimitation of the Study

The study in question is devoted to the investigation of

This study examined the classroom management techniques used by teachers and their influence on the learning behavior of elementary learners in Quezon District 1, Bukidnon, during the School Year 2025–2026. The respondents were limited to elementary teachers in the said district. Although learner behavior was one of the variables of interest, all data on classroom management practices were obtained solely from teacher reports.

The study was geographically limited to selected public elementary schools in Quezon District 1. Schools were

chosen based on accessibility and relevance to the research. Other districts, schools outside Quezon, and secondary or preschool levels were excluded to maintain a clear and manageable scope.

The study focused on three dimensions of classroom management: classroom structure and routines, learner collaboration, and behavioral interventions and consequences. Learner behavior was measured using four indicators: attention and focus, task persistence, cooperation and collaboration, and motivation and initiative. These variables were selected based on their theoretical relevance and applicability in elementary education.

Data were gathered using a researcher-made questionnaire. Other methods such as classroom observations, interviews, and administrative assessments were not included due to feasibility constraints. Additionally, external factors such as home environment, parenting style, and socioeconomic status were not examined, as the study focused solely on classroom-based management practices.

### **Limitations of the Study**

This study has several limitations. First, the data were based solely on teacher reports and did not include direct observation of learners' behavior. As a result, responses may reflect perceptions rather than actual classroom practices.

Second, the correlations obtained in the study were weak to moderate, indicating that a large portion of the variance in learning behavior remains unexplained. Other factors such as home environment, learner characteristics, and instructional quality may also influence outcomes.

Third, the descriptive–correlational design does not allow for causal conclusions. While significant relationships were identified, it cannot be concluded that classroom management practices directly cause improvements in learning behavior.

## **METHODS**

This section presents the research design, study locale, respondents, sampling procedure, research instrument, data-gathering procedure, scoring procedure, statistical treatment of data, and ethical considerations. These methodological components were carefully selected to examine the relationship between classroom management practices and learners' learning behavior.

### **Research Design**

This study employed a descriptive–correlational research design. The descriptive component was used to determine the level of classroom management practices in classroom organization, behavioral interventions, and learner collaboration, as well as the level of learners' behavior in attention and focus, persistence in tasks, cooperation and collaboration, and motivation and initiative.

The correlational component was utilized to examine the relationship between classroom management practices (independent variable) and learners' learning behavior (dependent variable). This design is appropriate because the study does not involve manipulating variables but instead focuses on existing conditions and their possible associations. It provides a systematic basis for identifying patterns and relationships using teacher-reported data and observed learner behaviors in actual classroom settings.

### **Research Locale**

The study was conducted in selected public elementary schools in Quezon District 1, Quezon, Bukidnon, Philippines, under the Department of Education (DepEd), Division of Bukidnon. The district includes both central and barangay-based schools serving learners from diverse socioeconomic backgrounds.

The locale was purposively selected due to its contextual relevance. The district reflects common realities in Philippine public schools, such as large class sizes, limited resources, and diverse learner needs. These conditions provide an appropriate setting for examining how classroom management practices influence

learner behavior. Moreover, ongoing teacher development programs and school-based reforms in the district offer a meaningful context for linking professional practices with learner outcomes.

### Respondents of the Study

The respondents of the study were 200 public elementary school teachers in Quezon District 1 during the School Year 2025–2026. These teachers are directly engaged in classroom instruction, responsible for implementing classroom management strategies, and observing learners’ behavior.

They include both homeroom and subject teachers across different grade levels, ensuring a comprehensive representation of instructional contexts and management practices.

Table 1. Distribution of Respondents by School

School	Population	Sample Size
Mahayag Elementary School	13	13
Manuto Integrated School	12	12
Merangeran Integrated School	20	20
Minsalirac Elementary School	9	9
Kibacania Elementary School	6	6
Libertad Elementary School	20	20
San Jose Integrated School	20	20
Quezon Central Elementary School	80	80
Zubiri Village Elementary School	10	10
Miluya Elementary School	4	4
Daof Elementary School	6	6
Total	200	200

### Sampling Procedure

The study employed total enumeration sampling, in which all public elementary school teachers in Quezon District 1 were included as respondents. This approach was appropriate due to the manageable population size and ensured full representation of the target group.

