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## **CULTIVATING CRITICAL THINKING AS *HABITUS* THROUGH STUDENT RESEARCH PROGRAMS IN MADRASAH EDUCATION**

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### **Abstrak**

*Penelitian ini bertujuan untuk menganalisis bagaimana pedagogi berbasis riset berfungsi sebagai arena pembentukan, penghayatan, dan pelestarian berpikir kritis sebagai pola berpikir, bertindak, dan memosisikan diri secara intelektual. Penelitian ini menggunakan pendekatan kualitatif dengan teknik pengumpulan data melalui observasi berkelanjutan, wawancara mendalam terhadap guru, pembimbing riset, dan peserta didik, serta studi dokumentasi. Analisis data dilakukan menggunakan model analisis interaktif yang meliputi kondensasi data, penyajian data, dan penarikan serta verifikasi kesimpulan secara iteratif untuk mengungkap mekanisme sosial yang membentuk dan mereproduksi disposisi berpikir kritis. Temuan penelitian menunjukkan bahwa program riset peserta didik tidak sekadar berfungsi sebagai pengayaan ekstrakurikuler, melainkan sebagai praktik pedagogis berkelanjutan yang menginstitutionalisasi inkuiri, refleksi dialogis, problematisasi kolaboratif, dan argumentasi publik. Melalui keterlibatan berulang dalam proses identifikasi masalah, penyusunan argumen berbasis bukti, negosiasi makna, dan presentasi temuan, peserta didik menginternalisasi inkuiri kritis sebagai orientasi normatif dan terwujud dalam praktik keseharian. Struktur pendukung seperti pendampingan berkelanjutan dan lingkungan akademik yang kompetitif memperkuat proses pembiasaan tersebut, sementara keterbatasan waktu dan kondisi lingkungan berpotensi menghambat keberlanjutannya. Penelitian ini berkontribusi dengan memosisikan berpikir kritis sebagai habitus yang dikonstruksi secara sosial, bukan sekadar capaian kognitif sesaat, sehingga menawarkan kerangka konseptual bagi pengembangan pedagogi berbasis riset di madrasah dan konteks pendidikan lainnya.*

**Kata kunci:** *Habitus Berpikir Kritis; Pedagogi Berbasis Riset; Pendidikan Madrasah; Pendidikan Karakter; Penelitian Kualitatif.*

### **Abstract**

The research aims to analyze how research-based pedagogy functions as an arena in which critical thinking is cultivated, embodied, and sustained as a patterned way of thinking, acting, and positioning oneself intellectually. Using a qualitative approach, data were generated through prolonged observation, in-depth interviews with teachers, research mentors, and student participants, and document analysis. The analytical process followed an interactive model of data condensation, display, and iterative interpretation to illuminate the mechanisms through which critical thinking dispositions are socially produced and reinforced. The findings indicate that student research programs operate not merely as extracurricular enrichment but as continuous pedagogical practices that institutionalize inquiry, dialogic reflection, collaborative problematization, and public argumentation.

Through repeated engagement in identifying problems, constructing evidence-based arguments, negotiating meaning, and presenting findings, students internalize critical inquiry as a normative and embodied orientation. Supporting structures such as sustained mentoring and an academically competitive climate strengthen this habituation process, while temporal and environmental constraints may disrupt its continuity. This study contributes by advancing an understanding of critical thinking as a socially cultivated *habitus* rather than a momentary cognitive outcome, thereby offering a conceptual framework for reimagining research-based pedagogy in madrasah education and beyond.

**Keywords:** Critical Thinking Habitus; Research-Based Pedagogy; Madrasah Education; Character Education; Qualitative Inquiry.

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## INTRODUCTION

Education is a fundamental human right and plays a strategic role in shaping the quality of life of individuals and society (Makkawaru, 2019). Education is not merely understood as fulfilling basic life needs, but also as a medium for developing critical awareness that enables learners to respond to social dynamics in a reflective and rational manner (Anisa et al., 2021; Patandung & Panggua, 2022). Education delivered through formal, informal, and non-formal pathways functions as a conscious and systematic effort to meet societal needs for knowledge while simultaneously shaping learners' character (Rusydiyah et al., 2020). In line with Ki Hajar Dewantara's educational philosophy, education is directed toward developing children's innate potential so that they can reach their full potential as individuals and members of society. Consequently, strengthening character education has become an increasingly crucial agenda (Febriyanti, 2021; Anggraini & Wiryanto, 2022; Faturrahman et al., 2022).

