

Project-Based History Learning and Student Engagement: A Classroom Action Study at an Indonesian Senior High School

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Abstract

This classroom action study examines Project-Based Learning (PjBL) as a strategy for strengthening student activity in Grade XI history at SMA Negeri 15 Padang. Thirty-two students participated in a pre-cycle observation and two action cycles, each consisting of two meetings. Student activity was observed across visual, listening, oral, writing, mental, and emotional dimensions. The average activity level increased from 39.3% in the pre-cycle to 71.05% in Cycle 1 and 81.6% in Cycle 2, exceeding the predetermined 70% success criterion. The project sequence required students to respond to essential questions, plan and schedule work, gather and communicate information, produce project outcomes, and reflect on the learning process. The findings suggest that project organization can redistribute responsibility from teacher explanation toward student inquiry and production. Because the evidence derives from classroom observation in a single class, the results are interpreted as local improvement rather than generalized causal effectiveness. The study clarifies how project structure can support participation in history learning without equating activity with historical reasoning.

Keywords: classroom action research; history education; project-based learning; student engagement; secondary education.

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Introduction

Education increasingly requires teachers to create learning environments in which students do more than receive information. In events surrounding Indonesian independence and international recognition, this requirement is especially important because the subject matter asks learners to interpret ideas, connect concepts with experience, and communicate their reasoning. Yet the classroom problem documented in this study was low visual, oral, listening, writing, mental, and emotional engagement during history lessons. Such conditions matter because observable participation is not a decorative feature of instruction; it is one of the mechanisms through which students encounter, test, revise, and communicate knowledge. A classroom may be orderly and still provide limited opportunities for intellectual participation. Conversely, a classroom that organizes meaningful tasks, clear roles, and structured interaction can create conditions in which students become more visible as learners.

Project-Based Learning is most educationally productive when projects organize sustained inquiry rather than simply add a product to conventional instruction. Reviews and meta-analyses associate well-designed PjBL with engagement and achievement, while also emphasizing the importance of clear questions, scaffolding, collaboration, feedback, and assessment (Bell, 2010; Kokotsaki et al., 2016; Chen & Yang, 2019; Guo et al., 2020; Almulla, 2020). In history education, the project must also preserve the disciplinary character of the subject. Historical learning requires students to evaluate evidence, contextualize sources, compare accounts, and construct

interpretations rather than reproduce a predetermined narrative (Wineburg, 1991; Reisman, 2012; Seixas & Morton, 2013).

Project-based learning in history is educationally meaningful when the project requires students to think with evidence, not merely produce an attractive artefact. Historical learning involves asking questions about the past, locating and contextualizing sources, comparing accounts, and constructing interpretations that can be justified. A project can organize these practices over time by giving students responsibility for planning, inquiry, production, and presentation. The present classroom-action study examines whether reorganizing Grade XI history lessons around projects increased observable student activity during learning about Indonesian independence and international recognition.

For this reason, the present article does not frame Project-Based Learning organized through essential questions, project planning, scheduling, monitoring, assessment, and reflection as a universally effective treatment. Instead, it treats the classroom as a situated pedagogical system and asks what changed in observable learning processes when the intervention was introduced. This distinction is important. Classroom action studies, qualitative case studies, exploratory factor analyses, and one-group pretest-posttest designs can provide useful evidence, but each design supports a different level of inference. Strengthening the manuscript therefore requires aligning the research question, evidence, and claims. The objective of this study is to examine changes in observed student activity when history learning was reorganized around projects.

Improvement in this study refers to observed student activity during project-based history learning, not to a direct test of historical knowledge. The class mean increased from 39.3% in the pre-cycle to 71.05% in Cycle 1 and 81.6% in Cycle 2. Activity was observed across visual, listening, oral, writing, mental, and emotional dimensions. These indicators show that more students became involved in the learning process, but they do not by themselves establish growth in historical reasoning or source evaluation.

The project sequence followed essential questions, collaborative planning, scheduling, monitoring, assessment, and reflection. This structure gave students sustained responsibility for producing and communicating work on Indonesian independence and international recognition. Recent history-education research is especially relevant because it shows that project-oriented designs can support motivation and knowledge when projects are integrated with purposeful historical inquiry (Pan et al., 2023), while design studies emphasize the need to scaffold historical thinking explicitly rather than assuming it emerges from activity alone (Wilke et al., 2023).