Total enumeration minimized sampling bias and enhanced the validity and reliability of the findings, as the data reflected the actual practices and perceptions of the entire teacher population within the district.

### Research Instrument

The study employed a researcher-developed questionnaire designed to measure classroom management practices and learners’ learning behavior. The instrument was developed based on relevant literature and aligned with the study's variables.

The questionnaire consisted of two parts:

**Part I: Classroom Management Practices**

- Classroom organization
- Behavioral interventions
- Learner collaboration

**Part II: Learning Behavior of Learners**

- Attention and focus
- Persistence in tasks
- Cooperation and collaboration
- Motivation and initiative

All items were measured using a five-point Likert scale, allowing respondents to indicate the extent to which each practice or behavior is observed.

**Data Gathering Procedure**

Permission to conduct the study was obtained from the Schools Division Office of Bukidnon, the District Supervisor, and school heads.

After securing approval, the questionnaires were distributed to all respondents. Clear instructions were provided, and participation was voluntary. Respondents were assured of confidentiality and anonymity.

Completed questionnaires were retrieved after a reasonable period (10–15 minutes). The collected data were then coded, tabulated, and prepared for statistical analysis.

**Scoring Procedure**

A five-point Likert scale was used to measure responses. Mean scores were computed for each variable and interpreted using the following scales:

**Scoring Scheme for Classroom Management Practices**

Scale	Mean Range	Description	Interpretation
5	4.21–5.00	Strongly Agree	Always Practiced
4	3.41–4.20	Agree	Often Practiced
3	2.61–3.40	Neutral	Sometimes Practiced
2	1.81–2.60	Disagree	Rarely Practiced
1	1.00–1.80	Strongly Disagree	Not Practiced

Scoring Scheme for Learning Behavior

Scale	Mean Range	Description	Interpretation
5	4.21–5.00	Strongly Agree	Very High
4	3.41–4.20	Agree	High
3	2.61–3.40	Neutral	Moderate
2	1.81–2.60	Disagree	Low
1	1.00–1.80	Strongly Disagree	Very Low

**Statistical Treatment of Data**

The following statistical tools were used:

- Mean and Standard Deviation These were used to determine the level of classroom management practices and learners’ learning behavior.
- Pearson Product–Moment Correlation Coefficient (r) This was used to determine the significant relationship between classroom management practices and learners’ learning behavior at a 0.05 level of significance.

**Ethical Considerations**

The study adhered to ethical standards in research. Approval was secured from the Schools Division Office and school authorities prior to data collection.

Participation was voluntary, and informed consent was obtained from all respondents. Confidentiality and anonymity were strictly maintained by using codes instead of names.

All data were used solely for academic purposes. Participants were informed of their right to withdraw at any time without penalty. The researcher ensured that no physical, emotional, or psychological harm was caused during the study.

**RESULTS AND DISCUSSION**

This section presents, analyzes, and interprets the study's findings on classroom management practices and learners’ learning behavior among public elementary school teachers in Quezon District 1, Bukidnon. The presentation follows the sequence of the research questions and utilizes mean, standard deviation, and Pearson correlation for analysis.

**Extent of Classroom Management Practices**

Table 1. Overall Extent of Classroom Management Practices

Variable	Mean	SD	Interpretation
Classroom Management Style	4.76	0.315	Very Highly Practiced
Learners’ Collaboration	4.67	0.351	Very Highly Practiced
Behavioral Interventions and Consequences	4.65	0.398	Very Highly Practiced

Overall	4.69	0.355	Very Highly Practiced
---------	------	-------	-----------------------

The findings reveal that classroom management practices are implemented to a very high extent ( $M = 4.69$ ,  $SD = 0.355$ ). Among the domains, classroom management style obtained the highest mean, followed by learners' collaboration and behavioral interventions.

The very high rating in classroom management style indicates that teachers consistently implement structured practices such as enforcing rules, maintaining records, organizing the classroom environment, and establishing routines. This reflects principles of Behaviorist Learning Theory (Skinner, 1953), which emphasizes that consistent reinforcement, clear expectations, and structured environments shape learners' observable behavior. By maintaining predictable routines and systematic procedures, teachers create conditions that reinforce appropriate behavior and minimize disruptions.