Within the broader agenda of 21st-century education, critical thinking is consistently identified as a core competency alongside creativity, collaboration, and communication (Abidin & Iskandar, 2022; Azizah et al., 2022). It is regarded as a determinant of students' capacity to navigate complex social realities and evaluate information in contexts shaped by rapid digitalization (Chikita et al., 2023). Indonesian curriculum policy, including the 2013 Curriculum, formally accommodates this orientation by promoting higher-order thinking skills in instructional design (Salsabilla et al., 2023). However, empirical realities indicate a persistent gap between policy aspirations and classroom practices. Teacher-centered approaches remain prevalent in many educational institutions, limiting opportunities for inquiry, dialogic engagement, and reflective reasoning (Khasanah, 2019). As a result, critical thinking is frequently treated as a measurable cognitive outcome rather than as an embodied and sustained intellectual disposition. Such a reduction overlooks the fact that intellectual dispositions, like character formation more broadly, emerge through sustained processes of habituation embedded in everyday pedagogical routines (Ma'rifatani, 2016).

This study departs from the premise that critical thinking should be understood not merely as a skill, but as *habitus*, a durable system of dispositions formed through repeated social practices. Drawing on Pierre Bourdieu's theory, *habitus* refers to structured and structuring dispositions internalized through participation in specific social fields. From this perspective, the cultivation of critical thinking depends on the interaction between the field as the educational context, capital in the form of cultural, social, and symbolic resources, and sustained pedagogical practice (Mustikasari & Arlin, 2023). The question, therefore, is not only whether students acquire critical thinking skills, but how particular educational arrangements enable the formation of critical thinking as an enduring way of perceiving, reasoning, and acting. This question becomes increasingly relevant when linked to the need for learning strategies that are not merely intracurricular, but also provide opportunities for authentic learning experiences through research-based activities.

Research-based pedagogy has increasingly been recognized as a strategic arena for strengthening academic culture in madrasah education. Empirical studies on student research programs demonstrate their contribution to fostering research culture, increasing participation in scientific activities, and enhancing institutional academic reputation (Saimroh & Basid, 2021; Afrahamiryano et al., 2023; Sholeh et al., 2025; Sari & Zulpadrianto, 2025). Within this landscape, research competitions such as the Madrasah Young Researchers Supercamp (MYRES) function as institutional platforms that structure students' engagement in scientific inquiry. MYRES integrates diverse domains, including mathematics, science and technology, social sciences and humanities, as well as religious studies, while strengthening competencies in proposal development, research methodology, and scientific presentation (Sa'diyah, 2018; Syam et al., 2021; Im et al., 2025).

Study conducted in various madrasah contexts, including MAN 2 Probolinggo City, further indicate that participation in such programs contributes to the development of students' critical thinking skills through structured competition processes (Ariyanti et al., 2022). However, existing scholarship predominantly conceptualizes these programs as mechanisms for improving measurable competencies and academic performance (Asyam et al., 2025), with limited attention to how sustained and institutionalized research practices may function as structured social processes that cultivate durable intellectual dispositions. As a result, the formation of critical thinking as *habitus* embedded in students' ways of reasoning and acting remains insufficiently examined.

A related body of scholarship addresses character education in madrasahs. However, such studies tend to focus on specific moral or religious values, such as keaswajaan, rather than explicitly examining the habituation to critical thinking as a central educational objective (Aprilia & Fajar, 2025). Meanwhile, analyses of research-based learning practices describe activities such as field research,



literature review, scientific writing, and presentation as pedagogical strategies for fostering analytical skills (Hamid, 2025; Aliyah, 2022; Dewi et al., 2018). Although these practices are pedagogically significant, they are predominantly interpreted as skill-development processes rather than as structured mechanisms for fostering critical-thinking dispositions.

This research aims to (1) analyze how research-based pedagogical practices operate as arenas for the formation of critical thinking dispositions; (2) examine the processes through which critical thinking becomes internalized through repeated research activities; and (3) identify supporting and constraining conditions influencing this habituation. This study contributes to character education and critical thinking scholarship by advancing a *habitus*-based conceptualization that integrates social practice, capital formation, and pedagogical structure. Practically, it has implications for the design of sustainable, research-based programs in madrasah education and other contexts seeking to cultivate critical thinking not merely as a cognitive outcome but as an enduring intellectual character.