The case involved 32 students in class XI.F.5 at SMA Negeri 15 Padang and focused on Indonesian independence and the struggle for international recognition. The topic lends itself to project work because it can be investigated through events, actors, documents, diplomatic claims, and competing interpretations. Classroom action research was used to refine the project sequence across a pre-cycle and two cycles, each consisting of two meetings. The central concern was whether the design could increase sustained participation in history learning.

The article asks: What pattern of student activity was visible before Project-Based Learning? How did the six activity dimensions change across the two project cycles? How should increased activity be interpreted in a history classroom where the disciplinary goal also includes evidence-based historical thinking? The third question prevents the study from equating participation with disciplinary mastery and allows the discussion to distinguish a successful engagement design from the stronger claim that students became better historical reasoners.

Research on Project-Based Learning reports positive associations with engagement and achievement, while also emphasizing the importance of sustained inquiry, scaffolding, feedback, and assessment (Bell, 2010; Kokotsaki et al., 2016; Chen & Yang, 2019; Guo et al., 2020). History-education scholarship adds a disciplinary requirement: students need opportunities to contextualize evidence and reason about competing accounts (Wineburg, 1991; Reisman, 2012; Seixas & Morton, 2013). Much PjBL literature treats projects in domain-general terms, whereas fewer classroom-action accounts examine how project organization changes participation in a history lesson. This study addresses that intersection by analysing student activity while interpreting the project as a structure for historical inquiry.

A disciplinary perspective further clarifies why the case matters. Learning about events surrounding Indonesian independence and international recognition requires students to coordinate factual information with interpretation. In social-science and humanities classrooms, concepts are not meaningful when they remain detached from concrete situations. Students must identify relationships, classify evidence, compare explanations, and communicate a position. This means that classroom activity should be evaluated not merely by how busy students appear but by whether the activity carries intellectual work. The intervention in this study is therefore best understood as an attempt to redesign the pathway through which students encounter and use disciplinary ideas.

History projects can generate visible activity through searching, writing, presenting, designing artifacts, and discussing interpretations. Yet historical thinking requires more than task completion. Students must consider source origin, context, corroboration, and the relationship between evidence and claims (Wineburg, 1991;

Reisman, 2012). The activity indicators in this study capture whether students entered the learning process more fully. They do not establish whether the resulting historical explanations were more accurate or better evidenced, which remains an important next step for assessment.

Project work can widen participation because it provides multiple roles—researching, organizing evidence, writing, designing, and presenting—but it can also conceal unequal intellectual labor within groups. The class-level observation data do not show whether all 32 students contributed equally or whether some specialized in peripheral production tasks. A stronger history-project design would rotate roles and require each student to produce an individual evidence-based explanation so that participation in artifact production is connected to personal historical reasoning.

The teacher's role across the cycles involved more than monitoring deadlines. Essential questions had to be sharpened, project plans checked for feasibility, sources and claims monitored, and reflection used to identify where students were active without being historically rigorous. This is where classroom action research adds value: the teacher can refine not only the project workflow but also the disciplinary demands embedded in it. Project management and historical scaffolding must develop together if activity is to support meaningful history learning.

The topic of Indonesian independence and international recognition is well suited to project work because it contains multiple actors, sources, diplomatic developments, and contested interpretations. Students can move beyond chronological recall by examining why events were interpreted differently and how particular sources support historical claims. In this classroom, project stages created a sequence in which students had to plan, gather information, organize findings, present a product, and reflect on their work. The study therefore treats engagement as participation in a structured historical task rather than as physical busyness alone.

A final conceptual point concerns the relationship between educational design and evidence. In this study, Project-Based Learning organized through essential questions, project planning, scheduling, monitoring, assessment, and reflection should be understood as a configuration of tasks, expectations, interactions, and feedback rather than as a single independent variable with an automatic effect. This perspective helps explain why apparently similar innovations can produce different outcomes across classrooms. Implementation quality depends on whether students understand the task, whether participation is distributed, whether teacher feedback is timely, and whether the activity requires use of the target concepts. It also clarifies why the same innovation may support one outcome more strongly than another. A worksheet may improve task organization without necessarily improving long-term retention; a collaborative model may increase communication while leaving group processing uneven; a digital tool may improve immediate performance while creating new demands for verification. The present article therefore treats the intervention as a situated pedagogical arrangement and uses the available evidence to identify plausible mechanisms rather than to assert an undifferentiated treatment effect.