Similarly, the very high level of learners' collaboration reflects that teachers actively promote respectful interaction, teamwork, and shared responsibility among learners. This aligns with Social Cognitive Theory (Bandura, 1986, 2001), which posits that learning occurs through social interaction and observation. Through structured group activities and peer engagement, learners model positive behaviors and develop social competencies within the classroom.

Behavioral interventions and consequences are also very highly practiced, indicating that teachers employ both preventive and corrective strategies. The consistent use of reinforcement, feedback, and fair consequences supports behavior regulation, which is strongly supported in the literature. Studies have shown that proactive classroom management strategies significantly reduce disruptive behavior and enhance learner engagement (Kirkland & O'Connor, 2020; Maliksi & Ching, 2023).

Overall, these findings suggest that classroom management in the district is systematic, structured, and consistently implemented. The results affirm that combining reinforcement-based strategies and social interaction processes creates a conducive learning environment that supports positive learner behavior.

**Level of Learning Behavior**

Table 2. Overall Level of Learning Behavior

Variable	Mean	SD	Interpretation
Attention and Focus	4.09	0.580	Large Extent
Task Persistence	3.96	0.725	Large Extent
Cooperation and Collaboration	4.14	0.613	Large Extent
Motivation and Initiative	4.07	0.707	Large Extent
Overall	4.07	0.656	Large Extent

The results indicate that learners' learning behavior is largely manifested ( $M = 4.07$ ,  $SD = 0.656$ ). Among the domains, cooperation and collaboration obtained the highest mean, followed by attention and focus, motivation and initiative, and task persistence.

The findings suggest that learners generally demonstrate positive engagement in classroom activities. The high level of cooperation and collaboration reflects learners' ability to interact effectively, share ideas, and contribute to group tasks. This supports Social Cognitive Theory, which emphasizes that social environments and peer interactions play a critical role in shaping behavior and learning outcomes.

Attention and focus are also evident to a large extent, indicating that learners are generally attentive and responsive to instruction. From a behaviorist perspective, this can be attributed to structured classroom environments and consistent reinforcement, which help sustain learners’ engagement. Research supports that organized instruction and attention-directing strategies significantly enhance learners’ focus and participation (Lugrin & Konovalov, 2025; Pöysä-Tarhonen et al., 2021).

Task persistence, although still high, obtained the lowest mean among the domains. This suggests that while learners demonstrate perseverance, their ability to sustain effort independently may still rely on teacher guidance. This aligns with studies indicating that persistence is strengthened through scaffolding, feedback, and supportive learning environments (Bakhtiar & Hadwin, 2020; Xu et al., 2025).

Motivation and initiative are also evident, as learners participate actively and show enthusiasm for learning. However, slightly lower ratings in extending learning beyond classroom tasks suggest that intrinsic motivation is still developing. Literature indicates that motivation improves when learners are given meaningful tasks, autonomy, and opportunities for active participation (Lee, 2024; Samarasinghe et al., 2023).

Overall, the findings indicate that learners exhibit positive learning behaviors, though aspects of self-regulation and independent initiative may require further strengthening. These results highlight the role of structured classroom environments and guided interactions in supporting learner engagement.

**Relationship Between Classroom Management and Learning Behavior**

Table 3. Test of Significant Relationship Between Classroom Management and Learning Behavior

Variable	r-value	p-value	Interpretation
Classroom Management Style	0.271	0.006	Significant
Learners’ Collaboration	0.338	0.001	Significant
Behavioral Interventions and Consequences	0.293	0.003	Significant
Overall	0.338	0.001	Significant

Notably, learners’ collaboration showed the strongest correlation with learning behavior ( $r = 0.338$ ). Although the relationship is moderate, this finding is meaningful in practice. It suggests that structured peer interaction plays a more influential role in shaping learning behavior than routines or disciplinary strategies alone.

When learners are actively engaged in collaborative tasks, they are more likely to remain attentive, persist in completing tasks, and participate meaningfully. Collaboration provides immediate feedback, social support, and shared responsibility, which enhance both engagement and motivation.

This implies that classroom management should not rely solely on control and structure but should also emphasize guided collaboration. Teachers who intentionally design group activities, assign roles, and facilitate interaction may achieve stronger behavioral and motivational outcomes among learners.