## **METHOD**

This study employed a descriptive qualitative approach to examine the processes through which critical thinking is cultivated as *habitus* within a madrasah-based student research program (Sugiyono, 2018). The methodological objective was not merely to describe program implementation but to analyze how sustained participation in research activities contributes to the formation of durable critical-thinking dispositions. The qualitative design was therefore selected to enable an in-depth exploration of pedagogical practices, student experiences, and the social conditions through which patterns of reasoning, argumentation, and intellectual positioning become internalized over time.

The study was conducted at MTsN 1 Brebes, a public madrasah located in a district that actively promotes research programs as a flagship educational initiative, including systematic participation in research competitions such as MYRES. This institutional context provides a relevant field in which research-based pedagogy functions as a structured and sustained practice, making it an appropriate site for examining the formation of a critical-thinking *habitus*. Participants were purposively selected for direct involvement and sustained engagement in the research program. A total of five informants participated in this study: one research mentor as the key informant, three student participants as main informants, and one teacher as a supporting informant. The research mentor was selected for their central role in coordinating research activities and MYRES participation, while the supporting teacher was chosen for their ongoing interaction with participating students in classroom settings.

Student informants were selected for active, sustained participation in the research program at MTsN 1 Brebes and direct involvement in the research

initiatives examined in this study. The criteria emphasized substantial engagement throughout the full research cycle, including problem observation, field data collection, data analysis, and the formulation of evidence-based conclusions. Such comprehensive and repeated participation ensured sufficient experiential depth to examine the development of critical-thinking dispositions within the program context.

Data were generated over a six-month period through prolonged engagement within the madrasah research program. Three complementary techniques were employed to capture the processes through which critical thinking dispositions were formed: observation, in-depth interviews, and document analysis. Observations focused on mentoring sessions, proposal discussions, research supervision, and student presentations, with attention directed toward patterns of inquiry, dialogic interaction, argumentative construction, and evidentiary reasoning. Semi-structured interviews were conducted with the research mentor, a teacher, and three student participants to explore their experiences, reflections, and perceived intellectual development through sustained engagement in research. Documentary materials, including research proposals, presentation outputs, and mentoring records, were examined to trace the progression of analytical reasoning and argumentative structure over time. Triangulation across these data sources was undertaken to ensure credibility and interpretive consistency.

Throughout the research process, reflexivity was maintained to minimize interpretive bias. Field notes and analytic memos were systematically documented to monitor emerging interpretations. Trustworthiness was strengthened through data triangulation, member checking with selected participants to confirm interpretive accuracy, and maintenance of an audit trail documenting coding decisions and thematic development. These strategies were implemented to ensure credibility, dependability, and confirmability in accordance with qualitative research standards. Data analysis consists of iterative data condensation, data display, and conclusion drawing. However, the analysis was directed specifically toward tracing patterns of habituation in critical thinking rather than merely categorizing activities. Guided by Bourdieu's conceptual framework, the research program was examined as a pedagogical field; mentoring and academic recognition were interpreted as forms of capital; and recurring patterns of inquiry, reflexivity, and public argumentation were analyzed as manifestations of an emerging critical-thinking *habitus*. This analytical orientation ensured alignment between methodological procedures and the study's central objective of understanding the formation of durable intellectual dispositions.



## RESULTS AND DISCUSSION

### Establishment and Orientation of the Research Program

The establishment of the research program at MTsN 1 Brebes emerged as a strategic institutional response to the Ministry of Religious Affairs' policy concerning student research competitions, particularly the Madrasah Young Researchers Supercamp (MYRES) (Krisma, et al., 2023). Interview data indicate that the program was initiated through structured discussions between the research mentor and the madrasah principal, resulting in the formal establishment of a research-based extracurricular activity in July. The program was designed not merely to prepare students for competitions but to cultivate a sustainable research culture within the madrasah. As expressed by the research mentor:

“This program initially emerged from discussions with the madrasah principal... until finally, in July, a new extracurricular activity was established... with the aim of preparing students for the MYRES competition each year and cultivating a research culture within the madrasah.” (Agus, 2025)

Observational findings demonstrate that the program is implemented through continuous mentoring, structured research stages, and collaborative academic discussions. Students involved in the program exhibit observable behavioral changes, including increased participation in classroom discussions, greater willingness to ask analytical questions, and stronger engagement in subjects that require reasoning, such as Social Studies.