The study contributes a classroom-level account of how project organization redistributed epistemic responsibility. Activity rose across cycles, but the more important instructional change was that students were required to make decisions about information, division of work, presentation, and reflection. This makes the findings relevant to history educators who want to use PjBL without reducing historical inquiry to product making. At the same time, the study measured observable activity rather than the quality of historical reasoning. Its contribution is therefore to identify a workable participation structure and to specify what future research should measure if it aims to establish gains in disciplinary understanding.

The classroom-action approach uses repeated observation to refine practice rather than to estimate a treatment effect. Practical assessment guidance is therefore relevant for establishing transparent indicators and success criteria (Arikunto, 2016). Indonesian classroom studies have also shown that cooperative structures can increase activity when responsibilities and interactive tasks are clearly organized (Hapsari, 2017). In the present case, such organizational gains are valuable, but the next development step is to align activity indicators with evidence of historical reasoning so that teachers can distinguish energetic project participation from disciplinary progress.

A history-specific interpretation also requires attention to the intellectual traditions of the discipline. Indonesian historiography has long emphasized questions of perspective, evidence, and the construction of historical explanation (Abdullah & Surjamiardjo, 1985). General curriculum literature similarly reminds teachers that learning activities must remain connected to intended knowledge and competencies (Hamalik, 2009). In project work, this means that student autonomy should be organized around a historical question rather than around artifact production alone. The project becomes educationally stronger when students must justify selection, interpretation, and representation of evidence.

The study also belongs to an Indonesian line of classroom research that has used Project-Based Learning to increase activity across vocational and general education settings (Emputri et al., 2019; Jusita, 2019; Khairat, 2020; Lesmana & Arpan, 2017). These studies support the feasibility of using projects to redistribute classroom work, but history education introduces an additional disciplinary requirement: students' products should make claims

about the past that can be supported with evidence. The present article therefore treats increased activity as a necessary but incomplete condition for stronger history learning.

Method

This study used a CAR design at SMA Negeri 15 Padang. The participants were 32 students in class XI.F.5. The design was selected because the research question concerned a bounded educational process rather than a population-level estimate. The study focused on events surrounding Indonesian independence and international recognition. The central pedagogical or analytic focus was Project-Based Learning organized through essential questions, project planning, scheduling, monitoring, assessment, and reflection. The study preserves the research design and data while clarifying the level of inference that the design can reasonably support.

The study used classroom action research with a pre-cycle observation and two cycles, each consisting of two meetings. Thirty-two students participated. Activity was observed across visual, listening, oral, writing, mental, and emotional dimensions. The predetermined success criterion was 70% average activity.

Data were obtained from classroom observations of six dimensions of student activity across the pre-cycle and two action cycles. The record captured visual, listening, oral, writing, mental, and emotional participation as students engaged in the project sequence. The study did not include a validated historical-thinking test or systematic scoring of project artifacts. Consequently, the quantitative summaries are treated as descriptive indicators of classroom engagement, while the discussion uses disciplinary literature to clarify what additional evidence would be needed to claim historical-thinking development.

The analysis compared the mean activity level across the three stages and examined whether the predefined 70% criterion was reached. The rise from 39.3% to 71.05% in Cycle 1 indicated that the threshold was already crossed after the first project cycle, and the increase to 81.6% in Cycle 2 suggested further consolidation. The interpretation focuses on the pattern and its relation to project implementation; no inferential statistical claim is made from one intact class observed iteratively.

Credibility is supported by repeated observation using the same activity dimensions and by the fact that the pattern was recorded across a pre-cycle and two project cycles rather than at a single endpoint. The article does not claim reliability coefficients or independent historical-thinking measures that were not part of the source documentation. It therefore separates what the action research demonstrates—change in observed activity—from what remains a theoretically informed possibility—that better-designed projects may create conditions for richer historical reasoning.