The findings reveal a statistically significant relationship between classroom management practices and learning behavior ( $r = 0.338, p = 0.001$ ). This indicates that improved classroom management is associated with better learning behavior among learners.

The combined perspectives of Behaviorist Learning Theory and Social Cognitive Theory provide a strong explanation of this relationship. From a behaviorist standpoint, consistent reinforcement, structured routines, and clear consequences shape learners’ behavioral responses. From a social cognitive perspective, teachers influence learners not only through direct instruction but also through modeling, interaction, and environmental structuring.

Among the variables, learners' collaboration shows the strongest relationship with learning behavior. This suggests that socially interactive and structured group processes play a significant role in enhancing engagement, persistence, and motivation. Studies support that collaborative learning environments improve both behavioral and academic outcomes when properly guided (Du et al., 2024; Bellhäuser & Siegfried, 2025).

Behavioral interventions and consequences also show a significant relationship, indicating that consistent reinforcement systems contribute to improved learner discipline and engagement. This aligns with findings that structured behavioral management enhances motivation and reduces disruptive behavior (Amponsah & Tawia, 2023).

Classroom management style, while yielding the lowest correlation coefficient, remains significant. This suggests that structured routines and organization still influence learner behavior, although their effect is enhanced when combined with interactive and reinforcement-based strategies.

Although the correlations are weak to moderate, their statistical significance confirms that classroom management practices are meaningful predictors of learning behavior. The findings demonstrate that effective classroom management operates through both structured control and social interaction mechanisms.

Overall, the rejection of the null hypothesis confirms that classroom management practices significantly influence learning behavior. These results underscore the importance of integrating structured, consistent, and collaborative strategies to promote positive learner engagement and behavioral development.

## CONCLUSION

Based on the findings, the following conclusions were drawn:

The level of classroom management practices in terms of classroom management style, learners' collaboration, and behavioral interventions and consequences was very high. This indicates that teachers consistently implement structured routines, enforce clear rules, facilitate collaborative activities, and apply appropriate behavioral interventions. These practices contribute to a well-organized, respectful, and productive classroom environment.

The extent of learning behavior in terms of attention and focus, task persistence, cooperation and collaboration, and motivation and initiative was manifested to a large extent. Learners demonstrated sustained attention, persistence in completing tasks, and active participation in collaborative activities. These findings suggest that structured classroom environments support positive learning behaviors and enhance student engagement.

The study also revealed a statistically significant positive relationship between classroom management practices and learning behavior. Although the correlations were weak to moderate, the results indicate that effective classroom management is associated with improvements in learners' attention, persistence, cooperation, and motivation. Notably, learners' collaboration showed the strongest relationship, highlighting the importance of structured peer interaction in promoting engagement and participation. This suggests that collaborative learning environments play a key role in shaping positive learning behaviors.

Since the design of the study was correlational, causal relationships cannot be established. Nevertheless, the findings confirm that consistent and well-implemented classroom management practices are important in supporting positive learning behaviors and overall academic engagement.

## RECOMMENDATIONS/ IMPLICATIONS

Based on the findings of the study, the following recommendations are proposed:

**Teachers.** Teachers are encouraged to sustain effective classroom management practices by maintaining structured routines, clear behavioral expectations, and guided collaborative activities. Greater emphasis may

also be placed on developing learners' self-regulation by encouraging independence, initiative, and responsibility in completing tasks.

**School Administrators.** School administrators are encouraged to strengthen support systems by providing continuous professional development programs focused on advanced classroom management strategies. These programs may emphasize learner autonomy, engagement, and consistency in behavioral expectations across classrooms.

**Parents and Guardians.** Parents and guardians are encouraged to reinforce positive learning behaviors at home by promoting responsibility, persistence, and self-initiative. Strengthening school-home collaboration can further support learners' behavioral and academic development.

**Future Researchers.** Future studies may incorporate qualitative methods such as classroom observations and student focus group discussions to capture actual learner behavior and classroom dynamics. Additionally, future research may include multiple data sources (e.g., student reports, parent feedback, and academic records) to strengthen the validity of findings and provide a more comprehensive understanding of classroom management and learning behavior.