“Students who participate in research projects ask questions more confidently, engage more actively in discussions, and become accustomed to thinking in a deeper and more analytical manner.” (Agus, 2025)

Students also reported enhanced abilities to identify social phenomena, analyze causal relationships, evaluate information sources, and present findings systematically in written form. These empirical findings indicate that the research program extends beyond extracurricular enrichment and influences broader classroom learning dynamics by fostering a more inquiry-oriented academic climate. The findings suggest that the research program operates not merely as an instructional activity but as a structured pedagogical arena in which critical thinking dispositions are gradually formed. At the level of instructional outcomes, the findings align with previous studies demonstrating that research-based learning enhances students' analytical awareness and problem-solving abilities (Afrahmiryano et al., 2023; Ariyanti et al., 2022; Hakim et al., 2021).

However, beyond skill acquisition, the present study demonstrates that sustained and institutionalized research practices serve as a mechanism for the gradual development of critical-thinking dispositions. Unlike prior models that

conceptualize critical thinking primarily as an instructional outcome, the research program at MTsN 1 Brebes embeds inquiry within the madrasah’s cultural structure, thereby contributing to the formation of critical thinking as *habitus*. From a Bourdieusian perspective, *habitus* emerges through repeated social practices that become internalized as durable dispositions (Mustikasari & Arlin, 2023). The empirical evidence of increased student confidence, analytical questioning, and reflective engagement indicates not only cognitive development but the gradual structuring of thinking patterns. Through this program, students accumulate cultural capital in the form of research knowledge and methodological skills, social capital through mentorship and peer collaboration, and symbolic capital through participation and recognition in MYRES (Kobandaha, 2017; Linda, 2019). These forms of capital operate within the madrasah's educational field, reinforcing critical thinking as a legitimate and valued disposition.

While previous studies highlight the effectiveness of research-based learning in enhancing analytical skills (Hidayati, 2019; Khumaidah et al., 2022), this study advances the discussion by demonstrating how institutional continuity transforms episodic research activities into a mechanism of *habitus* formation. The program’s orientation toward sustainability rather than short-term competition constitutes its primary pedagogical strength and theoretical contribution as described in Figure 1.

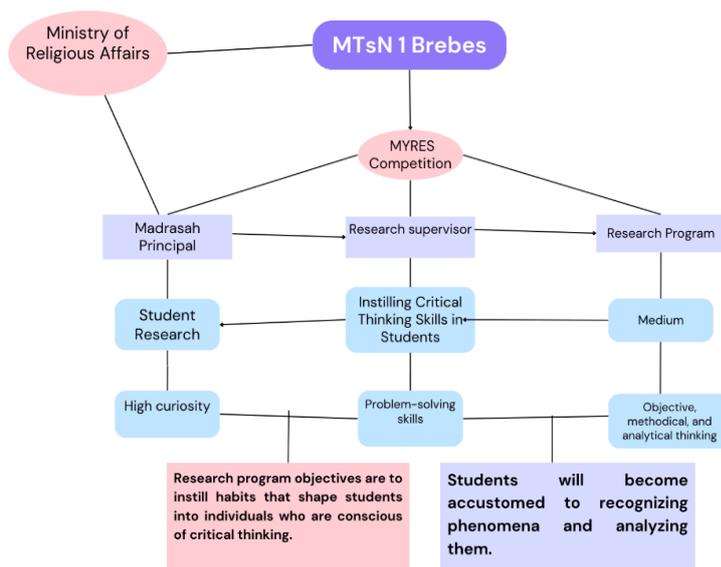


Figure 1. Background and Objectives of the Research Program Establishment  
**Core Research Practices in the Program as Mechanisms of Habituation**

Empirical data reveal that the formation of critical-thinking character occurs through repeated, structured engagement in three interrelated research practices: problem identification and problem-solving, research writing, and discussion, presentation forums, as described in Figure 2.