The classroom action study involved 32 students in class XI.F.5 at SMA Negeri 15 Padang. A pre-cycle observation was followed by two action cycles, each consisting of two meetings. Student activity was observed across visual, listening, oral, writing, mental, and emotional dimensions. Descriptive percentages were compared across stages with a predetermined 70% classroom success criterion. The study did not use a comparison class or a separate assessment of historical reasoning, so the analysis treats the observed increase as evidence of local classroom improvement. The project procedure and observation records are used to interpret how changes in task organization were associated with changes in participation.

The study has three main limitations. It concerns one class and one history topic, so transfer to other contexts should be cautious. The two-cycle duration does not show whether higher activity persists after the project structure is removed. Most importantly, activity was the measured outcome; no direct assessment of sourcing, contextualization, corroboration, or evidence-based argument was included. The findings therefore support an engagement claim, while the historical-thinking literature identifies the disciplinary outcomes that future project studies should measure directly.

Results and Discussion

Initial engagement was below the classroom target

Pre-cycle activity averaged 39.3%. Observations described off-task conversation, unrelated smartphone use, repeated exits from class, unequal participation in group work, copying of individual tasks, reluctance to ask or answer questions, and difficulty producing lesson conclusions.

The pre-cycle result shows that low engagement was distributed across several forms of classroom activity. Off-task conversation, unrelated smartphone use, unequal group participation, reluctance to ask questions, and difficulty concluding the lesson all pointed to a weak connection between students and the intellectual work of history. This provided a clear classroom-action problem: the lesson needed a structure that required more students to produce and communicate historical work.

Cycle 1 moved participation above the target

After Project-Based Learning was introduced, average observed activity increased to 71.05%, slightly above the 70% success criterion. Students were required to work through project stages rather than simply receive historical information.

Cycle 1 moved the class just above the 70% success criterion. The project sequence required students to make plans, gather information, and work toward a shared output, creating a more visible set of responsibilities than the pre-cycle lesson. Crossing the criterion in the first cycle was encouraging, but the modest margin also justified further refinement rather than immediate closure of the action process.

Cycle 2 consolidated the improvement

Average activity rose further to 81.6% in Cycle 2. The pattern suggests the pattern as evidence that project work made students more visibly involved in planning, information gathering, group production, presentation, and reflection.

The increase to 81.6% in Cycle 2 indicates that the participation pattern became more stable as students gained experience with the project sequence. Planning, information gathering, group production, presentation, and reflection were no longer novel procedures. The second-cycle gain may therefore reflect both improved design and increased fluency in managing project responsibilities.

Projects gave historical content a task structure

The model connected historical inquiry to a concrete product and a sequence of responsibilities. This did not merely add an assignment; it changed who had to make decisions, gather evidence, communicate interpretations, and evaluate the learning experience.

Projects gave historical content a task architecture. Students were not only asked to remember events; they had to decide how to organize information and communicate an account to others. This redistributed some epistemic responsibility from teacher explanation to student production, although the teacher remained responsible for framing questions, checking sources, and consolidating historical interpretations.

The intervention changed the organization of participation

Across the reported evidence, the most consistent change concerned how participation was organized around Project-Based Learning organized through essential questions, project planning, scheduling, monitoring, assessment, and reflection. Students or institutional actors were given clearer sequences, roles, products, or decision points than in the initial condition. This result matters because it shifts attention from the innovation as an object to the practices that the innovation made possible. The source does not provide evidence that every participant changed in the same way, but it does show a reorganization of the learning or implementation environment.

The improvement remains bounded by the classroom-action design and the activity measure. More participation does not automatically mean more sophisticated historical reasoning. The findings are best understood as evidence that project organization made student involvement more sustained and visible, while the effect on source evaluation, contextualization, and historical argument requires direct assessment in future studies.

Observed improvement remained context dependent

The topic of independence and international recognition gave the project a natural inquiry structure because students could examine diplomatic events, actors, claims, and historical evidence. Project-Based Learning may be less productive when the task is reduced to decorating a chronology or compiling facts without an interpretive question. The case therefore suggests that disciplinary authenticity matters: history projects should organize activity around a historical problem that requires evidence and explanation, not merely around the production of an attractive artifact.