## REFERENCE

1. Aksoy-Pekacar, K. (2023). Task-related collaborative behaviours in task-based oral peer interactions. *The Language Learning Journal*, 52, 397–413. <https://doi.org/10.1080/09571736.2023.2193577>
2. Alojacin, G. S., & Tantiado, R. C. (2023). Classroom management practices and learners' academic performance. *International Journal of Research Publications*. <https://doi.org/10.47119/ijrp1001261620224978>
3. Amponsah, E., & Tawia, S. (2023). Classroom behavior management and learner motivation in basic schools: A correlational study. *International Journal of Educational Management*, 37(2), 179–193. <https://doi.org/10.1108/IJEM-06-2022-0256>
4. Bakhtiar, A., & Hadwin, A. (2020). Dynamic interplay between modes of regulation during motivationally challenging episodes. *Frontline Learning Research*, 8(2). <https://doi.org/10.14786/flr.v8i2.561>
5. Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
6. Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26. <https://doi.org/10.1146/annurev.psych.52.1.1>
7. Bellhäuser, H., & Siegfried, S. (2025). Digital collaborative learning in education. *Frontiers in Psychology*, 16. <https://doi.org/10.3389/fpsyg.2025.1572277>
8. Du, H., Yang, Z., Wu, Y., & Xie, N. (2024). Improving cooperation via joint intrinsic motivation exploration. *International Conference on Data-driven Optimization of Complex Systems*. <https://doi.org/10.1109/DOCS63458.2024.10704285>
9. Espela, M. E. P., Dela Cruz, E. S., & Santiago, R. J. (2021). The GRIN approach: Minimizing disruptive behaviors and increasing academic engagements. *International Journal on Trends in Education and Their Implications*, 3(4), 195–218. <https://doi.org/10.31149/IJOT.V3I4.1690>
10. Guzmán, J., & Zambrano, J. (2024). Effects of split-attention and task complexity on learning. *Education Sciences*. <https://doi.org/10.3390/educsci14091035>
11. Jayme, P. I. B., & Tantiado, R. C. (2025). Teachers' classroom management practices and learners' behavior. *International Journal of Multidisciplinary Research and Analysis*. <https://doi.org/10.47191/ijmra/v8-i05-04>
12. Kirkland, D., & O'Connor, E. (2020). Managing behavior proactively: Its impact on student engagement. *Journal of Classroom Interaction*, 55(1), 18–30.
13. Lee, H.-J. (2024). Self-determination motivation in collaborative learning. *Journal of Learner-Centered Curriculum and Instruction*. <https://doi.org/10.22251/jlcci.2024.24.7.521>
14. Lugin, N., & Konovalov, A. (2025). Manipulating attention facilitates cooperation. *Communications Psychology*, 3. <https://doi.org/10.1038/s44271-025-00206-9>
15. Maliksi, R. M., & Ching, D. A. (2023). Mediating effect of classroom behavioral management. *International Journal of Research Publications*. <https://doi.org/10.47119/ijrp1001301820235342>

16. Pöysä-Tarhonen, J., Awwal, N., Häkkinen, P., & Otieno, S. (2021). Joint attention behaviour in collaborative problem solving. *Research and Practice in Technology Enhanced Learning*, 16, 1–24. <https://doi.org/10.1186/s41039-021-00160-0>
17. Samarasinghe, D., Barlow, M., & Lakshika, E. (2023). Collaborative learning and task engagement. Springer. [https://doi.org/10.1007/978-981-99-8391-9\\_26](https://doi.org/10.1007/978-981-99-8391-9_26)
18. Scoular, C. (2021). Monitoring collaboration skills. *Research Conference 2021*. [https://doi.org/10.37517/978-1-74286-638-3\\_15](https://doi.org/10.37517/978-1-74286-638-3_15)
19. Skinner, B. F. (1953). *Science and human behavior*. Macmillan.
20. Xu, J., Pi, Z., Liu, M., Ye, C., & Hu, W. (2025). Task motivation and learning scaffolding. *Instructional Science*. <https://doi.org/10.1007/s11251-024-09698-0>
21. Zhang, S., Yin, Z., Lu, S., Cai, Z.-G., & Li, Q. (2025). Collaborative knowledge construction processes. *Thinking Skills and Creativity*. <https://doi.org/10.1016/j.tsc.2025.101774>