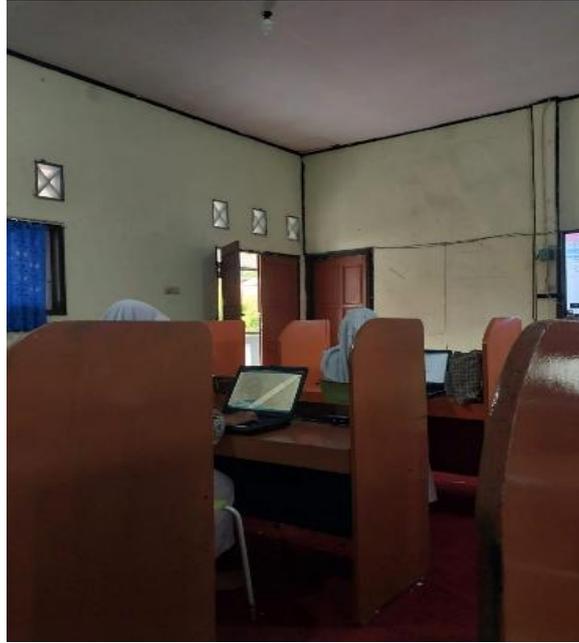


Figure 2. Implementation of the Research Program

First, students are required to observe and analyze social phenomena within the madrasah and surrounding community, including issues such as bullying and juvenile delinquency. These observations are developed into research topics through guided inquiry (Agus, 2025). Field observations show that students progressively move from descriptive accounts toward analytical examination of causes and evidence-based solutions. Second, the research writing process involves systematic stages, including problem formulation, literature review, instrument design, data collection, analysis, and reporting. Interview data indicate that students learn to distinguish fact from opinion, compare multiple sources, verify the credibility of information, and refine arguments through iterative revisions under mentor supervision.

Third, structured discussion and presentation sessions function as collective reflective spaces. Students defend arguments, respond to critiques, and revise their reasoning accordingly (Arina et al., 2019). The use of digital platforms such as Canva enhances students' digital literacy and supports responsible data presentation (Rany et al., 2025). Participation in MYRES further reinforces these practices by requiring students to apply the entire research process in competitive academic settings. Reaching the provincial level in 2023 indicates that these competencies extend beyond the internal madrasah context. The range and structure of research activities conducted throughout the program are summarized in Table 2.

Table 2. Research Program Activities

Research Activities	Problem Analysis Stimulation	Research Writing	Presentation
<b>Implementation</b>	Identifying researchable phenomena and examining issues in the surrounding environment	Writing observation/interview results systematically with mentor guidance	Presenting research outputs and receiving critiques and feedback from research mentors

The findings clarify the pedagogical mechanisms through which critical thinking becomes internalized as *habitus*. First, the repetition of inquiry cycles normalizes analytical questioning as a routine cognitive practice. This aligns with contemporary educational frameworks emphasizing 21st-century competencies (Anisa et al., 2021) and supports evaluative reasoning processes (Reffhaug & Lysgaard, 2024; Thorndahl & Stentoft, 2020). However, unlike models that conceptualize critical thinking as discrete skill training, the program embeds inquiry within sustained institutional routines.

While previous research confirms that student involvement in research enhances analytical ability (Kartika et al., 2020; Azizah et al., 2022), this study demonstrates that iterative revision and mentor-guided critique function as mechanisms of cognitive restructuring. Critical thinking is not only practiced but disciplined through feedback, verification, and argumentative refinement. Third, dialogical interaction in discussion and presentation forums facilitates social mediation of reasoning. Consistent with Khumairoh et al (2020) serta Calma & Davies (2021), students develop the ability to distinguish relevant information and construct independent arguments. Yet, this study extends prior findings by showing how collective academic dialogue contributes to the socialization of critical dispositions within a specific educational field.

Moreover, participation in MYRES serves as symbolic reinforcement of these dispositions (Supit & Yonathan, 2024; Arina et al., 2019). Recognition within competitive arenas strengthens students' identification with research-oriented thinking patterns, consolidating symbolic capital and stabilizing critical thinking as a durable disposition rather than a situational skill. Taken together, these findings demonstrate that critical thinking in the madrasah context is cultivated through repeated, socially mediated, and institutionally structured research practices. The conceptual contribution of this study lies in explaining how such practices function as pedagogical mechanisms of *habitus* formation. Rather than merely evidencing program success, the study elucidates the structural and cultural processes through which critical thinking becomes embedded in students' cognitive and social orientations.

### **Supporting and Constraining Conditions in Fostering Students' Critical Thinking Character**

The process of fostering students' critical-thinking character inevitably takes place under varying conditions, which may function as either supporting or inhibiting factors. Such conditions are consistently present in all educational activities conducted at MTsN 1 Brebes. Based on interview findings, three supporting factors and two inhibiting factors were identified regarding the development of students' critical-thinking character at MTsN 1 Brebes. The supporting factors include structured mentoring, a competitive academic orientation, and the integration of digital literacy, while the two principal inhibiting factors are limited instructional time and inconsistent learning environments.