Discussion

Project work and the redistribution of epistemic responsibility

The growth in observed student activity is therefore important but should not be reduced to physical busyness. Project work can redistribute responsibility for asking questions, locating evidence, organizing information, and presenting an interpretation. This aligns with accounts of PjBL that emphasize sustained inquiry and learner agency (Kokotsaki et al., 2016; Guo et al., 2020), while history-education scholarship reminds us that disciplinary quality depends on how students reason with evidence (Lévesque, 2008; VanSledright, 2011). The action-research design documents increasing participation across cycles, not a direct measure of historical thinking. The strongest conclusion is consequently that the project structure created a more active environment for engaging with historical content; future research should measure the quality of students' historical arguments and source use directly.

Engagement beyond physical busyness

A second issue concerns engagement beyond physical busyness. In the present case, observable change should be read as evidence that the learning environment created additional opportunities for students to interpret, communicate, decide, or respond. This is particularly important in subjects concerned with social phenomena, citizenship, history, values, or digital judgment, because disciplinary learning requires more than completing a task. Students need opportunities to connect concepts with cases, compare perspectives, justify claims, and examine the consequences of their reasoning. The value of an interactive model is therefore strongest when activity is tied to a disciplinary form of thinking.

History learning, evidence, and student agency

The third issue is history learning, evidence, and student agency. Teacher guidance remained central because projects do not become historical inquiry automatically. The teacher must select or approve questions, ensure access to credible sources, model contextualization, monitor interpretation, and provide feedback on claims. Project-based learning research similarly emphasizes scaffolding and formative guidance as conditions for productive inquiry (Kokotsaki et al., 2016; Bell, 2010). In history education, the teacher also protects the disciplinary quality of the project by asking students to justify interpretations with evidence rather than rewarding attractive products alone (Wineburg, 1991; Seixas & Morton, 2013). Student agency is therefore developed within a structured evidentiary framework.

Limitations of action research and observation-based measures

Finally, limitations of action research and observation-based measures requires explicit attention. The evidence comes from a bounded educational study and should not be generalized statistically beyond its participants. Observation percentages may be sensitive to attendance and observer judgment; qualitative findings depend on the range of informants; exploratory factor analysis with a modest sample requires replication; and one-group pretest-posttest designs cannot exclude maturation, testing, or other contextual influences. These limitations do not make the findings useless. They instead define what the study can contribute: a transparent account of a locally implemented educational process and a set of propositions that can be tested in stronger comparative designs.

Implications for educational practice

For practice, the findings support using Project-Based Learning organized through essential questions, project planning, scheduling, monitoring, assessment, and reflection only when its structure is aligned with a clear learning problem. Teachers should identify the specific behavior or reasoning that needs to change, design tasks that make that behavior necessary, and use observation or assessment to determine whether the intended change actually occurs. Activities should include explicit instructions, opportunities for peer or teacher feedback, and a closing phase in which learners explain what they learned and how they know it. In institutional programs, the same logic applies: roles, time, resources, and goals need to be aligned rather than merely documented.

This distinction suggests a more discipline-specific way to design history projects. Instead of beginning with a product—poster, presentation, or report—the teacher can begin with a historical problem and a small source set. Students might compare diplomatic documents, photographs, newspaper accounts, or speeches related to Indonesian independence and international recognition, identify differences in perspective, and then decide what claim their project will defend. Document-based history instruction has shown the value of explicit sourcing, contextualization, and corroboration for moving students beyond textbook reproduction (Reisman, 2012). A project can then become the vehicle through which students organize and communicate an interpretation. This sequencing preserves the motivational and collaborative benefits associated with PjBL while ensuring that the project remains recognizably historical rather than a generic activity.

The outcome measure in the present classroom action study, however, was student activity. Visual, oral, writing, mental, and emotional participation increased across cycles, but the study did not directly score the quality of historical reasoning. That limitation should shape the claim. Project-based learning research reports positive effects on engagement and achievement across many contexts (Chen & Yang, 2019; Almulla, 2020), yet history education requires additional measures of source use and argumentation. Future research could combine the existing activity observation with a historical-thinking rubric assessing evidence, contextualization, causation, perspective, and argument quality. The current study provides useful evidence that the project structure created a more active history classroom; it does not by itself demonstrate growth in historical thinking.