First, continuous mentoring and systematic monitoring constitute a central enabling condition. Research supervisors regularly guide students through the stages of problem identification, methodological design, analysis, and revision. This structured supervision strengthens students' ability to organize arguments, evaluate evidence, and refine reasoning. As observed during mentoring sessions, students are required to justify their analytical choices and revise their arguments in response to feedback. This iterative process enhances reflective discipline and intellectual confidence. Structured supervision within the MYRES preparation framework further familiarizes students with scientific procedures, reinforcing systematic reasoning and evidentiary thinking.

Second, participation in research competitions, particularly MYRES, serves as both a motivational and a structural driver of analytical engagement. Competitive contexts require students to formulate research questions, gather data, defend arguments, and present conclusions coherently (Krisma, Laili, & Muqtada, 2023). Students reported that preparing for competitions compelled them to deepen problem analysis and scrutinize evidence carefully before drawing conclusions. Observational data show increased seriousness in literature review, data verification, and argumentative clarity during competition preparation phases.

Third, digital literacy practices support the cultivation of evaluative reasoning. Students regularly access academic references through platforms such as Google Scholar, Publish or Perish, and ScienceDirect. They are trained to compare sources, verify credibility, and cite evidence appropriately. Such practices enhance their ability to distinguish reliable from unreliable information and prevent uncritical acceptance of digital content. The integration of technology thus reinforces critical filtering, comparative analysis, and methodological awareness.

However, two constraining conditions were identified. The first concerns limited time allocation, as the research program operates only twice weekly as an extracurricular activity. Scheduling conflicts with other programs reduce consistency of participation and restrict opportunities for extended inquiry. The second relates to uneven learning environments. In some classrooms, teacher-

centered instruction and rote-based approaches persist, limiting opportunities for dialogical reasoning and debate. Additionally, unsupportive peer or home environments may discourage questioning and critical engagement. These contextual constraints reduce the continuity required for sustained disposition formation.

While previous studies emphasize the motivational value of competitions and digital tools in enhancing critical thinking skills (Krisma, Laili, & Muqtada, 2023), the present findings extend this discussion by demonstrating how these elements function structurally to stabilize dispositions. In this context, digital literacy transcends mere technical proficiency and functions as an epistemic mechanism that systematically cultivates evaluative and reflective reasoning practices. Limited instructional time and teacher-centered pedagogies illustrate how misalignment within the field may weaken *habitus* consolidation. When inquiry-oriented practices are discontinuous, dispositions risk remaining situational rather than durable. Thus, the findings underscore that the formation of critical thinking as *habitus* depends not only on program design but also on broader institutional coherence. This analysis clarifies that enabling conditions do not merely “support” skill development; rather, they shape the structural continuity necessary to stabilize critical dispositions.

### Patterns of Critical Thinking Dispositions

The findings reveal patterned dispositions emerging from sustained participation in the research program. These dispositions reflect five interrelated dimensions: analytical mindset, disciplined research practices, evaluative reasoning, intellectual openness, and argumentative communication, based on Table 3.

Table 3. *Habitus* Analysis in the Implementation of the Research Program

<b>Habitus Component</b>	<b>Practices in the Student Research Program</b>	<b>Developed Critical Thinking Character</b>	<b>Field</b>	<b>Type of Capital</b>	<b>Implementation</b>
<b>Mindset</b>	Identifying phenomena/problems and formulating them into research instruments	Analytical and skeptical	Madrasah, students' environment	Cultural capital (knowledge, technology use, and digital literacy practices)	Students habitually question phenomena, avoid accepting information at face value, seek and compare multiple sources, analyze learning tasks from multiple perspectives, and take structured notes during lessons
<b>Action habits</b>	Field data collection	Objective	Research activities	Cultural capital (learning experience)	Students learn to collect information based on empirical evidence

<b>Habitus Component</b>	<b>Practices in the Student Research Program</b>	<b>Developed Critical Thinking Character</b>	<b>Field</b>	<b>Type of Capital</b>	<b>Implementation</b>
<b>Evaluation approach</b>	Data analysis and evaluation of information sources	Evaluative	Madrasah	Cultural capital (conceptual understanding)	Students are able to assess information accuracy and compare multiple sources
<b>Intellectual attitude</b>	Guidance and monitoring by research mentors	Reflective	Madrasah	Social capital (peer and teacher relationships, guidance, and monitoring)	Students become accustomed to receiving feedback, revising their work, evaluating task outcomes, and considering new perspectives
<b>Communication patterns</b>	Research discussions and presentations	Argumentative	Madrasah, research activities	Symbolic capital (recognition of work and teacher appreciation)	Students confidently express opinions with logical reasoning, actively participate in discussions, and engage in questioning

The table above illustrates how the formation of *habitus* through the research program supports the development of students' critical thinking character. Five core components of *habitus* mindset, action habits, evaluative approach, intellectual attitude, and communication patterns are systematically cultivated through repeated research practices (Novandi et al., 2025). *Habitus* refers to a prolonged process of value socialization that leads to the development of habits and social values internalized by individuals, thereby shaping patterns of thinking and behavior (Oktaviyanti et al., 2016). It also represents a subjective structure produced through continuous social interactions within specific social spaces, which gradually generates habitual practices. These habits are formed through socialization in particular contexts such as the home, school, and educational institutions (Deni, 2015). Bourdieu conceptualizes *habitus* as a system of dispositions, encompassing schemes of perception, thought, and action that are learned and sustained through lifestyles, values, character traits, and expectations associated with specific social groups (Fatmawati & Sholikin, 2020). According to Elfena et al. (2020) *habitus* can also be understood as the internalization of diverse sociocultural norms and skills that are translated consciously or unconsciously into ways of behaving within a particular social arena and are perceived as natural.

The patterns identified above demonstrate that the research program functions as such a field, in which repeated inquiry practices gradually produce stable cognitive and behavioral orientations. Unlike approaches that frame critical

thinking as a transferable skill set, this study shows how dispositions become embodied through the interaction of cultural, social, and symbolic capital. Cultural capital manifests in students' mastery of research methodology and digital literacy; social capital emerges from collaborative mentoring and peer dialogue; symbolic capital arises through recognition and academic validation. These capitals interact within the madrasah field to legitimize inquiry as a normative practice.

Thus, the study contributes conceptually by demonstrating that critical thinking in madrasah education can be cultivated as *habitus* through sustained, socially mediated research practices. The findings extend *habitus* theory into the domain of Islamic secondary education, illustrating how institutional design, capital distribution, and pedagogical structuring converge to embed critical inquiry into students' everyday cognitive dispositions. Rather than merely evidencing improved academic performance, this study elucidates the structural and cultural mechanisms through which critical thinking becomes durable, transferable, and socially legitimized within the educational field.

## CONCLUSION AND SUGGESTION

This study concludes that the research-based learning program implemented at MTsN 1 Brebes plays a significant role in developing students' critical thinking *habitus* through sustained, structured, and socially embedded research practices. The findings demonstrate that critical thinking is cultivated not merely as a cognitive skill but as a durable *habitus* formed through repeated engagement in research activities, including problem identification, data collection, analysis, discussion, and presentation. The interaction between internal and external conditions such as routine mentoring, participation in research competitions, digital literacy practices, time constraints, and learning environments shapes the effectiveness of this process. Guided by Bourdieu's framework, the study reveals that the formation of critical thinking *habitus* is strengthened by the accumulation of cultural, social, and symbolic capital within specific educational fields. Through continuous research experiences supported by mentoring and institutional recognition, students internalize analytical, evaluative, reflective, and argumentative dispositions that extend beyond formal research activities and influence their everyday learning behaviors. Thus, the research program serves as a pedagogical arena that systematically fosters critical thinking as an embedded, sustainable character trait among madrasah students.

Based on these findings, it is recommended that madrasahs and similar educational institutions integrate research-based learning more systematically into both curricular and extracurricular programs to strengthen the cultivation of critical thinking *habitus*. Schools should ensure consistent mentoring, adequate time allocation, and supportive learning environments that encourage inquiry, discussion, and reflection across subjects. Teachers are encouraged to move beyond



teacher-centered approaches by incorporating research-oriented tasks, collaborative problem-solving, and evidence-based discussions in classroom practices. Additionally, strengthening students' digital literacy and access to credible academic resources is essential to support critical evaluation of information. Future research is suggested to explore longitudinal impacts of research-based programs on students' academic trajectories and to examine similar initiatives across diverse educational contexts to further validate and enrich the understanding of critical thinking *habitus* development.

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