This approach also suggests a stronger assessment strategy. The current observation instrument captured visual, oral, writing, mental, and emotional activity, which is useful for monitoring participation during action research. A future cycle could add a short rubric for historical reasoning that assesses use of evidence, contextualization, comparison of accounts, and justification of claims. This would connect engagement to disciplinary quality and address an important limitation of the present study. PjBL research indicates that projects are most effective when

inquiry, feedback, and assessment are aligned (Kokotsaki et al., 2016; Guo et al., 2020). In a history classroom, that alignment means assessing not only whether students participated in a project, but whether the project helped them construct a more defensible account of the past.

The distinction between project completion and historical inquiry deserves particular emphasis. A project can increase participation while still leaving students dependent on unexamined secondary summaries. Historical-thinking research shows that disciplinary learning involves sourcing, contextualization, corroboration, and interpretation of evidence (Wineburg, 1991; Reisman, 2012). Project design should therefore specify what students must do with sources, not only what product they must submit. For example, a project on Indonesian independence could require groups to compare diplomatic documents, newspaper reports, photographs, or speeches and explain why accounts differ. The final product would then become a vehicle for an evidence-based interpretation rather than the primary objective of the lesson.

The project format also creates an opportunity for formative feedback at several points rather than only at the final presentation. Students can receive feedback on the historical question, source selection, preliminary interpretation, and draft product. This is important because historical misconceptions can become embedded in a polished project if feedback arrives only after completion. Seixas and Morton (2013) emphasize that historical thinking develops through disciplined engagement with evidence and concepts, while VanSledright (2011) argues that students need support in learning how historical knowledge is constructed. Project milestones can therefore be designed as moments for disciplinary feedback: teachers can ask whether a source is credible, whether context has been considered, and whether a claim is sufficiently supported. In this way, PjBL can support both engagement and the epistemic practices of history rather than treating the two as separate goals.

For teachers, this means that the quality of a history project should be judged by the reasoning students perform during the process, not only by the attractiveness of the final product. A simple project with well-chosen evidence and explicit historical questions may be more educationally valuable than a complex presentation assembled from unexamined internet summaries. The design principle emerging from this study is therefore inquiry before product.

Such an approach also makes assessment more transparent because students can see that historical quality depends on evidence, context, comparison, and justification rather than on presentation polish alone.

Implications for further research

Future classroom-action studies should score project artifacts for historical reasoning using criteria such as sourcing, contextualization, corroboration, claim-evidence alignment, and acknowledgment of uncertainty. Individual writing tasks could reveal whether students who participate actively in group projects can independently construct evidence-based explanations. Comparing different project questions would also help identify which designs generate deeper inquiry. Longer follow-up could test whether the observed activity transfers to subsequent units after students have become more familiar with project routines.

A useful practical extension is to attach a historical-thinking checkpoint to each project milestone. When students select information, they can record who produced the source and in what context; when they compare accounts, they can identify agreements and contradictions; when they prepare the final product, they can link each major claim to evidence. These checkpoints would preserve the motivational advantages of project ownership while making disciplinary reasoning visible to the teacher. They would also allow future action cycles to evaluate not only how much students participate, but how historically defensible their participation becomes.

Conclusion

This study examined changes in observed student activity when history learning was reorganized around projects. The evidence indicates that Project-Based Learning organized through essential questions, project planning, scheduling, monitoring, assessment, and reflection was associated with a meaningful reorganization of the studied learning or implementation process. The most defensible contribution is not a universal claim of effectiveness, but a context-specific account of how tasks, roles, interaction, feedback, and reflection changed within SMA Negeri 15 Padang.

Project-Based Learning was associated with a substantial increase in observed student activity, with the class moving from 39.3% before action to 81.6% in Cycle 2. The result supports PjBL as a workable engagement design in this history classroom. It should not be read as direct evidence of improved historical thinking, because source evaluation and evidence-based reasoning were not measured. The study's value lies in demonstrating how project structure can mobilize participation while clarifying the disciplinary assessments needed for stronger claims.

Declarations

Author contribution

Author 1: developed the main research idea and objectives, designed the research methodology, conducted data collection and investigation, performed the data analysis, and prepared the first draft of the manuscript. Author 2: contributed to the development and implementation of the research methodology, supported the data collection and investigation process, and reviewed and revised the manuscript to improve its academic quality, clarity, and structure, provided input into the research concept and direction, supervised and guided the overall research process, reviewed and improved the manuscript, and contributed to obtaining financial support or research funding

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Conflict of Interest

The authors declare that there is no conflict of interest related to the publication of this article.

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